

Here for New Zealand

Financial Condition Report 2020

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

Financial condition supports a fair and sustainable Scheme

The ACC Scheme provides no-fault personal injury cover to all New Zealanders and overseas visitors. It exists to prevent injuries and rehabilitate and compensate injured people. Around one-third of New Zealanders are injured every year and make claims to ACC. For some, the support needed is short term. For others, the support extends over a long period.

That's why it's important that the Scheme is sustainable and fair. New Zealanders need to feel confident that if they or their friends or whānau are injured ACC will be there to support their wellbeing – not just today but into the future. And as funders of the Scheme, levy payers and taxpayers must share this confidence. They need to know how their money is being used and what funds may be needed in the future to sustain the services under the Scheme. Ministers and the ACC Board, in their governance role, also require this understanding and assurance.

Purpose

At the end of each financial year, we, the actuaries at ACC, write a formal Financial Condition Report (FCR) to assess ACC's financial condition. Specifically, the report sets out the financial condition of the Scheme, how it's changed over the year and the reasons for the change. The report also identifies existing and future risks to the Scheme. Where appropriate, we make recommendations for improving customer outcomes and ensuring a stronger financial condition in the future.

In writing this report as at 30 June 2020, we have complied with the New Zealand Society of Actuaries' professional standards in a way that makes sense for ACC. In line with these standards, our objective is to present a view of the Scheme that's transparent and free from bias. That's important in helping others build a clear picture of the financial condition of the Scheme. It's also important in establishing what is needed to ensure ACC's financial condition can support a fair and sustainable Scheme for New Zealanders now and in the future.

Rent

Herwig Raubal BEC FNZSA FIAA Nina Herries BSc (Hons) FNZSA FIA Chief Risk and Actuarial Officer **Appointed Actuary**

December 2020

Head of Actuarial Services

We define **fair** as achieving outcomes, in accordance with the purpose of the Scheme, that are equitable for individuals and groups of people with an interest in the Scheme.

A **sustainable** Scheme is one that can fulfil its purpose, withstand shocks and endure into the future.

Financial condition

includes the financial health of those aspects of the Scheme that are relevant to ACC's ability to prevent, rehabilitate people after, and compensate for injury.

Unlike private sector insurers, ACC is 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. The main departure relates to solvency as ACC does not have the requirements for minimum capital that private insurers have. Rather we adhere to the Government's funding policies for the ACC Accounts.

Richard Korte BSc BBS FNZSA FIA Manager, Actuarial Monitoring and Insight

Executive summary

ACC needs to manage its performance better to respond to the deterioration in the financial condition

ACC's financial condition has deteriorated

The funding position of each Account reduced during 2019/20

The financial health of those aspects of the Scheme relevant to ACC's ability to prevent, rehabilitate and compensate for injury, and operate at a cost that's reasonable and sustainable, has declined in 2019/20.

Funding positions for all the Accounts reduced significantly during the year, largely due to falling interest rates, which are outside of ACC's control, although this impact has been partially offset by a change in the asset mix. The funding positions also reduced due to worsening claims performance. Levies and appropriations, which are set by the Government, are below new year costs. This also reduced the funding positions.

New year (claim) costs are the estimated lifetime costs of new claims for accidents that occur during the year that the levies or appropriations cover.

In 2019/20 the Government's funding policies were updated, and that changed the funding targets for the levied Accounts. The update to the funding policy meant that, despite a significant reduction in funding positions during the year, all the levied Accounts remain at or above the new target as at 30 June 2020.

However, the funding ratio for the Non-Earners' Account deteriorated from 68% to 59% and for the Non-Earners' portion of the Treatment Injury Account the funding ratio has reduced from 69% to 61%.

ACC recorded a \$4.8 billion deficit in 2019/20

This year the Scheme recorded a deficit of \$4,809 million¹. Around one-quarter of the deficit was due to levies and appropriations being below the expected cost of new year claims. When levies were last set in 2018, all three levied Accounts were above their funding target. Consequently, levies were set at lower than the expected lifetime cost of new claims to reduce the surplus in each Account and move closer to the target funding position.

The outstanding claims liability (OCL) is the estimated future lifetime cost of claims for injuries that have already happened.

Note that this result represents the true economic cost to the Scheme and is consistent with how ACC is funded. It differs from that shown in the Annual Report 2020, which excludes work-related gradual process claims incurred but not reported but includes the asset and liability for the Accredited Employers Programme, the unexpired risk liability and the OCL risk margin. Higher than expected claim payments since the time levies and appropriations were set led to assumption changes in both the 2019 and 2020 valuations. These contributed \$1,097 million to the deficit. This deficit included an increase in the outstanding claims liability (OCL) of \$134 million (excluding risk margin) higher than originally forecast. This is known as an OCL strain and excludes the impacts of economic changes.

The total contribution of economic conditions to the deficit was \$2,396 million. Economic conditions are volatile by nature, but in the last couple of years interest rates have kept falling. Deficits generated by falling interest rates are seen in other long-tail insurance schemes across the world. The major contributions were falling interest rates, resulting in an increase in the OCL of \$5,184 million, partially offset by investment returns of \$3,416 million. This year's investment return rate, after expenses and tax, was 7.59%, much higher than the risk-free rate and higher than the market-based benchmark of 7.42%.

Injury prevention has met most targets, but benefits need to grow significantly to achieve strategic goals

Most of the injury prevention benefits are still in the future

The ambition of the Injury Prevention Strategy is to improve the quality of life for New Zealanders while ensuring the long-term sustainability of the Scheme for future generations. While injury prevention met most targets this year, the initiatives have not yet delivered a significant impact on the financial condition of the Scheme. That's partly because the injury prevention programme is still maturing. So, although investment has occurred, most of the expected benefits are in the future, and the gap between investment and benefits has been increasing for the past three years. As the portfolio matures, we would expect to realise more of the benefits and this gap to reduce.

In 2019/20 ACC invested \$102.5 million in injury prevention (including a one-off investment of \$25.4 million in the firearms buy-back scheme). The planned investment was \$120 million. \$71.6 million of this investment was for programmes now in delivery; \$30.9 million was for programmes in development.

The return on investment over 2019/20 has largely been in line with expectation, with a few exceptions

ACC estimates the effectiveness of injury prevention programmes through return on investment (ROI), the number of claims prevented and the rate of serious injury.

The ROI is a measure of how much we expect to receive back in claim benefits from the investments we're making. This year ACC had a target of receiving \$1.80 for every \$1 invested and this was achieved. Five injury prevention programmes (neonatal, gun violence, targeted financial incentives, falls and fractures and motorcycle rider training) make up half of all the expected future claim benefits feeding into the June 2020 ROI. Three of these programmes are still unproven in terms of performance, with benefits not expected to start accruing until the 2020/21 financial year.

One significant suite of programmes in design is through a partnership with WorkSafe, and this has a lower target ROI of \$1.10. This is planned to increase to ACC's target by 2028. The suite of WorkSafe programmes has no claim benefits yet as it is still in design. \$14.3 million was invested this year, bringing the total investment to \$29.3 million, which is a large investment for injury prevention. It has become clear that planned benefits may not be delivered. A joint review of this programme's performance is underway to ensure all benefits are identified and corrective action agreed.

During 2019/20 ACC prevented an estimated \$40 million worth of claims. Claims incidence was affected by the COVID-19 lockdown, meaning most of the June 2020 quarter results weren't included in the estimate of prevented claims. The number of claims prevented in 2019/20 was well ahead of target (15,547 vs 12,100), despite not including most of the June 2020 quarter results. However, the value of the injuries prevented was below the value expected (\$40 million vs \$65 million). This was a result of the types of claims prevented having lower than average estimated lifetime cost.

The rate of serious injury is the number of new serious injury and fatal claims per 100,000 new registered claims. In 2019/20 the rate of serious and fatal injuries prevented did not meet its target.

Achieving an ROI is important, and this is being done through the increasing benefits expected in the future, while the portfolio is expanding. The Injury Prevention Strategy aims to achieve future Executive summary

claim benefits of \$2.4 billion over 10 years. However, current programmes are expected to provide only one-quarter of this. ACC must deliver benefits already planned from existing investments. In addition, new programme development must be delivered as per the strategic plan.

Rehabilitation and compensation performance have continued to worsen over the year and ACC needs to manage this better

Claims performance was worse than expected

In the past six years (2014/15 to 2019/20) claim volumes and costs have been higher than expected. The OCL has increased by nearly \$3 billion more than originally forecast over this period. Most of this and past years' strain is in areas at least partially influenceable by management and has contributed to pressure on funding, and on the financial condition of the Scheme.

In 2019/20 the OCL strain was \$154 million including risk margin. This comprised \$593 million of influenceable OCL strain, offset by \$439 million in a non-influenceable release. The COVID-19 restrictions are a significant driver of the OCL release. The June 2020 quarter coincided with New Zealand's national lockdown. This meant claim volumes during this quarter were significantly lower than projected. If not for the pandemic, the total OCL strain for the 2019/20 financial year would have been much higher (\$548 million).

Despite the continued OCL strain, claims can continue to be paid for the foreseeable future. However, large or enduring funding deficits mean the cost burden of claims will shift to future generations, compromising the policy intent to fund these Accounts fully. That's why ACC must improve those things that it can influence.

The impact of claims performance on the OCL varied by claim payment type

The payment types contributing significantly to the OCL strain and presenting the greatest ongoing risks to Scheme fairness and sustainability are:

- Weekly compensation: The OCL strain over the past six years has been \$1,600 million. Of this, over 90% is from claims more than one year old. In past years, a key driver of weekly compensation strain has been worsening rehabilitation rates. This was again a significant driver of the strain in 2019/20. Claims are remaining on the Scheme for longer than expected.
- Serious and non-serious injury social rehabilitation: The OCL strain over the past six years has been \$1,607 million (\$1,129 million excluding pay equity). The average cost of serious injury non-capital claims was higher than expected largely due to higher than expected care hours. Due to the long-term nature of these claims, a small change in care required can have a large impact on the OCL.

We define **influenceable**

areas where management

client outcomes, leading

to reduced costs for levy

payers and taxpayers.

OCL strain as strain in

action could improve

Higher than expected growth in care hours for established serious injury claims has been evident in the past few years, and concerningly it has coincided with a steady reduction in the achievement of self-reported independence outcomes. For nonseriously injured clients, growth in training for independence payments has been significant in the past three years. Investigative

monitoring was undertaken in 2019/20 to help identify the cohorts of clients contributing to the growth. Work to better understand entry criteria, the suitability of the service for various cohorts of clients and outcome measures must continue in 2020/21.

Sensitive claims: Higher than expected numbers of new sensitive claims has been evident since the implementation of the Integrated Services for Sensitive Claims (ISSC) contract in November 2014. The length of time that clients from older accident periods remained on the Scheme has stabilised and was below expected. Despite this, uncertainty around the growth in sensitive claim costs and volumes remains. Last year the assumption of growth in new claims was raised from 9% to 20%, yet higher than expected new claims growth was again evident in 2019/20. Capacity constraints are being felt across the service, and these may delay the time it takes for clients with sensitive claims to receive the help they need, prolonging their recovery time. The OCL strain over the past six years has been \$1,261 million.

Future funding requirements are under pressure as the Scheme responds to deteriorating financial condition

We forecast new year claim costs will continue to increase

New year claim costs represent the economic cost of claims and are the largest component of required funding. For all Accounts, the estimated new year costs in 2020/21 and 2021/22 are higher than the funding approved by the Government (\$2.4 billion over the two years).

In 2019 the changes to the funding policy reduced the funding target of the levied Accounts from 105% of OCL including risk margin to 100% of OCL excluding risk margin. This led to the funding position for all Accounts being above the new target.

Although the funding positions on all levied Accounts are still at or above target, we expect the future levies will need to increase. We expected the change in funding policy to mean that future levy growth would be lower than forecast on the old policy. However, recent claims performance and economic conditions have significantly increased new year costs and reduced funding positions. This has reversed some of this expected impact.

The expected new year costs for 2022/23 have increased since 2019. The two main drivers of the rising cost of claims are reducing interest rates and deteriorating claims performance. Changing the asset mix towards equities which have a higher expected return, but also a higher risk, partially offsets the increase from interest rate changes. Over the last two years we have seen up to a 7% annual increase in the cost of claims as a result of changes in claim frequency and severity; this varies by Account. This is a significant annual increase in the cost.

Calculated levies and appropriations include offsets for the quantified financial impact of injury prevention (IP) and the Integrated Change Investment Portfolio (ICIP). These activities are expected to reduce the calculated levies in the 2022/23 year by about \$157 million. The expected reduction to the Non-Earners' appropriation from IP and ICIP is \$55 million for 2021/22. Over the next five years, benefits from IP and ICIP are expected to reduce levy rates and appropriations by \$1.1 billion. If these benefits are not realised, levies and appropriations will need to increase above the latest forecasts.

Ultimately, continuing levy rate and appropriation increases are expected

The rising cost of new year claims leads to a required increase in future levies and appropriations.

The Government has rolled over the levy rates for the 2021/22 levy year. The next opportunity to review levy rates will be in 2021, for the 2022/23 levy year. The funding policy for the levied Accounts restricts increases in levy rates to 15%, in addition to inflation for the Motor Vehicle Account.

The indicative levy rates for the 2022/23 levy year have increased for all Accounts compared to those calculated using the June 2019 basis, as shown in Table 1. Executive summary

TABLE 1 - INDICATIVE LEVY RATES FOR THE 2022/23 YEAR

	Motor		Earners' portion of		
Indicative 2022/23 levy rates	Vehicle	Earners'	Treatment Injury	Work	
Current levy rates	114	1.16	0.05	0.67	
30 June 2019 basis					
New year cost	205	1.44	0.11	0.85	
2022/23 indicative uncapped levies before ICIP and IP benefits	194	1.41	0.08	0.75	
30 June 2020 basis					
New year cost	217	1.53	0.12	0.86	
2022/23 indicative uncapped levies before ICIP and IP benefits	210	1.55	0.08	0.76	
Reduction due to ICIP and IP – new year cost	(9)	(0.05)	(0.01)	(0.03)	
Reduction due to ICIP and IP – funding adjustment	(1)	(0.01)	(0.00)	(0.03)	
Reduction due to capping	(67)	(0.17)	(0.02)	0.00	
2022/23 indicative capped levies as at 30 June 2020	133	1.33	0.06	0.72	

Note – Due to rounding, the sum of the components may not exactly match the totals

For the levied Accounts, the levy cap is expected to apply for one year for the Earners' Account. The increases on the Work Account and Earners' portion of the Treatment Injury Account are expected to be below the levy cap.

The indicative levy for 2022/23 is \$133, which is 64% of the new year cost (\$209 including management response). The levies for the Motor Vehicle Account are expected to increase at cap for four years. However, the Motor Vehicle Account is particularly sensitive to economic changes. If the investment rate increases, the uncapped levy will reduce. Our scenario modelling shows a 25% chance the Account will not hit cap in 2022/23 due to a combination of claim performance and economic factors. The main driver for this is scenarios with an increase in interest rates.

As the motor vehicle levy is low compared to new year costs, applying a cap to increases on a low rate means that it takes longer to get to the funding level required.

Assuming levies are increased in line with the funding policy, by 2026/27 we expect the Motor Vehicle levy rate to double from the current prescribed rate to \$228.

There is some lack of clarity around how frequently the cap can apply, and the length of each levy cycle under the new funding policy. We have assumed that the cap applies annually over a three-year cycle. If the cap is confirmed to apply to the entire levy cycle, the rates will increase more slowly, and the cap will apply for longer.

For the Non-Earners' Accounts, the Government has approved an additional \$284 million of funding to meet the expected new year cost of claims for the 2020/21 year. Annual increases to the appropriation are expected to be at the maximum cap of 7.5% per annum for the next five years. However, increasing claim costs and changing economics mean this higher level of appropriation is still expected to be insufficient to meet the 2021/22 new year cost of claims. The expected shortfall is \$40 million. We expect that in 2022/23 the appropriation will be above new year costs unless there are further significant falls in interest rates.

The changes ACC is making in how it operates need to generate a significant improvement in customer outcomes

The ICIP has delivered the foundations for improving customer experiences and outcomes

In 2019/20 significant transformational milestones were delivered under the ICIP, laying the foundational work to deliver better customer experiences and outcomes:

- Next Generation Case Management (NGCM) was delivered during the year as planned, despite the unexpected operational challenges during the year from the COVID-19 lockdown. The redesign of ACC's case management model is expected to improve client recovery outcomes and drive productivity improvements.
- The organisation is shifting to a 'purchasing for outcomes' model under the Health Sector Strategy (HSS). This involves setting up provider contracts to incentivise effective, efficient and sustainable outcomes for clients. Six provider contracts were signed during the year as part of the Escalated Care Pathways project. Outcome measures for the project are being measured and reported, with the goal of improving the experiences of and outcomes for clients with non-acute knee, shoulder and lower-back injuries.
- The Business Analytics platform is progressing, and this is allowing ACC to use more advanced analytical techniques to deliver insights, develop predictive models and test hypotheses.

A significant investment has been made in improving performance and delivering better outcomes for clients. However, the benefits of the ICIP transformation have yet to be realised. The three main programmes expected to deliver the ICIP financial benefits are all behind their original expected timeframes – and COVID-19 restrictions exacerbated this. While the ultimate end targets are still expected to be reached, the pathway to achieving these goals has changed.

With the delivery of NGCM, there are some promising results with the performance of claims that have been managed entirely under ACC's new ways of working. As the delivery of NGCM has been occurring over the year, only about a third of all the claims have been managed entirely under NGCM. No claims of over 12 months' duration have been managed from inception in NGCM. Most complex and serious injury claims are over 12 months' duration. ACC can't rely on good performance from short-term claims commencing under NGCM alone. Existing and new long-term claims that contribute most to ACC's OCL must be managed effectively. It is imperative that the new ways of working under NGCM are replicated to achieve good client and financial outcomes for these claims.

ACC's measurement of client outcomes is improving, but there's more to do

The need to measure and define client outcomes more effectively has been a key message in past FCRs. This year's OCL strain, along with historical strains, highlights the need for client outcomes to be better understood and measured. ACC is spending more but it's not clear whether outcomes have improved sufficiently to match the increased spend.

In last year's FCR we listed actions underway or planned to target claims growth and customer outcomes:

- a strategic review of the sensitive claim 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 the development of robust service entry criteria for the training for independence service
- a cost/benefit review of a particular kaupapa Māori pilot for seriously injured clients
- a focus on achieving projected benefits from the ICIP, particularly those to be delivered by the HSS and NGCM
- an exploration of ways to better measure and attribute benefits for longer-term strategic and infrastructure investments in injury prevention.

There was progress in many of these areas in 2019/20, but as at 30 June 2020 is ongoing.

There are some areas where we believe management should take more focused action to deliver fairer and more sustainable services.

In preparing this year's Financial Condition Report, we have been unable to identify clear measurable objectives focused on tracking changes in Māori Executive summary

access and outcomes within Whāia Te Tika, or more broadly across ACC. So, it hasn't been possible to provide an update on progress against these. ACC will need to be able to demonstrate that the work it's doing for and with Māori is achieving the right outcomes and at a cost that's reasonable and sustainable for funders of the Scheme.

We recommend that ACC's work with Māori and other relevant stakeholders on improving Māori access, outcomes and experience focuses on:

- understanding and acting on the drivers of the differences between Māori and non-Māori
- ensuring all services provided can be shown to deliver the right client outcomes for Māori at a cost that's reasonable and sustainable for funders of the Scheme.

[Responsibility: Tumu Pae Ora]

In our view, the organisation needs a better understanding of the drivers of the growth in sensitive claim volumes and costs. It needs a deeper understanding of the people suffering sexual abuse or assault in the community, including what their injury and claim patterns look like. This would allow the organisation, as part of the wider health sector, to provide effective prevention, compensation and rehabilitation services in the future, and deal with any remaining access barriers. It would also enable better management of potential impacts to the financial condition, by being better able to estimate service needs and funding requirements.

We've also commented in previous FCRs that greater focus is needed on the services provided to clients with sensitive claims, to ensure that the spend is achieving outcomes for clients. Last year's report noted that a review of the ISSC was scheduled to be completed in early 2019, including a strategic component focused on outcomes being delivered. This review wasn't completed. ACC is part of the Government's Joint Venture for Family Violence and Sexual Violence. The organisation's work for supporting the Joint Venture is still in the early stages. We've yet to see specific initiatives designed to ensure that the service is delivering the right client outcomes at a cost that's reasonable and sustainable for levy payers and taxpayers.

We make two separate but related recommendations on sensitive claims:

ACC's work on sensitive claims needs to provide a deeper understanding of the people suffering sexual abuse or assault in the community, including what their injury and claim patterns look like, and the drivers of the growth in sensitive claim volumes and costs. This understanding needs to be translated into action where appropriate, to provide targeted prevention or services to clients, and manage the impacts on the financial condition.

[Responsibility: Chief Operating Officer]

ACC's work on sensitive claims needs to ensure the services provided can be shown to deliver the right client outcomes at a cost that's reasonable and sustainable for levy payers and taxpayers.

[Responsibility: Chief Operating Officer]

Most of the OCL strain has arisen from longerterm claims. The main drivers are deteriorating rehabilitation performance in weekly compensation, social rehabilitation care hours being higher than expected, and higher spending on large social rehabilitation capital items.

Major milestones were delivered for the ICIP tools in 2019/20. These laid the foundations for responses to performance issues with these longer-term claims. Injury prevention also has a role to play in preventing or reducing the severity of claims with the potential to become long term.

The operational emphasis has been on measuring short-term performance. An appropriate balance is needed to ensure long-term performance is maintained.

Because of this, we recommend that ACC Operations increase its focus on claims that are or have the potential to become longer term. This should start with a focus on outcomes for claims receiving:

- weekly compensation
- social rehabilitation care and capital.

[Responsibility: Chief Operating Officer]

Despite the investment in injury prevention and the ICIP, we've seen significant strain emerging for multiple claim types and over several years. In 2019/20 an external review failed to identify the root causes of growth in the volume of weekly compensation claims. This suggests issues may be of a systemic nature.

Recent messaging from senior management has emphasised the need to improve performance through delivering the right client outcomes. Two recommendations made in recent Financial Condition Reports aim to address possible systemic issues:

- Strategic outcomes framework open
- Claims management closed this year.

ACC should consider other possible drivers of a systemic issue with claims performance. It might be helpful to trial some responses to these to see what might be effective in improving client and financial outcomes.

We've closed two recommendations this year

This year we're closing two of our previous recommendations. These were both first raised in the 2016 FCR, and it has taken several years for the organisation to respond.

One of the recommendations we're closing relates to reviews by clients of decisions made. The actions taken in the past year have resulted in better results, particularly in decisions on elective surgery.

The other relates to establishing a formal regime for claims management. In 2019/20 ACC adopted a health outcomes framework, and this, alongside the development of other tools, has allowed us to close this recommendation. Executive summary

Two recommendations from last year's report are closing this year and the other three are progressing

In our 2019 report we included five recommendations. Owing to the Scheme's long-term nature, we expect that many of these recommendations will require longer than a year to resolve.

We closed two of the recommendations in 2019/20. Three remain open and continue as recommendations in this year's report, with further work needed.

Recommendations remaining open

Strategic outcomes framework

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]

Progress update:

The Health Outcomes Framework (HOFW) is central to ACC being able to understand client outcomes and improve value. It defines what ACC wants to achieve through investment in injury prevention, care, and rehabilitation services at an organisational level.

This work will provide the basis for the development of a broader organisational customer outcomes framework. The anticipated completion date of the scope and roadmap for this framework is December 2020.

Our response:

Work to address this recommendation is progressing well with the initial work on the HOFW. The scoping of the broader customer outcomes framework should indicate a timeframe for completion. If focus and momentum are maintained, this recommendation should close in 2021.

Status: Recommendation remains open

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 and Chief Governance Officer]

Progress update:

There have been examples of positive changes made by district health boards (DHBs) based on the publication of treatment injury data to incentivise performance improvements in treatment safety. Further changes to Risk of Harm reporting are being made to include trend and aggregate reporting. Advice on financial incentives was provided in November, with responding actions under consideration.

Our response:

This recommendation was first raised in the 2017 report. Since then, for various reasons, progress has been limited. We need to see evidence of what an incentives framework could look like and how it could be implemented before we can close this recommendation.

We have some doubts about ACC's ability to engage appropriately with the health sector (primarily DHBs) on this due to the COVID-19 response.

It's important to acknowledge that this is a substantial and complex piece of work, but we expect the response to the November advice to move this work forward.

Status: Recommendation remains open

Injury prevention

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 Operating Officer]

Progress update:

Existing measures and targets were reviewed to establish how well they aligned with the intent of the Injury Prevention Strategy. Measures that didn't align with the intended direction were identified and terms of reference were drafted to guide the development of a framework for measuring the impacts of longer-term strategic investments. The aim is to have new metrics and targets finalised by 31 March 2021. These measures will initially be internal with a view to adding them to the Service Agreement once they've been properly established and tested.

Our response:

This recommendation was first raised in the 2016 FCR. Progress has been slow, and we're pleased to see a plan now in place to close out the recommendation.

We can close this recommendation once we see new measures and targets finalised.

Status: Recommendation remains open

Recommendations closed

Review of cases and decisions

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]

Progress update:

A survey of client reviews in May 2020 was beneficial in helping the business understand generally why clients seek reviews and why the decisions go in favour of the clients. In response to the survey results, the business is working on a series of initiatives to reduce the number of clients needing to apply for reviews. This includes providing training for clinicians, implementing a feedback process to improve the quality and clarity of decision-making and using analytics to help predict review outcomes. Previous recommendations

Clients who've lodged reviews will be surveyed fortnightly from the end of 2020. The survey will reach clients at different stages of the review process, not just those who've received decisions. A cross-functional group will develop a plan for reviewing the insights gained from the surveys, recommending responses to the insights and monitoring the effectiveness of those responses.

Work has also been undertaken to look at adverse review findings of cases with clinical components. Actions taken in response include reviewing the quality of decisions and putting in place feedback loops involving multiple teams – to share insights based on review decision documents. Training opportunities have also been identified to improve hearing performance, along with ways to work together better in advance of review hearings to maximise the quality and clarity of ACC's case.

As a result, surgical review success rates increased by 10% to 87% in ACC's favour in quarter three of 2019/20. This will be expanded to cover entitlements and weekly compensation, which after surgery decisions are the two biggest drivers of reviews. The analysis of cover review outcomes will lead to training for relevant parts of the business, expected to be delivered from December 2020 to February 2021. Given that the review cycle typically takes four to six months from lodgement to the issue of a decision, ACC expects to see any meaningful impacts emerge in the middle of 2021.

Our response:

This recommendation was first raised in the 2016 FCR and was redefined in a later FCR.

The business has made good progress in the past six months, on understanding why a client goes to review and why a review decision goes in favour of the client. There are some good initiatives underway in this area, particularly work on elective surgery reviews and the positive results we're seeing from it.

We're satisfied that a process for understanding the drivers of reviews and acting on insights gained from analysing review outcomes has been formalised and embedded in normal work practices.

Status: Recommendation is closed

Claims management

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]

Progress update:

The recently endorsed HOFW can be used to make decisions on the prioritisation of different work programmes, to engage with various stakeholders, and as a tool to ensure a consistent approach to evaluation. This allows ACC to measure the collective impact of its work and ensure that everyone is working together to achieve common goals.

Three specific practical use cases showing the status of ACC's work in implementing this recommendation follow.

- A draft 'user guide' has been developed to support the delivery/embedding of the HOFW. Escalated Care Pathways is one example of how it can be applied in practice. The value and outcomes sought from this programme can be mapped to the framework, and the impact of this investment is being measured, monitored and reported on each month. The impact includes financial benefits, client outcomes and experience, and system equity measures.
- 2. Work is underway on defining ACC's outcomes methodology through the Health Agile Release Train (H-ART) project. The task is to define what client outcomes mean for ACC and how they will be measured. The work has been broken down into three areas to progress:
 - a. Develop a conceptual framework/approach that resolves the HOFW, NGCM and Whāia Te Tika in a way that supports the HSS commissioning for outcomes approach, by identifying client cohorts with discrete and measurable outcomes.
 - b. Test and validate the framework against a real-life client cohort (e.g. physiotherapist-led basic rehabilitation).
 - c. Develop a roadmap that outlines future framework development, enabling system changes and delivery for other client cohorts.

The H-ART programme increment underway will deliver minimum viable product artefacts for each of these three areas, with a subsequent programme increment likely to be required to socialise, refine and finalise these artefacts.

3. An updated service assessment and evaluation tool has been aligned with the HOFW and is being used to review ACC's Artificial Limb service contract. Evidence for the assessment is gathered from reviewing service schedules, service design documents, pricing and procurement plans, guidelines, and external frameworks like the New Zealand Disability Strategy and New Zealand's Māori Health Strategy, He Korowai Oranga. The relevant portfolio team/advisor is engaged after the assessment is complete, to consider the findings and determine if they align with how they see the service and the future direction. This approach will continue to be refined and used for future service reviews.

Our response:

This recommendation was first raised in the 2016 FCR.

We're satisfied that the plans in place for measuring and monitoring changes in operational, financial and client outcomes will provide the ability to assess whether the changes are delivering improved outcomes.

It's important that these plans are implemented effectively. We'll be monitoring it and will comment, as needed, in future FCRs.

Status: Recommendation is closed

Previous recommendations

Many factors shape how ACC works and its financial condition

The Accident Compensation Act sets ACC's obligations and ACC is guided by the principles of Te Tiriti o Waitangi

ACC is the Crown entity set up by the Accident Compensation Act 2001 (the AC Act) to administer the Scheme. 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. Prevent injuries or reduce the seriousness of injuries that 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.

ACC is guided by the three principles of New Zealand's founding document, Te Tiriti o Waitangi: partnership, participation and protection. The organisation is committed to supporting the Crown in honouring these principles. This includes addressing inequities and delivering culturally appropriate services with the aim of making meaningful differences in the lives of Māori.

Injury prevention is an important part of the Scheme

"Injury arising from accident demands an attack on three fronts. The most important is obviously prevention. Next in importance is the obligation to rehabilitate the injured. Thirdly, there is the duty to compensate them for their losses."

- Sir Owen Woodhouse in the 1967 Royal Commission report

Injury prevention has been an important part of the Scheme since the AC Act was passed in 1972. IP is an effort to reduce or prevent the occurrence of, or the severity, of an 'accident' as defined in the AC Act. ACC invests in injury prevention activities through levies, and Government appropriations for the Non-Earners' Account, only if they're likely to result in cost-effective reductions in levies or appropriations, through reduced claim costs. The Government can also allocate money to ACC for injury prevention.

The Scheme supports injured New Zealanders

Every year around one-third of New Zealanders are injured and lodge claims with ACC. About 90% of injuries are minor; people only need simple medical treatment and recover quickly. At the other extreme, a few hundred people every year are seriously 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.

New Zealanders provide the funds for this support

Claims for injuries are assigned to one of five Accounts based on where, or how, each injury occurred. Levies or appropriations fund prevention, rehabilitation, support and compensation. The Accounts funded through levies (the 'levied Accounts') are the:

- Motor Vehicle Account, which is funded through vehicle licensing charges and a levy on petrol
- Earners' Account, with a levy charged as a percentage of salary collected as part of PAYE tax
- Work Account, which is funded through a levy charged to employers as a percentage of payroll and the self-employed as a percentage of taxable earnings.

The Non-Earners' Account is funded by taxpayers through Government appropriations. The Treatment Injury Account is funded through appropriations and a portion of the Earners' levy.

Overall, for every \$1 of levy and appropriations collected, ACC expects to return \$0.90 to clients via claim payments.

The way ACC operates helps it to meet its obligations

ACC has a clear governance structure

As a Crown entity, ACC has a Board, appointed by the Minister for ACC. The Board delegates dayto-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) oversees ACC policy and the New Zealand 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 2020.

An effective risk culture helps ACC to deliver the right outcomes for clients, levy payers and taxpayers

ACC's risk appetite is set by the Board. ACC's Enterprise Risk function has an important role to play in embedding risk management maturity and helping ensure the organisation is operating within the agreed limits. 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. If risks are well managed, the Scheme is in a strong position to fulfil its purpose, withstand shocks and endure into the future.

Further details about the framework, the highestpriority enterprise risks, and treatment plans can be found in **Appendix B**.

ACC invests in injury prevention to lessen the impact of injury and reduce the funding needed

The Board developed and endorsed a refreshed Injury Prevention Strategy in May 2018. The aim is to invest \$1 billion in injury prevention, with expected future claim benefits of up to \$2.4 billion in a 10-year period.

Historically ACC has designed programmes to prevent particular types of injury. The strategy aims to shift the focus towards people and how their injury risks change in their lifetimes.

ACC partners with many organisations to deliver injury prevention programmes, including:

WorkSafe, Sport New Zealand, St John New Zealand, Waka Kotahi NZ Transport Agency, the Ministry of Health, central government, local councils and iwi. It's also a member agency of a cross-government joint venture to focus on reducing family and sexual violence. How ACC works

ACC's support for injured New Zealanders is flexible depending on needs

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 rehabilitated, ACC aims to provide ongoing support to allow them to be as independent as possible.

ACC claims are lodged directly by general practitioners (GPs) and other treatment providers such as physiotherapists and chiropractors. The vast majority of these claims require only a few treatments. In these cases, ACC's only involvement is to make payments for the medical services provided. And it's generally the same for clients who present to public hospitals during the acute phase. Unless further support from ACC is required, the cost of treating these injuries is covered by a consolidated payment that ACC makes to the Crown.

However, some injured people require access to a wider range of treatment services or weekly compensation. In these situations, they're assessed and assigned to one of four recovery teams: Enabled, Assisted, Supported or Partnered (see **Appendix A.6**). Clients may transition between the teams depending on the level of support they require.

Clients needing support for longer have more impact on ACC's financial condition

The types of support presenting the greatest ongoing financial risks to Scheme fairness and sustainability are:

- social rehabilitation, such as aids and appliances, childcare and home help. These supports are often provided for clients' lifetimes. Small changes in amounts provided have significant impacts on the claim liabilities, levies and appropriation
- weekly compensation changes in the duration of weekly compensation provided can have big impacts on the OCL, particularly for longerterm claims
- sensitive claim volume and cost growth increasing awareness of the support available for clients with sensitive claims 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.

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

Clients who are dissatisfied with ACC's cover or entitlement decisions can ask for a review.

Reviews can be lodged against any decision ACC makes on a claim. This may include the initial decision on cover, a decision on certain treatments or a decision around a specific entitlement. This means that more than one review can be lodged for an individual claim. The biggest proportions of review applications relate to decisions to cover and decisions to approve elective surgery.

Before involving an external party, ACC reviews a claim for which a review request has been lodged. Around a third of all review requests are resolved at this review. If issues can't be resolved between ACC and the clients, ACC funds three independent companies to review the decisions.

In addition to funding mediation and dispute resolution, ACC started funding a navigation service in September 2019. Through this service clients can receive independent advice, help in lodging complaints and help in preparing for review hearings.

The funding ACC needs from New Zealanders is determined in a fair and transparent way

ACC recommends levies and appropriations in line with the Government's funding policies and consults widely. The funding policy for the levied Accounts was updated this year and gazetted in July 2020 (Funding Policy Statement in Relation to the Funding of ACC's Levied Accounts). The funding policy for the appropriation was updated at the same time. See **Appendix A.4** for details.

There are two main components to the funding:

Firstly, the **new year claim costs** represent the lifetime cost of ACC rehabilitating and supporting people injured during the year. New year costs are influenced by economic changes, frequency and severity of claims, expense forecasts and exposure

changes. See **Appendix A.3** for detail on how exposure is modelled for each Account.

Secondly, the **funding adjustment** ensures there's enough money to pay for the ongoing cost of past claims, while not over-collecting funds. The funding adjustment for each Account is calculated to move the funding position to target over a period prescribed in the funding policies, usually 10 years. The funding adjustment is influenced by the same factors as the new year costs.

Expected future claim benefits from planned injury prevention programmes and the delivery of the Integrated Change Investment Portfolio (ICIP) are deducted from these amounts.

The increase in the recommended levy or appropriation is then capped at 15%² for the levied Accounts and 7.5% for the appropriations.

ACC consults businesses, communities and individuals on recommended levies, and the drivers and assumptions behind them. The Board then reviews the feedback and recommends levy rates to the Minister for ACC.

The final levy rates and appropriations are set by Cabinet.

ACC's funding position is a key measure of the Scheme's sustainability

Private insurers are legally required to have enough funds to meet minimum solvency requirements set by the Reserve Bank of New Zealand. But ACC is different. It's a statutory monopoly with the right to raise levies and is therefore not subject to the same minimum solvency requirements. So, instead of discussing regulatory solvency, as a private insurer would, we consider the funding position of each of the Accounts compared to funding targets set by Government.

ACC is not a profit-making body. It collects levies and receives Government appropriations. ACC invests to meet the costs of claims and expenses. Over time all levy and investment income must be spent on:

- paying claims, or
- administering the Scheme, or
- preventing injuries.

Movements upwards or downwards in net assets are not the same as profit or loss. We refer to these movements as 'surplus' and 'deficit' instead.

Each of ACC's five Accounts has a target funding position set through its funding policy. In simple terms, a funding position is the amount of 'assets' (mainly investments) each Account has available to cover the 'liabilities' (the OCL).

If the funding position of an Account is above or below its target, its funding policy outlines the pathway required to return the Account towards its target through changes in levies and appropriations. 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. This change in levies and appropriations to allow for underfunding or overfunding is made using the funding adjustment. If a funding target is met, it means sufficient

funds are being collected to cover the lifetime costs of claims as they occur.

Full funding means the assets held to cover claims liabilities are equal to those liabilities.

When the Accounts are not at target it means either that previous levy payers and taxpayers paid too much or that future funders will need to subsidise the shortfall. We expect each Account to have volatility around the target given the nature of the Scheme. However, if Accounts remain significantly over- or underfunded for too long, it can become difficult to bring the Accounts back to target. This could lead to problems with intergenerational equity as the Scheme moves away from the principles of full funding.

Therefore, managing towards targets helps ensure that the Scheme remains fair and sustainable. Looking at changes in the funding positions and the reasons for these changes is one of the key ways we can assess the Scheme's financial condition. How ACC works

² The Motor Vehicle Account is capped at 15% plus inflation.

Changes in how ACC operates affect its financial condition

ACC has invested to improve how it operates, including initiatives aimed at delivering improved access, customer outcomes and experience.

Defining, measuring and delivering improved outcomes for customers remain a priority

The AC Act directs ACC to rehabilitate with the goal of achieving "an appropriate quality of life through the provision of entitlements that restores to the maximum practicable extent a claimant's health, independence, and participation". It also states that individual rehabilitation plans must be updated to include the outcomes that would be achieved through the provision of particular social rehabilitation treatments.

When ACC manages support effectively, everyone benefits – clients through faster rehabilitation and improved independence, and levy payers and taxpayers through lower funding requirements. Defining expected outcomes and knowing what works (and what doesn't work) to achieve these outcomes plays an important role in managing ACC's financial condition to support a fair and sustainable Scheme.

The Health Outcomes Framework (HOFW) was formally endorsed in August 2020 after extensive engagement with both internal and external stakeholders. The HOFW is central to ACC being able to understand client outcomes and improve value. The HOFW defines what ACC wants to achieve through investment in injury prevention, care, and rehabilitation services at an organisational level. The HOFW supports ACC's ability to:

- understand and improve the value of the healthcare and injury prevention interventions that ACC funds/commissions
- reduce inequalities in health by highlighting unwarranted variation in access, care, experience and outcomes
- transition to an outcomes-based approach to commissioning care and rehabilitation services
- maximise the coordination and collective impact of the organisation's work in health.

This work will provide the basis for the development of a broader customer outcomes framework. The anticipated completion date for the scope and roadmap for this framework is December 2020.

It's important that the Scheme is accessible to everyone

An accessible Scheme is one where:

- people can access injury prevention that helps them have fewer, or less severe, injuries
- injured people can easily get ACC's support at the right time and in the right way to achieve rehabilitation outcomes and receive compensation where appropriate.

ACC can only properly fulfil its purpose if people entitled to its services can access them in the right way and at the right time. Improved access can result in higher overall Scheme costs in the short term as more people are supported by ACC. There should be longer-term client and financial benefits if ACC reaches people earlier and can improve longterm rehabilitation outcomes.

ACC's Engagement Strategy is intended to help break down access barriers to the Scheme. Its aim is to support better health outcomes and improve awareness of, trust in and confidence in the organisation by:

- reinforcing ACC's vision and mission
- enhancing public knowledge of its role and services
- creating relevance and gaining the public's respect for its role and value
- forming a trusted partnership between ACC and New Zealanders.

The key measures set by the Engagement Strategy to monitor progress are Public Knowledge of ACC and Public Trust and Confidence. Other measures are a reduced lapsed time between accident and claim and the number of visitors to the new online Newsroom on *acc.co.nz*.

Whāia Te Tika aims to improve Scheme access and outcomes for Māori

There's increasing recognition throughout the public sector that existing systems haven't served Māori well. As a result, there are growing expectations by the public for improved equity and for choice around kaupapa Māori services. Whāia Te Tika is ACC's strategy aimed at delivering improved outcomes for Māori and honouring Te Tiriti o Waitangi principles. Translated into English, Whāia Te Tika means 'pursue what is right'. The strategy aims to deliver culturally appropriate, evidence-based, cost-effective services to and with Māori by focusing on five key areas:

- Improving access for Māori to services: Disparities and barriers are reduced, such that Māori can get the right services at the right time.
- Preventing injuries for Māori: Injury prevention initiatives recognise and actively target the risks faced by Māori.
- 3. Improving rehabilitation outcomes for Māori: Improve outcomes for Māori together with all segments of the population.
- Building trust and confidence by Māori: Engage and partner with Māori in service design and delivery. Māori clients experience services in culturally sensitive ways.
- 5. Building cultural capability: Build a culturally diverse workforce and leadership.

Like other initiatives, Whāia Te Tika will have associated costs in the short term. It's likely that if access to the Scheme improves for Māori, claim costs will go up. It's also possible that the costs of delivering kaupapa Māori services will be different from the costs of existing services. In addition, it may not be solely Māori clients who choose this type of service once it's available. These are all appropriate, as long as the increased spend is delivering the right outcomes.

ACC is part of a joint venture committed to responding to family and sexual violence in New Zealand

ACC is one of 10 government agencies involved in the Joint Venture for Family Violence and Sexual Violence. The joint venture response aims to reduce the impact of family and sexual violence and focus collective efforts where they can make the biggest difference.

The services ACC provides for victims of family and sexual violence are intended to:

- reduce harm
- improve people's wellbeing
- be Te Tiriti based
- ensure equity in access and outcome
- be trusted and valued.

ACC is developing an integrated approach to enable prevention and intervention responses across Government. These are intended to better support outcomes for clients, whānau and communities.

ACC continues its transformation to deliver better customer experiences and outcomes

Since 2014 ACC has been transforming to deliver better customer experiences and outcomes. Change is being delivered through the ICIP. The ICIP encompasses a large range of initiatives that aim to:

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

The three main projects delivering claim cost benefits under the ICIP are the Health Sector Strategy (HSS), Next Generation Case Management (NGCM) and Business Analytics. Detail on these projects, their progress, and expected claim cost benefits are on **pages 70 to 72** of this report, as well as **Appendix A**. How ACC works

Changes to the environment in which ACC operates also affect its financial condition

In addition to changes in ACC's internal operations, there are factors outside of ACC's control that affect its financial condition. Some of these factors have the potential to affect ACC's financial condition significantly.

Changing economic conditions add uncertainty to ACC's financial condition

Movements in key economic factors such as inflation, interest rates and investment returns affect the funding position of each Account. For example, when interest rates fall, the OCL increases.

In an ideal world, ACC would invest its funds selectively to ensure asset and liability values would respond similarly to economic stresses and mostly offset each other. And at a high level, the objective of ACC's asset allocation strategy is to manage investment asset returns against OCL risks. But in practice it's not possible to invest Scheme assets to match claims liabilities closely. That's because some clients have injuries so severe that they require ACC support throughout their lives, and investments with maturities that are long enough to match those payment profiles aren't available in New Zealand.

So, a fall in interest rates will not be fully offset by an increase in investment asset values, reducing the funding position.

Changing economic conditions add uncertainty to the Scheme's financial condition in other ways too. For example, fewer employment opportunities in a weakened economy can make rehabilitation more challenging. Economic conditions can also influence the volumes and types of claims that are made and change the funding base. See **Appendix A.3** for detail on the funding base for each Account.

Large external events can also have an impact

Large events external to ACC can also affect the financial condition. We define large events as generally catastrophic incidents involving large numbers of high-cost claims with implications for claim behaviour, ACC's operations and the ability for New Zealanders to fund the Scheme. Reinsurance can be used as a means of protecting insurers from large claim risks. In 2017 scenario analysis was undertaken to assess the need for reinsurance as a way to reduce risk to ACC's funding position. The analysis considered the financial impact of various catastrophic events. Based on the findings of the report, the Board agreed reinsurance 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 claims for these events.

The Christchurch earthquakes, the volcanic eruption at Whakaari/White Island and the mosque terror attacks are recent examples of large events. While the impacts of these events on individuals were large, the financial impacts on ACC were not significant relative to other factors that routinely affect the Scheme.

Unless there is a significant change in Scheme circumstances, reinsurance should be reviewed again by 2022.

Large events are not always 'one-off' type incidents. They can also encompass more enduring situations. For example, climate change is an external event that may have longer-term effects on ACC's financial condition, through its impact on the global economy and general population health. Similarly, the COVID-19 pandemic had an immediate impact and its effects are likely to remain for some time.

ACC has taken steps to respond to climate change

In 2020 ACC released a climate change framework. This framework outlined ACC's commitment to "be proactive in leading New Zealand's commitment to net zero emissions by 2050, including supporting efforts to limit average temperature rise to less than 1.5 degrees above pre-industrial levels". It will be achieved through two main pathways:

- 1. **Corporate:** aiming for a 60% reduction in emissions by 2025³.
- 2. **Investments:** reducing the carbon intensity of the global equity portfolio by at least 50% by 2030 compared to 2019 levels. The expected investment return has not changed as a result of this.

To date, ACC has seen little direct impact on the Scheme as a result of climate change – although it is difficult to pinpoint past claims or costs specifically affected by climate change.

In the future, there is a risk climate change will have an impact on the financial condition of the Scheme. We expect the largest contributor of this to be the secondary effects of increasing demand for the health system resulting in increasing costs of medical care, or through disruption to economic conditions.

In 2020 analysis was undertaken to estimate the potential future impact of climate change to ACC in terms of claim costs:

• **Direct impact on claim costs:** This estimates a modest financial impact to new year claim costs as a result of changes to claim types and performance.

We estimate an increase of between \$100 million and \$400 million per year (an increase of between 3% and 10% of the current new year claim costs).

• Secondary impact: An increase in the demand for healthcare leading to pressure on supply of people and resources would likely result in an increase in health-related costs.

For each 1% increase in costs we expect to see an increase of \$40 million in new year claim costs and the total increase could 50% or more.

These impacts are of the same order as other large claim risks faced by the Scheme, and so should be manageable using existing mechanisms.

In the context of the recent effects of economic changes on the financial condition, climate change is no bigger a risk than other external events.

3 The scope of this has not yet been formally defined.

Since it began in late 2019, the worldwide COVID-19 pandemic has continued to bring significant losses of life and major economic disruptions globally.

The lockdowns and border restrictions as a result of COVID-19 significantly disrupted New Zealand businesses, and the uncertainty it has created has had major impacts on the economy. New Zealand officially entered a recession at the end of June 2020 and the impacts of the COVID-19 restrictions on the economy are expected to continue for some time. If there are further reductions to already low interest rates and investment returns, this will result in increases to the OCL and new year claim costs, and reductions in the funding position.

It's also possible that during a recession people's spending and behaviour may change and reduce the frequency of accidents, particularly for some sport-related injuries. In addition, while the borders remain closed, the number of claims for visitors to New Zealand should remain low, reducing the spend on these claims.

At the same time, if there is a substantial number of job losses following the COVID-19 restrictions this may affect rehabilitation outcomes. It may also increase the number of non-earners and corresponding claims, putting additional funding pressure on the Non-Earners' Account.

During the COVID-19 lockdown many providers couldn't provide rehabilitation services face to face. ACC trialled the delivery of some rehabilitation services through telehealth. Work is ongoing to evaluate the future use of the telehealth service.

Clients with respiratory conditions or compromised immunity were unable to access group activities or schools during the COVID-19 lockdown, so they received extra in-home care. This was expected to be temporary, but pre-COVID-19 lockdown service levels have not yet resumed. It's important to frequently assess client needs in order to deliver the appropriate amount of care.

The financial impacts of these behavioural changes on the five Accounts are hard to predict, with multiple drivers operating in opposite directions. For example, while there were fewer new weekly compensation claim lodgements during the lockdown periods, it also took longer to rehabilitate clients. **Pages 40 to 55** of this report provides more detail on how the COVID-19 restrictions affected claim registrations and rehabilitation performance. How ACC works

External policy changes can have implications for ACC's financial condition

Legislation and regulation changes and court decisions can lead to changes in the injuries that are covered, the treatment services that are offered, how ACC delivers those services and/or the costs involved. Such changes can affect both the Scheme's financial condition and outcomes for clients. Recent events that have affected ACC's financial condition have included:

- Community Services Card: In 2018 the Government increased ACC's contribution to GP visits for people a with Community Services Card. This is estimated to cost \$13 million per year for non-earners
- **pay equity:** The Care and Support Worker (Pay Equity) Settlement Act was enacted in 2017 to address pay equity issues for home-based-care, aged-care and disability workers. It provided for a significant increase in the rates of pay for these workers. The legislation came into effect on 1 July 2017, resulting in annual increases in care rates through to 1 July 2021. These changes resulted in an OCL increase of \$482 million.

Court cases can affect the cover ACC provides

Clients sometimes challenge decisions in court. This is particularly the case in situations where the AC Act can be interpreted in different ways. The court process and resulting decisions provide clarity and certainty on the cover and support that ACC can provide.

For example, in the 2019 FCR we reported that ACC was appealing a High Court decision regarding the circumstances in which an injury should be regarded as an ordinary consequence of medical treatment. ACC won its appeal to the Court of Appeal on 7 July 2020. This means ACC didn't need to change the way it decides which treatment injuries are covered.

Two court cases that were before the courts in 2019/20 could have financial implications for ACC. Details of these are in **Appendix A.g**.

The Government's Health and Disability System Review may change how ACC operates in the future

A review of the New Zealand health and disability system took place in 2018. The objective was to identify ways to improve the system's performance, structure and sustainability in order to:

- achieve better health and wellbeing outcomes for all
- improve health outcomes of Māori
- improve health outcomes of other population groups
- reduce barriers to access to health and disability services
- improve the quality, effectiveness and efficiency of the health and disability system, including institutional, funding and governance arrangements.

The results of the review, published in March 2020, included recommended structural changes to various health sector agencies. These were intended to strengthen national leadership and accountability in public health. Under the proposed model the system under which ACC operates could look fundamentally different. ACC is considering the results of the review and what they may mean for supporting injured clients to return to work or independence in the future. Once the Government has responded to the recommendations, ACC will provide further comment on potential operational implications.

How ACC works

ACC's financial condition has deteriorated

ACC's funding position is a good indicator of the financial condition of the Scheme. When the financial position is near target, ACC is in a good position to:

- invest in injury prevention
- provide the right rehabilitation and compensation to injured people
- operate at a cost that's fair and sustainable for the people who fund the Scheme levy payers and taxpayers.

Throughout this report, results are stated on a basis consistent with how ACC is funded, representing true economic costs to the Scheme. This means that in some cases figures differ from those in the Annual Report 2020, which are prepared on the required accounting basis, and exclude work-related gradual process claims incurred but not reported (IBNR) but include the asset and liability for the Accredited Employers Programme, the unexpired risk liability and the OCL risk margin. For a reconciliation between these presentations, see **Appendix E**.

The funding position of each Account reduced during 2019/20

During 2019/20 ACC's funding policy for the levied Accounts was updated. The change made the target funding ratio for the levied Accounts consistent with the fully funded portion of the Non-Earners' Account. The target funding ratio for all Accounts is now 100%. This means each Account should aim to hold net assets equal to the OCL excluding the risk margin.

The **risk margin** allows for uncertainty in the estimate of the OCL and is required under the accounting standards.

Both the Non-Earners' Account and the Non-Earners' portion of the Treatment Injury Account have pre-2001 claim liabilities funded under pay-as-you-go (PAYG). The funding targets for PAYG claims are effectively 0%, as claim payments are only met in the years they occur.

Applying the updated funding policy, the funding positions for all the levied Accounts at 30 June 2019 were above target. However, the funding positions for the Non-Earners' Account and the Non-Earners' portion of the Treatment Injury Account remained significantly below target. Table 2 restates the funding positions at 30 June 2019 (excluding the PAYG portion), under the new funding policy.

Funding ratio 30 June 2019	Motor Vehicle Account	Non-Earners' Account	Earners' Account	Work Account	Treatment Injury Account – Earners' portion	Treatment Injury Account – Non-Earners' portion
New funding policy	106.7%	68.0%	111.9%	118.7%	165.4%	69.4%
Old funding policy	93.8%	68.0%	100.2%	105.7%	145.3%	69.4%

TABLE 2 – ACC ACCOUNTS' FUNDING RATIOS AT 30 JUNE 2019 UNDER NEW FUNDING POLICY

The funding ratios for all Accounts have reduced in 2019/20, but the levied Accounts are above target

Table 3 shows the past three years' funding ratios based on the new funding policy for all Accounts. It shows the overall funding position reduced by 7.5% in the year to 30 June 2020 and 24% in the previous two years.

Because levies and appropriations have been set below the expected lifetime cost of new claims, the overall funding position was expected to reduce by 2.5% based on the June 2019 OCL valuation. When levies were last set in 2018, all three levied Accounts were over their funding targets. This means levies were set lower than the expected lifetime cost of new claims to reduce the surplus in each Account and move closer to the target funding positions. For the non-levied Accounts, the approved appropriation was lower than the expected lifetime cost of new claims as well, despite the funding position being below target.

Higher than expected claim payments during 2019/20, due to the deteriorating rehabilitation performance, resulted in an OCL strain. The higher payments and OCL strain together reduced the overall funding position by 0.9%. This was partially offset by higher than expected levy revenue and fewer new claims due to the lockdown. The overall funding position reduced by 0.2% due to increased claim volumes and costs.

The fall in interest rates during the year led to a significant increase in the OCL. It also contributed to higher than expected investment returns due to unrealised revaluation gains for bonds, which partially offset the increase in the OCL. In addition, the asset mix was changed over the year toward equities, which have a higher expected return. This further offset the reduction in the funding position. The net impact of these items resulted in a 4.6% reduction in the total funding position.

These are discussed in more detail later in this report.

TABLE 3 - FUNDING POSITIONS IN PAST THREE YEARS UNDER NEW FUNDING POLICY

	As at 30 June				
	2018	2019	2020	Target	
Motor Vehicle Account	127%	107%	100%	100%	•
Non-Earners' Account	49%	41%	37%		
Fully funded portion	86%	68%	59%	100%	• • • •
Earners' Account	131%	112%	102%	100%	•
Work Account	131%	119%	111%	100%	••
Treatment Injury Account	90%	75%	66%		
Earners' portion	166%	165%	145%	100%	••
Non-Earners' fully funded portion	92%	69%	61%	100%	•
Total	108%	91%	84%		

ACC recorded a \$4.8 billion deficit in 2019/20

Deficits were recorded across all Accounts for 2019/20, totalling \$4,809 million.

New year claim costs have increased and are now much higher than when the levy rates and appropriations were determined. The total deficit from new year claims was \$1,810 million across the levied and non-levied Accounts.

This includes an expected deficit of \$1,297 million. \$717 million is due to levies and appropriations being set below new year costs and \$580 million is due to different assumptions being used to calculate the OCL from those used to calculate levies and appropriations.

In addition, the actual cost of new year claims has increased, due to movements in economic assumptions in the 2019 valuation, as well as changes in other assumptions to reflect worsening claims trends in both 2019 and 2020 valuations. This contributed another \$513 million deficit.

Detailed analysis, including the tables for underwriting results, can be found in Appendix E.

If Scheme performance doesn't improve, we expect the future funding position of the Scheme to reduce

We forecast the Scheme will return a deficit in each of the next four years. This is discussed further on **page 61** and in **Appendix G**.

The levy rates for the 2020 to 2022 years were set when the levied Accounts were overfunded and have been rolled forward for one year longer than the usual levy rate window. In addition, the prescribed levy rates have also been lower than those ACC consulted on.

Funding positions from 2023 have been forecast assuming levies and appropriations will increase according to the funding policy. Increases in future years are limited by a cap, so the existing gap between new year claim costs and levy income will take several years to reduce for the Motor Vehicle Account.

Table 4 shows the corresponding forecast funding position. This is presented both by Account and in total.

TABLE 4 - FORECAST FUNDING POSITION

		As at levy/financial year end ⁴					
	30 June 2020	2021	2022	2023	2024	Target	
Motor Vehicle Account	100%	98%	97%	95%	95%	100%	••
Non-Earners' Account	37%	39%	41%	43%	46%		
Fully funded portion	59%	59%	60%	62%	64%	100%	• • • • • •
Earners' Account	102%	99%	95%	94%	94%	100%	
Work Account	111%	110%	109%	109%	108%	100%	• • • • • • • • •
Treatment Injury Account	66%	65%	65%	65%	65%		
Earners' portion	145%	140%	134%	129%	124%	100%	•••
Non-Earners' fully funded portion	61%	61%	61%	62%	63%	100%	• • • • •
Total	84%	85%	84%	83%	84%		

If the increases do not occur, future funding positions will be lower. For example, the Motor Vehicle Account funding position is expected to be 93% in June 2024 if levies remain flat, compared to 95% in Table 4. The Non-Earners' Account is expected to be 56% in June 2024 if the appropriation remains flat, compared to 64%.

Our forecasts are sensitive to changes in economic conditions and claim behaviour

There are several key factors that drive changes in the funding position, 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 5 shows how a 1% move in interest rates could change the OCL, the investment portfolio and the funding position, as at 30 June 2020. It also shows how changes in major claim risks could change the OCL and the resulting change in the funding ratio.

⁴ For the Work and Earners' Accounts, and the Earners' portion of the Treatment Injury Account the levy year ends 31 March. For all other Accounts the levy/financial year end is 30 June.

TABLE 5 - SENSITIVITY OF FUNDING POSITION

	Change in OCL (\$M)		Change in assets (\$M)		Change in funding ratio (%)	
	+1%	-1%	+1%	-1%	+1%	-1%
Interest/discount rates	-10,305	14,485	-2,534	2,842	13.6	-13.3
Inflation rate	14,302	-10,411	-	_	-17.2	19.5
Weekly compensation continuance rates	1,287	-1,069	_	-	-1.9	1.7
Sensitive claims continuance rate	869	-659	-	_	1.7	1.0
Serious injury social rehabilitation superimposed inflation	5,179	-3,771	-	_	-7.2	6.1
Elective surgery superimposed inflation	1,260	-897	-	-	-1.9	1.4
Medical and care for non-serious injury superimposed inflation	821	-605	-	-	-1.2	0.9
Elective surgery active claims	1,849	-1,204	_	-	-2.7	1.9

The post-COVID-19 environment will result in more uncertainty around claim costs and economic conditions, which will lead to more uncertainty in the funding position.

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 \$7,771 million increase in net assets. The overall funding ratio would increase by 13.6% to 97.2%. On the other hand, a 1% fall in interest rates would reduce net assets by \$11,643 million and the overall funding ratio would fall by 13.3% to 70.3%.

At lower interest rates, the sensitivities to changes are significantly higher. The interest rates at 30 June 2020 were historically low, so a 1% change in the rates would cause large changes in the OCL and the assets.

After economic assumptions, a 1% increase in superimposed inflation for serious injury social rehabilitation would create the largest OCL increase. If this happened, investment assets wouldn't change, and the overall funding ratio would fall by 7.2%.

Changes in the OCL, the assets, and therefore the funding position have implications for the levies and appropriations. We discuss the sensitivities to the same factors for levy rates and appropriations on *pages 62 and 63*.

To understand how the uncertainty of these assumptions impacts the future funding position, we've simulated pathways using variations in the above assumptions. Full results of these can be found in **Appendix G**.

Superimposed inflation is the increase in average claim costs greater than normal (economic) inflation. It is common to observe a level of superimposed inflation in health care and medical services.

Financial condition

Injury prevention has met most targets, but benefits need to grow significantly to achieve strategic goals

Since 2014 injury prevention has had a period of building programmes and achieving a return on that investment. Annual investment in injury prevention has increased from \$30 million in 2013/14 to \$102 million in 2019/20. Aggregate return on investment has improved from \$1.20 to \$1.80 over this period.

The Injury Prevention Strategy implemented in 2018 has split the programme into five portfolios – targeted investments, strategic investments, treatment safety, workplace investments and Māori investments.

The way ACC estimates the effectiveness of injury prevention programmes is through return on investment (ROI), the rate of serious injury and the number of injuries prevented.

The ROI is how much ACC expects to receive back in claim benefits for the investment it's making. Injury prevention ROIs are a mixture of:

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

This year ACC had a target of receiving \$1.80 for every \$1 invested. From next year this target has been split into programmes of less than 20 years' duration (which includes targeted, treatment safety and Māori investments), workplace programmes and strategic programmes (longer-term programmes). The measure for serious and fatal injuries has been changed. Up to June 2020 the rate was calculated as all serious and fatal injuries in New Zealand per 100,000 claims. From June 2020 this has been refined to the number of serious and fatal claims in the areas in which ACC has injury prevention programmes per New Zealand population. New targets are being developed for the strategic portfolio, which has no ROI target yet. We would expect that the work underway to respond to our injury prevention recommendation (*see page 13*) will result in a target ROI being set for this portfolio.

TABLE 6 – INJURY PREVENTION RESULTS

		2018/19	2019/20	2020/21	2021/22
Return on investment					
Target pre-June 2020					
Overall ROI	Target	\$1.80	\$1.80	n/a	n/a
	Achieved	\$1.81	\$1.80		
Targets post June 2020					
Less than 20-year programmes	Target	n/a	n/a	\$2.05	\$2.08
	Achieved	\$2.11	\$1.99		
Workplace programmes	Target	n/a	n/a	\$1.30	\$1.37
	Achieved	\$1.63	\$1.23		
Rate of fatal and serious injury					
Target pre-June 2020 – rate per 100,000 claims					
Overall rate	Target	n/a	80.1		
	Achieved	81.2	84.7		
Targets post June 2020 – rate per population of NZ					
Less than 20-year programmes	Target	n/a	n/a	9.3	9.1
	Achieved	8.9	9.3		
Workplace programmes	Target	n/a	n/a	0.2	0.2
	Achieved	0.35	0.16		
Number of injuries prevented					
	Target	11,000	12,100	13,310	14,461
	Achieved	12,253	15,547		

Injury prevention

During the COVID-19 lockdown people were unable to do many of the activities that result in injury. This meant that most estimated claim benefits in quarter four, between 1 April 2020 and 30 June 2020, were not the result of injury prevention and could not be included in the ROI. Despite this, the ROI and number of injuries prevented targets were met.

For fatal and serious injuries, there's a six-month delay in evaluating the rate, so both the target and the actual are on a calendar year basis. This means the 2019/20 fatal and serious injury results in Table 6 don't include any impact from the COVID-19 lockdown. The rate of fatal and serious injuries didn't meet its target. This was the result of higher than expected fatal claims for older adult falls throughout the 2019 year. There was an improvement in the rate in the second half of the year from a reduction in road fatalities, but this was not enough to achieve the year-end target.

There has been an increase in the proportion of estates claiming for fatal injuries for older adults who may not have claimed in the past. Many of these will be the result of a fall. A comparison with University of Otago historical data (up to 2016) suggests we've only been receiving claims for approximately two-thirds of potential claims. It also shows the rate of fatalities per 100,000 population is decreasing, which suggests an improving injury landscape. Therefore, this trend may not reflect an increased level of injury harm, but a greater awareness and claiming for injury-related entitlements. ACC is undertaking further monitoring to verify this result so appropriate action can be determined.

Most of the injury prevention benefits are still in the future

During 2019/20 ACC saved \$40 million worth of claims. The benefits were impacted by COVID-19 lockdown, meaning most of the June 2020 quarter results were not included. The number of injuries prevented in 2019/20 was well ahead of target (15,547 vs 12,100), despite also not using most of the June 2020 quarter results. However, the value of the injuries prevented in 2019/20 was below what was expected (\$40 million vs \$65 million). This is a result of the type of injuries prevented having a lower than average value. The sports programmes saved a significant number of claims this year, particularly for younger ages (which have a lower than average claim cost). The number of fall claims prevented was well below the target at the start of the year (these have a larger than average claim cost).

In 2019/20 ACC invested \$102.5 million in injury prevention (including a one-off investment of \$25.4 million on the firearms buy-back). The planned investment was \$120 million. \$71.6 million of this investment was for programmes currently in delivery; \$30.9 million was for programmes in development.

In general, investment occurs at the beginning of a programme's lifespan, while benefits occur over a longer period. As the portfolio matures, we expect to see more of the benefits achieved and the gap between benefits saved and investments made reduce. At 30 June 2020 most of the expected claim benefits from injury prevention are still in the future and the gap between investment and benefits saved has been increasing for the last three years.

Achieving an ROI is important, and this is being done through the increasing benefits expected in the future, while the portfolio is expanding. However, it is important to see some tangible benefits coming through.

The return on investment over 2019/20 has largely been in line with expectation, with a few exceptions

ACC has 91 injury prevention programmes in development or delivery split over five investment portfolios. Approximately half of these programmes are in delivery and half are in development. Investments and claim benefits are broken down into past and future-projected periods. All costs for programmes that stop before they have reached their planned end are included in the respective portfolios and overall ROIs, including any that don't reach delivery.

		Year ending 30 June 2019			Year ended 30 June 2020			l.		
Portfolio	Past	:	Project	ed	ROI	Past		Projected		ROI
	Investment	Benefit	Investment	Benefit	Total	Investment	Benefit	Investment	Benefit	Total
Targeted investments	158.5	176.2	20.7	207.6	\$2.14	216.2	243.9	34.9	259.0	\$2.00
Strategic investments	60.8	0.9	1.2	8.1	\$0.15	116.0	6.1	0.1	94.8	\$0.87
Treatment safety investments	23.9	0.0	15.4	128.3	\$3.26	37.8	0.0	5.5	154.4	\$3.57
Māori investments	1.4	0.0	0.0	0.0	\$0.00	1.8	0.0	0.0	0.0	\$0.00
Workplace investments	30.4	21.0	33.6	83.4	\$1.63	48.8	32.9	29.4	89.6	\$1.57
	275.1	198.2	70.9	427.4	\$1.81	420.6	282.9	70.0	597.9	\$1.80

TABLE 7 – INJURY PREVENTION PORTFOLIO RETURN ON INVESTMENT FOR ALL PROGRAMMES IN DELIVERY AS AT 30 JUNE 2020

Following is some commentary on the main items contributing to the movement in the overall ROI in 2019/20. See **Appendix A.8** for more detail on each portfolio.

Targeted investments portfolio

Targeted investments target specific injuries. These tend to be short-to medium-term core investments that should provide a consistent return on investment. The ROI for targeted investments has reduced from \$2.14 to \$2.00 over 2019/20.

There are a number of core, long-term, well-performing programmes

ACC has several long-term, well-performing sports programmes including rugby union, netball and touch, and has reinvested in all these programmes this year. The ROI on rugby union dropped with the reinvestment, with the new investment providing a lower ROI (but still well above the targeted ROI). The combined lifetime investment in these three programmes is \$37.1 million and the ROI has reduced from \$3.88 to \$3.45 over 2019/20.

As part of the National Road Safety Committee, ACC is the lead agency for motorcycle safety and young driver safety. These two areas alone account for 40% of claim costs from road accidents, from only 2% of road users. ACC's programmes in both these areas have outperformed expectations since inception.

The Ride Forever programme is a comprehensive programme about staying safe on a motorcycle. Claim benefits have been higher than anticipated for over three years since inception. ACC increased the future expected claim benefits by \$7 million spread over the next seven years. The lifetime investment in this programme is \$42.3 million and the ROI has increased from \$2.00 to \$2.16 over 2019/20.

ACC's Drive programme with Waka Kotahi NZ Transport Agency helps young drivers build up their skills and confidence and gives them the knowledge to stay safe on the road. Estimated claim benefits have also been higher than anticipated for over three years since inception. ACC increased the future expected claim benefits by \$12 million spread over the next seven years. The lifetime investment in this programme is \$31.7 million and the ROI has increased from \$2.51 to \$2.94 over 2019/20.

The Out of Context curves programme was responsible for altering the camber of roads to make them safer for motorcycles. The expected future claim benefits for this programme have now been determined as \$15.4 million.

Injury prevention

The Falls programme has not delivered claim benefits as expected

The Falls and Fractures 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 fall-related injuries by having local systems (such as GPs) identify those at risk and refer them to services before a fall occurs. ACC has invested \$43.5 million in this programme to 30 June 2020.

ACC pays around \$200 million per annum for fall-related claims in people over age 65. These claims make up a significant proportion of claims for that age group. It is important that ACC has a programme in this area.

In 2019/20 ACC determined that the expected claim benefits from this programme were not going to be achieved. The part of this programme delivered through the DHBs has had success in only a few DHBs to date. At the same time, financial pressure faced by the DHBs meant ACC had to continue to invest to sustain the present service levels. Over the year, ACC agreed to an additional investment of \$7.5 million and a reduction in the estimated future claim benefits of \$20.6 million. If no further investment had been made, the programme would not have been able to continue and most future benefits would have been lost. The lifetime investment in this programme is \$58.3 million and the ROI has reduced from \$1.76 to \$0.99 over 2019/20.

ACC must ensure that this programme is delivered successfully. After considering options, an approach has been determined to achieve this. ACC must monitor to make sure outcomes are being met and act in a timely manner if this does not occur.

Two sports programmes also had less claim benefit than expected

Rugby league and football performed below expectation this year. Following a review, the expected claim benefits for football have been halved for the next three years returning to original benefits after that. Rugby league performance is still under investigation so no adjustment to benefits has been made yet. The combined lifetime investment in these two programmes is \$17.4 million and the ROI has moved from \$2.46 to \$2.23 over 2019/20.

Strategic investment

These investments aim to create large-scale, longterm sustainable societal change in behaviours and environments. These sorts of programmes address broader societal issues than just claims to ACC. We haven't included any estimate of these wider benefits. The ROI for strategic investment has increased from \$0.15 to \$0.87.

The biggest movement in ROI from this portfolio has come from the introduction of the gun violence programme this year. Following the mosque attacks in Christchurch last year, the Government introduced a buy-back scheme to remove militarystyle semi-automatic firearms from circulation. This included an expected investment of \$40 million through injury prevention from ACC. The estimated claim benefits for firearm injuries in the next 20 years is \$70.5 million. The programme was less costly than anticipated, and the investment amount was reduced to \$25.4 million while the future claim benefits remained at \$70.5 million. The ROI on this programme is \$2.62.

There are several programmes in delivery that target family violence and abuse. Until this year there have been no estimated claim benefits included in the ROI as there is no methodology for valuing these programmes.

Mates & Dates is a programme for secondary school students. It teaches young people healthy relationship skills and behaviours to help prevent sexual and dating violence. In the short term ACC expects there may be an increase in claims as awareness and encouragement to address issues are raised. It's estimated to take 16 years on average for these claims to be reported. ACC has estimated claim benefits for this programme for the first time. The ROI on the programme is \$1.98.

Gandhi Nivas provides early intervention and prevention services for New Zealand men identified at risk of committing harm in the family home. This programme supports men to change their behaviour, reducing the likelihood of further family harm and increasing safety for their families. Work is underway to establish a way to calculate estimated claim benefits for this programme.

Treatment safety investments

These programmes aim to improve patient safety across the health system.

The neonatal encephalopathy (NE) programme aims to reduce the incidence and severity of NE claims by at least 10% by 2022. When NE, a major cause of brain trauma in newborn babies, is caused by treatment, ACC covers the injury for life. Because of the long-term nature of these injuries, the expected claim cost benefits to ACC from this programme are high. Claim benefits were adjusted upwards this year as a result of a reassessment of the average claim costs of these types of claims. The lifetime investment in this programme is \$6.6 million, with an ROI of \$13.10. This programme has the largest expected future claim benefits of all programmes in delivery and is expected to start producing benefits this year.

Workplace investments

These programmes reduce the incidence and severity of workplace injuries. The frequency of Work Account entitlement claims has increased since 2013 (refer **Appendix C.10**). This is despite recent increases in the public profile of workplace health and safety and ACC prevention investments.

Some programmes in the work portfolio are performing well in areas such as farming, construction and forestry. These have a combined lifetime investment of \$15.8 million and the ROI has increased from \$2.30 to \$2.60 over 2019/20.

Targeted financial incentives (TFI) has the third biggest expected claim benefits of all programmes in delivery. This programme aims to use non-levybased economic incentives to drive behaviour change. ACC is now accepting applications for grants or subsidies and is expecting to start delivering claim benefits next year. The lifetime investment in TFI is \$33 million, with an ROI of \$2.00.

ACC collaborates with WorkSafe on workplace injury prevention. Programmes delivered through WorkSafe have a lower target ROI of \$1.10. These programmes are planned to increase their target ROI to ACC's target by 2028. The WorkSafe programmes have no expected claim benefits yet as they are still in design. \$14.3 million was invested this year, bringing the total investment to \$29.3 million, which is a large investment for injury prevention.

It has become clear that planned benefits may not be delivered. A joint review of this programme's performance is underway to ensure all benefits are identified and corrective action agreed.

Máori investments

There are several prevention initiatives in design and delivery that aim to positively impact Māori and reduce their incidence of injury:

- Māori business: workplace-based initiatives.
- Tuārai: a wellbeing model that reframes injury prevention with Kaupapa Māori values and whose design and implementation of Tuārai were led by Tairāwhiti iwi providers.
- Tahi Ngātahi: reducing injuries in the shearing and wool growing industries.
- Māori Water Safety.
- Whānau Ora: programme supporting at risk whanau, averting an intervention from Oranga Tamariki and ACC.

ACC partners with Te Puni Kōkiri, Oranga Tamariki and iwi to design and deliver the programmes. These programmes are relatively new, and don't have benefits in the ROI yet.

Injury prevention needs to deliver planned benefits to reduce pressure on the Scheme

The Injury Prevention Strategy is aiming to invest \$1 billion to achieve future claim benefits of up to \$2.4 billion over the next 10 years. The programmes now in delivery have expected claim benefits over the next 10 years of \$600 million. There will have to be significant expansion of these programmes and new programme development to get to the desired claim benefits target.

Five injury prevention programmes are expected to deliver half the expected future claim benefits

Table 8 shows the expected future claim benefits and the status of five injury prevention programmes. These programmes make up half of all expected future claim benefits feeding into the June 2020 ROI. **Injury prevention**

IP programme	Future claim benefits (\$M)	Percentage of total future benefits	Delivery status
Neonatal	87	14%	Not returned any benefits yet
Gun violence	69	12%	Not returned any benefits yet
Targeted financial incentives	67	11%	Not returned any benefits yet
Falls and fractures	43	7%	Remedial action underway
Motorcycle rider training	36	6%	Performing well
Total	302	50%	

TABLE 8 - INJURY PREVENTION PROGRAMMES WITH THE TOP FIVE EXPECTED FUTURE CLAIM BENEFITS

Three of these programmes have not returned any benefits yet (so are unproven in terms of performance). They are expected to start returning benefits in the 2020/21 financial year.

It's particularly important that these programmes are monitored closely and early intervention occurs to correct any issues arising or to adjust expected future claim benefits if necessary.

TABLE 9 - TARGET RETURN ON INVESTMENT IN FALLS AND WORKSAFE PROGRAMMES

		Target ROI (\$)			
	2019/20	2020/21	2021/22	2022/23	
From 2019/20 Service Agreement	1.80	1.85	1.90	1.95	
Now	1.80	1.75	1.80	1.90	

The overall target ROI for the next four years has been reduced.

This is partially an allowance for the impacts of COVID-19 restrictions on delivery of injury prevention programmes and a recognition that the strategic portfolio programmes ROI measurements are still in development. We expect target returns for the strategic portfolio will be added as these are developed.

Injury prevention needs to keep growing to meet its strategic goals

The ambition of the Injury Prevention Strategy is to improve the quality of life for New Zealanders while ensuring the long-term sustainability of the Scheme for future generations. However, the Scheme is experiencing ongoing significant growth in claims liability. Injury prevention is an important mitigation for this, alongside improved rehabilitation performance.

The injury prevention portfolio is maturing. The majority of initiatives in delivery have incurred most of the costs needed to prevent injury, but most of the expected benefits are in the future. The gap between investment and benefits has been increasing in the past three years. The **IP portfolio** is expected to **deliver \$1.4 billion of net benefits** through claims prevention over the next 10 years. The **OCL strain** has been **\$3 billion** over the past six years.

As ACC's Injury Prevention Strategy is implemented, investment is expected to increase. ACC must deliver benefits already planned from existing investments. The issues that have arisen with benefit realisation on the Falls and the WorkSafe programmes highlight the need to set and monitor clear outcomes required when delivering programmes through a partnership.

The five portfolios listed above are key, as well as expansion through new channels and use of data to better target programmes.

An example of where ACC has started to do this is Injury Prevention to the Frontline (IP2FL). Now in development, this programme will deliver targeted injury prevention through digital/customer channels. The targeted audience is identified by analytical solutions. Once set up, ACC will be able to reuse the infrastructure to push targeted injury prevention directly through the frontline. The initial focus of IP2FL

is older adult falls and pressure injuries. This programme is having no impact on the ROI yet as it is still in development.

Existing programmes are expected to provide 25% of the future benefits from the IP strategy. Expansion of these programmes will contribute further to the future benefits. New programme development as proposed in the strategic plan will need to deliver the remainder of the expected benefit.

Injury prevention

Rehabilitation and compensation performance has continued to worsen over the year and ACC needs to manage this better

Claims performance was worse than expected

The total OCL strain in 2019/20 was \$154 million (\$134 million excluding risk margin) including a \$104 million release for incurred but not reported work-related gradual process claims.

When claim volumes or costs move above or below what is expected and we can link that movement to areas that management has at least partial control over, we consider that movement influenceable. If the movement is fully beyond the control of ACC management, the movement is considered noninfluenceable. This year's \$154 million OCL strain comprises \$593 million influenceable strain offset by \$439 million noninfluenceable release. This year's result brings the total influenceable strain over the six-year period (2015 to 2020) to almost \$3 billion.

When the OCL is increased because actual payments are higher than expected this is referred to as **OCL strain. OCL release** is when the OCL is reduced because payments are lower than expected.

This year's \$593 million OCL strain can be broken down into two main drivers that affect estimates of future claim volumes, types and costs:

- 1. Average cost of claims: Overall, the average amount paid per claim was higher than expected, resulting in a \$183 million OCL strain.
- 2. Active claims: Increases in the number of new claims and how long clients require assistance resulted in a \$410 million OCL strain.

The COVID-19 lockdown is a significant driver of the \$439 million OCL release. The June 2020 quarter coincided with New Zealand's national lockdown. Because movement was severely restricted during the period of lockdown, people's ability to do things that might cause injury reduced considerably. So, there was a significant reduction in new claim registrations during this time. And for some clients the lockdown meant delays in reporting and/or delays in receiving treatment for their injuries. This was reflected in the valuation resulting in an OCL release of \$394 million. If not for the pandemic, the total OCL strain for the 2019/20 financial year would have been \$548 million.

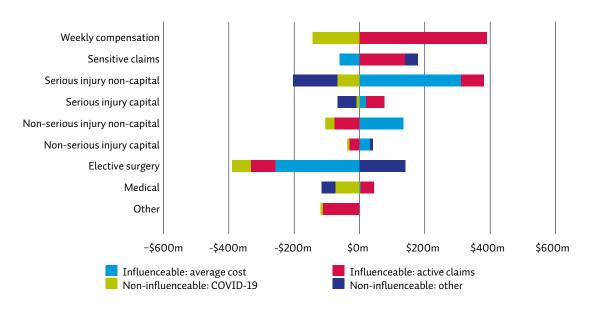
In addition to the COVID-19 lockdown, other significant drivers of the \$439 million OCL release included:

- changes in mortality assumptions for seriously injured clients (\$459 million release)
- increases to carer sleepover rates (\$266 million strain)
- improvements to models to help ensure a better and more accurate reflection of claims performance (\$148 million strain).

The impact of claims performance on OCL varied by claim payment type

Graph 1 shows how each of the four main drivers affected each claim payment type leading to the \$154 million total OCL strain.

GRAPH 1 - COMPOSITION OF THE 2019/20 OCL STRAIN BY CLAIM PAYMENT TYPE



Claims performance

Rehabilitation rates in weekly compensation have resulted in significant OCL strain

The OCL for weekly compensation at 30 June 2020 was \$13.5 billion. In 2019/20 the OCL strain for this payment type was \$248 million. In the previous five years to 30 June 2019, the strain was \$1.4 billion.

The breakdown for 2019/20 OCL is shown below:

Active claims: \$391 million OCL strain



Clients are remaining on the Scheme for longer than expected, resulting in higher than expected numbers of weekly compensation claims. The total strain due to deteriorating rehabilitation performance is \$484 million. The Earners' Account was particularly impacted. Higher than expected numbers of earners continuing to receive weekly compensation payments more than five years following their injury contributed \$133 million to the strain. The strain due to poorer rehabilitation performance was partially offset by a \$93 million OCL release due to lower than expected numbers of new claims from older accident years. This was particularly evident in the Work and Motor Vehicle Accounts.



Non-influenceable change: \$143 million OCL release

Low numbers of new claims in the June 2020 quarter were evident due to the COVID-19 national lockdown resulting in a \$143 million OCL release. This was particularly evident in the Work and Motor Vehicle Accounts.

Clients remaining on the Scheme for longer than expected has been evident over the past six years.

In 2019/20 New Zealand's return-to-work rate dropped to its lowest level in 18 years. Although a comparison with Australia for 2019/20 is not yet available, this year's result is lower than Australia's lowest rate for the 2003 to 2020 period (see **Appendix C.2**).

When claims receive 365 days of compensation (cumulative) they enter the long-term claims pool. In 2019/20 the growth of entries into this pool was 12.6% compared to a target of 6.2%. Deteriorating rehabilitation performance for short-term (less than one-year) claims means a greater potential for more entries to this pool in the future. This increases the risk of further OCL strain. That's because rehabilitation rates tend to fall the longer claims remain on the Scheme.

Work is underway to understand internal and external factors influencing the average number of weekly compensation days paid per claim. Until ACC has this understanding, curbing the growth in claim volumes will likely be difficult. Progress is needed to address the financial risk these claims pose for ACC.

The impact of the COVID-19 lockdown may result in higher unemployment in the short term and a reduction in new weekly compensation claims. But if an economic recession makes it harder for existing clients to return to work, this could be offset by further deterioration in rehabilitation rates.

Sensitive claims volume growth has continued in 2019/20

The OCL for sensitive claims at 30 June 2020 was \$5 billion. In 2019/20 the OCL strain for this payment type was \$118 million. In the previous five years to 30 June 2019, the strain was over \$1.1 billion.

The breakdown of the 2019/20 OCL strain is shown below:

Active claims: \$139 million OCL strain

Higher than expected numbers of new sensitive claims resulted in OCL strain of \$183 million. Growth in the number of new sensitive claims reported has been evident since the implementation of the Integrated Services for Sensitive Claims (ISSC) contract in November 2014. This strain has been partially offset by OCL release of \$44 million. The length of time clients from older accident periods remained on the Scheme has stabilised and was below expected.

Average cost of claims: \$61 million OCL release

Average payments have shown an upward trend since 2014. Lump-sum payments have had a particular impact. But these payments appear to have slowed in 2019/20 and average costs have stabilised, especially in the Earners' Account.

Non-influenceable changes: \$40 million OCL strain

A model assumption was reviewed and adjusted to allow for new claims to report 50+ years after an injury. This resulted in OCL strain of \$40 million. A high proportion of sensitive claims occur at home and it was assumed the COVID-19 lockdown would not reduce the underlying rate of incidents.

Uncertainty remains around the growth in sensitive claim costs and volumes that has been raised in previous FCRs. Last year the assumption for new claims growth was raised from 9% to 20%, yet higher than expected new claims growth was again evident in 2019/20. If growth for sensitive claims is greater than these assumed levels, this may result in future increases in the OCL.

Ongoing sensitive claims growth means capacity constraints are being felt across the service. This may delay the time it takes for clients with sensitive claims to receive the help they need, prolonging time to recover. Actions underway in relation to sensitive claims relate to supporting injured victims of sexual and violent crimes to receive more timely and targeted support. However, more is needed to ensure outcomes are being delivered. See **page 68** for our recommendations for sensitive claims.

Close proximity and anxiety as a result of lockdown and the pandemic have the potential to lead to a spike in injuries of a sensitive nature. But given the length of time it can take for some clients to seek help, ACC may not see this for some years.

Claims performance

Seriously injured clients received higher care hours than expected

The OCL for serious injury non-capital at 30 June 2020 was \$24.6 billion. In 2019/20 the OCL strain for this payment type was \$180 million. In the previous five years to 30 June 2019, the strain was \$581 million.

The breakdown of the 2019/20 OCL strain is shown below:

Active claims: \$70 million OCL strain

There were fewer new serious injuries in 2019/20 resulting in an OCL release of \$34 million. However, the severity of newly reported claims was higher than expected leading to strain of \$104 million.



Average cost of claims: \$313 million OCL strain

The average cost per serious injury non-capital claim is higher than expected, particularly for claims less than five years old. Higher than expected care hours and residential care payments is a key driver.



Non-influenceable changes: \$203 million OCL release

In 2019/20 the non-influenceable OCL change for serious injury non-capital was due to several factors. Mortality was different from expected and assumptions were updated (\$402 million release) and there were lower new claim numbers due to the COVID-19 lockdown (\$67 million release). This was offset by higher than expected contracted sleepover rates (\$266 million strain).

Higher than expected growth in care hours for established serious injury claims has been evident over several years. Due to the long-term nature of these claims, even small increases in the number of hours have the potential to make a significant impact on liability.

There has been a steady reduction in the achievement of independence outcomes for seriously injured clients over the past few years (see **Appendix C.4**). This is particularly concerning considering continued increases to both capital and non-capital expenditure over the past few years. Work is underway to look at how decisions for care and capital items are made and if the intended outcomes are being achieved. Progress is needed to ensure the support ACC is providing to these clients is appropriate.

ACC is in discussions with providers about bulk billing serious injury care. Under this approach providers would receive an aggregate amount based on the injury profile of their clients. The provider can then choose how best to deliver client services. This means less involvement by ACC in decision-making at an individual level and less visibility around how funds are being used. Controls will be needed to mitigate the risk of future care costs continuing to increase without improved client outcomes.

Capital costs for seriously injured clients were slightly higher than expected

The OCL for serious injury capital at 30 June 2020 was \$3.2 billion. In 2019/20 the OCL strain for this payment type was \$11 million. Growth in serious injury capital payments has occurred over the previous five years to 30 June 2019, with the strain totalling \$296 million.

The breakdown of the 2019/20 OCL strain is shown below:

- Active claims: \$58 million OCL strain Increased severity of newly reported serious injury claims was offset by lower than expected new claim volumes. The net impact is OCL strain of \$30 million. This has also resulted in increases to the incurred but not reported claim assumptions (\$28 million strain).
 - Average cost of claims: \$19 million OCL strain
- Higher projected capital costs in serious injury are associated with higher levels of care. Over
 the past year, seriously injured clients have received higher than expected numbers of care hours, leading to higher projections for future levels of care. As a result, the expected future cost of capital has also been increased for these clients.



Non-influenceable changes: \$66 million OCL release

In 2019/20 the total OCL change in serious injury capital due to factors considered noninfluenceable is primarily due to COVID-19 lockdown (\$9 million release) and mortality being different from expected (\$57 million release).

While the OCL strain this year is not large, it must be viewed in the context of continuing liability increases over the past few years. 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.

Work is underway to look at how decisions for capital items are made and if the intended outcomes are being achieved.

Claims performance

Non-serious injury non-capital payments were higher than expected

The OCL for non-serious injury non-capital at 30 June 2020 was \$1.5 billion. In 2019/20 the OCL strain for this payment type was \$32 million. Non-serious injury capital payments have been higher than expected over the previous five years to 30 June 2019, with a strain of \$242 million.

The breakdown of the 2019/20 OCL strain is shown below:

Active claims: \$75 million OCL release

There are two primary drivers of active claims release. In the Motor Vehicle Account, claims from older accident years are staying on the Scheme for less time than expected. Rehabilitation rates have been stable now for the past few years. So, assumptions were changed slightly to reflect this, resulting in an OCL release of \$33 million. In addition, numbers of new claims for older accident periods in the Work Account were lower than expected. This resulted in further release of \$57 million.

Average cost of claims: \$135 million OCL strain

Higher than expected average costs for non-serious injury non-capital claims, particularly for accidents before 2018, have resulted in OCL strain of \$135 million. The key drivers of this strain include:

- superimposed inflation for this payment type was higher than assumed
- backdated payments have increased average costs, particularly in the Motor Vehicle Account
- a larger number of claims are utilising more expensive services
- growth in training for independence programmes has continued

Non-influenceable changes: \$28 million OCL release

Fewer non-serious injury claims requiring care during the national lockdown period resulted in OCL release of \$28 million.

Training for independence payment growth has been significant in the past three years for non-seriously injured clients. In 2019/20 monitoring was implemented to help identify cohorts of clients contributing to the growth. Entry criteria and the suitability of the service for various cohorts along with outcome measures are being investigated.

Non-serious injury capital was largely as expected

The OCL for non-serious injury capital at 30 June 2020 was \$0.8 billion. In 2019/20 the OCL strain for this payment type was \$5 million. Non-serious injury capital payments, like serious injury, have grown significantly over the past five years to 30 June 2019, with OCL strain of \$260 million.

The breakdown of the 2019/20 OCL strain is shown below:

- Active claims: \$30 million OCL release
- Lower than expected numbers of non-serious injury capital claims, primarily in the Work Account, resulted in a \$30 million OCL release.
 - Average cost of claims: \$31 million OCL strain
- The average cost of claims for pre 2005 accidents was almost 20% higher than expected. However capital payments, especially for older accident years, can be irregular. So, assumptions increased to reflect some, but not all, of the higher than expected average costs.
 - Non-influenceable changes: \$4 million OCL strain
- Modelling changes were made to better reflect run off patterns. This resulted in OCL strain of \$11 million. The strain was partially offset by an OCL release of \$7 million due to fewer non-serious injury capital claims during the COVID-19 lockdown.

The work underway for serious injury capital will also cover capital decisions for non-serious injuries.

The average cost of elective surgery claims was lower than expected, resulting in OCL release

The OCL for elective surgery at 30 June 2020 was \$4.9 billion. In 2019/20 the OCL release for this payment type was \$250 million. Over the previous five years to 30 June 2019, average payments were lower than expected and resulted in an OCL release of more than \$1 billion.

The breakdown of the 2019/20 OCL strain is shown below:



Active claims: \$74 million OCL release Fewer new claims, particularly for the 2020 accident year, were evident in 2019/20.



Average cost of claims: \$257 million OCL release

In 2019/20 actual superimposed inflation across all accident periods was, on average, 3%. For accidents within the past year, the rate was higher at 4.5%, but for accidents that occurred more than a year ago, it was much lower at 1.5%. As the average cost of claims relating to older accidents has a greater OCL impact, superimposed inflation assumption changes resulted in a substantial OCL release.



Non-influenceable changes: \$81 million OCL strain

The rate of elective surgery claims for accidents before 1992, tends to be higher than for accidents post 1992. This year, the models were altered to account for this effect resulting in OCL strain of \$140 million. However, this was partially offset by OCL release of \$59 million due to a significant drop in new elective surgery claim volumes during the period of lockdown.

Actual volumes of elective surgery claims have been lower than expected for the past three years. Based on historical experience, when some surgeries stop being performed, other surgeries eventually take their place, keeping claim numbers relatively consistent. There is a risk that future trends in surgeries, through either technological advancement or changes to treatments, may result in an increase in the number or cost of surgeries.

As lockdown restrictions eased during the month of June 2020, elective surgery claim volumes showed signs of returning to pre-COVID-19 restriction levels. However, it's possible that some surgeries may be deferred to a later date as a result of a post-lockdown backlog. This could cause a deterioration in rehabilitation performance and potentially an increase in future weekly compensation payments.

The national lockdown was a key driver of OCL release in medical claims

The OCL for medical claims at 30 June 2020 was \$2.8 billion. In 2019/20 the OCL release for this payment type was \$71 million. In the previous five years to 30 June 2019, the release was \$414 million.

The breakdown of the 2019/20 OCL strain is shown below:

Active claims: \$42 million OCL strain Key drivers of the change in OCL due to active claims are as follows:

- In the other-medical payment type, claims are staying on the Scheme for longer but fewer new claims for older accident periods were reported. The net impact is OCL strain of \$18 million.
- More imaging claims relating to older accident periods were evident over the year in the Earners' and Non-Earners' Accounts. The models were increased to reflect this resulting in OCL strain of \$15 million.
- The policy change made in March 2018 to allow for extended physiotherapy treatments continues to have an impact. This year it has resulted in OCL strain of \$10 million.

Average cost of claims: \$3 million OCL strain

The average cost of general practitioner claims for accidents older than two years increased in the March 2019 quarter and is the main driver of strain.



Non-influenceable changes: \$116 million OCL release

There were two key drivers of the non-influenceable OCL change. A reduced number of medical claims during the national lockdown period resulted in a \$73 million OCL release. Claims before 1992 have a higher average cost than those in 1993 and after. Modelling changes were made to better reflect this and resulted in a release of \$43 million.

In general, medical claims tend to be short term in nature and do not tend to have a large impact on the OCL. But they can put significant pressure on the funding of the Scheme due to the volume of claims paid.

The lockdown resulted in a significant drop in new claim volumes due to temporary provider closures, reductions in new claims and clients not presenting for treatment. It's possible there may be a delay in the presentation of injuries and therefore slower rehabilitation, or some injuries normally requiring treatment may resolve without requiring treatment.

During lockdown people relied on telehealth consultations more extensively. This service is being investigated to see if it should be implemented on a more permanent basis, where clinically appropriate. This technology could improve access to the Scheme or reduce the need for travel in some circumstances. The outcomes this service delivers will need to be monitored.

A change in physiotherapy contracts in March 2018 extended the minimum number of treatments to 50 and removed the one-year limit for treatments. As a result, 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. This resulted in strain last year (\$17 million) and again this year (\$10 million). The size of the strain is large in the context of the \$105 million OCL for physiotherapy.

Assumption changes relating to incurred but not reported work related gradual process claims have led to OCL release

The OCL for all other payment types at 30 June 2020 was \$7 billion. The payments include vocational rehabilitation, independence allowance, lump sums, hearing loss, asbestosis, and claims handling expenses. These payment types contributed to a release in 2019/20 of \$119 million.

The breakdown of the 2019/20 OCL strain is shown below:



re-aiding.

Active claims: \$111 million OCL release This is primarily driven by the \$104 million OCL release relating to incurred but not reported work-related gradual process claims. Asbestosis exposure is better controlled than it was in the past and the number of asbestos claims reported in the future is expected to reduce. This is half of release. The remainder is due to hearing loss clients remaining on the Scheme for less time than expected. Clients are also requiring less support between the initial aiding and the first

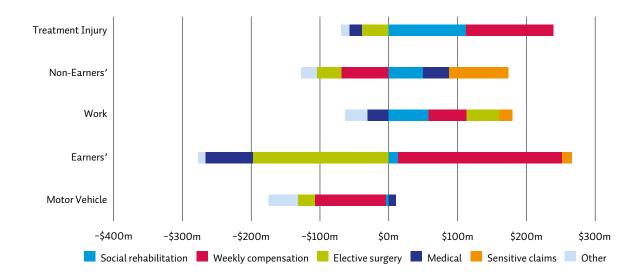
Non-influenceable changes: \$8 million release
 Fewer claims during the national lockdown period resulted in OCL release of \$8 million.

Claims performance

In 2019/20 the Motor Vehicle Account was the only one to produce a sizeable OCL release

Graph 2 shows the \$154 million total OCL strain by Account and main payment type.

GRAPH 2 - COMPOSITION OF THE 2019/20 OCL STRAIN BY ACCOUNT



OCL strain in the Treatment Injury Account is split between social rehabilitation and weekly compensation

For the Non-Earners' portion of the Treatment Injury Account, clients from older accident periods are receiving loss of potential earnings (LOPE) for longer than projected. Increases in the cost of care hours for seriously injured clients resulted in social rehabilitation strain.

The Earners' portion of the Treatment Injury Account had higher than expected numbers of new claims and people remaining on the Scheme for longer than expected, resulting in a strain for weekly compensation.

Lower volumes of new claims due to COVID-19 restrictions resulted in an OCL reduction of \$47 million. The largest reductions were in social rehabilitation care, weekly compensation and elective surgery.

The total Account OCL change in the Treatment Injury Account is \$169 million OCL strain.

Sensitive claims have continued to affect the Non-Earners' Account in 2019/20

Sensitive claims continue to be a key cause of strain in the Non-Earners' Account. In addition, increases to incurred but not reported claim assumptions in serious injury and higher care rates have resulted in Non-Earners' Account OCL strain this year. There is some offset largely driven by lower than expected numbers of clients receiving loss of potential earning payments.

During lockdown club sports couldn't take place and there were far fewer injuries to children. Lower volumes of new claims due to COVID-19 restrictions resulted in an OCL reduction of \$52 million. The largest reductions were in social rehabilitation care, elective surgery and medical payments.

Total OCL strain in the Non-Earners' Account is \$45 million.

In the Work Account most of the main payment types contribute to the \$116 million OCL strain

The changes in serious injury mortality assumptions, deteriorating rehabilitation in weekly compensation and higher than expected numbers of new elective surgery claims for older accident periods have all resulted in strain in the Work Account.

There is a small offset due to OCL release for medical claims and also the 'Other' category. The release in medical claims is primarily due to lower than expected numbers of new claims relating to older accident periods. The OCL release in 'Other' is due to a reduction in work related gradual process incurred but not reported (IBNR) assumptions. This is due to a reduction in the number of asbestos claims expected to be reported in the future and fewer additional services being required for hearing loss claims.

During lockdown many workplaces shut or had employees working from home and this was a significant reason for lower volumes of new claims. The OCL reduction due to COVID-19 restrictions was \$67 million, with the largest reductions for weekly compensation and elective surgery.

Higher volumes of weekly compensation claims have had a major impact in the Earners' Account

OCL strain driven by rehabilitation in weekly compensation resulted in significant strain in the Earners' Account. This was offset by release largely due to lower than expected average elective surgery costs. The modelling changes for medical claims have also had an impact in the Earners' Account.

During lockdown less sport was played and this was a significant driver of the lower volumes of new claims in the Earners' Account. The OCL reduction due to the COVID-19 lockdown for the Earners' Account was \$154 million with the largest reductions in weekly compensation, elective surgery and medical payments. Overall, there was a small OCL release of \$13 million in the Earners' Account.

The Motor Vehicle Account is the only Account to experience a sizeable OCL release.

The Motor Vehicle Account has experienced OCL release of \$164 million. Lower than expected numbers of new weekly compensation claims for accidents that occurred more than five years ago had an impact. Also contributing to the release were changes to mortality assumptions in serious injury.

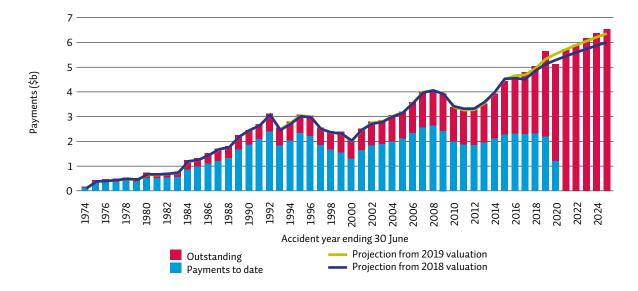
During lockdown there was a significant reduction in the volume of traffic, which resulted in lower claim volumes. The OCL reduction due to COVID-19 restrictions for the Motor Vehicle Account was \$73 million, with the largest reductions coming from social rehabilitation care and weekly compensation.

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

Graph 3 shows the projected total cost of all claims by accident year. It compares the incurred cost from the 2020 valuation with projections from the previous two valuations. These costs are expressed in 2020 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).

Claims performance GRAPH 3 - INCURRED COST BY ACCIDENT YEAR



The expected total incurred cost in 2019/20 for claims before 2015/16 is below the 2018 and 2019 projections. For claims between 2015/16 and 2018/19, the current expected total incurred cost is higher than previously expected. Recent claims are undeveloped, meaning we know less about their behaviour and they're more affected by assumption changes. Deteriorating rehabilitation rates in weekly compensation, higher than expected average costs for seriously injured clients and higher than expected numbers of newly reported sensitive claims are key drivers of the increase.

The incurred costs for the 2019 accident year have increased significantly compared to the projection from the 2019 valuation. The 2019 accident year saw a higher than expected number of new serious injury claims reported in 2019/20, which generally have a large OCL. Poor performance in serious injury and weekly compensation claims led to changes in the valuation assumptions and increases in the OCL, particularly for 2019 accident year claims.

The 2020 accident year claim performance was similar, but there weren't as many new serious injury claims. This, along with the OCL release due to COVID-19 lockdown, meant that the incurred costs for the 2020 accident year was much lower than the projection from the 2019 valuation.

For future years, the external actuary (see **Appendix D.3**) has assumed that the recent levels of growth in incurred costs will continue. We note, however, that, there is significant uncertainty surrounding the pandemic and the economic conditions and the true incurred cost for these periods may be materially different.

Claims performance is negatively impacting ACC's financial condition

Claims performance over the last six years has resulted in a \$3 billion OCL strain. Table 10 shows that the largest contributors of this strain have been weekly compensation, sensitive claims, and social rehabilitation non-capital payments.

OCL strain (\$M)	Influenceable	Non-influenceable	Other	Total
Social rehabilitation non-capital	1,309	(275)		1,034
Social rehabilitation capital	596	(23)		573
Weekly compensation	1,470	129		1,599
Sensitive claims	1,131	130		1,261
Elective surgery and medical	(1,644)	(106)		(1,750)
Other*	(7)	(8)	157	142
Total	2,855	(153)	157	2,859

TABLE 10 - CONTRIBUTORS OF OCL STRAIN OVER THE LAST SIX YEARS

*Other includes a number of smaller payment types and the claims handling expenses.

The OCL strain has a direct effect on the funding position. The claims performance also flows into the expected new year claim costs. If the Scheme is to remain sustainable into the future, claims performance must improve.

ACC has improved its handling and understanding of client reviews

At the beginning of 2019/20 ACC had made changes to improve the review process and increase access and services for clients wishing to dispute ACC decisions:

- Two new resolution providers joined existing provider Fairway Resolution Ltd.
- An ACC-funded navigation service was started to provide clients with independent advice on the support ACC provides and the review process.
- The timeframe was extended for review specialists to consider the appropriateness of ACC's decision before a review must be passed to a resolution provider. This has increased the number of reviews resolved before going to formal hearings.

Work has also been done to understand the reasons why clients generally seek a review and why some decisions go in favour of the client. Regular surveys of clients seeking review and looking at adverse review findings involving cases with a clinical component are described on **page 18**.

Table 11 shows that 8,641 reviews were lodged during 2019/20, which was 8.1% of decline decisions. In the same year 9,543 reviews were completed. Some of these completed reviews were lodged the previous year, with the resolution process taking up to several months.

12% of reviews were lodged by Māori clients.

Māori clients lodged reviews on <7% of decline decisions issued to them.

11% of reviews lodged by Māori completed in 2020 were found in the client's favour.

Although the differences between Māori and non-Māori are small, they've been consistent over the last seven years. Claims performance

TABLE 11 - REVIEW LODGEMENTS AND OUTCOMES

	Year ending 30 June						
	2014	2015	2016	2017	2018	2019	2020
Number of reviews lodged	6,970	6,514	6,534	7,228	7,582	8,082	8,641
% of decline decisions	7.3%	6.8%	7.0%	7.2%	7.0%	7.2%	8.1%
Number of reviews completed	6,955	6,874	6,398	6,446	7,806	8,378	9,543
Number withdrawn or settled	2,850	2,892	2,893	2,799	3,457	4,192	5,798
% withdrawn or settled	41%	42%	45%	43%	44%	50%	61%
Number found in favour of clients	1,068	1,084	1,003	1,156	1,424	1,464	1,216
% found in favour of clients	15%	16%	16%	18%	18%	17%	13%

The number of reviews lodged as a proportion of decline decisions has increased in 2019/20. It may be that the new navigation service has contributed to this increase. While this information is not yet available, we expect the regular surveys being conducted to provide insight into any appropriate actions that can be taken to reduce the need for clients to seek review.

Results for 2019/20 on review outcomes indicate that the work ACC has done is making a difference. While the number of reviews lodged increased in 2019/20, the proportion withdrawn or settled without requiring an external third party increased to 61% from 50% the previous year. Reviews found in favour of clients is at its lowest since 2014 at 13%, down from 17% the previous year.

Similar results were seen in 2019/20 for elective surgery reviews, which made up just under a quarter of all reviews lodged in 2019/20. This is a decline in the number of reviews during the period from 2014 to 2018, when reviews of elective surgery decisions were a third of all reviews. For elective surgery review outcomes, withdrawal and settlement volumes are up at about 55%, the highest they have been since 2014. Of reviews completed, the proportion found in favour of clients has likewise dropped from an average of 24% over the period from 2017 to 2019 to 18% in 2020.

Of elective surgery declines, close to a quarter (23%) still go to review. This is almost three times the overall proportion (8.1%) and about six times that for cover decisions (3.7%). The higher rate of elective surgery decisions going to review may be due to its higher cost. Relative to other treatments, it may be more difficult for people to cover these costs without support from ACC.

Claims performance

Future funding requirements are under pressure as the Scheme responds to a deteriorating financial condition

As described on **page 18**, the combination of the two funding components, new year costs and funding adjustment, gives an uncapped levy rate or appropriation. Pressure on (or improvements in) the new year costs and any increases (or decreases) in the funding position and the funding adjustment ultimately lead to increases (or decreases) in future levy rates.

In the long term, levies and appropriations are expected to increase as new year claim costs increase. In the short to medium term, this won'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.

Estimates for the next round of levies and appropriations increased during the year

ACC was due to consult on levy rates in 2020. However, because of the uncertainty caused by COVID-19 restrictions, Cabinet decided to roll over the levy rates for the 2021/22 levy year. The next opportunity to review levy rates is for the 2022/23 year. ACC plans to consult on this in 2021.

Table 12 shows the change in the indicative 2022/23 levy rates between those calculated using the June 2019 basis and the indicative rates calculated at June 2020. The uncapped levies at 30 June 2019 are calculated after the changes to the funding policy; therefore, the changes identified in the table do not include funding policy changes.

	Motor Vehicle \$	Earners' \$	Earners' portion of Treatment Injury \$	Work \$
2019/22 Prescribed levies	114	1.16	0.05	0.67
2022/23 indicative uncapped levies before ICIP and IP benefits as at 30 June 2019	194	1.41	0.08	0.75
New year cost				
New year cost on June 2019 basis	205	1.44	0.11	0.85
Change from:				
Claims frequency and severity	9	0.10	0.01	0.02
Discount rate/investment forecasts	10	0.02	0.00	0.02
Base inflation	(6)	(0.03)	(0.00)	(0.02)
Other	(1)	0.00	0.00	(0.01)
New year cost on June 2020 basis	217	1.53	0.12	0.86
Funding adjustment				
Funding adjustment on June 2019 basis	(12)	(0.03)	(0.04)	(0.10)
Change from:				
Claims frequency and severity	(4)	0.01	0.00	0.02
Discount rate/investment forecasts	44	0.06	0.01	0.08
Base inflation	(13)	(0.02)	(0.00)	(0.03)
Other	(22)	(0.00)	(0.01)	(0.06)
Funding adjustment on June 2020 basis	(7)	0.03	(0.04)	(0.10)
2022/23 indicative uncapped levies before ICIP and IP benefits as at 30 June 2020	210	1.55	0.08	0.76
Reduction due to ICIP and IP	(10)	(0.05)	(0.01)	(0.04)
Reduction due to capping	(67)	(0.17)	(0.02)	0.00
2022/23 indicative capped levies as at 30 June 2020	133	1.33	0.06	0.72

TABLE 12 - CHANGE IN INDICATIVE 2022/23 LEVY RATES FROM JUNE 2019 TO JUNE 2020

Note – rounding of totals means new year cost plus funding adjustment may not exactly equal the levies.

The indicative uncapped levy rates for 2022/23 are higher than previously estimated. For the Earners' and Motor Vehicle Accounts, which are expected to be below funding target in 2022/23, the estimated new year cost is higher than the indicative capped levies.

For the Non-Earners' Account, the Government approved \$1,755 million of funding in Budget 2020 to meet the expected new year costs of claims for the 2020/21 year. This was an increase of \$284 million (19%) from the 2019/20 approved funding. The Government also pre-approved increases of 7.5% in each of the following three years. For 2021/22 this results in a pre-approved appropriation of \$1,885 million.

Since the appropriation was calculated and approved, new year costs have continued to increase. Therefore, despite the 2019/20 increase and the subsequent 7.5% increase in 2020/21, the appropriation is now expected to be \$40 million less than new year costs. We expect that in 2022/23 the appropriation will be above new year costs unless there are further significant falls in interest rates.

Table 13 shows the change in the calculated 2021/22 Non-Earners' appropriation between the calculations in June 2019 and the calculations at June 2020.

Funding

TABLE 13 - CHANGE IN CALCULATIONS FOR 2021/22 NON-EARNERS' APPROPRIATION FRO	OM JUNE 2019
TO JUNE 2020	

	Non-Earners' Account only	Non-Earners' portion of Treatment Injury Account	Non-Earners' combined Accounts
Key drivers of appropriation	\$M	\$М	\$M
2021/22 Approved funding	1,640.5	244.7	1,885.3
Estimated 2021/22 appropriation before ICIP and IP benefit as at 30 June 2019	1,721.8	392.3	2,114.2
New year cost			
New year cost on June 2019 basis	1,574.3	290.6	1,864.9
Change from:			
Claims frequency and severity	104.3	(7.7)	96.5
Discount rate/ investment forecasts	11.6	23.7	35.3
Base inflation	(28.2)	(9.2)	(37.4)
Other	15.7	7.1	22.7
New year cost on June 2020 basis	1,677.6	304.5	1,982.0
Funding adjustment			
Funding adjustment on June 2019 basis	196.4	112.3	308.7
Change from:			
Claims frequency and severity	13.9	(8.0)	5.9
Discount rate/ investment forecasts	104.7	82.3	187.0
Base inflation	(28.6)	(17.5)	(46.1)
Other	12.3	13.1	25.4
Funding adjustment on June 2020 basis	298.7	182.1	480.8
Estimated 2021/22 uncapped appropriation before ICIP and IP benefit as at 30 June 2020	1,976.3	486.5	2,462.8
Reduction due to ICIP and IP	(44.8)	(9.9)	(54.6)
Reduction due to capping	(303.0)	(231.4)	(534.5)
Additional funding	11.6	0.0	11.6
Estimated 2021/22 capped appropriation as at 30 June 2020	1,640.0	245.2	1,885.3

Note - rounding of totals means new year cost plus funding adjustment may not exactly equal the appropriation.

Claims frequency and severity forecasts are putting pressure on funding requirements

Over the last two years we have seen up to a 7% increase in the cost of claims as a result of changes in claim frequency and severity; this varies by Account. This is a significant annual increase in the cost of claims in a one-year period.

For two Accounts, the changes in the frequency and severity of claims reduced the funding required for:

- the new year cost and funding adjustment for the Non-Earners' portion of the Treatment Injury Account. This was mainly the result of reductions in the severity of elective surgery claims and serious injury social rehabilitation claims
- the funding adjustment for the Motor Vehicle Account. This was due to lower than expected claim numbers for older accident periods, and fewer accidents during the COVID-19 lockdown.

Increases in costs from interest rates and investment forecasts have been partially offset by a change in the mix of assets

The net impact on levies and appropriations is lower than we would expect given the change in interest rates and investment forecasts. This is due to:

- interest rates falling by around 0.5% in the year ending 30 June 2020. These lower interest rates
 increase expected new year claim costs and reduce the funding position, which increases the funding
 adjustment
- lower investment returns weakening future funding positions through lower expected returns on assets, further increasing funding adjustments
- a change in the mix of assets partially offsetting this increase in costs. The allocation to equities, which have a higher expected return, but also higher risk, has increased for most Accounts. For example, the allocation to equities in the Earners' Account increased from 35.5% to 41%.

We expect a partial offset from inflation rates

Future expectations of inflation rates have decreased. This means the expected cost of claims will increase at a slower rate, reducing the overall expected new year claim costs and therefore the levy rates.

In general, this has a larger impact on longer-term claims. The Motor Vehicle Account has a higher proportion of longer-term claims than the other Accounts, so the impacts on the claim costs in this Account are higher.

Other factors also have an impact

There are four main components to this movement:

- 1. The difference in the actual starting asset balance compared to the balance projected the previous year.
- 2. Changes in operating expenses or their allocations.
- 3. Exposure.
- 4. Underfunding from the approved rates or appropriation in the previous year.

The largest driver of 'other' change is the change in asset balance for the levied Accounts, particularly the Motor Vehicle and Work Account, which reduces the funding adjustment and therefore the levy. The change in asset balance is mainly from higher than expected investment returns driven by falling interest rates. The change in asset balance reduces the funding adjustment by \$31 for the Motor Vehicle Account and \$0.07 for the Work Account. This reduction is offset by lower than expected income in 2021/22 as a result of rolling over the levy rate for the 2021/22 year.

The short-term impact of COVID-19 restrictions has resulted in a 7% increase in the number of non-earners between January 2020 and June 2020. Each additional non-earner increases the uncapped appropriation. This is the largest driver of 'other' increase for the Non-Earners' Account. Forecasts from the Treasury expect the numbers of non-earners to start slowly decreasing from the December 2020 quarter and continue decreasing until June 2023 as the economy recovers.

Expected IP and ICIP benefits reduce the estimates of levies and appropriations

ACC offsets the calculated levies and appropriations with the quantified financial impact of Injury Prevention (IP) and the Integrated Change Investment Portfolio (ICIP).

These activities are expected to reduce the calculated levies in the 2022/23 year by about \$157 million. The expected reduction to the Non-Earners' appropriation from IP and the ICIP is \$55 million for 2021/22.

Table 14 shows the expected reductions in levies and appropriations for each of the next five years.

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\$M	2020/21	2021/22	2022/23	2023/24	2024/25
Expected reduction from IP					
Levies	47.5	83.4	115.4	147.2	167.8
Appropriation	21.0	35.3	45.3	52.9	58.3
	68.5	118.7	160.7	200.1	226.1
Expected reduction from ICIP					
Levies	32.6	36.4	41.8	45.0	47.3
Appropriation	19.9	19.8	22.7	24.2	24.1
	52.6	56.2	64.4	69.4	71.4
Total reduction from IP and ICIP	121.1	174.9	225.1	269.4	297.5

TABLE 14 - EXPECTED REDUCTIONS IN LEVIES AND APPROPRIATIONS FROM IP AND THE ICIP

If these benefits are not realised, levies and appropriations will need to increase above the latest forecasts.

To date, the benefits expected through the ICIP response have not been delivered in line with expectations. While most of the ultimate end targets are expected to be reached, the pathway to achieving these targets has changed.

We forecast new year claim costs will continue to increase

New year claim costs represent the economic costs of claims and are the largest component of the required funding.

The difference between the prescribed levies and appropriation and the estimated new year cost of claims results in an underfunding of \$2.4 billion in the 2020/21 and 2021/22 years. This represents the true economic cost difference between levies and the new year claim costs. It differs from the amount presented in Table 15 mainly due to the discount rate used for future cash flows.

The estimated new year claim cost is expected to increase by up to 4% each year, depending on the Account; this is mainly due to inflationary impacts on claim costs and exposure increases.

This contributes to a forecast deficit in the next four years

We expect ACC to return large underwriting deficits for each of the next four years. The increases in new year costs, as well as the need to cap levy and appropriation increases in line with the funding policy, result in upward pressure on costs and a limit on the speed with which levies can respond to this pressure. The net result of this is an underwriting deficit.

The forecast underwriting results, and the total deficit, for the next four years are shown in Table 15.

TABLE 15 - PROJECTED DEFICIT

\$М	2020/21	2021/22	2022/23	2023/24
Surplus/(deficit) from underwriting activities	(2,529)	(2,434)	(2,065)	(1,713)
Total economic changes	1,202	1,224	1,191	1,135
Total surplus/(deficit)	(1,327)	(1,210)	(873)	(577)

The projected deficits assume that levies and appropriations increase in line with the funding policy. Despite these increases, we still expect to see significant deficits for the coming years.

There is some lack of clarity around how frequently the cap can apply, and the length of each levy cycle under the new funding policy. We have assumed that the cap applies annually over a three-year cycle.

If the 15% cap is confirmed to apply to the entire levy cycle, an expected deficit will endure for longer. For example, if the policy is approved with the 15% applying over a three-year cycle, we expect ACC will still be returning an underwriting deficit around \$2 billion in eight years' time.

The estimated 2020/21 underwriting deficit is higher than previously projected

For 2020/21 the projected underwriting deficit is \$2,529 million, \$135 million higher than the projection last year. The factors contributing to this deficit are shown in Table 16.

TABLE 16 - ANALYSIS OF PROJECTED UNDERWRITING DEFICIT

	\$М
Levy income lower than new year claim costs based on 30 June 2018 pricing	(595)
Higher expected costs for new year claims (30 June 2018 to 30 June 2020 valuation assumptions and interest rate movement)	(1,117)
Difference in assumptions between how levies/appropriations and OCL are determined	(817)
2020/21 projected underwriting deficit	(2,529)

The main component is higher new year claim costs. The 2019/21 rates were set below cost in 2018. These rates were then rolled over to 2021/22. When the levies were set, new year costs for 2020/21 were expected to be \$595 million higher than levies. Since 2018 the expected cost for new year claims has increased by an additional \$1,117 million – \$844 million from the levied Accounts and \$273 million from the non-levied Accounts. The total deficit from levies and appropriations being lower than the costs for new year claims is \$1,712 million.

The drivers of this underwriting deficit are discussed in more detail in Appendix E.7.

Forecast investment income partially offsets the expected deficit

The contribution from economic factors partially offsets the forecast underwriting deficit. We are forecasting an investment income of \$1,379 million for 2020/21. This is significantly higher than the expected increase in the OCL for prior-year claims, due to investment returns being higher than risk-free interest rates. The total contribution from economic factors for 2020/21 is a surplus of \$1,202 million.

The large total deficit for the Motor Vehicle Account is expected to remain for many years

The two largest contributors to the total deficit are the Earners' Account and the Motor Vehicle Account.

For the Earners' Account, the forecast deficits, including investment income, are projected to improve significantly over the next four years from around \$500 million in 2020/21 to \$100 million in 2023/24. The total deficit on the Motor Vehicle Account is expected to improve from \$300 million in 2020/21 to \$200 million in 2023/24. These projections assume the levies increase in line with the funding policy. The

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expected levy rate for Earners' Account in 2023/24 is 31% higher than the current prescribed rate. For the Motor Vehicle Account, the expected levy in 2023/24 is 36% higher.

The total deficit improves much faster for Earners' Account than for Motor Vehicle Account. This is partly due to the starting difference between the levy and new year cost for the Earners' Account being smaller than for the Motor Vehicle Account. The forecast investment returns for Earners' Account are also higher compared to Motor Vehicle Account due to a higher equity asset allocation.

The Motor Vehicle Account is the most sensitive to economic changes

Our indicative levies and appropriations are calculated using best estimate assumptions; this means they're equally likely to be too high or too low. Changes in any of these assumptions affect our forecasts, including the forecast level of funding.

Given the uncertainty in each of the assumptions, instead of there being one possible levy rate for each year there is a range of possible outcomes. To understand the possible variability in the levy rates and appropriations, we've simulated future funding pathways by varying the model assumptions shown in Table 17 and Table 18.

The key findings from the simulations are:

- For any given year between 2022 and 2025 there is around a 74% probability of Motor Vehicle levies hitting the cap. The uncapped levies for this Account display the most volatility of all the levied Accounts.
- There is an 87% chance that the levy for the Earners' Account (including the Earners' portion of the Treatment Injury Account) will be capped in the 2022/23 levy year. This reduces to 52% for the 2023/24 levy year.
- For any given year between 2022 and 2025 there is around a 40% probability of the levies for the Work Account being capped.
- We project that increases in the Non-Earners' Account appropriations will be capped for the next five years. There is a 10% probability that increases in the appropriations will be capped in 2029/30.

The full results, including charts, can be found in **Appendix G**.

Table 17 and Table 18 show 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 are calculated independently of each other.

TABLE 17 - SENSITIVITY OF LEVY RATES

Impact on levy rates (\$)	Motor Vehicl	e Account	Earners' Account		Earners' portion of Treatment Injury		Work Account	
	1%	-1%	1%	-1%	1%	-1%	1%	-1%
Risk-free discount rates and investment returns	-74.90	104.32	-0.16	0.20	-0.02	0.02	-0.13	0.16
Inflation rates	129.13	-99.29	0.28	-0.23	0.03	-0.03	0.23	-0.19
Number of new weekly compensation claims	0.97	-0.97	0.01	-0.01	0.00	-0.00	0.01	-0.01
Weekly compensation continuance rates	14.73	-12.67	0.02	-0.02	0.00	-0.00	0.04	-0.04
Sensitive claims continuance rate	N/A	N/A	0.03	-0.02	N/A	N/A	0.00	0.00
Elective surgery superimposed inflation	9.23	-6.44	0.05	-0.04	0.01	-0.00	0.02	-0.02
Medical superimposed inflation	5.85	-4.17	0.02	-0.02	0.00	-0.00	0.01	-0.01
Care superimposed inflation	66.20	-47.13	0.06	-0.04	0.01	-0.01	0.03	-0.02
Elective surgery active claims	10.16	-6.73	0.05	-0.03	0.00	-0.00	0.03	-0.02

TABLE 18 - SENSITIVITY OF NON-EARNERS' APPROPRIATION

Impact on Non-Earners' appropriation \$M	Non-Earners' A	ccount	Non-Earners' p Treatment Inju		Total Non-Earners'		
	1%	-1%	1%	-1%	1%	-1%	
Risk-free discount rates and investment returns	-201	306	-162	252	-363	557	
Inflation rate	371	-269	268	-182	639	-452	
New weekly compensation rates	N/A	N/A	N/A	N/A	N/A	N/A	
Weekly compensation continuance rates	N/A	N/A	N/A	N/A	N/A	N/A	
Sensitive claims continuance rate	57	-42	0	0	57	-42	
Elective surgery superimposed inflation	29	-19	8	-6	37	-25	
Medical superimposed inflation	21	-16	2	-1	22	-18	
Care superimposed inflation	173	-114	212	-139	386	-254	
Elective surgery active claims	28	-18	8	-6	36	-23	
Number of non-earners	16	-16	3	-3	19	-19	

No sensitivities have been calculated for weekly compensation scenarios for the Non-Earners' Account, as non-earners are not eligible⁵ for weekly compensation payments.

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No sensitivities were applied to care inflation rates in periods before June 2022. These periods are affected by the pay equity decision for care workers.

⁵ There is a small number of scenarios where non-earners are eligible for weekly compensation. However, the volume of claims is too small to consider them in this scenario.

Ultimately continuing levy rate and appropriation increases are expected

In 2019 the changes to the funding policy reduced the funding target of the levied Accounts from 105% of OCL including risk margin to 100% of OCL excluding risk margin. This led to the funding position for all Accounts being above the new target.

Although the funding positions on all levied Accounts are still at or above target, we expect the future levies will need to increase. We expected the change in funding policy to mean that future levy growth would be lower than forecast on the old policy. However, recent claims performance and economic conditions have significantly increased new year costs and reduced funding positions. This has reversed some of this expected impact.

Table 19 shows the estimated future levy rates and appropriations for all Accounts. Where the value is shaded blue, the funding is limited by a cap in that year. For all Accounts, the prescribed levies are low compared to historical rates (refer to **Appendix G.2**).

	Indicative levy rates and appropriation						
	2021/22	2022/23	2023/24	2024/25			
Motor Vehicle Account	113.94	132.84	155.26	181.46			
Earners' Account	1.16	1.33	1.52	1.52			
Earners' portion of the Treatment Injury Account	0.05	0.06	0.07	0.08			
Work Account	0.67	0.72	0.73	0.74			
Non-Earners' Account (\$M)	1,640	1,762	1,891	2,035			
Non-Earners' portion of Treatment Injury Account (\$M)	245	264	283	305			

TABLE 19 – FUTURE LEVY RATES AND APPROPRIATIONS BY ACCOUNT⁶

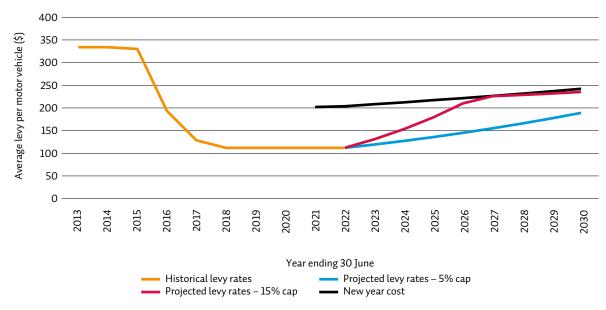
The appropriation for the Non-Earners' Account needs to increase at cap for five years.

The indicative levy for 2022/23 is \$133, which is 64% of the new year cost (\$209 including management response). The levies for the Motor Vehicle Account are expected to increase at cap for four years. However, as shown in Table 17, the Motor Vehicle Account is particularly sensitive to economic changes. If the investment rate increases, the uncapped levy will reduce. Our scenario modelling shows a 25% chance the Account will not hit cap in 2022/23 due to a combination of claim performance and economic factors. The main driver for this is scenarios with an increase in interest rates.

As the motor vehicle levy is low compared to new year costs, applying a cap to increases on a low rate means that it takes longer to get to the funding level required.

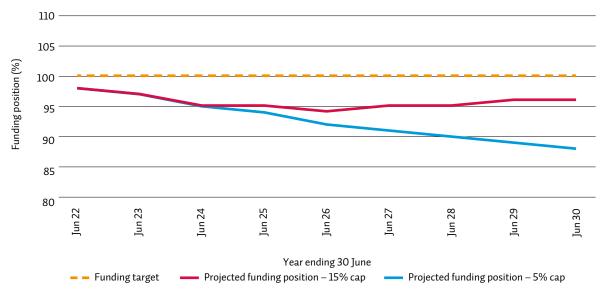
Assuming levies are increased in line with the funding policy, by 2026/27 we expect the Motor Vehicle levy to double from the current prescribed rate to \$228. If rates are not approved in line with the funding policy, or if the new funding policy allows the cap to apply to each levy cycle (not each year), the levies will increase more slowly and the Account will take longer to return to funding target. To demonstrate this, we have estimated the future levies assuming a 5% annual cap is applied – this is shown by the blue line below.

⁶ These calculations assume the new funding policy will allow the cap to apply each year rather than each levy cycle.



GRAPH 4 – LEVY PATHWAY FOR MOTOR VEHICLE ACCOUNT





Funding

The graphs above show the projected capped levies and new year cost for the Motor Vehicle Account as well as the projected funding position. Graph 4 also shows, for context, historical levy rates. The new year cost is expected to be below the levy rate on the Motor Vehicle Account in seven years.

The changes ACC is making in how it operates need to generate a significant improvement in customer outcomes

ACC's measurement of client outcomes is improving, but there's more to do

This year's OCL strain, along with historical strains, continues to highlight the need for client outcomes to be better understood and measured. ACC is spending more, but it's not clear whether outcomes have improved sufficiently to match the increased spend.

A recommendation was made in the 2019 FCR to develop a strategic outcomes framework to define and assess the effectiveness of all ACC services. In accordance with the recommendation, the Health Outcomes Framework (HOFW) was developed and tested externally with stakeholders in 2019/20. This framework will provide the basis for the development of a broader organisational customer outcomes framework. The scope of this is expected to be completed in December 2020.

The development of the HOFW aims to achieve an appropriate quality of life for clients through the provision of entitlements that restore, to the maximum practicable extent, a client's health, independence and participation. Its development should help ACC to define client outcomes over and above traditional measures such as return-to-work rates.

The successful implementation of the HOFW will have a key role in allowing the organisation to shift to a 'purchasing for outcomes' model under the Health Sector Strategy (HSS). The success of the HSS relies on being able to define and measure outcomes clearly. A clear and consistent understanding across the business of outcomes is a pre-requisite to partnering externally to incentivise effective, efficient and sustainable rehabilitation outcomes for clients. It should also help ensure that conversations between ACC and providers are performance based.

In addition to establishing the HOFW, the organisation has been working on an integrated set of operational, Scheme and system levers to help deliver client outcomes. The biggest of these is NGCM. Improving outcomes for clients was a key objective in the design of this model. As the nationwide delivery of NGCM has only recently been completed, it's too early to assess how much client outcomes have improved as a result of the change. However, this will be monitored closely as it's vital that NGCM delivers on this objective.

ACC's Wháia Te Tika strategy has laid the foundations for improving Māori access, outcomes and experience

In 2019/20 ACC:

- established a steering group with oversight of the Whāia Te Tika programme
- appointed a dedicated project manager to develop a comprehensive plan with a roadmap
- established programme of work for commissioning kaupapa Māori services, with an initial focus on sensitive claims and serious injuries
- commissioned a measurement framework to measure the outcomes of Whāia Te Tika initiatives
- · created a Māori-specific injury prevention portfolio
- introduced an Evidence Centre, Whetū Mārama, which has a dedicated area for Māori research and evaluation.

In addition, after 30 June 2020, ACC has undergone an executive restructure that includes a new Tumu Pae Ora (Chief Māori and Equity Officer) role. The Tumu Pae Ora will be responsible for leading and developing Whāia Te Tika, partnering with the Chief Executive and Executive colleagues. This new role will help elevate Whāia Te Tika's status within the organisation, create opportunities to help it achieve its objectives, and ensure that ACC has a more culturally diverse range of services.

Māori make up around **16%** of New Zealand's **population**.

25% of **serious injury** costs relate to Māori clients.

Over **20%** of the **weekly compensation** support paid following an accidental **death** is provided to whānau of Māori people.

Māori clients have lodged **28%** of **sensitive claims** since 2014, with **20%** of the costs.

Research is underway within the organisation to further investigate inequity for Māori. It examines claiming behaviours, demographics, occupational trends, access to services and rehabilitation outcomes for Māori compared to all New Zealanders. Other research is looking into injuries not resulting in claims and into factors associated with poor outcomes, such as subsequent injury, frequent injury and family violence, and inequities in the healthcare system for ageing Māori. The findings from these research projects need to support future developments in the Whāia Te Tika area.

In terms of measuring performance, particularly in relation to Scheme access, ACC uses the Māori claim lodgement ratio. This statistic reflects the rate at which Māori are claiming compared to all New Zealand. The overall claim rate for Māori has been consistently lower than for non-Māori for many years. Conversely, Māori are overrepresented in serious injury and sensitive claims. In 2019/20 the lodgement ratio fell to 81% and failed to meet the target of 86%.

TABLE 20 – MĀORI CLAIM LODGEMENT RATIO

	2016/17	2017/18	2018/19	2019/20
Ratio of Māori claims lodged to all claims lodged	86%	86%	83%	81%

Improving access for Māori is likely to result in an increase in claim numbers. But it should also result in better rehabilitation outcomes, achieved by providing the right support at the right time.

In addition to understanding the differences between Māori and non-Māori in the claim lodgement ratio, the organisation needs to further understand and act on:

- why there are differences in the proportions of Māori and non-Māori accessing the Scheme for certain claim types, such as serious injuries and sensitive claims
- why there are differences in cover decline rates between Māori and non-Māori (where these exist)

Next steps

 where rehabilitation is less effective for Māori and why.

It's important to demonstrate that the efforts to improve access and outcomes for Māori are well designed and targeted, include Māori leadership in design and decision-making, and are working.

In the 2019 FCR we raised concerns about a trial of a particular kaupapa Māori programme delivering support to seriously injured clients. An external review recommended that ACC continue to support Whānau Ora as a model and that a cost/benefit social impact analysis be undertaken to quantify the social and financial benefits. This analysis hasn't happened. It means that ACC invested in a programme but has been unable to conclusively demonstrate improved long-term outcomes for Māori.

Focusing on Māori service providers alone will not deliver the improvements needed. It is important for ACC to ensure that Māori can access services and support shaped by and reflecting Māori worldviews, cultural norms and the communities they live in.

In preparing this year's Financial Condition Report, we have been unable to identify clear measurable objectives focused on tracking changes in Māori access and outcomes within Whāia Te Tika, or more broadly across ACC. So it hasn't been possible to provide an update on progress against these. ACC will need to be able to demonstrate that the work it's doing for and with Māori is achieving the right outcomes and at a cost that's reasonable and sustainable for funders of the Scheme.

We recommend that ACC's work with Māori and other relevant stakeholders on improving Māori access, outcomes and experience focuses on:

- understanding and acting on the drivers of the differences between Māori and non-Māori
- ensuring all services provided can be shown to deliver the right client outcomes for Māori at a cost that's reasonable and sustainable for funders of the Scheme.

ACC needs a better understanding of access and outcomes for people experiencing sexual abuse or assault

Historically, sensitive claims have been notable for their access barriers. In 2014 ACC formalised the contract for sensitive claims through the Integrated Services for Sensitive Claims (ISSC). The introduction of the ISSC was a move to a supplier-/ provider-led model. ACC aimed to address access barriers, equity, supplier, and consistency issues.

The number of providers available to support clients with new sensitive claims has increased significantly since 2014, from just over 700 to about 1,900 providers by 2020. Despite this, the ongoing growth in sensitive claims means capacity constraints are being felt across the service.

Increased provider capacity, the increased public awareness of sexual violence and the support available, and increased client and provider trust and confidence are all factors that may have driven the sensitive claims growth of over 140% between 2014 and 2020.

We've commented in previous FCRs that there is ongoing uncertainty around how long it might take for growth in sensitive claim volumes to stabilise.

In our view, the organisation needs a better understanding of the drivers of the growth in sensitive claim volumes and costs. It needs a deeper understanding of the people suffering sexual abuse or assault in the community, including what their injury and claim patterns look like. This would allow the organisation, as part of the wider health sector, to provide effective prevention, compensation and rehabilitation services in the future, and deal with any remaining access barriers. It would also enable better management of potential impacts to the financial condition, by being better able to estimate service needs and funding requirements.

We've also commented in previous FCRs that greater focus is needed on the services provided to sensitive claim clients, to ensure that the spend is achieving outcomes for clients. Last year's report noted that a review of the ISSC was scheduled to be completed in early 2019, including a strategic component focused on outcomes being delivered. This review wasn't completed. ACC's plan to support the Government's Joint Venture in the area of family and sexual violence is still in the early stages. We've yet to see specific initiatives designed to ensure that the service is delivering the right client outcomes at a cost that's reasonable and sustainable for levy payers and taxpayers.

We make two separate but related recommendations on sensitive claims:

ACC's work on sensitive claims needs to provide a deeper understanding of the people suffering sexual abuse or assault in the community, including what their injury and claim patterns look like, and the drivers of the growth in sensitive claim volumes and costs. This understanding needs to be translated into action where appropriate, to provide targeted prevention or services to clients, and manage the impacts on the financial condition.

ACC's work on sensitive claims needs to ensure the services provided can be shown to deliver the right client outcomes at a cost that's reasonable and sustainable for levy payers and taxpayers.

The ICIP has delivered the foundations for improving customer experiences and outcomes

The Integrated Change Investment Portfolio (ICIP) is a large-scale transformation that has been underway since 2014, with an expected total cost of \$669 million and an expected net benefit of \$300 million delivered through:

- a reduction in annual weekly compensation costs of \$30 million by 2025/26
- an annual \$75 million benefit from HSS by 2025/26
- better analysis leading to actions for improved client outcomes and less fraud, waste and abuse from the Business Analytics platform
- efficiency gains.

The ICIP is at the bottom of the investment/benefit cycle, with the majority of the investment complete (74% as at 30 October 2020), but before significant benefits have been realised.

In the 2019 FCR we noted that ACC had achieved a lot of foundational work with significant investments in modernising systems to minimise operational risk. The programmes delivering the most improvements in client, operational and financial outcomes were yet to be delivered. Two critical projects ACC expected to deliver in 2019/20 were the:

- 1. new case management model (NGCM)
- 2. Health Sector Strategy pilots.

In addition to this, functionality was to be added to the Business Analytics platform.

NGCM completed its nationwide roll out as planned, but performance is below target and still behind schedule

2019/20 presented some unexpected operational challenges with the Whakaari/White Island volcanic eruption and, in particular, COVID-19 restrictions. Despite these, NGCM completed its nationwide delivery by September 2020, only slightly behind the original schedule.

The COVID-19 lockdown and the resulting economic environment have affected the claims performance since April 2020. However, average weekly compensation days paid have been steadily increasing in the past few years from a base of 97.4 days in 2014/15 to 100.2 days in 2019/20. ACC is still expecting to get to its ultimate target of returning to work an average of 5.5 days sooner than the 2014/15 base by 2025/26. This now requires a much faster improvement to achieve the ultimate target within the original timeframe.

Table 21 shows how average weekly compensation days targets have changed over time.

Next steps

TABLE 21 - TARGET OF AVERAGE WEEKLY COMPENSATION DAYS

	Year ending 30 June										
	Baseline	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Original ICIP targets	97.4	100.22	99.43	99.31	96.9	96.4	94.4	93.4	92.4	91.9	91.9
Actuals then 2020/21 targets	97.4		98.3	98.3	100.6	102.2	104.4	101.6	97.9	93.7	91.9

NGCM is showing some promising results with claims that have been managed entirely under ACC's new ways of working. These are new claims that have occurred in the past 12 months. However, ACC cannot rely on good performance from claims commencing under NGCM alone. Existing claims must be managed effectively. All claims that are over a year in duration did not commence in NGCM. These claims are by nature more complex and require more management. It's imperative that these claims are managed well as they contribute most of our long-term costs (OCL) and have large impacts on future levies and appropriations needed.

COVID-19 restrictions affected delivery of the Health Sector Strategy

In the 2019 FCR we said that the Health Sector Strategy was in the early stages of trialling its outcomesbased programmes for a wider population. However, the COVID-19 lockdown reduced ACC claim volumes and put pressure on the health sector, which affected ACC's ability to deliver initiatives at scale. It also created uncertainty as to which initiatives were most appropriate and feasible in the short to medium term and reduced the planned 2021 benefits. A new benefit realisation plan has been created to get benefit delivery back to the pre COVID-19 targets by 2022.

In the short term it's expected that, in some cases, ACC will need to invest to move from the traditional purchasing of individual services to purchasing for outcomes. Better rehabilitation outcomes should lower the expected lifetime costs for these clients, giving an expected net benefit in the longer term.

Last year we said that, in order to ensure success, appropriate measures of outcomes needed to be in place and reported on. Contracts with providers needed to be set up in a way that incentivises effective, efficient and sustainable outcomes for clients.

Escalated Care Pathways (ECP) is an example of where this has been done well. ECP aims to improve the experiences of and outcomes for patients with non-acute knee, shoulder and lower-back injuries by providing integrated, patient-centred pathways to recovery. In the last year ACC has been working in partnership with six groups of healthcare providers to create new, integrated and interdisciplinary pathways. By May 2020 contracts had been signed with all six providers. These contracts are four years long with a stop/go evaluation and decision point at 18 months. At the end of the four years the project will be scaled up if successful.

Outcome measures for ECP have been clearly defined in contracts and are being measured and reported on to the HSS Workstream Board. Providers supply data monthly for this purpose.

Ensuring equitable access and outcomes for Māori is an important focus of ECP, and Māori representation is a contractual obligation at all levels of governance to ensure that the project's ambitions are met.

ECP was only just underway when the COVID-19 lockdown started. This means volumes are behind schedule and rehabilitation outcomes have been more difficult to achieve this year.

For detail on the progress of the three other outcomes-based purchasing pilots under HSS, see Appendix A.7.

From inception a significant proportion of the benefits to be delivered from the HSS relied on new programmes not yet in development. While ACC now has a plan to deliver some of these benefits further initiatives are required to realise the overall projected benefit profile for HSS.

The Business Analytics platform is in place

The third component of the ICIP that was delivering claim cost benefits is the Business Analytics platform. Functionality was delivered this year that allowed ACC to use more advanced analytical techniques to develop predictive models and test hypotheses. The expectation is that this will lead to actions for improved client outcomes and less fraud, waste and abuse.

The expected benefit from the new tools of \$7 million in 2019/20 was reduced to \$3.5 million due to delays in implementing technology. As a result of the COVID-19 lockdown the actual benefit achieved was \$3 million. The expected benefit for 2020/21 is \$16 million.

Now the foundational work had been done, benefits must be delivered

The three main programmes expected to deliver claim cost benefits from the ICIP are behind the original expected benefit timeframes. The ICIP was expected to have achieved a reduction in claim costs of \$19.4 million by 30 June 2020. However, the actual result was a claim cost increase of \$20.3 million. NGCM and the Business Analytics platform have now been delivered. ACC must deliver the benefits of these investments.

Despite improvements made in how ACC operates, management of longer-term claims needs to improve

As we've stated in this report, ACC's financial condition is under pressure.

As at 30 June 2020 ACC's risk profile is 'high'. This means there are a number of enterprise risks rated as high in the combination of the likelihood of their occurring and the impacts if they did occur. That's primarily due to:

- the continuation of claim cost growth in 2019/20
- a heightened risk of Māori customers becoming dissatisfied with ACC's efforts to improve access, engagement and outcomes for Māori

the realisation of benefits from the investment in transformation being delayed and/or lower than projected.

There are management actions in place to respond to these risks. In our opinion there are some areas where management could take more focused action in addition to this.

The total OCL strain in the six-year period from 2014/15 to 2019/20 was more than \$3.2 billion. We deem more than \$2.8 billion of this to be influenceable.

Most of this OCL strain has arisen from longerterm claims. The main drivers are deteriorating rehabilitation performance in weekly compensation, social rehabilitation care hours being higher than expected, and higher spending on large social rehabilitation capital items.

Major milestones were delivered for the ICIP tools in 2019/20. These laid the foundations for responses to performance issues with these longer-term claims. Injury prevention also has a role to play in preventing or reducing the severity of claims with the potential to become long term.

The operational emphasis has been on measuring short-term performance. An appropriate balance is needed to ensure long-term performance is maintained.

As a result of this, we recommend that ACC Operations increase its focus on claims that are or have the potential to become longer term. This should start with a focus on outcomes for claims receiving:

- weekly compensation
- social rehabilitation care and capital.

Despite the investment in injury prevention and the ICIP, we've seen significant strain emerging for multiple claim types and over a number of years. In 2019/20 an external review failed to identify the root causes of growth in the volume of weekly compensation claims. This suggests issues may be of a systemic nature.

Recent messaging from senior management has emphasised the need to improve performance through delivering the right client outcomes.

In 2015/16 we made a claims management recommendation to deliver a framework to improve the measurement and monitoring of client, operational and financial outcomes. In 2018/19 our Next steps

strategic outcomes framework recommendation was added to assess the effectiveness of ACC's services and ultimately ensure the Scheme remained affordable and sustainable. The claims management recommendation has taken four years to close. Good progress is being made on the strategic outcomes recommendation. Both of these recommendations target systemic issues.

ACC should consider what might be other possible drivers of systemic issues with claims performance. It could be helpful to trial some responses to these to see what might be effective in improving client and financial outcomes.

Next steps

Glossary of key terms

ACC Accounts:

ACC manages five Accounts, each funded differently. Combined, these Accounts fund every accident, treatment and compensation claim that ACC pays.

For information on the coverage and funding for each Account see Appendix A.2.

Appropriation:

Money received from the government (from the general tax pool) to cover costs arising from the Non-Earners' Account.

Claim payment types:

Types of payment ACC makes to provide compensation and rehabilitation to clients, shown in *Appendix A.*1.

Claim frequency:

The number of claims in a given period as a proportion of the population covered.

Claim severity:

The average lifetime cost of a claim.

Client:

A person who makes a claim under the Scheme.

Customer:

Anyone in New Zealand who receives or funds ACC services. Includes clients, levy payers and taxpayers.

Customer outcomes framework:

A new framework being scoped for defining and assessing the effectiveness of services for all ACC's customers. This will include assessing against ACC's three core functions of preventing injuries, rehabilitating and compensating injured people, and ensuring the Scheme is affordable and sustainable.

Deficit:

An excess of expenditure over income.

Enterprise Risk Management/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.

Full funding:

The assets held to cover claims liabilities are equal to those liabilities.

Funding policy:

The policy set by the Government that says how the levies or appropriations will be set to fund the Scheme.

Funding position:

The amount of 'assets' (mainly investments) each Account has available to cover the 'liabilities' (the expected costs of claims that have already happened).

Funding ratio:

The ratio of assets held to liabilities.

Health Outcomes Framework:

Defines what ACC wants to achieve through investment in injury prevention, care, and rehabilitation services at an organisational level.

Health Sector Strategy (HSS):

A strategy focused on collaborating with providers to support clients to recover more quickly and effectively from injury.

Influenceable strain/release:

OCL strain or release in areas where management action could improve client outcomes, leading to reduced costs for levy payers and taxpayers.

Integrated Change Investment Portfolio (ICIP):

The ICIP encompasses a large range of initiatives intended to improve performance and deliver better outcomes for clients including:

- Next Generation Case Management (NGCM) see Appendix A.6 for detail
- Health Sector Strategy (HSS) see **Appendix A.7** for detail
- Business Analytics Platform see page 71 for detail

Levied Accounts:

The three levied Accounts are Motor Vehicle, Work and Earners'.

Levy payers:

Funders of the levied Accounts. See Appendix A.4.

Long-term claims pool:

A pool comprising claims that have received more than 365 days' cumulative weekly compensation.

New year claims:

Claims from accidents that occur during the year that the levies or appropriations cover.

Non-serious injury:

An injury that is not classified as a serious injury.

OCL strain/release:

When the OCL is increased because actual payments are higher than expected, this is referred to as OCL strain. OCL release is when the OCL is reduced because payments are lower than expected.

Outstanding claims liability (OCL):

The expected amount of money needed to cover the cost of claims that have already happened.

Pay-as-you-go:

Claims that are funded as costs arise.

Purchasing for outcomes model:

A model under which providers are accountable for client outcomes rather than delivering specific services.

Risk-free rate:

The Treasury prescribes the risk-free rates used in financial accounting for all Crown entities. Risk-free rates reflect the yields of New Zealand Government bonds. The long-term risk-free rate is based on long-term historical norms.

Risk margin:

A margin added to the central estimate of claims to allow for uncertainty in the estimate of the OCL. This is required under the accounting standards.

Serious injury:

An injury of a specified severity and/or complexity level that leaves a person impaired and requiring support such as home or nursing care to various levels, often throughout their lives.

Service Agreement:

ACC's annual agreement with the Minister for ACC setting out the services it will deliver and the expected performance standards. This agreement is required under the Accident Compensation Act 2001.

Superimposed inflation:

The increase in average claim costs greater than normal (economic) inflation.

Surplus:

An excess of income over expenditure.

Unexpired risk liability:

A provision for claims ACC can expect to incur after the end of the financial year that are funded by levies already received.

Glossary of key terms

Acronyms:

AEP:

Accredited Employers Programme

CPI:

Consumer price index

COSO:

The Committee of Sponsoring Organizations of the Treadway Commission **www.coso.org**

DHB:

District health board

ECP:

Escalated Care Pathways

FCR: Financial Condition Report

GP:

General practitioner

HOFW:

ICIP:

Health Outcomes Framework

HSS: Health Sector Strategy

IBNR: (Claims) incurred but not reported

Integrated Change Investment Portfolio

IHCS: Integrated home and community support services

IP:

Injury prevention

ISSC:

Integrated Services for Sensitive Claims

LCI:

Labour cost index

LOPE:

Loss of potential earnings

MRI:

Magnetic resonance imaging

NGCM:

Next Generation Case Management

NZ IFRS 4 (PBE):

The New Zealand equivalent to the International Financial Reporting Standard No.4 – Insurance Contracts for Public Benefit Entities

Outstanding claims liability

PAYG:

OCL:

Pay-as-you-go

ROI:

Return on investment

TFI:

Targeted Financial Incentives

Glossary of key terms Appendix A – Additional background information

A.1 Types of payment ACC makes to rehabilitate and compensate clients

Table 22 summarises the main payments the Scheme makes to rehabilitate and compensate people with covered personal injuries.

TABLE 22 – SCHEDULE OF SERVICES

Madiaal					
Medical Public health acute	Accidental iniury co	osts from acute inpa	atient care, emergency department, outpatient, complex burns,	Appendix	
services	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 physic	otherapists.			
Ambulance	Emergency transpo	ort to a medical faci	ility, by road and/or air.		
Elective surgery	Mainly orthopaedic	-related surgery.			
Other-medical	All medical costs ex beyond physical inj		bove. These include counselling for claims that need support		
Compensation					
Weekly compensation – non-fatal	Loss of earnings based on 80% of weekly income (capped) before the injury occurred and loss of potential earnings for minors.				
Death benefits	Funeral grants and	support for spouse	es and/or dependants.		
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 by lump sum. Eligible claims for injuries before 1 April 2002 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.				
Rehabilitation					
Vocational	Programmes to sup	port clients' returr	ns to independence.		
	Serious injury	Capital	Mainly housing and motor vehicle modifications for people with serious injuries.		
	Serious injury Non-capital	Care costs (such as attendant care and assessments) and other costs related to serious injury.			
Social rehabilitation	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.		

A.2 ACC's five Accounts

ACC manages five Accounts, each funded differently. Combined, these Accounts fund every accident, treatment and compensation claim that ACC pays. The funding of each Account is matched with where injury risks happen. Table 23 summarises the coverage and levies/funding of each Account.

TABLE 23 - 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'		Government taxation		
Earners'	All other locations and activities	Levy as a 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.

A.3 Exposure and funding base

For ACC, exposure is the number of people with the potential to claim. Funding base refers to those with the ability to pay levies and appropriations. Although the two are usually linked, they're not the same.

Exposure

The number and mix of people in New Zealand and the activities in which they participate can change. This can affect the volume and types of injury occurring and the subsequent claims made to ACC.

For example, the volumes and types of claims ACC receives can be affected by changes in:

- net migration, both volumes and demographics
- the types of work New Zealanders do
- attitudes to working part-time and working past the age of retirement
- the vehicle types driven on the roads
- the way people choose to spend their leisure time.

Changing economic conditions can influence these. When economic conditions change, the activities people participate in and their attitudes to making claims can change. For example, an economic downturn tends to be associated with a reduction in physical injuries due to a decline in the number of people participating in leisure activities.

We use exposure to estimate how many claims ACC might receive in the future. The Accounts have different measures for exposure because they serve different types of claims and people. The way exposure is used to measure those with the potential to claim is explained below, by Account:

• **Earners' Account:** The number of people working and earning incomes in New Zealand is estimated from the labour force of New Zealand less those who are unemployed. Estimates for both the labour

force and the number unemployed come from the Treasury's budget releases and are converted to quarterly figures. We call this the Earners' Account, or earner, population.

- Non-Earners' Account: The remaining New Zealand population is estimated from the Treasury's total population less the Earners' Account population. Non-working tourists are included in the population. This is converted to quarterly figures. We call this the Non-Earners' Account, or non-earner, population.
- Work Account: The number of people working and earning in New Zealand is similar to the Earners' Account, but excludes those working for accredited employers.
- **Motor Vehicle Account:** The number of vehicles on the road is based on Waka Kotahi NZ Transport Agency historical levels of vehicle registrations, which are also used to forecast future registrations. This includes rental vehicles that tourists may use to travel around New Zealand.
- **Treatment Injury Account:** The total population is split into non-earner and earner populations.

Funding base

New Zealand levy payers and taxpayers fund ACC in a different way for each Account. For each of the levied Accounts, we calculate the levy rate using a 'levy base' that's linked to the way of collecting funds. For example, motor vehicle owners and drivers fund the Motor Vehicle Account through vehicle registrations and a levy on petrol. So, changes in the amount of petrol consumed or the number and types of vehicles registered affect the levy base and the levy rate for this Account.

ACC uses external estimates and forecasts to quantify the levy base and set the levy rate for each levied Account.

Often changes in levy bases will also be reflected in changes in the volumes and types of claims made, but these are not always fully aligned.

For example, an increase in the number of electric vehicles on New Zealand roads will decrease the levy available from petrol consumption; but will not necessarily decrease the number of claims from motor vehicle accidents.

Levies and appropriations are set in advance, based on the expected claim volumes, types and costs and, for the levied Accounts, the levy base. There can be a difference in the timing of when changes are reflected in claims and the levy base. When these change unexpectedly, the funding collected can be different from what's needed, affecting the financial condition. For example, a significant increase in unemployment will mean more claims need to be funded by the Non-Earners' appropriation.

The funding bases for each Account are:

- For the Earners' Account we use total liable earnings paid to workers. These include liable earnings for self-employed people and shareholder employees. Liable earnings are subject to a maximum of \$130,911 to 31 March 2021 and this is subject to change each year. Inland Revenue sends ACC information monthly about the earnings of workers in New Zealand. Future liable earnings are estimated using average weekly earnings inflation, which is linked to the consumer price index from Treasury forecasts.
- For the Non-Earners' Account we use an annual appropriation from the Government. The appropriation comes from the general tax pool.
- For the Work Account we use liable earnings as per the Earners' Account, less liable earnings paid to those employed by accredited employers.
- For the Motor Vehicle Account we use the number of vehicle registrations and the level of petrol consumption in New Zealand. We use the historical level of petrol consumption, supplied by the Ministry of Business, Innovation and Employment to project future consumption. Levies are paid alongside the registration of vehicles and a petrol levy is collected as oil enters the country.
- For the Treatment Injury Account the Earners' portion uses the same liable earnings as the Earners' Account to determine the levy rate. The Non-Earners' portion forms part of the appropriation funded annually by the Government.

Appendix A Additional background information

A.4 Funding policies

The funding needed for each Account is calculated in accordance with the Government's funding policies.

Funding policy for the levied Accounts

The Government's funding policy for the levied Accounts (the Motor Vehicle, Earners' and Work Accounts) is in a statement gazetted in July 2020 (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 in the period for which ACC is recommending levies.
- Each Account must target a funding position of 100%. That means that the amount of 'assets' an Account has should be equivalent to the liabilities for that Account (including an additional liability for work-related gradual process claims incurred but not yet reported, and excluding the risk margin).
- A funding adjustment must be included in the average levy rate that takes each Account's funding position to the funding target (100%) 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.

Funding policy for the Non-Earners' Account

The Non-Earners' Account's funding policy was updated in 2019/20.

TABLE 24 – NON-EARNERS' ACCOUNT FUNDING POLICY FROM 2019/20

Pre-1 July 2001 claims	Post-1 July 2001 claims
• Pay-as-you-go basis	Fully funded basis.
One-year funding horizon	Costs are discounted using investment forecasts.
 Funding position target of 0% 	 Funding position target of assets at 100% of liabilities, excluding risk margin.
	• Three-year funding horizon when the Account is above its funding target.
	 Ten-year funding horizon when the Account is below its funding target.
Annual increases in the appropriation are capped at 7.5%	

A.5 Products

ACC offers variations to standard cover and pricing (levies) to incentivise certain behaviours. In the Work Account ACC provides qualifying business customers with options in claims management and adjusts levies based on their claim history. The aims of this are to promote injury prevention and effective rehabilitation and to reduce work-related injury claims and costs.

Accredited Employers Programme

Large employers may be eligible for the Accredited Employers Programme (AEP). Members of the AEP represent 19% of total liable earnings and 14% of the workforce. Under the programme; ACC delegates to employers the authority to make entitlement decisions and deliver injury prevention, rehabilitation and claims management. In return, the employers receive a reduction of up to 90% of their Work Account levies. Their claims management performance determines the levels of discount or loading to standard pricing.

Appendix A Additional background information

Cover Plus Extra

Self-employed people have the option of setting values for weekly compensation. This gives those with volatile incomes greater certainty about cover. Their levies are adjusted accordingly.

Experience rating

Businesses in operation for at least three years qualify for either experience rating or a no-claims discount. Experience rating is available to large employers who pay at least \$10,000 in levies each year. An employer's levy is adjusted based on an analysis of the business's injury and return-to-work rates in the previous three years. Levies may be increased by up to 75% or decreased by up to 50%. No-claims discounts apply to smaller employers ineligible for experience rating. Depending on their claims history, levies may remain at standard rates or be modified by plus or minus 10%.

Fleet Saver

The Motor Vehicle Account has an optional fleet safety incentive programme designed to improve the safety performance of commercial vehicle fleets. In return for business safety practices and compliance, levy discounts are provided.

A.6 Claims management process

Claims management is the function of providing rehabilitative support to injured people in order to return them to work and/or independent living where possible. For most people the support required is relatively minor (such as a one-off visit to a GP). In these cases, ACC's only involvement is to make payments for the medical services provided.

But for some individuals the services and support required are more complex. Where full rehabilitation is not possible, claims management includes the provision of support to allow people to be as independent as possible.

In the past 12 months ACC has delivered Next Generation Case Management (NGCM) nationwide. NGCM is a fundamental redesign of the ACC case management model. It's designed to allow ACC to respond to the changing environment in which it operates, with shifts in client expectations, the healthcare eco-system and technology. Delivering more effective case management is expected to help injured workers recover faster and return to work sooner. System and process improvements should result in workflow efficiency and allow ACC staff to spend more time on improving outcomes for clients. Under the NGCM model four recovery teams provide different levels of support depending on the needs of clients. The recovery teams are:

1. **enabled recovery** (approximately 18% of claims): Clients primarily manage their own recovery using an online portal to select services and regularly check in.

Example: An office worker with a wrist fracture who's still able to work most of the time

2. **assisted recovery** (approximately 48% of claims): Clients primarily manage their own recovery. Members of the ACC team contact them if there's something specific to discuss.

Example: A teacher with a dislocated shoulder who requires additional services to assist with their recovery

3. **supported recovery** (approximately 16% of claims): Clients have a dedicated ACC contact who works with them on their recovery.

Example: A farmer with a disc prolapse. Coordination by ACC will help manage multiple providers, challenging work environments, and additional services that may be needed throughout the farmer's recovery

4. **partnered recovery** (approximately 18% of claims): Clients build relationships with dedicated ACC contacts who support them in managing their injuries and recovery.

Example: A client with paraplegia who needs expert support to coordinate specialised services. This may continue for an indefinite period.

ACC screens all claims at the point of registration to establish which recovery teams are best suited to the clients and their needs. These decisions aren't based purely on injury diagnosis. Factors such as age, co-morbidities and living circumstances are also taken into consideration. Throughout their recovery, clients can transition between the teams depending on the level of support they require.

A.7 Health Sector Strategy proof-of-concept projects

The Health Sector Strategy (HSS) is focused on collaborating with providers to support clients to recover more quickly and effectively from injury. This includes changing to an outcomes-based purchasing model, under which providers are accountable for client outcomes rather than delivering specific services. There are four main projects underway. Escalated Care Pathways is discussed on **page 70**. The other projects are:

- **primary care (high-tech imaging):** This service aims to improve and expedite client outcomes by enabling GPs to appropriately refer clients directly for MRIs. Results from the initial pilot showed:
 - improved access by Māori and Pasifika customers
 - reduced costs through fewer specialist referrals
 - increases in non-surgical interventions
 - reduced weekly compensation usage through faster access to treatment.

This has been delivered to 12 primary health organisations resulting in a reduction of seven to nine days in average weekly compensation. The national delivery of GP referred high-tech imaging was approved in July 2020, with an expected go-live of early December 2020

non-acute rehabilitation: This is testing outcomes-based purchasing, shifting from care models that
provide incentives for longer hospital stays to models focused on providing appropriate rehabilitation
within a community setting. The non-acute rehabilitation pilot has been developed with DHBs and is
also expected to reduce demand on their rehabilitation beds. The test and learn phase is continuing
with three DHBs. The funding model, case mix and outcomes frameworks are being refined as the test

progresses. ACC expects to deliver non-acute rehabilitation progressively to all DHBs from the third quarter of 2020

integrated home and community support services (IHCS): Home and community support services deliver personal, childcare and home care services intended to help clients return to independence or reach their maximum level of participation in everyday life, following an accident. IHCS is provided by five contracted suppliers, many of which have their own networks of specialised, regional or kaupapa Māori organisations. Under the HSS work is underway to move to a 'case mix' funding model, purchasing outcomes instead of services. Work is well advanced on the outcomes, assessment, and case mix/case weight model, including consideration of the cultural requirements of any new model. The first phase of the case mix model for lower complexity clients will go live on 1 December 2020.

Appendix A Additional background information

A.8 Additional information on injury prevention

Portfolio	Programmes in delivery	Programmes in development	Expected future claim benefits (\$M)	Return on investment 30 June 2020 (\$)
Targeted	20	12	259.0	2.00
Strategic	8	5	94.8	0.87
Treatment safety	9	6	154.4	3.57
Māori	-	4	0.0	n/a
Workplace	9	18	89.6	1.57
Total	46	45	597.9	1.80

Injury prevention has five portfolios under which it delivers programmes. This is a change from the portfolio groupings reported in previous Financial Condition Reports.

Following is information about the programme-driven movement in each portfolio's return on investment (ROI) in 2019/20. The ROI is also affected by economic changes and actual investments and claim benefits versus expected in 2019/20. Economic impacts have been negative for all portfolios, reducing the overall ROI by 13 cents.

ACC has exited 16 programmes over 2019/20. This can happen either in development or delivery when it becomes clear that benefits are not going to be achieved. When the programme had expected benefits contributing towards the overall ROI these benefits are removed. The costs incurred to the time of exit of the programme remain in the ROI. In this case the ROI will then reduce when a programme is exited.

Targeted investments

Targeted investment programmes include what used to be under the falls, sport and road portfolios.

The main drivers of movement in the ROI for this portfolio have been:

- additional investments in the Falls and Fracture programme, which have reduced the targeted portfolio ROI by 15 cents
- reinvestments in rugby union and touch rugby, which have increased the targeted portfolio ROI by 4 cents
- re-evaluation downwards of football's expected future claims, which has reduced the targeted portfolio ROI by 1 cent
- an investment in the third cohort of training and a re-evaluation upwards of the expected future claim benefits of the motorcycle programme, which increased the targeted portfolio ROI by 3 cents
- a re-evaluation upwards of the expected future claim benefits from young drivers, which increased the targeted portfolio ROI by 5 cents

• the Out of Context curves programme, which is responsible for altering the camber of roads to make them safer for motorcycles. The expected future claim benefits for this programme have now been determined and brought into the ROI, increasing it by 6 cents.

Strategic investment

The strategic investment programmes include what used to be under the community and violence portfolios.

The main drivers of movement in the ROI for this portfolio have been:

- investment in the firearms buy-back programme, which increased the strategic portfolio ROI by 62 cents
- bringing in benefits to the ROI calculation for the Mates & Dates programme, which increased the strategic portfolio ROI by 17 cents.

Treatment Injury

This portfolio is unchanged under the new grouping.

The treatment injury portfolio ROI increased from \$3.26 to \$3.57 in 2019/20. This was largely driven by:

- a re-evaluation of the expected future claim benefits, driven by an increase in average claim amount for the neonatal programme, increasing the treatment safety portfolio by 73 cents
- exiting from two non-performing programmes (a surgical site infection programme and a programme to improve outcomes from back injuries), which reduced the treatment safety portfolio ROI by 29 cents.

Workplace

The workplace portfolio ROI reduced from \$1.63 to \$1.56 in 2019/20. Movements in programmes affecting this were:

- a reinvestment in the farming programme, which increased the workplace portfolio ROI by 5 cents
- ACC's exit from Risk Reckoner (a digitised risk assessment and solution programme targeting carrying and lifting in a business context), which reduced the workplace portfolio by 4 cents.

A.9 Court cases before the courts during 2019/20

Table 25 has the details of two cases that have been before the courts during 2019/20.

TABLE 25 - COURT CASES

Case	Issue before the courts	What the courts decided	What this means	
Calver v ACC	ACC has previously only covered disease caused by asbestos exposure when it's contracted through the workplace. In this case the client asserted that mesothelioma was contracted through childhood exposure to asbestos via her father when he came home from work. Should mesothelioma not	The High Court has ruled that disease caused by an identified, external, non- disease-related agent will be covered by ACC. In order to achieve certainty in the law, ACC has appealed and its appeal was heard by the Court of Appeal on 25 November 2020. The decision is pending.	The High Court's expansion of cover would result in an increase in claims, the OCL and levies and appropriations. The size and scale of the issue are difficult to determine, although they're anticipated to be minor.	Appendix A Additional background information
	caused by a work exposure be considered an accident, and therefore be covered by ACC?			
Larkin v ACC	This client didn't make a claim for an injury that occurred 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.	This client-initiated appeal was dismissed by the High Court in November 2019. The client has asked for leave to appeal to the Court of Appeal, and ACC has opposed the request.	Clients who sustained injuries before 1992 and didn't claim until after 2002 could be eligible to receive backdated payments for the period between 1993 and 2002 if leave is granted to appeal and the appeal succeeds. The estimated increase in the OCL for this is \$15 million to \$45 million.	

Appendix B – Risk management

Taking appropriate risks to achieve strategic objectives is a normal and necessary part of doing business. By embedding risk management practices in all areas, Enterprise Risk Management gives decision-makers the confidence to make more informed and better decisions.

B.1 ACC 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 with AS/NZS ISO 31000:2009 Risk Management: Principles and guidelines and the COSO Enterprise Risk Management – Integrated Framework.

The objective of the framework is to ensure ACC operates within agreed tolerance and risk limits as set by ACC's Board of Directors. It does this by helping to ensure:

- effective and efficient continuity of operations
- safeguarding of assets
- preservation and enhancement of reputation
- · reliability of internal and external reporting
- compliance with applicable laws and regulations
- a culture consistent with our risk tolerance.

ACC's Enterprise Risk Management process is well established and is continually evolving.

B.2 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.

B.3 The Five Lines of Assurance risk model

The Five Lines of Assurance risk model, implemented during 2017/18, is now part of ACC's everyday way of working.

The model:

- focuses attention on strategic objectives to better support the enterprise
- identifies value creation treatments (the upside/performance aspect) and value protection treatments (downside/minimising harm)
- improves links between strategy/planning and risk management
- defines specific accountabilities for the Board, the Chief Executive and the executive to identify, challenge and monitor residual risks
- defines an active role for the Board in assessing the effectiveness of risk management processes
- elevates the role and importance of internal assurance over risk management.

FINANCIAL CONDITION REPORT 2020

Appendic B Risk management The Five Lines of Assurance are described in Table 26.

TABLE 26 – 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 activities to recognise and respond proactively to 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 Enterprise Risk Management, 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 the reliability of ACC's risk management processes and performance.
	Other independent external providers (external auditors, 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.

B.4 The six priority risks for ACC

Table 27 shows the Board's and the executive's six highest-priority enterprise risks during 2019/20. It also includes the actions agreed as at 30 June 2020 that management is taking in response. Since 30 June 2020 additional actions have been identified for these risks. For example, work underway on the frameworks for measuring customer and health outcomes has now been identified as a response to the Customer Outcomes risk.

Risk	Management actions
Benefits	Review quarterly transformation benefit profile.
ACC fails to identify and/or realise the	 Work with Ministry of Health to identify wider system opportunities.
short- and long-term outcomes and benefits of the transformation investment	 Refresh Health Sector Strategy benefit realisation plans and appoint new HSS Benefits Lead.
effectively	Review benefits framework controls.
Customer outcomes	• Drive more efficient and effective rehabilitation of clients through Next Generation
ACC fails to deliver expected customer	Case Management.
outcomes	• Design and prove a new outcomes-based framework for commissioning specialist care through the Escalated Care Pathways project.
	Design and implement a case-mix framework through the IHCS initiative.
	 Introduce incentives for providers to work more innovatively to support clients through the non-acute rehabilitation initiative.
	 Support general practitioners to access high-tech imaging diagnostics to support injury management.
	 Develop, test and embed new outcome-based measures for clients via the new case management approach.

TABLE 27 – ACC'S HIGH-PRIORITY ENTERPRISE RISKS AS AT 30 JUNE 2020

Continued

Risk	Management actions
Claim cost management	Drive improvements in clinical pathways through alternative commissioning models
ACC does not adequately anticipate,	as part of the Health Sector Strategy.
monitor, and respond to claim cost performance trends, resulting in pressures	 Identify improvement opportunities and future service strategies using procurement sector, service and contract analysis.
on levy rates	 Drive more efficient and effective rehabilitation of clients through Next Generation Case Management.
Response and business interruption management	Build Business Continuity Programme response capability through training and plan exercises.
Failure to respond to and recover from a business interruption effectively	
Māori access and outcomes	• Implement a targeted set of initiatives to improve access to services for Māori.
ACC fails to make progress in	 Develop cultural and leadership capability at ACC.
implementing initiatives that are	Partner with Māori for better outcomes.
meaningful, scalable or timely enough to improve Scheme access and outcomes	 Implement the recommendations of the Whāia te Tika health check.
and engagement with Māori materially	• Make better use of Māori research, insights and experience.
Model	Establish an enterprise model register.
Reliance on material models to facilitate	 Develop model governance and a model framework.
key organisational decisions results in	 Develop model policy and standards.
unintended outcomes due to a limitation	Further refine model risk assessments with model owners.
in that model as a result of a lack of judgement applied to the interpretation	Fully document all identified models.
of the models' output, poor model	
calibration, model design flaw or	
documentation.	

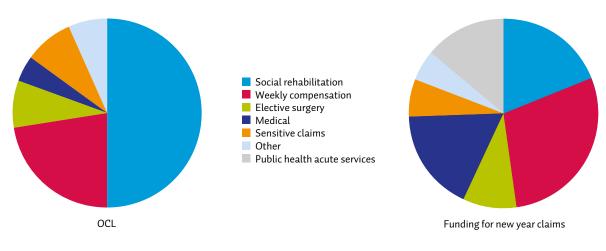
Appendic B Risk management

Appendix C – Claim volumes, types and costs

C.1 Comparison of payment types' contribution to the OCL and funding for new year claims

Claim volumes, types and costs affect the OCL, levy rates and Government appropriations.

Graph 6 shows that the contribution of claim types to this year's OCL at 30 June 2020 is different from the lifetime costs of new claims in 2020/21.



GRAPH 6 – COMPARISON OF CLAIM TYPES' CONTRIBUTION TO OCL AND FUNDING FOR NEW YEAR CLAIMS

The five largest claim payment types (social rehabilitation, weekly compensation, elective surgery, medical and sensitive claims) made up 94% of the 30 June 2020 OCL and 81% of the funding for new year claims.

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

Table 28 shows the influenceable and non-influenceable changes in OCL (including work-related gradual process claims incurred but not reported) by payment type during the 2019/20 financial year. The total OCL balance is also included to provide an indication of the materiality of the OCL change for each payment type.

TABLE 28 - CHANGE IN OCL BY PAYMENT TYPE DURING THE 2019/20 FINANCIAL YEAR

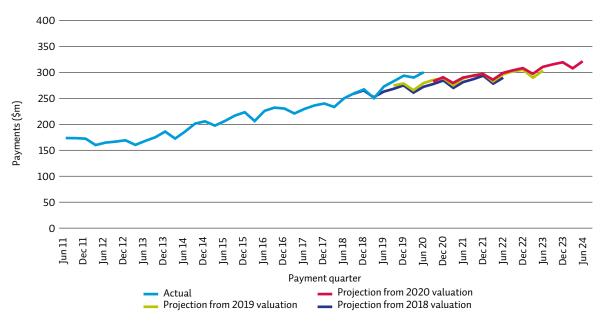
\$M	OCL balance as at 30 June 2020	Influenceable change in OCL during 2019/20	Non-influenceable change in OCL during 2019/20	Total change in OCL during 2019/20
Weekly compensation – non-fatal	13,503	391	(143)	248
Sensitive claims	5,019	78	40	118
Serious injury non-capital	24,556	383	(203)	180
Serious injury capital	3,203	77	(66)	11
Non-serious injury non-capital	1,464	60	(28)	32
Non-serious injury capital	810	1	4	5
Elective surgery	4,875	(331)	81	(250)
Medical	2,774	45	(116)	(71)
Other	7,042	(111)	(8)	(119)
Total	63,246	593	(439)	154

Appendix C Claim volumes, types and costs

C.2 Weekly compensation

Weekly compensation is a loss of earnings payment 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.

Graph 7 shows the actual and projected weekly compensation payments in the June 2020 and the two previous June valuations. It reveals that total payments during 2019/20 were much higher than previously projected.

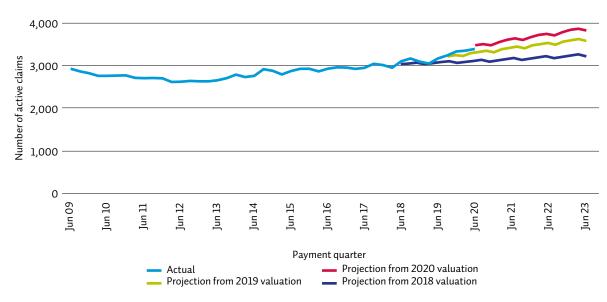


GRAPH 7 - NON-FATAL WEEKLY COMPENSATION CLAIM PAYMENTS

The influenceable OCL strain in weekly compensation was \$391 million

This year's influenceable strain in weekly compensation followed five years of influenceable strain totalling over \$1 billion. Key drivers in the past have included higher than expected claim volume growth and lower than expected rehabilitation rates. People remaining on the Scheme for longer than expected is a key driver of OCL strain again this year. This is evident across most accident periods but particularly for claims less than five-years old. And as a result of this, there is growth in the number of clients receiving weekly compensation for an injury that occurred more than five years prior. The Earners' Account is particularly affected.

Graph 8 shows that the number of weekly compensation earner clients still receiving payments five years after their accidents has increased. The resulting OCL strain was \$133 million.



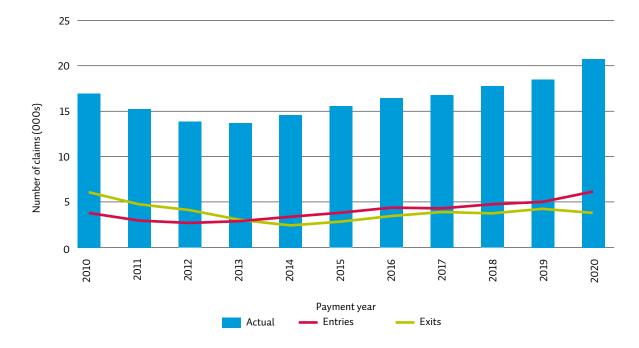
GRAPH 8 - EARNERS' ACCOUNT ACTIVE CLAIMS 5+ YEARS POST-ACCIDENT

Some of the strain due to poorer rehabilitation performance was offset by an OCL release of \$93 million due to fewer new claims from older accident periods being reported across the Motor Vehicle and Work Accounts.

Long-term weekly compensation claims continue to grow

The long-term claims pool refers to claims that have received more than 365 days' cumulative weekly compensation. Deteriorating short-term rehabilitation rates has seen an increase in the number of clients entering the long-term claims pool.

Graph 9 shows the historical numbers of long-term weekly compensation claims. The growth in the longterm claims pool for the 12 months to June 2020 was 12.6%. In 2019/20 the number of new entries to the pool was much higher than the number of exits. Some of this was attributable to an active decision made during the national lockdown to suspend entitlement and vocational independence decisions during Alert Levels 4 and 3. It was also a product of a decline in both short-term and long-term rehabilitation performance. Of concern is the growing proportion of the pool comprising non-seriously injured clients. Appendix C Claim volumes, types and costs

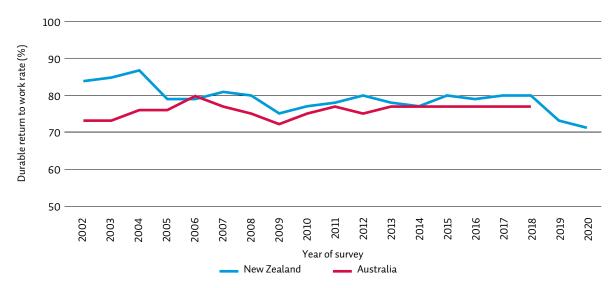


GRAPH 9 - LONG-TERM WEEKLY COMPENSATION CLAIMS

Return-to-work rates are continuing to fall

ACC benchmarks its return-to-work performance against the Australian workers' compensation scheme. Safe Work Australia and ACC calculate the return-to-work rate by surveying clients who've been injured at work seven to nine months prior and who 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 10 shows the New Zealand return-to-work rate has dropped to 71%, its lowest level in 18 years. The bi-annual Australian survey result would normally be available this year, but it has been delayed after considering the impact of the COVID-19 pandemic on the survey outcomes. For the New Zealand survey 18% of ACC clients citing the pandemic as the reason for their not being back at work. But this isn't the only driver. Before the COVID-19 lockdown, ACC's return-to-work rate result was only slightly higher at 73%.

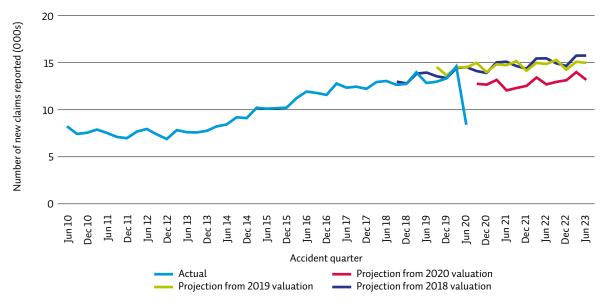




The non-influenceable OCL release in weekly compensation was \$143 million

Graph 11 shows a sharp drop in the number of new weekly compensation claims reported in the June 2020 quarter as a direct result of the COVID-19 restrictions. This was reflected in the June 2020 external valuation and resulted in OCL release of \$143 million.

Due to the pandemic, unemployment rates are expected to rise, leading to a lower projected number of new weekly compensation claims in the future (see claim frequency projections in **Appendix C.10**).



GRAPH 11 - NUMBER OF NEW WEEKLY COMPENSATION CLAIMS REPORTED

C.3 Sensitive claims

Sensitive claims are claims for physical and/or mental injury suffered as a result of sexual abuse or sexual assault. Sensitive claim clients receive six main types of payment:

- 1. weekly compensation payments
- 2. other-medical counselling services
- 3. independence allowance
- 4. lump sums
- 5. vocational rehabilitation
- 6. non-serious-injury care.

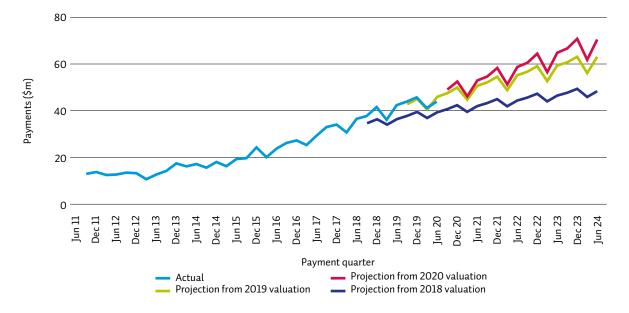
Graph 12 shows that the number of future payments for sensitive claims is expected to grow faster than what was expected in the 2018 and 2019 valuations.

Appendix C

Claim volumes,

types and costs

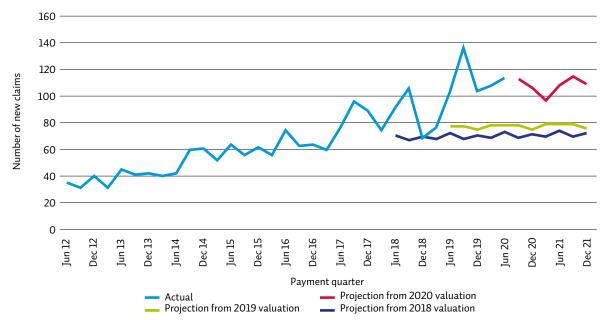
GRAPH 12 - SENSITIVE CLAIM PAYMENTS



The influenceable OCL strain in sensitive claims was \$78 million

In the 2018 FCR we discussed the uncertainty around continued growth in sensitive claim costs and volumes. In 2018/19 the new sensitive claims growth assumption was raised from 9% to 20%. This year, while volume growth has slowed compared to last year, it's still higher than expected. For newly reported claims relating to injuries that occurred more than one year prior, the growth is particularly significant with OCL strain of \$183 million. This level of OCL strain was partially offset by \$44 million in an OCL release, because the length of time clients from older accident periods were remaining on the Scheme remained stable and below projections. In addition, there was a further OCL release of \$61 million as the average cost of sensitive claims didn't increase by as much as expected.

Graph 13 shows that in 2019/20 the number of new sensitive claims for injuries that occurred one to four years prior was well above the 2019 projections.

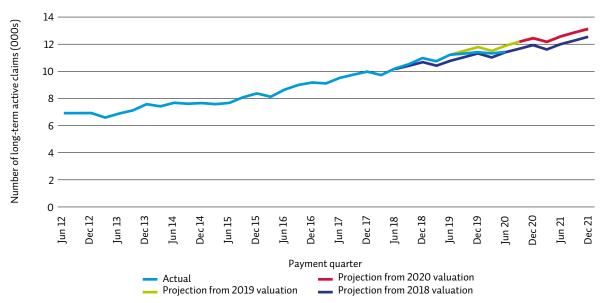


GRAPH 13 - ACTUAL AND PROJECTED NEW SENSITIVE CLAIMS 1-4 YEARS POST ACCIDENT

Graph 14 shows the actual and projected number of sensitive claims on the Scheme more than 7.5 years post-accident. Even very small changes in the rehabilitation rate for these claims of longer durations can have a significant impact on the OCL. The graph shows that the trend appears to be stabilising, with volumes at, or slightly below, expected.

Appendix C Claim volumes, types and costs





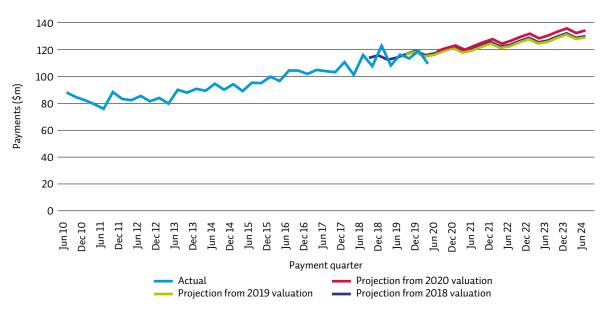
The non-influenceable OCL strain in sensitive claims was \$40 million

Many sensitive claims aren't reported until many years after the incidents occur. This year assumptions were adjusted so that new sensitive claims with injuries dating back 50+ years were specifically allowed for in the models. This resulted in approximately 800 more new claims being modelled and led to OCL strain of \$40 million due to the length of time these claims are expected to stay on the Scheme.

C.4 Serious injury non-capital

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

Graph 15 shows payments for seriously injured clients receiving non-capital services. In 2019/20 non-capital claim payments were above those expected, except for the June 2020 quarter, when the nation was under lockdown. Due to the lifelong nature of the support provided, even a small upward adjustment can have a significant impact on the OCL.

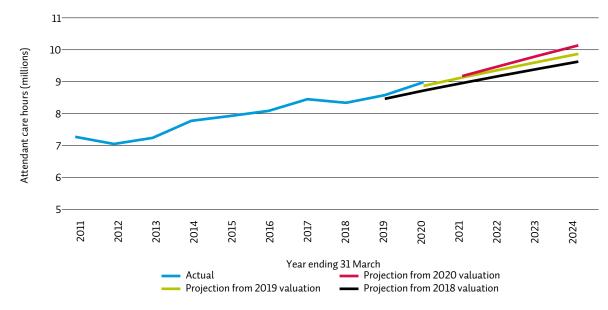


GRAPH 15 - SERIOUS INJURY NON-CAPITAL CLAIM PAYMENTS

The influenceable OCL strain in serious injury non-capital was \$383 million

Higher than expected care hours have accounted for the bulk of the more than \$600 million influenceable OCL strain in serious injury non-capital over the previous five years. In 2019/20, higher than expected attendant care hours was again a major driver of OCL increase. OCL strain due to higher than expected average serious injury non-capital claim costs was \$313 million. Higher than expected attendant care hours was a major driver of the increase.

Graph 16 shows that the valuation projections for serious injury care hours were increased last year and again this year.



GRAPH 16 - SOCIAL REHABILITATION - SERIOUS INJURY CARE HOURS

There were 27 fewer new claims than expected for the year ending 31 March 2020. This resulted in OCL release of \$34 million. However, the injury mix for these new claims was more severe than expected with more high-level tetraplegic claims. Consequently, injury mix assumptions were adjusted. The resulting OCL impact of \$104 million was reasonably large due to the level of support high-level tetraplegic clients require.

Table 29 shows actual numbers of new serious injury claims in 2019/20, by injury profile, compared to the expected numbers.

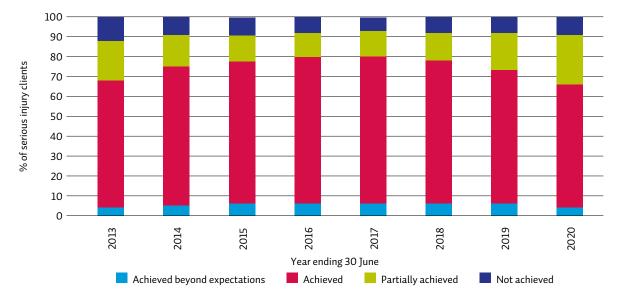
Appendix C
Claim volumes,
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Injury profile	Actual	Expected	Actual – Expected	Actual/Expected
High-level tetraplegic	30	17	13	174%
Low tetraplegic and high paraplegic	7	8	(1)	85%
Low-level paraplegic	41	29	12	142%
Incomplete spinal cord injury	33	40	(7)	83%
Severe brain injury	60	93	(33)	65%
Moderate brain injury	84	88	(4)	95%
Comparable diagnosis	13	20	(7)	65%
Total	268	295	(27)	91%

TABLE 29 - NEW SERIOUS INJURY CLAIM PROFILE

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 17 shows the percentage of clients in each category. There has been a steady reduction in achieved and achieved beyond expectations in the past few years. This decline in self-reported outcomes is despite continual increases in capital and non-capital spending for a period of years.



GRAPH 17 – SERIOUS INJURY CLIENT GOAL ACHIEVEMENT

The non-influenceable OCL release in serious injury non-capital was \$203 million

A number of factors led to the non-influenceable OCL release for serious injury non-capital. One driver was the COVID-19 national lockdown, during which fewer-than-expected new serious injury claims were reported. This resulted in an OCL release of \$67 million. Other key drivers of non-influenceable OCL change are described below.

Increases in the contracted sleepover rate resulted in an OCL strain

Since the previous valuation ACC has revised the amount of money paid to carers. The main change is an increase in sleepover rates for contracted providers due to the rise in the minimum wage. The increase also allows for additional funding to cover overhead costs and has resulted in an OCL strain of \$266 million.

Mortality was different from that expected

This year there was a \$66 million OCL release relating to mortality being different from expected.

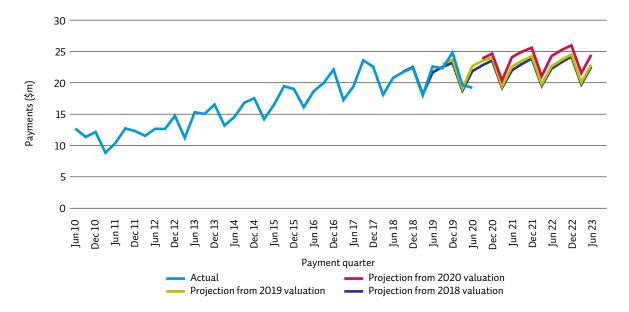
In the past few years there have been OCL releases due to mortality rates being different from those expected. As a result, the mortality assumptions for serious injury clients have been updated. This has been based on an analysis of the combined claims history of the Transport Accident Commission (the motor accident injury scheme in Victoria, Australia), the Motor Accident Insurance Board (the motor accident injury scheme in Tasmania, Australia) and ACC. The updated assumptions have led to an additional \$336 million OCL release. The key changes in the mortality assumptions since the previous valuation are:

- mortality loadings have been increased at younger ages and reduced at older ages
- new mortality loadings have been introduced for clients in residential care.

C.5 Serious injury capital

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.

Excluding the June 2020 quarter, when New Zealand was in lockdown, the capital payments for seriously injured clients were around 2% higher than expected. This is shown in Graph 18.



GRAPH 18 - SERIOUS INJURY CAPITAL CLAIM PAYMENTS

The influenceable OCL strain in serious injury capital was \$77 million

This year's influenceable OCL strain in serious injury capital was relatively insignificant, but it must be considered in relation to continued growth in capital payments for several years prior. This year, higher than expected payments on large capital items were the main drivers of OCL strain of \$19 million. There was some offsetting effect due to lower than expected recurring expenditure on consumables and hearing aids. Accidents that took place in the past two years were most affected.

During 2019/20 new serious injury claim volumes were lower than expected, but the severity of the newly reported claims was greater than expected. In particular, there was a higher number of young clients with brain injuries. These claims tend to have higher capital costs across their lifetime and a longer expected time on the Scheme. The net impact was \$30 million OCL strain.

The change in injury profile of new serious injuries affected the IBNR assumptions. It's expected that future new claims will include a higher proportion of complex claims with higher capital costs. The changes in IBNR assumptions resulted in an OCL strain of \$28 million.

The non-influenceable OCL release in serious injury capital was \$66 million

The COVID-19 national lockdown resulted in fewer new serious injuries than expected. There was an OCL release for this payment type of \$9 million. In addition, assumption changes due to mortality being different from expected resulted in further release totalling \$57 million.

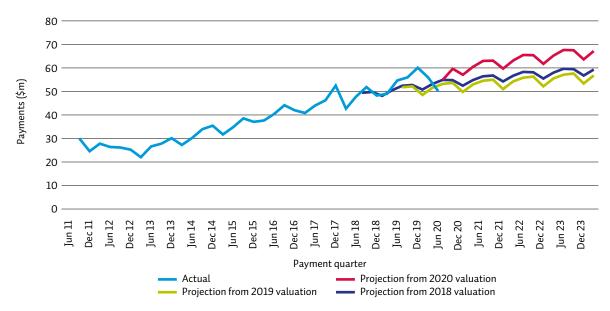
Appendix C

Claim volumes, types and costs

C.6 Non-serious injury non-capital

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

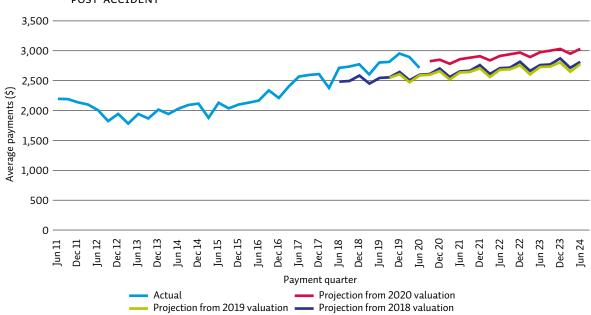
Graph 19 shows that payments for non-seriously injured clients receiving non-capital services were higher than expected. This trend has been evident in five of the past six years and projected future payments have been lifted as a result. However, as around half of these payments relate to newer (less than two-year-old) injuries, the impact on the liability is not as significant as it would be for older claims.



GRAPH 19 - NON-SERIOUS INJURY NON-CAPITAL PAYMENTS

The influenceable OCL strain in non-serious injury non-capital was \$60 million

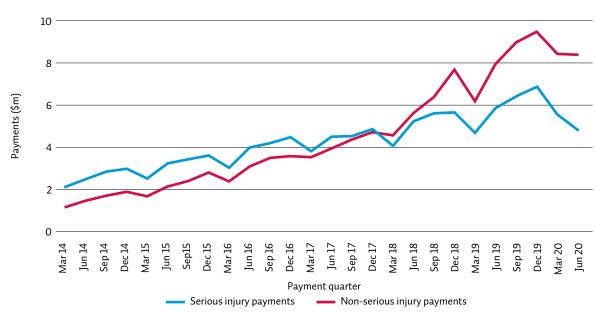
The total OCL strain due to higher than expected average costs in non-serious injury non-capital was \$135 million. Average payments for injuries that occurred more than two years ago is the main driver of this strain. This is reflected in Graph 20.



GRAPH 20 - NON SERIOUS INJURY NON-CAPITAL AVERAGE PAYMENTS FOR CLAIMS MORE THAN TWO YEARS POST-ACCIDENT

Continued growth in payments for training for independence programmes is partly driving higher than expected average cost growth. In 2019/20 monitoring was established to highlight the key trends and identify drivers that are contributing to cost growth. Based on insights from the monitoring, a qualitative review is being undertaken to better understand how the programme is used with a selected cohort of clients. This has included looking in greater depth at the client journey, outcomes agreed and progress toward achievement. Growth in training for independence payments is shown in Graph 21.

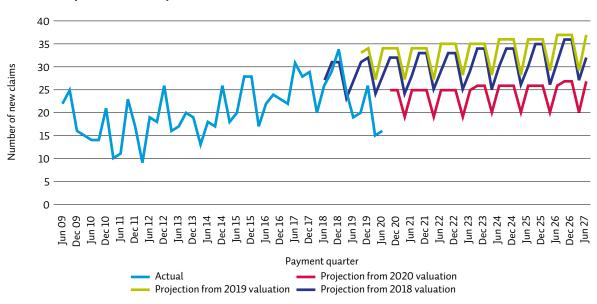
Appendix C Claim volumes, types and costs



GRAPH 21 - PAYMENTS FOR TRAINING FOR INDEPENDENCE

The OCL strain due to higher than expected average costs was partly offset by a \$75 million OCL release due to claim patterns for older accidents.

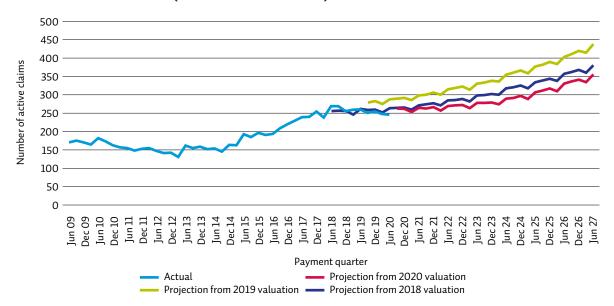
As shown in Graph 22, numbers of new claims for older accidents in the Work Account were lower than expected. This contributed an OCL release of \$57 million.



GRAPH 22 - NON-SERIOUS INJURY CARE NEW CLAIMS MORE THAN 10 YEARS POST-ACCIDENT (WORK ACCOUNT)

Graph 23 shows the length of time older motor vehicle accidents are remaining on the Scheme was below expected. The resulting OCL release was \$33 million.

GRAPH 23 – NON-SERIOUS INJURY CARE ACTIVE CLAIMS FOR POST 1992 ACCIDENTS MORE THAN 10 YEARS POST-ACCIDENT (MOTOR VEHICLE ACCOUNT)



The non-influenceable OCL release in non-serious injury non-capital was \$28 million

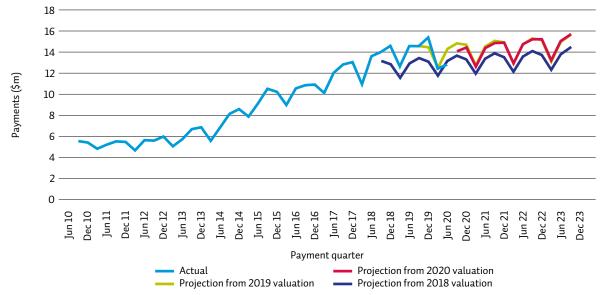
The fewer new non-serious injury claims requiring care during the national lockdown period resulted in an OCL release of \$28 million.

C.7 Non-serious injury capital

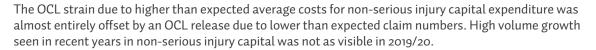
Non-serious injury social rehabilitation claims relate to people who require extra help for rehabilitation but aren't expected to be on claim for the rest of their lives.

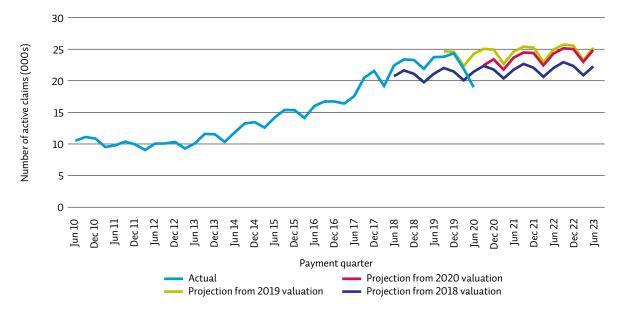
Non-serious injury capital expenditure growth has been particularly high in the past five years, with successive increases in the valuation projections occurring in each of the past three years. This year, as shown in Graph 24, non-serious injury capital payments were reasonably close to those assumed.





The influenceable OCL strain in non-serious injury capital was \$1 million





GRAPH 25 - NON-SERIOUS INJURY CAPITAL CLAIM VOLUMES

Appendix C

Claim volumes, types and costs

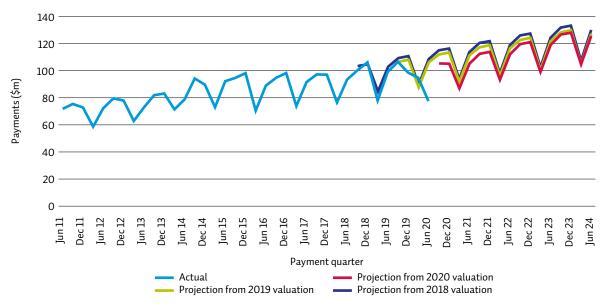
The non-influenceable OCL strain in non-serious injury capital was \$4 million

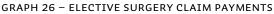
This year adjustments were made to the models to account for the fact that the length of time clients remain on Scheme varies depending on when the accident occurred. It resulted in OCL strain of \$11 million. This was partially offset by an OCL release of \$7 million due to fewer non-serious injury capital claims during the national lockdown period.

C.8 Elective surgery

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 medical services while recovering from surgery.

Graph 26 shows that elective surgery payments in 2019/20 were, on average, around 7% lower than expected. This follows lower than expected payments in each of the previous three years.



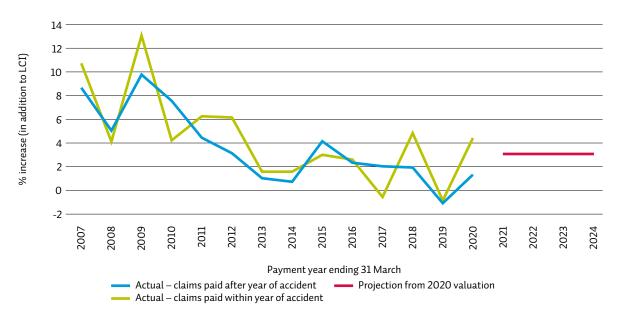


The influenceable OCL release in elective surgery was \$331 million

In 2019/20 actual superimposed inflation, for all accident periods combined, was as projected at 3%. However, for claim payments relating to accidents that occurred in the previous year, actual superimposed inflation was higher at 4.5%. And for claims relating to accidents that occurred more than a year previously, superimposed inflation was much lower at 1.5%.

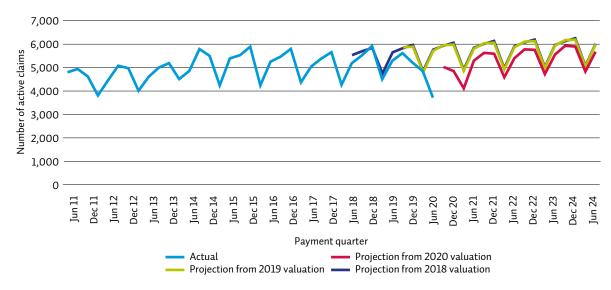
The average cost of claims relating to older accidents had a greater impact on the OCL than newer accidents, and there was an OCL release of \$257 million. In addition, fewer new claims received elective surgery during 2019/20. This was particularly evident for injuries that had happened in the previous year. OCL release due to lower than expected active elective surgery claims was \$74 million.

Graph 27 compares actual superimposed inflation for claims within one year of accident to claims older than one year. It shows that claims within one year of accident have higher superimposed inflation but, on average, superimposed inflation is as expected at 3%.



GRAPH 27 - ELECTIVE SURGERY SUPERIMPOSED INFLATION BY CLAIMS GROUP

In the past few years there has been a slight decline in new elective surgery volumes. There's evidence to suggest a preference for less invasive procedures and rehabilitation over surgery. As a result, the future projections were lowered, although we're still allowing for some future growth. Graph 28 shows the gradual decline.



GRAPH 28 - ELECTIVE SURGERY CLAIMS IN FIRST YEAR OF ACCIDENT

The non-influenceable OCL strain in elective surgery was \$81 million

The number of elective surgery claims for injuries that happened before 1992 tends to be higher than the number of claims received for injuries post 1992. This year additional terms were added to the models to reflect this. Modelling changes affecting older accidents tend to have higher OCL impacts, so the resulting OCL strain was large at \$140 million. This was offset by a \$59 million OCL release due to lower than expected new elective surgery claim volumes in the June 2020 quarter.

C.9 Medical

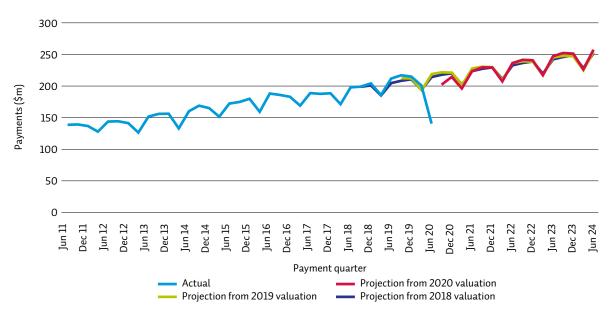
Medical payments are made to primary care providers in four categories:

- 1. general practice
- 2. radiology
- 3. physiotherapy
- 4. other-medical, which includes specialist consultancy, 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.

Payments for medical services are typically short term. The impacts they have on the OCL are less significant than their impacts on levy rates and Government appropriations.

Excluding the June 2020 quarter, when New Zealand was in lockdown, Graph 29 shows medical payments were around 3% higher than expected.



GRAPH 29 - CLAIM PAYMENTS FOR MEDICAL SERVICES

The influenceable OCL strain in medical claims was \$45 million

The three main drivers of the OCL change in medical claims were:

- 1. other-medical clients remaining on the Scheme for longer than expected, which resulted in an OCL strain of \$18 million that was partially offset by fewer than expected new other-medical claims
- 2. in medical imaging an increase in recorded claims relating to older accidents, resulting in an OCL strain of \$15 million
- 3. the policy change made in March 2018 to allow for extended physiotherapy treatments, which continued to have an impact in 2019/20 with an OCL strain of \$10 million.

The non-influenceable OCL release in medical claims was \$116 million

The majority of the non-influenceable release in medical claims (\$73 million) was due to the impact of the national lockdown.

The remainder of the release related to modelling changes.

The average cost of earners' non-work accidents before 1992 is higher than the average cost of those occurring after 1992. This year, a modelling change was made to post-1993 accident periods to better reflect claim payment patterns. Average costs 15 years or more following injury are now assumed to remain flat rather than increase. No changes were made to the pre-1992 accident models. The change resulted in a \$32 million OCL release.

A further modelling change was made to remove the impact of large medical imaging payments on the Earners' and Motor Vehicle Accounts. It was found that large payments relating to the oldest accident years (10+ years) were distorting the models. This resulted in a reduction in the projections. The OCL release was \$11 million.

C.10 Claim frequency projections

Claim frequency is a measure of the number of claims as a proportion of the population covered. Any increase (or decrease) reflects growth in the claim numbers above (or below) the growth in the relevant population. The claim frequencies here allow for the number of claims for accidents that have happened in the year in question, but that have not been reported.

The COVID-19 lockdown had a distinct impact on claim frequencies. All Accounts saw a sharp drop in claim rates for the 2020 financial year. While the country was in lockdown, the potential for people be injured significantly reduced. Once lockdown ended, claim rates quickly returned to normal. These movements have been reflected in our projections. Future claims frequencies have been projected in line with ACC's budget and the Treasury's expectations of economic recovery. The trend for future frequencies is not the same across the Accounts. This is largely driven by expected changes in the demographics of people able to claim in each Account.

Some claims are handled through bulk-funded public health acute services. We don't count these claims initially for our calculations, as the vast majority require no further support from ACC. Those that do go on to receive further support are counted when that support is provided.

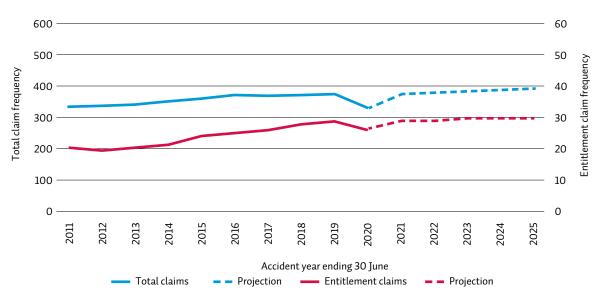
We also exclude work-related claims from employers in the Accredited Employers Programme, as these are not covered by the levies set for the Work Account, but rather are paid for directly by the employers.

Work related gradual process claims are excluded, where applicable, from the following charts. These will be included in future years.

Total Scheme claim frequency rates are gradually rising

Graph 30 shows the total historical and projected claim frequency across ACC's five Accounts.

Appendix C Claim volumes, types and costs



GRAPH 30 - TOTAL SCHEME: ESTIMATED CLAIM FREQUENCY RATES PER 1,000 PEOPLE

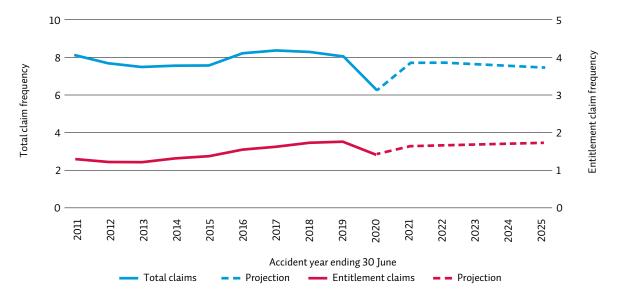
As mentioned, the COVID-19 lockdown caused significant decreases in claim frequencies for the 2020 financial year. We forecast that total claim frequencies will return to levels seen before the COVID-19 restrictions and rise slightly in the coming years.

Entitlement claim frequencies fell during 2020 with the COVID-19 lockdown, but to a lesser amount than total claims. Overall, we project that entitlement claim frequencies will steadily increase in the coming years.

Motor Vehicle total claim frequencies are expected to slowly reduce, however the entitlement claim frequencies are expected to increase

The Motor Vehicle Account covers injuries involving moving motor vehicles. It includes injuries to pedestrians and cyclists hit by motor vehicles on public roads (with a few exceptions). The Account is funded by levies paid by motor vehicle owners and petrol users.

Graph 31 shows the annual historical and projected claim frequency rates for this Account.



GRAPH 31 – MOTOR VEHICLE ACCOUNT: ESTIMATED CLAIM FREQUENCY RATES PER 1,000 MOTOR VEHICLES

The number of vehicles being driven, and therefore the number of claims in the Motor Vehicle Account, reduced during the COVID-19 lockdown.

The claim frequencies increased back to a near-normal level after lockdown. The projected claim frequencies have not been adjusted for the COVID-19 pandemic but follow the historical trend of frequencies.

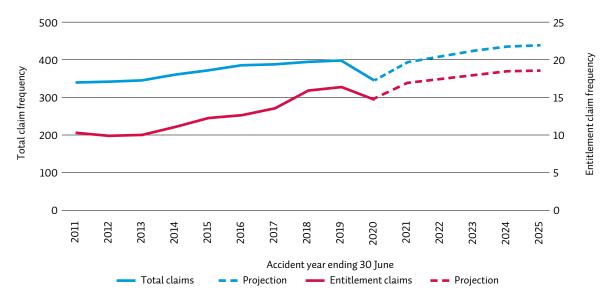
Claims receiving entitlements in addition to medical treatment make up a growing proportion of the total. We expect entitlement claim frequencies to increase slightly over the coming years, and to continue to slowly increase as a proportion of the total number of claims.

Non-Earners' claim frequencies are slowly increasing

The Non-Earners' Account is funded through Government appropriations from general taxation to cover personal injuries to people who aren't employed. Many of these are children or super annuitants. The Account covers a wide range of injuries, including those at home, during sport, in and on the water, and in public and commercial places. It excludes injuries to non-earners that are covered by the Motor Vehicle and Treatment Injury Accounts.

Around 4% of claims receive additional entitlement support, mostly for home care and assistance. The remaining 96% receive short-term medical treatment only. Bulk-funded public health acute services are a large portion of the new year costs in this Account.

Graph 32 shows the annual historical and projected claim frequency rates for this Account.



GRAPH 32 - NON-EARNERS' ACCOUNT: ESTIMATED CLAIM FREQUENCY RATES PER 1,000 NON-EARNERS

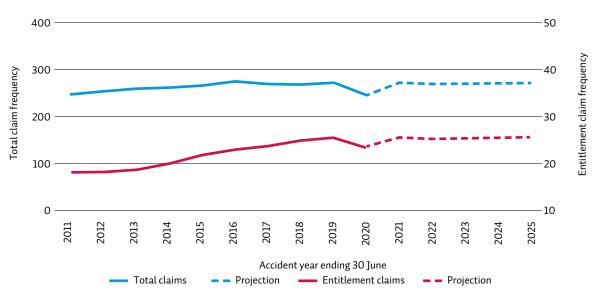
Non-earner claim frequencies are expected to increase slowly in line with historic trends. This is the same for both the total claims and entitlement claims.

Claim frequencies for the Earners' Account are expected to be stable

The Earners' Account is funded by levies paid by earners to cover injuries that are not related to their employment happening on or after 1 July 1992 when the Account was established. The Account covers a wide range of injuries, including those in the home, during sport, in and on the water, and in public and commercial environments. It excludes injuries to earners that are covered by the Motor Vehicle, Work, and Treatment Injury Accounts.

Graph 33 shows the annual claim frequencies, including projections, for the Earners' Account.

Appendix C Claim volumes, types and costs



GRAPH 33 - EARNERS' ACCOUNT: ESTIMATED CLAIM FREQUENCY RATES PER 1,000 EARNERS

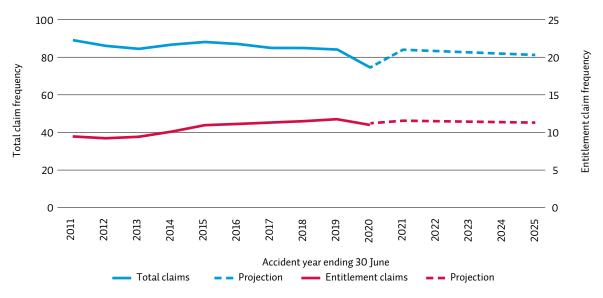
The projected claim frequencies have not been adjusted for the COVID-19 pandemic but follow the historical trend of frequencies and remain stable.

Around 90% of all claims in the Earners' Account only receive payments for short-term medical treatment. The remaining 10% receive additional entitlement support. We expect frequency of entitlement claims to remain steady over the coming years.

Claim frequencies for the Work Account are expected to reduce slowly

The Work Account is funded by levies paid by employers and the self-employed to cover people who had work-related personal injuries on or after 1 July 1974 or had non-work injuries between 1 July 1974 and 30 June 1992.

Almost 85% of work claims require medical treatment only. About 50% of the costs of new year claims are for weekly compensation. The Work Account OCL is most sensitive to changes in the long-term rehabilitation rates for weekly compensation claims.





⁷ Excludes work-related gradual process claims

We expect to see fewer weekly compensation claims during a recession. The Work Account has relatively more weekly compensation claims than the Earners' Account. This results in the projected reductions over the coming years. In addition, the Work Account has lower exposure to some claim types which are expected to increase in frequency; for example, it has no exposure to sensitive claims.

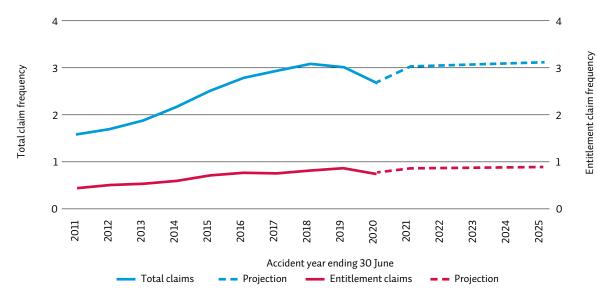
Claim frequencies for the Treatment Injury Account are expected to stabilise

Approximately 80% of the Treatment Injury Account's OCL relates to non-earners. Serious injury claims drive most of the cost for the Non-Earners' portion of the Account. Each year, new serious injury claims are added to the OCL. The claims needing support for the longest periods are for birth-related treatment injuries. These may need attendant care for decades into the future.

Most earners' treatment injuries only result in follow-up medical treatment. These claims are very short, and clients have usually recovered by the time the OCL is valued.

Before 2005 the Account was called the Medical Misadventure Account and mostly covered serious injuries. On 1 July 2005 the Account was renamed the Treatment Injury Account. From then on clients didn't have to prove that an injury was both rare and severe, or caused by medical error, for ACC to accept their claims.

Graph 35 shows the annual historical and projected claim frequency rates for this Account.



GRAPH 35 - TREATMENT INJURY ACCOUNT: ESTIMATED CLAIM FREQUENCY RATES PER 1,000 PEOPLE

We do not expect any significant changes to treatment Injury claim frequency as a result of the COVID-19 lockdown. Claim frequency projections are flat, to reflect the lack of growth since 2018.

The entitlement claim frequency is expected to remain stable.

Appendix C

Claim volumes, types and costs Appendix D – Valuation of the outstanding claims liabilities

D.1 The OCL increased by 15% between June 2019 and June 2020

ACC's OCL at 30 June 2020 was \$63,246 million including risk margin, an increase of \$8,243 million from 30 June 2019. The initial forecast was an increase of \$2,195 million.

We expect an increase in the 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 resulted in a large increase in the liability.

The liability includes work-related gradual process claims incurred but not 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.

D.2 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.

D.3 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 2020, in September 2020.

They calculated the OCL by forecasting future cash flows for each payment type for accidents that happened before 30 June 2020. They then discounted back cash flows to 30 June 2020 using a 'risk-free' interest rate. They also included allowances for claims handling expenses and risk margins.

D.4 The OCL calculation complies with all professional reporting standards

These are:

- the New Zealand equivalent to International Financial Reporting Standard No. 4 Insurance Contracts for Public Benefit Entities (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.

Appendix D Valuation of the outstanding claims liability

D.5 The changes in the OCL between June 2019 and June 2020 were driven by many factors

Table 30 shows the breakdown of the OCL (including risk margin) and how it changed between 30 June 2019 and 30 June 2020.

TABLE 30 – CHANGES IN OCL FROM 30 JUNE 2019 TO 30 JUNE 2020

(\$M)	Liability at 30 June 2019	Expected increase	Changes due to economic assumptions	Changes due to experience and modelling changes	Changes due to COVID-19 restriction experience	Liability at 30 June 2020
Medical costs	2,505	133	209	0	(73)	2,774
Elective surgery	4,391	259	474	(191)	(59)	4,875
Social rehabilitation	25,474	945	3,385	339	(111)	30,032
Compensation related	12,164	506	912	366	(154)	13,793
Sensitive claims	4,206	265	425	118	0	5,014
Other	3,379	23	269	(71)	3	3,603
Claims handling expenses	2,883	64	221	(14)	0	3,154
Total liability	55,002	2,195	5,894	548	(394)	63,426

D.6 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.

D.7 Excluding changes due to economic assumptions, and the impact of COVID-19 restrictions, the OCL increased

Claim volumes and costs during 2019/20 were higher than expected. This resulted in a total increase in the OCL of \$548 million. The main increases in the OCL are discussed in the report

D.8 The OCL includes claims handling expenses

The OCL must allow for future claims handling expenses. These are based on the assumed cost 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 2020/21 budget. The costs of the projects are assumed to be offset by future benefits.

D.9 Changes to economic factors have also resulted in significant increases in the OCL

Changes due to economic assumptions increased the OCL by \$5,894 million, including risk margin (\$5,184 million excluding risk margin). Changes in the economic environment cause the OCL to go up or down. The investment team helps to manage the risks through its asset allocation strategy, as described in **Appendix F**. The \$5,894 million change this year reflected:

- a decrease in interest rates, resulting in an increase of \$7,515 million
- a decrease in inflation rates, resulting in a reduction of \$1,829 million
- higher than expected inflation during 2019/20, resulting in an increase of \$208 million.

D.10 Cash flows are projected for each payment type

Table 31 shows the main payment types and how each is valued for the OCL.

Appendix D Valuation of the outstanding claims liability

TABLE 31 – 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 and imaging services.	Simplified payment per active claim
Other-medical	All other medical services	Full 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 cost by duration is forecast based on the starting average cost and assumed inflation. The average cost and the average number of active claims are multiplied at each future point to calculate the projected cash flow.

Simplified payment per active claims

The number of future active claims is projected based on the claim durations. The future average claim cost by duration is determined based on the starting average cost and assumed inflation. The average cost 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 a client's age and the severity of the injury.

D.11 Assumptions for calculating the OCL are 'best estimate'

Many 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'.

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 by looking at actual claims made. Short-term assumptions follow recent claims quite closely. Long-term assumptions are also set to follow the actual claim volumes and costs, but these tend to be volatile and the selected rates will generally reflect historical averages.

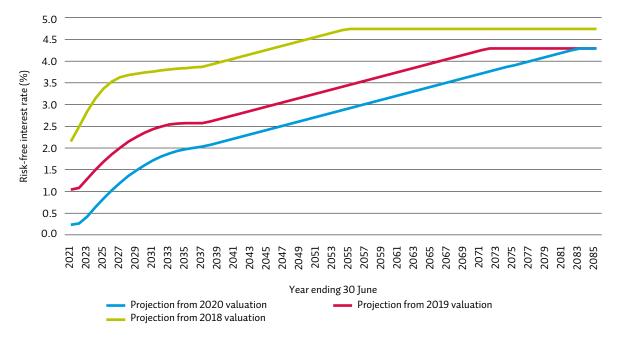
We're satisfied that the methods and assumptions used are appropriate.

Assumptions for economic factors meet strict requirements

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. Risk-free rates reflect the yields of New Zealand Government bonds. The long-term risk-free rate is based on long-term historical norms. This 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 36 shows the risk-free interest rates used in the calculation of the 30 June 2020 OCL and the rates used in the two previous years.



GRAPH 36 – RISK-FREE INTEREST RATES – APPLICATION OF THE YIELD CURVE TO LIABILITIES

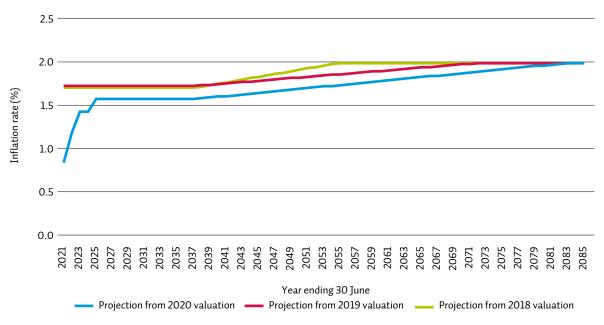
In 2019/20 interest rates decreased significantly, in line with market yields available on New Zealand Government bonds.

Appendix D

Valuation of the outstanding

claims liability

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 37 shows the CPI assumptions used in the calculation of the 30 June 2020 OCL and the rates used in the two previous years.



GRAPH 37 – INFLATION RATE ASSUMPTIONS

Short-term inflation rates decreased significantly from the previous year. This reflected the expected impacts of the COVID-19 pandemic on the New Zealand economy in the next three or four years.

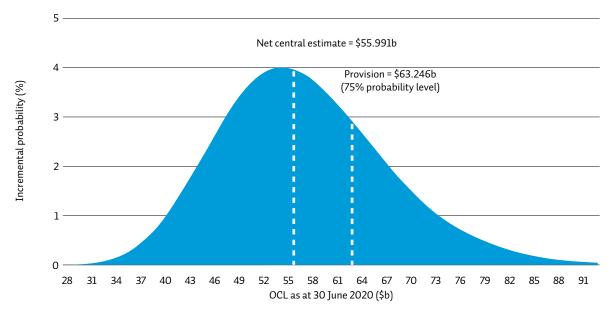
The inflation indices are applied to payment types according to economic drivers of cost. Table 32 shows the inflation type used for each payment type.

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.
СРІ	Independence allowance, lump sum and funeral grants/benefits.

D.12 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 the 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 38 shows the distribution of potential OCL estimates without the risk margin. It shows the 'best estimate' of the OCL was \$55.991 billion at 30 June 2020. It also shows the variance in the OCL, with 95% of potential estimates between \$39 billion and \$78 billion.



GRAPH 38 – ESTIMATED DISTRIBUTION OF OCL AT 30 JUNE 2020

Table 33 shows the risk margins added to the central estimate to meet the 75% level.

TABLE 33 - RISK MARGINS

Account	2019/20
Earners'	11.6%
Motor Vehicle	13.8%
Non-Earners'	13.8%
Treatment Injury	13.8%
Work	11.6%
Total risk margin	13.0%

Appendix D Valuation of the outstanding claims liability

Appendix E – Financial results

ACCIDENT COMPENSATION CORPORATION

E.1 ACC recorded a \$4.8 billion deficit in 2019/20

Reconciliation with the Annual Report

The Scheme deficit of \$4,809 million shown in here is different from what has been reported in the Annual Report 2020. The financial statements shown are consistent with the way ACC is funded. This means they:

- exclude the assets and liability for the Accredited Employers Programme (AEP), the unexpired risk liability (URL) and the OCL risk margin
- include work-related gradual process claims incurred but not reported.

The Annual Report financial statements include a provision for unearned levy revenue. This is revenue received or accrued before 30 June 2020, the end of the fiscal year. The URL is a provision for claims ACC can expect to incur after 30 June 2020 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.

Table 34 provides a high-level reconciliation of the results reported through the FCR to the results reported in the Annual Report.

	ŞIVI
rplus/(deficit)	(5,946)
AEP income and costs	(56)
OCL risk margin and AEP OCL	996
URL ⁸	266
Work-related gradual process claims incurred but not reported	(70)
icit)	(4,809)
	AEP income and costs OCL risk margin and AEP OCL URL ⁸ Work-related gradual process claims incurred but not reported

TABLE 34 - RECONCILIATION OF STATEMENT OF COMPREHENSIVE INCOME WITH THE ANNUAL REPORT

Overall result

The statement of comprehensive income is shown in Table 35 for the year ended 30 June 2020, and compares results with the previous two years. The statement of comprehensive income by Account for the year ended 30 June 2020 is shown in Table 38.

The results for 2018/19 and 2019/20 are separated into performance related to cash flow (as in the Annual Report 2020) 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.

Appendix E Financial results

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⁸ The Annual Report financial statements include a provision for unearned levy revenue. This is revenue received or accrued before 30 June 2020, the end of the fiscal year. The unexpired risk liability (URL) is a provision for claims ACC can expect to incur after 30 June 2020 that are funded by levies already received. If the levies aren't enough to cover these claims (including a risk margin), a URL is held. Changes in the URL are recorded in the statement of financial position, as required by accounting standards.

			2019/20				2018/19		2017/18
\$М	Cash flow	OCL	Total	Budget	Difference	Cash flow	OCL	Total	Total
Income									
Total levies and appropriations	4,412		4,412	4,399	14	4,406		4,406	4,115
Expenditure									
Claims incurred									
Medical costs	1,498	25	1,524	1,585	(61)	1,445	(1,187)	258	1,354
Elective surgery	374	(38)	336	494	(158)	370	51	421	(282)
Sensitive claims	176	294	470	296	174	155	2,967	3,122	
Social rehabilitation	830	749	1,579	1,110	469	785	387	1,172	290
Compensation related	1,540	488	2,028	1,616	413	1,402	(418)	984	1,907
Other	201	(76)	125	184	(59)	218	(779)	(560)	124
Claims handling expenses	525	21	545	505	40	480	28	508	439
Total claims incurred	5,145	1,464	6,608	5,791	818	4,856	1,049	5,905	3,831
Expenses									
Net operating costs	115		115	125	(10)	118		118	138
Injury prevention costs	103		103	120	(17)	75		75	69
Total expenses	217	0	217	245	(27)	193	0	193	208
Total expenditure	5,362	1,464	6,825	6,035	790	5,049	1,049	6,098	4,039
Surplus/(deficit) from underwriting activities	(950)	(1,464)	(2,413)	(1,637)	(777)	(643)	(1,049)	(1,692)	76
Economic									
Change in risk-free discount and inflation rate assumptions		(5,184)	(5,184)	0	(5,184)		(9,430)	(9,430)	(2,301)
Investment management costs	(58)		(58)	(57)	(1)	(54)		(54)	(52)
Unwind of risk-free interest rate		(570)	(570)	(742)	172		(608)	(608)	(648)
Investment income	3,416		3,416	1,655	1,762	5,054		5,054	3,547
Total economic	3,358	(5,754)	(2,396)	856	(3,251)	5,000	(10,038)	(5,038)	546
Total surplus/(deficit)	2,408	(7,217)	(4,809)	(781)	(4,028)	4,357	(11,087)	(6,730)	622

TABLE 35 – STATEMENT OF COMPREHENSIVE INCOME FOR THE PAST THREE YEARS

E.2 Underwriting deficits were larger than expected

The underwriting result is the surplus or deficit generated by ACC's insurance activities during the financial year. It's the difference between levies and appropriations collected for insurance activities, and the cost of claims incurred and expenses paid out. It excludes pure economic impacts.

The underwriting result has worsened over the last three years. Total claims incurred for 2017/18 was \$3.8 billion. This included a large \$840 million OCL release due to the recalibration of the valuation models and changes to long-term assumptions.

2018/19 and 2019/20 saw much higher claims paid and incurred of \$5.9 billion and \$6.6 billion respectively, partly driven by changes in valuation assumptions and the resulting OCL strains. Significant reductions in risk-free interest rates during 2018/19 also meant a much larger OCL for new year claims in 2019/20.

The claim cost increases occurred after levy and appropriations were determined, so the total levy and appropriation were insufficient to cover the increased cost.

The main drivers of this year's underwriting deficit are shown in Table 36. This compares the actual deficit to what was expected when the levies and appropriations were determined.

		\$M
Expected deficit	Levy income lower than expected new year claim costs	(548)
	Appropriation lower than expected new year claim costs	(169)
	Assumption differences between how levies/appropriations and OCL are determined	(580)
	Total expected deficit	(1,297)
Valuation basis change from 2018 to 2019	Higher expected OCL at June 2020 for 2020 accident year claims	(862)
2019/20 claim volumes and costs	Higher than expected cash payments	(100)
	OCL strain from 2020 valuation	(486)
	OCL release due to COVID-19 restrictions	351
	Higher expenses than expected	(19)
Total underwriting deficit		(2,413)

TABLE 36 – ANALYSIS OF UNDERWRITING DEFICIT

A key driver of the underwriting deficit was approved levies and appropriations being set below the cost of new claims. This resulted in an expected underwriting deficit of \$1,297 million. It includes an estimated \$580 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 so it's expected that new year claims will increase the OCL by more than is projected under the levy and appropriation assumptions. Additionally, levy rates were determined factoring in the expected benefits of the actions ACC management is undertaking to reduce claims incidence and improve claims performance. These expected benefits are not explicitly accounted for in the OCL valuation. Instead, the OCL is expected to reduce if and when the benefits are realised.

Incurred cost for new year claims was revised in the 2019 valuation

Assumptions were changed in the 2019 valuation, causing an OCL strain. The risk-free interest rates also fell during 2018/19. These two factors resulted in an OCL increase of \$862 million to the cost for injuries incurred in 2020 compared to when levies and appropriations were determined.

Appendix E Financial results

Higher than expected claims incurred contributed to the underwriting deficit

Total claims cash flow for all claims paid during the year, excluding claims handling expenses, increased by \$266 million (6%) to \$4,620 million and is below the budgeted amount of \$4,698 million. This result was heavily influenced by the national lockdown leading to lower numbers of new injuries and would have been much worse otherwise. This would have been higher had the COVID-19 restrictions not been in place.

The total OCL strain from the 2020 valuation was \$134 million excluding risk margin (\$154 million including risk margin). This included a \$486 million strain reflecting claims performance throughout 2019/20 and a \$351 million release due to COVID-19 restrictions.

Total cost of claims paid and incurred in 2019/20 has contributed to a \$234 million underwriting deficit.

E.3 Changes in the economic environment also contributed to the overall deficit

The total economic contribution was a deficit of \$2,396 million compared to the budgeted surplus of \$856 million. In the previous two years, the economic contributions were a surplus of \$546 million in 2017/18 and a deficit of \$5,038 million in 2018/19. Two main factors drove the economic contribution for 2019/20:

- There were reductions in risk-free interest rate over the year (0.62% reduction in the single effective discount rate, which is a duration-weighted average risk-free discount rate on the undiscounted OCL). This was partially offset by the reductions in inflation rates, particularly in the short term. The total impact on the OCL was an increase of \$5,184 million and accounted for the vast majority of the deficit.
- 2. Investment income was \$3,416 million. ACC achieved an annual return of 7.59% after costs, much higher than the risk-free rate and above the benchmark by 0.2%. This result was largely driven by decreases in market interest rates directly increasing the market values of some assets ACC holds.

There have been considerable reductions in interest and inflation rates in the past two years. These have had significant impacts on the OCL and investment income.

E.4 Total expenses were below budget, but two categories were above budget

Total expenses increased by 10%, from \$726 million in 2018/19 to \$800 million in 2019/20. This was \$19 million higher than allowed for in the levies and appropriation, but \$5 million below budget. Expenses pay for handling claims, preventing injuries, investing funds and the costs of operating. About one-third of the increase in expenses was due to a one-off injury prevention cost for the firearms buy-back scheme of \$24.5 million, which was budgeted for.

Overall expenses were adequately managed.

Graph 39 shows expenses for the past five years, alongside the 2019/20 budget and 2020/21 projected, as percentages of the underlying service, in five categories:

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

GRAPH 39 – EXPENSE CATEGORIES WITH ICIP AND OTHER COSTS SPLIT OUT

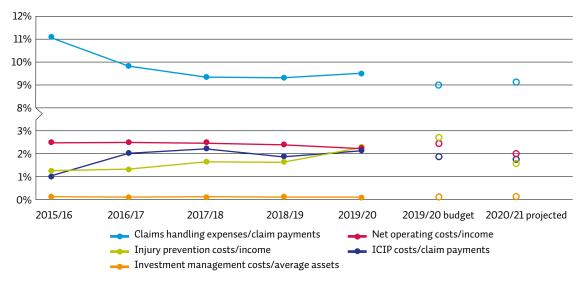


TABLE 37 - EXPENSES CATEGORIES WITH ICIP AND OTHER COSTS SPLIT OUT

		2019/20		2018/19			
\$M	ICIP	Other	Total	ICIP	Other	Total	
Injury prevention costs		103	103		75	75	
Net operating costs	18	97	115	13	105	118	
Claims handling expenses	83	442	525	72	408	480	
Investment management costs		58	58		54	54	

More was spent on injury prevention during the year

Injury prevention costs increased to \$103 million from \$75 million, and as a percentage of income from levies and appropriations to 2.32% from 1.68%. This was mainly due to the \$25.4 million in costs that ACC

Appendix E Financial results contributed to the Government's firearms buy-back scheme, which was a one-off and budgeted for. Total injury prevention costs were below the \$120 million budget (2.72%) with several programmes not spending their allocated budget. The budget for 2020/21 shows a return to normal annual injury prevention costs at \$76 million or 1.60%.

The injury prevention programmes are designed to reduce the number and severity of injuries and should lead to lower claim costs in the future. The expected reductions in future claim costs from injury prevention programmes are usually accounted for when future levy rates and appropriations are set. The spend on the firearms buy-back scheme was an exception, as the levies for 2019/20 had been set before the scheme was in place so didn't allow for it.

Spending on ICIP projects also increased

ICIP projects as a percentage of claim payments increased to 2.18% (\$101 million) from 1.94% (\$85 million). The costs were just above the budget of \$100 million. The percentage was higher than the budget of 1.89%, mainly due to the claim payments being lower than the budget due to the COVID-19 lockdown. Fewer major projects are planned for 2020/21, so the next year's budget projected for the ICIP is decreased by \$15 million to \$86 million or 1.80% of claim payments.

Remaining operating costs decreased during the year

Net operating costs, excluding the ICIP project spend, as a percentage of income from levies and appropriations decreased to 2.24% (\$97 million) from 2.35% (\$105 million). \$3.3 million of this difference was due to lower levy collection fees paid to Inland Revenue. These were below the budget of 2.50% (\$110 million) due to lower spending in projects.

Claims handling expenses increased

Claims handling expenses in 2019/20, excluding the ICIP project spend and as a percentage of claim payments, increased to 9.52% (\$442 million) from 9.32% (\$408 million). This was above the budget of 9.00% (\$423 million), driven by both higher than budgeted cost and lower than budgeted claim payments. The main driver for higher than budgeted cost was a temporary increase in resources assisting with the long-term delivery of Next Generation Case Management and more annual leave balance accrued for the year. The number of claims processed per full time-equivalent employee decreased during the year from 605 to 507, largely driven by the lower new claim volumes and operational disruptions due to COVID-19 restrictions.

Investment management costs were on budget

Investment management costs of \$58 million were slightly above the budget of \$57 million. As a percentage of funds under management they remained at around 0.13%, slightly below the budget of 0.14%. The percentage was influenced by the higher than expected investment return and higher average investment asset balance held.

E.5 Financial Performance by Account

Table 38 sets out the statement of comprehensive income based on the funding policy for the year ending 30 June 2020, split by Account.

TABLE 38 – STATEMENT OF COMPREHENSIVE INCOME BY ACCOUNT	•
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\$M	Motor Vehicle Account	Non-Earners' Account	Earners' Account	Work Account	Treatment Injury Account	2019/20 Total	2018/19 Total
Income							
Total levies and appropriations	444	1,278	1,664	758	267	4,412	4,406
Expenditure							
Claims incurred							
Medical costs	137	791	440	139	17	1,524	258
Elective surgery	31	72	93	117	23	336	421
Sensitive claims	0	226	227	18	0	470	3,122
Social rehabilitation	385	423	232	129	411	1,579	1,172
Compensation related	169	(42)	1,123	579	200	2,028	984
Other	39	17	69	(27)	28	125	(560)
Claims handling expenses	60	78	210	165	32	545	508
Total claims incurred	821	1,564	2,393	1,119	711	6,608	5,905
Expenses							
Net operating costs	5	5	40	62	3	115	118
Injury prevention costs	8	23	34	27	10	103	75
Total expenses	14	28	74	89	12	217	193
Total expenditure	835	1,592	2,467	1,208	724	6,825	6,098
Surplus/(deficit) from underwriting activities	(391)	(315)	(803)	(449)	(456)	(2,413)	(1,692)
Economic							
Change in risk-free interest and inflation rate assumptions	(1,402)	(1,260)	(837)	(732)	(953)	(5,184)	(9,430)
Investment management costs	(18)	(6)	(14)	(13)	(7)	(58)	(54)
Unwind of risk-free interest rate	(157)	(128)	(117)	(87)	(82)	(570)	(608)
Investment income	1,124	343	790	745	414	3,416	5,054
Total economic	(452)	(1,050)	(178)	(88)	(628)	(2,396)	(5,038)
Total surplus/(deficit)	(843)	(1,364)	(981)	(537)	(1,084)	(4,809)	(6,730)

Appendix E Financial results

All Accounts had underwriting deficits

In 2019/20 all Accounts had underwriting deficits, with the total deficit being \$2,413 million. The main drivers were:

- Levies and appropriations were lower than expected claim costs.
- Actual claim costs were higher than expected.

The Earners' Account had the largest underwriting deficit

The Earners' Account had the largest deficit at \$803 million. Levies for the Earners' Account were \$155 million lower than the expected new year claim costs. The expected incurred cost of new year's claims had

been revised to increase by \$304 million after the 2019 valuation. This is the largest driver for the deficit. Other significant drivers included \$94 million higher claim payments and \$115 million OCL strains, and a \$243 million deficit driven by levy pricing using different economic and expense assumptions to the OCL valuation.

The results for all other Accounts were driven by mostly the same drivers as the Earners' Account, except for the Motor Vehicle Account. For the Motor Vehicle Account, the OCL reduced mainly due to lower numbers of weekly compensation claims from older accident periods.

E.6 We expect a deficit in each of the next four years

Table 39 shows expected income and expenditure for the Scheme over the next four years. This forecast is calculated on a pricing basis and differs from the accounting basis used in the Annual Report.

The four-year projections are based on:

- the 2021/22 levy rates set by the Government
- · indicative future levies for future years
- assumptions updated to 30 June 2020
- approved appropriations for the Non-Earners' Account for 2019/20.

TABLE 39 – STATEMENT OF COMPREHENSIVE INCOME

\$M	2020/21	2021/22	2022/23	2023/24
Income				
Total levies and appropriations	4,722	5,073	5,802	6,475
Expenditure				
Claims incurred				
Medical costs	1,688	1,760	1,849	1,939
Elective surgery	597	635	679	722
Sensitive claims	493	541	592	616
Social rehabilitation	1,637	1,660	1,688	1,725
Compensation related	1,921	1,985	2,098	2,193
Other	188	194	200	208
Claims handling expenses	536	538	557	572
Total claims incurred	7,060	7,313	7,663	7,974
Expenses				
Net operating costs	115	115	119	122
Injury prevention costs	76	79	85	92
Total expenses	190	194	204	213
Total expenditure	7,251	7,507	7,867	8,188
Surplus/(deficit) from underwriting activities	(2,529)	(2,434)	(2,065)	(1,713)
Economic				
Investment management costs	(63)	(64)	(65	(67)
Unwind of risk-free interest rate	(115)	(135)	(229)	(364)
Investment income	1,379	1,424	1,486	1,565
Total economic	1,202	1,224	1,191	1,135
Total surplus/(deficit)	(1,327)	(1,210)	(873)	(577)

E.7 The estimated 2020/21 underwriting deficit is higher than previously projected

The projected total underwriting deficit has increased. For 2020/21 the projected underwriting deficit is \$2,529 million, \$135 million higher than the previous 2019 projection.

The factors contributing to the underwriting deficit of \$2,529 million are shown in Table 16.

• Income is expected to be lower than new year costs.

As previously discussed, the levy rates for 2019/21 were set below the new year cost due to the Accounts being overfunded – this resulted in an expected deficit of \$595 million. Levy rates for the 2021/22 levy year were rolled over and this also results in an expected deficit of \$595 million in next year's underwriting result.

For the Non-Earners' Account and Non-Earners' portion of the Treatment Injury Account, the approved appropriation for 2020/21 (determined in 2018/19) was expected to match the lifetime cost of claims for injuries to occur in 2020/21. This results in a nil expected underwriting surplus.

• New year claim costs are expected to increase.

Claim costs have increased over the past two years since levies and appropriations were set. This is due to both changes in economic assumptions and valuation assumptions changes to reflect higher claim costs. This contributes \$1,117 million to the expected deficit with \$753 million from the economic changes. \$844 million of the expected deficit is from the levied Accounts with \$643 million economic changes. \$273 million of the expected deficit is from the non-levied Accounts with \$110 million economic changes.

• Different assumptions in determining levies/appropriations and OCL.

Differences in the assumptions between those used to calculate levies and appropriations and those for the OCL (such as different discount rates) result in a projected deficit of \$817 million.

Appendix E Financial results

E.8 Economic conditions are affecting investment outcomes

The economic surplus in 2020/21 is projected to be \$1,202 million. This is much higher than the \$2,396 million economic deficit in 2019/20. The projections are made based on the assumption that economic factors remain unchanged. Combined with the underwriting deficit of \$2,529 million, the total projected deficit of the Scheme is \$1,327 million in 2020/21.

Economic conditions are volatile by nature and this brings uncertainty to the overall Scheme performance. Over the past two years there was significant deterioration in the economy, resulting in large reductions in the risk-free interest rates. For ACC the result of this was an increase of over \$14.6 billion in OCL. Falling interest rates also have implications on future investment returns. Both put pressure on levy rates and appropriations.

Table 40 gives the projected statement of comprehensive income by Account for 2020/21 compared with the total result for 2019/20.

\$M	Motor Vehicle Account	Non- Earners' Account	Earners' Account	Work Account	Treatment Injury Account	Projected 2020/21 Total	2019/20 Total
Income							
Total levies and appropriations	454	1,527	1,703	737	302	4,722	4,412
For an diama							
Expenditure Claims incurred							
Medical costs	136	828	529	159	36	1,688	1,524
	59	828 122	52 <i>5</i> 274	159	56 66	1,688 597	1,524 336
Elective surgery Sensitive claims	59 0	220	274 274		0	493	470
				(1) 76	-		
Social rehabilitation	463 290	465 33	282 918	76 576	350 104	1,637	1,579
Compensation related						1,921	2,028
Other	46	17	37	69	20	188	125
Claims handling expenses	73	105	206	111	40	536	545
Total claims incurred	1,067	1,791	2,519	1,068	616	7,060	6,608
Expenses	_	_		<i>c</i> .			
Net operating costs	7	5	34	64	4	115	115
Injury prevention costs	10	16	10	29	10	76	103
Total expenses	18	21	45	93	14	190	217
Total expenditure	1,085	1,812	2,564	1,160	630	7,251	6,825
Surplus/(deficit) from underwriting activities	(631)	(285)	(861)	(423)	(328)	(2,529)	(2,413)
Economic							
Changes to risk-free discount and inflation assumptions							(5,184)
Investment management costs	(7)	(9)	(26)	(18)	(2)	(63)	(58)
Unwind of risk-free interest rate	(31)	(26)	(23)	(17)	(17)	(115)	(570)
Investment income	377	181	377	287	156	1,379	3,416
Total economic	339	147	328	252	137	1,202	(2,396)
Total surplus/(deficit)	(293)	(139)	(533)	(171)	(191)	(1,327)	(4,809)

TABLE 40 - PROJECTED 2020/21 STATEMENT OF COMPREHENSIVE INCOME

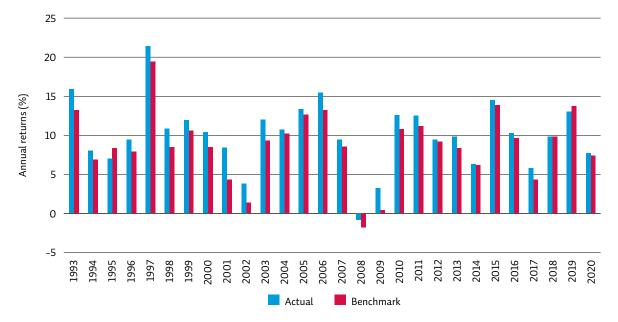
Appendix E Financial results

Appendix F – How ACC manages its investments

F.1 The 2019/20 investment return was above benchmark

In 2019/20 the Scheme's investment return, after adjusting for investment expenses and tax, was 7.59% compared to the market-based benchmark of 7.42%. The asset allocations and market indices used to determine the benchmark are set in advance by the ACC Board's Investment Committee. The higher than benchmark return was mainly driven by better-than-benchmark equity returns. Investment returns varied by Account, but all were above the benchmark.

Since 1993 the actual investment returns have, on average, beaten the benchmark by over 1% per annum. The actual investment returns have only been below the benchmark twice since 1992/93, as shown in Graph 40.



GRAPH 40 - 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 fallen by about 1.5% to around 4% per annum. This has primarily been due to significant falls in interest rates during the past three years. Declines in interest rates cause a revaluation gain for bonds, but also lower returns for the remaining lives of the bonds. With lower expected investment returns from fixed-interest assets, there's a smaller income buffer to absorb negative shocks from the equity market. It's unclear how long rates will remain at this level or even if they'll continue to fall.

Actual gross investment returns have been higher than expected at 13.1% last year and 7.7% this year. This has been due to falling interest rates over the past two years and the revaluation gains for bonds. Given the volatility of investment returns, these results are within the range of likely outcomes. Prolonged low interest rates will likely reduce future expected investment income. It's unclear how long rates will remain at this level or even if they'll continue to fall.

With expected investment returns declining, the chance of negative investment returns has increased, with a negative return expected about one year in three. But with lower expected investment returns from fixed-interest assets, there's less of an income buffer to absorb negative shocks from the equity market. This will slightly increase ACC's chances of a negative total investment return.

Appendix F How ACC manages its investments

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 in the net of ACC's assets minus liabilities
- effects on levies
- impacts on Government appropriations for the Non-Earners' Account and the Non-Earners' portion of the Treatment Injury Account.

F.2 There is governance around how ACC invests its assets

The investment team reports through the Investment Committee

ACC's investment team manages investments and is governed by the Investment Committee, a subcommittee 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, on which compliance monitoring is done and reported to the Investment Committee.

The Investment Committee sets guidelines and reviews benchmarks

The committee:

- sets risk tolerances
- approves asset allocation benchmark weightings, benchmark indexes 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. There are 12 external fund managers that manage assets outside New Zealand. Since the end of 2019 ACC hasn't managed any global equity investments internally.

F.3 Investment assets are allocated to manage the trade-off between risk and return

Investment returns and risks relate to ACC's OCL

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 2019/20 the investment assets ACC owned had a market value of \$46.7 billion. These assets, and future investment returns on them, are there to fund expected future cash claim payments of \$78.9 billion over the lifetime of existing claims (excluding pay-as-you-go claims that are funded as costs arise).

The non-levied 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 appropriations will be needed to cover this. While the levied Accounts are not in deficit, the surpluses are small, and we forecast that increases in levies are needed to cover new year claim costs in order to reduce the risk of deficits arising in the future.

The asset allocation strategy's high-level objective is to manage investment returns and risks. The principal focus is on the asset-liability risk, which incorporates both the OCL and investment assets. Levy payers and taxpayers 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 claim 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 claim 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.

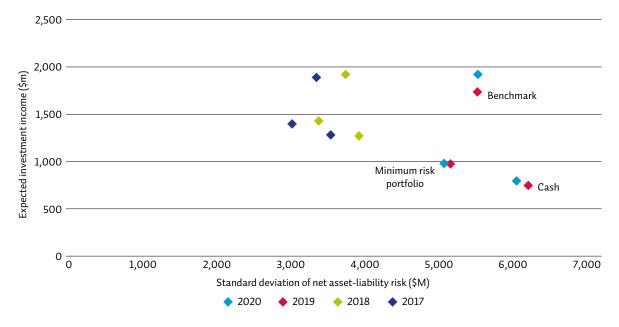
The notional minimum risk portfolio is typically dominated by New Zealand Government bonds, including a weighting for index-linked bonds. These are typically a good match with the OCL, much of which is long-dated and moves with inflation. The portfolio also contains relatively small allocations of equity 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 41 shows the estimated risks and returns for the minimum risk portfolio compared to cash and the benchmark portfolio. Risk is shown as the sum of net annual assets minus liability volatility (standard deviation) in all Accounts. It is shown at 30 June 2020 and for the previous three years.

Appendix F How ACC manages its investments

GRAPH 41 – TOTAL RESERVE ACCOUNT – RISK VS RETURN



At 30 June 2020 ACC estimates an expected return of \$1.0 billion for the notional minimum-risk portfolio, with a net asset-liability risk of \$5.1 billion. The portfolio benchmarks adopted in 2019/20 increase the expected annual investment income to \$1.9 billion, but also raise the total risk to \$5.6 billion.

The fall in interest rates between June 2018 and June 2019 was the main cause of the large movement in the risk-return profiles between those in 2017 and 2018, and those in 2019 and 2020. The lower interest rates reduced the returns from the minimum risk portfolio and cash. When interest rates are low, movements result in greater volatility in the liabilities and assets and increase the overall risk. As the reduction in bond yields was higher than that for equity returns, the difference between the benchmark and the minimum risk returns increased.

Table 41 shows the strategic asset allocations for each of the five Accounts. It also shows the total actual asset allocation at 30 June 2020 compared with the total strategic asset allocation at 30 June 2019.

TABLE 41 – STRATEGIC ASSET ALLOCATION BY ACCOUNT AND TOTAL ACTUAL

Asset class	Motor Vehicle Account	Non- Earners' Account	Earners' Account	Work Account	Treatment Injury Account	Total strategic asset allocation 2020	Actual asset allocation 2020	Strategic asset allocation 2019
New Zealand cash	2.0%	2.0%	2.0%	4.0%	2.0%	2.5%	5.0%	2.5%
New Zealand long bonds	31.5%	11.0%	24.5%	35.0%	24.0%	27.8%	20.3%	34.0%
New Zealand index- linked bonds	30.0%	29.5%	21.0%	16.5%	31.5%	24.8%	28.7%	23.9%
Global bonds	2.0%	2.5%	7.5%	8.5%	2.5%	5.0%	4.4%	4.9%
New Zealand property and infrastructure	3.5%	3.5%	4.0%	4.0%	3.5%	3.7%	2.3%	3.7%
Private markets	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	4.1%	0.0%
New Zealand equities	8.5%	11.0%	9.0%	8.0%	11.0%	9.0%	8.4%	8.6%
Australian equities	4.0%	4.5%	4.5%	4.5%	4.5%	4.3%	4.3%	4.3%
Global equities	18.5%	36.0%	27.5%	19.5%	21.0%	22.9%	21.1%	18.1%
								Continued

Asset class	Motor Vehicle Account	Non- Earners' Account	Earners' Account	Work Account	Treatment Injury Account	Total strategic asset allocation 2020	Actual asset allocation 2020	Strategic asset allocation 2019
Foreign currency contracts overlay	n/a	n/a	n/a	n/a	n/a	n/a	0.5%	n/a
Other	n/a	n/a	n/a	n/a	n/a	n/a	0.9%	n/a
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Interest rate derivative asset allocation overlay	9.0%	15.0%	5.0%	0.0%	11.5%	6.8%	3.7%	7.4%
Total equity weight (treating New Zealand property and infrastructure as 'half equities')	32.8%	53.3%	43.0%	34.0%	38.3%	38.1%	34.9%	32.9%

Asset allocations are determined by Account

Asset allocations are shaped by Account. The size and nature of claim 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. The resulting changes took effect progressively between the end of October 2019 and the end of April 2020.

The changes varied by Account due to specific Account differences, such as changes in funding ratios. Overall, the cumulative changes in Table 41 were:

- an increase in the global equity weight and a reduction in the nominal bond weight due to reduced funding ratios and an increase in the expected equity risk premium
- an increase in the weighting for inflation-indexed bonds due to the availability of newly issued inflation-indexed bonds
- a reduction in the total unhedged foreign currency exposure due to an increase in the expected returns from foreign currency hedging through increases in the New Zealand interest rate differential and decreases in the value of the New Zealand dollar.

The liability profile is different for each Account

Most claims are short term and don't pose significant investment issues. A small number of claims are for very long-term serious 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 the clients can go back to work or reach the age of eligibility for New Zealand 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.

Appendix F How ACC manages its investments 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.

F.4 Many factors 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 affect assets and liabilities differently

The OCL's value is calculated using risk-free interest rates for many years into the future, so falls in longterm interest rates raise the value of the OCL. When this happens, assets also tend to rise in value. But they tend not 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.

Following a reduction of more than 1% in 2018/19, the risk-free interest rates fell significantly again in 2019/20. The single effective discount rate fell by 62 basis points during 2019/20. This resulted in an increase in the OCL of \$7,515 million. This was only partially offset by investment returns being \$1,762 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 2040. In July 2020, a new bond with a maturity date in 2041 was issued. The risk-free interest rate methodology adopted by the Treasury assumes interest rates will 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 in 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. When the long-term risk-free rate was changed from 4.75% to 4.30% in 2019, this resulted in an increase in the OCL of \$170 million, with no corresponding increase in assets.

Future claim payments are generally linked to inflation

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 can improve investment returns, but this increases risk

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 its 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 it introduced more formal methods to monitor and evaluate the ongoing creditworthiness of the Australasian banking system and custodians.

Appendix F How ACC manages its investments

Appendix G – Funding details

ACCIDENT COMPENSATION CORPORATION

G.1 There are many possible pathways for the funding position

Changes in economic and claim trends can vary the funding positions of each Account. To understand more, we simulate future examples of these variations.

For the three levied Accounts and the fully funded portion of the Non-Earners' Account (including the Non-Earners' portion of the Treatment Injury Account) the simulations allow for:

- the funding position at 30 June 2020
- variations in economic factors, including the earned rates of investment returns, inflation rates and risk-free interest rates
- changes in the number of claims, rehabilitation rates, average payments and superimposed inflation.

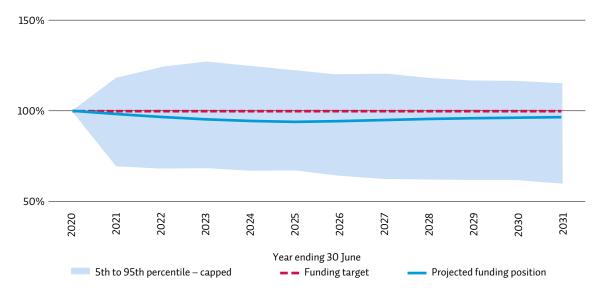
We've generated funding positions for each simulation and associated revised levy paths. Using all simulations, Graph 42 to Graph 45 show the distribution of funding positions for each Account in future years, with levy rates and appropriation increases calculated according to the funding policy.

Motor Vehicle Account

The Motor Vehicle Account had an opening funding position of 100%. Low interest rates and deteriorating claims performance have caused new year claim costs to increase substantially. Due to capping, this cost increase can't be fully met by immediate increases in levies. As a result, the funding ratio is likely to fall below the 100% target in one year and remain below target in the foreseeable future.

The Motor Vehicle Account has more serious injury claims than the other levied Accounts meaning it has the highest exposure to future variability in interest rates. This is evident in the wide range of possible future funding positions.

The expected funding position reduces to 95% over the next three years and is expected to remain around this level for the remainder of the next 10 years. This assumes future levy increases are approved according to the funding policy. Our simulations imply that there is a 23% probability that the funding position will be above 100% at 31 March 2031.

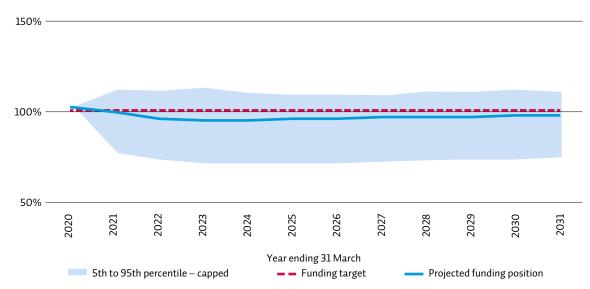


GRAPH 42 - MOTOR VEHICLE ACCOUNT: PROJECTED FUNDING POSITION

Earners' Account (excluding the Earners' portion of the Treatment Injury Account)

The Earners' Account (excluding the Earners' portion of Treatment Injury) had an opening funding ratio of 102%. Like the Motor Vehicle Account, low interest rates and deteriorating claims performance have 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 ratio is likely to fall below the 100% target in one year and remain below target in the foreseeable future. Our simulations imply that there is a 22% probability that the funding position will be above 100% in 2030.

Under this scenario the funding ratio is likely to be around 97% by 31 March 2031.

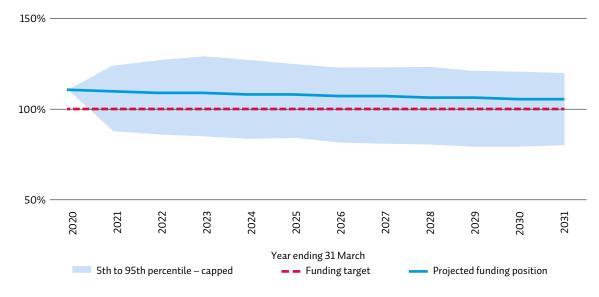


GRAPH 43 – EARNERS' ACCOUNT: PROJECTED FUNDING POSITION

Work Account

The Work Account had the strongest funding ratio at 30 June 2020 of 111%. Compared to the Earners' Account, the Work Account is more exposed to future variability in interest rates.

GRAPH 44 - WORK ACCOUNT PROJECTED FUNDING POSITION



Of the levied Accounts, the Work Account is most likely to remain above the 100% funding target over the next 10 years.

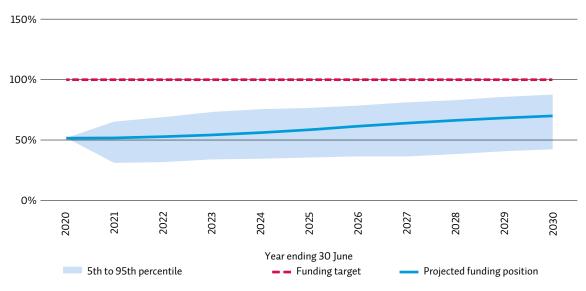
Non-Earners' Account (fully funded portion and excluding the Non-Earners' portion of the Treatment Injury Account)

The funding ratio of the fully funded portion of the Non-Earners' Account, excluding the Non-Earners' portion of the Treatment Injury Account, was 52% at 30 June 2020. This was significantly below its funding target of 100%. Compared to the Earners' Account, the Non-Earners' Account is more exposed to future variability in interest rates.

The funding position is expected to increase more slowly than projected last year due to the introduction of a 7.5% annual cap on appropriation increases.

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. In 2020 it represents 32% of the total Non-Earners' Account liability, including the Non-Earners' portion of the Treatment Injury Account. It is expected to reduce to 18% by 2030.

Graph 45 shows the projected funding position for the fully funded portion of the Non-Earners' Account. It shows the funding ratio under increasing appropriations in line with the funding policy.



graph 45 – non-earners' account (fully funded portion): projected funding position

Even if appropriations do increase, it is extremely unlikely that the 100% funding target will be reached within the next 10 years. This is because the present funding target is significantly below target and appropriation increases are capped at 7.5%.

G.2 Levies and appropriations are sensitive to assumptions too

As with funding positions, new year claim costs can also vary with changes in economic and claim trends. This results in a range of possible pathways for levies and appropriations.

We've used the same set of simulations for the funding positions to understand the variability of levies and appropriations.

For each simulation, the assumptions can change each year. The levies and appropriations are then recalculated by applying the applicable funding policy. The simulations also assume that levies can be set each year under the new funding policy. This means when three years' levies are set in advance, levies can be increased by up to 15% per annum.

Levy rates for the all levied Accounts 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-asyou-go (PAYG) liability to full funding.

Graph 46 to Graph 49 show, for each Account, the distribution of future uncapped and capped levy and appropriation paths. Uncapped 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.

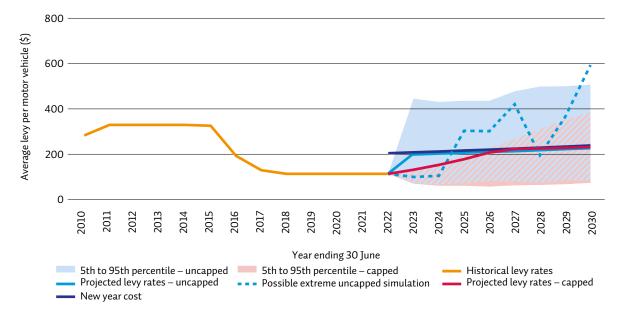
For each Account, we've also selected an extreme simulation to demonstrate that the changes in the uncapped levy rates from year to year may be large and may not necessarily be smooth.

Motor Vehicle Account

The Motor Vehicle Account had the lowest opening funding position of all levied Accounts and has the highest exposure to future variability in interest rates. Indicative future levies show new year claim costs for 2021/22 have risen to \$204, compared to the current levy of \$114.

Levy increases are expected to be capped until 2025/26. For any given year between 2022 and 2025 there is around a 74% probability of levies hitting the cap.

The distribution of the Motor Vehicle Account's simulated uncapped levy path is also the widest of the levied Accounts. The graph below shows an extreme scenario, in this scenario we see a significant shock reduction in the investment return rates, impacting both the new year cost of claims and the funding position of the Account. The combined impact of these increases the uncapped levy rate to almost \$600 in 2030.



GRAPH 46 - MOTOR VEHICLE ACCOUNT: DISTRIBUTION OF FUTURE LEVY PATHS

The peak rate for this Account was just over \$330 between 2011 and 2015.

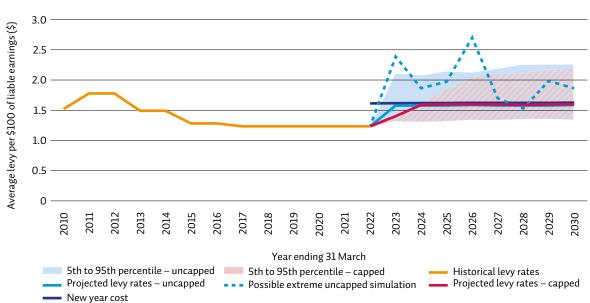
Given the 30 June 2020 funding position, we expect levy increases will be needed in the future. Without capping there would be a wide range of possible future levies. For example, the 2022/23 levy could vary from \$73 to \$448 with 90% confidence. Capping narrows the range of likely levy outcomes for the same period to between \$73 and \$136.

There are scenarios in which the levies could fall. This would primarily come from changes in economic assumptions (increases to interest rates or reductions to inflation), reducing both the new year cost and the funding adjustment (through an improved funding position). There is a 16% probability of levies reducing in the 2022/23 year.

Earners' Account (including the Earners' portion of the Treatment Injury Account)

The reduction in interest rates and deteriorating claims performance have reduced the Earners' Account (including the Earners' portion of the Treatment Injury Account) funding position to 107% at June 2020 and caused new year claim costs to increase substantially.

The new year rate for 2021/22 is \$1.58 per \$100 liable earnings, significantly higher than the current levy rate of \$1.21. There is an 87% chance that the levies will be capped in the 2022/23 levy year. This reduces to 52% for the 2023/24 levy year. After 2022/23 levies are expected to exceed the new year cost due to the Account being below funding target by that time.



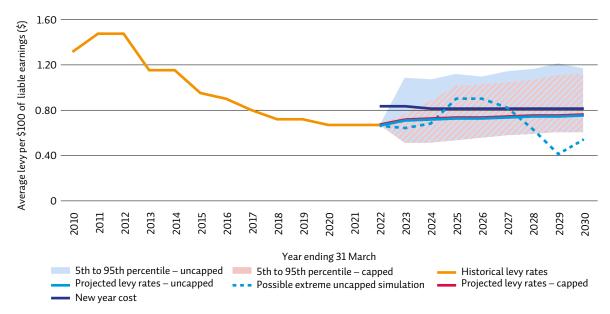
GRAPH 47 – EARNERS' ACCOUNT, INCLUDING THE EARNERS' PORTION OF THE TREATMENT INJURY ACCOUNT: DISTRIBUTION OF FUTURE LEVY PATHS

Levies for the Earners' Account have been falling since 2012, when they peaked at \$1.78. We expect levy increases will be needed in the short term. Without capping, there would be a wide range of possible future levy rates. For example, the 2022/23 levy could vary from \$1.32 to \$2.09 with 90% confidence. Capping narrows the range of likely levy outcomes for the same period to between \$1.32 and \$1.39.

Work Account

The new year claim costs rate is \$0.83 per \$100 liable earnings, significantly higher than the current levy rate of \$0.67. Work Account is more exposed to future variability in interest rates compared to the Earners' Account. This means the simulated uncapped levy path is slightly more volatile than it is in the Earners' Account.

Levies are projected to be below new year claim costs for at least the next eight years. This is in accordance with the funding policy as the Account exceeds its funding target. For any given year between 2022 and 2025 there is around a 40% probability of levies being capped.



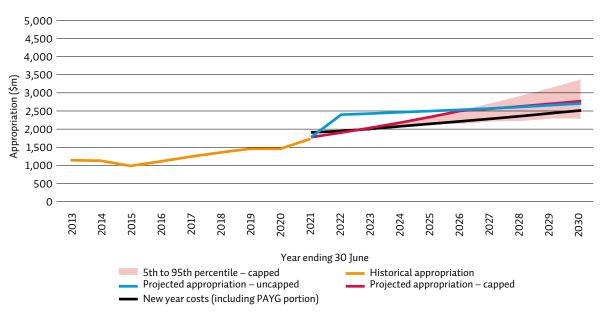
GRAPH 48 - WORK ACCOUNT: DISTRIBUTION OF FUTURE LEVY PATHS

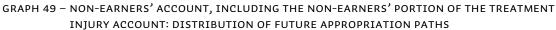
Levies for the Work Account are at historically low levels. The peak rate for this Account was \$1.47 between 2011 and 2012. Levy increases are not expected to be limited by the cap over the next 10 years, although the cap does reduce the range of possible levy rates. For example, the 2022/23 rates could vary from \$0.52 to \$1.09 with 90% confidence. Capping narrows the range of likely levy rate outcomes for the same period to between \$0.52 and \$0.77.

Non-Earners' Account (including the Non-Earners' portion of the Treatment Injury Account)

The Non-Earners' Account, including the Non-Earners' portion of the Treatment Injury Account uses the approved appropriation amount for 2020/21 from Budget 2020 but allows for increases in line with the funding policy throughout.

Using all simulations, Graph 49 shows the distribution of future appropriations, calculated according to the funding policy.





Projected appropriations are close to new year costs and PAYG costs in the immediate term. Capping reduces yearly increases in appropriations to 7.5%, which means increases in appropriations need to be spread over a longer period than previously expected to rebuild to the funding position.

There is a small probability that the appropriation will not hit cap over the next few years. This would require changes in economic assumptions (increases to interest rates or reductions to inflation), this would reduce both the new year cost of claims and the funding adjustment (through an improved funding position). There is a 3% probability that the appropriation will not hit cap in 2022/23 and a 9% probability in 2023/24.

There is a 10% probability that appropriations will still need to increase at the capped amount by 2029/30.



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