Report in Relation to Rates of Levies Prescribed in the Accident Compensation (Work Account Levies) Regulations 2017 and the Accident Compensation (Earners' Levy) Regulations 2017

Sections 331(5A) and 331(5B) of the Accident Compensation Act 2001 ("Act") require the Accident Compensation Corporation (ACC) to prepare a report in relation to the rates of levies prescribed in regulations in accordance with generally accepted practice within the insurance sector in New Zealand.

This report relates to the Work and Earners' Accounts and their respective levies for the two years from 1 April 2017. It provides information about the expected long-term impacts of the 2017/19 levy rates for those Accounts and describes long-term projections of each Account's finances along with key assumptions on which the projections are based. Appendices A and B provide more information about the projections and assumptions.[1]

The levy rates discussed in this report are shown in Figure 1.

Unless otherwise stated, all rates in this report are expressed exclusive of GST.

Figure 1: Average levy rates for 2017/19 for the Work and Earners' Accounts

Work Account **Average levy rate per $100 of liable earnings**	**Earners' Account** **Average levy rate per $100 of liable earnings**
$0.72	$1.21

The Accident Compensation Scheme

ACC is a Crown agent providing comprehensive, no-fault personal injury cover to all New Zealand residents and visitors to New Zealand.

ACC cover is managed under five separate Accounts including the Work Account and the Earners' Account (the levied Accounts). ACC collects levies to fund both these Accounts.

The **Work Account** covers claims for all work-related injuries. The Work Levy is paid by employers and self-employed people working in New Zealand and is expressed as a rate per $100 of liable earnings. The average levy, reported here, is the rate that all employers and self-employed people in New Zealand would pay if ACC charged a flat levy rate. The actual rate paid by each business differs from the average rate and is determined by the claims experience of its classification unit, individual business' claims experience, and any ACC safety incentive products and programmes a business participates in.

The **Earners' Account** covers claims for non-work personal injuries for employed persons (including self-employed) not including motor vehicle injuries. The Earners' Levy is a flat rate paid by all employees and self-employed on their liable earnings up to a defined maximum and is expressed as a rate per $100 of liable earnings. It includes a component to fund earner claims in the Treatment Injury Account.

The Levy-Setting Process

Work and Earners' Accounts' levies are set by regulation under the authority of sections 167, 218, 219, 244, 329 and 333 of the Act.

ACC reviews the expected costs of the levied Accounts to determine the levy rates required to meet the lifetime cost of claims in the upcoming period, along with funding adjustments to move each Account towards its funding target. The ACC Board ("Board") undertakes public consultation before recommending levy rates to the Minister for ACC.[2] Cabinet sets the levy rates for the forthcoming levy period after considering the Board's recommendations, along with the public interest as required by section 300 of the Act.

Principles of Financial Responsibility in Relation to the Levied Accounts

Section 166A of the Act requires the cost of all claims under the levied Accounts to be fully funded. To achieve full funding when setting levies, section 166A requires the Minister for ACC to have regard to the following principles:

- The levies derived for each levied Account should meet the lifetime costs of claims made during the levy year.
- If an Account has a deficit or surplus of funds to meet the costs of claims incurred in past periods, that surplus or deficit is to be corrected by setting levies at an appropriate level for subsequent years.
- Large changes in levies are to be avoided.

These principles provide guidance on how to balance the trade-off between funding stability and levy stability.

The Government's Funding Policy

The funding policy issued by the Minister for ACC on 10 May 2016 (outlined below) specifies how ACC is to balance these principles when recommending levies for each levied Account. ACC must recommend levies for each levied Account consistent with the funding policy.

The funding policy requires that:

- Levy rates must be based on the estimated lifetime costs of claims expected to occur during the levy period (new-year claim costs).
- Accounts will aim to hold assets between 100% and 110% of the outstanding claims liability, with a midpoint funding ratio target of 105%.
- A funding adjustment must be included that takes each Account's funding position to the 105% target smoothly over a ten-year horizon.
- Any increase to the levy rates for each Account must not exceed 15% (in addition to the Labour Cost Index (LCI) for the Motor Vehicle Account).

The funding policy is consistent with the principles in section 166A of the Act.

Variations in claims and economic experience are expected for a scheme such as ACC. The ten-year horizon allows for a gradual return of an Account's funding ratio towards the target and is expected to result in relatively small ongoing changes in levy rates. A shorter horizon would result in a more rapid return to the target funding ratio, but also larger changes in levy rates.

Levy rates are recommended and set every two years. The effect of this is to reset the funding horizon every two years. All other things being equal, this will mean that an Account's funding ratio will approach the target, but never fully arrive at it. As the funding ratio approaches the target, funding adjustments will decrease and levy rates will more closely reflect new-year claim costs.

Another way to consider the funding policy is that it determines both how quickly the funding ratio approaches the funding target and the levy rate approaches new year claim costs. Any deviation from the funding policy changes the expected trajectory towards these targets.

In practice, experience will not exactly match what was assumed when recommending levy rates, and therefore levies are expected to vary around the best estimate forecasts shown in this report.

The levies recommended to the Minister for ACC by the Board for 2017/19, as well as those indicated for subsequent out-years, for both the Work Account and the Earners' Account, were consistent with the funding policy.

Assumptions Underlying the Projections for the Work and Earners' Accounts

Projections in this report are based on the assumptions underlying the 2017/19 levy rate recommendations made by ACC, but with prescribed rather than recommended levy rates where these differ.

The 2017/19 levy rates consulted on and recommended by the Board to the Minister for ACC were determined based on the following:

- claims experience trends up to 31 March 2016. Increases in costs, compared to the previous consultation, have been driven by a higher than expected number of weekly compensation and medical claims, and claims remaining active longer than previously projected. These trends have been reflected by allowing for:
    - an increase in projected claim volumes particularly for claims receiving weekly compensation which, in addition to population growth, are assumed to continue increasing at around 2% per annum over the next three years before flattening off. This assumed increase is lower than recent claims volume growth of around 6%;
    - a small increase in the projected duration of weekly compensation claims. The reflected increase is less than recent experience implies; and
    - superimposed inflation estimated at 2–5% for various types of medical treatment and social rehabilitation;
- estimates of future investment returns given current and expected future market conditions as at 31 March 2016; and
- risk-free interest rates as implied by the New Zealand Government bond yield curve derived as at 30 April 2016. This is inconsistent with the timing of other economic assumptions, however this has no material impact on levy paths.

See Appendix C for an explanation of these terms.

A. The Work Account

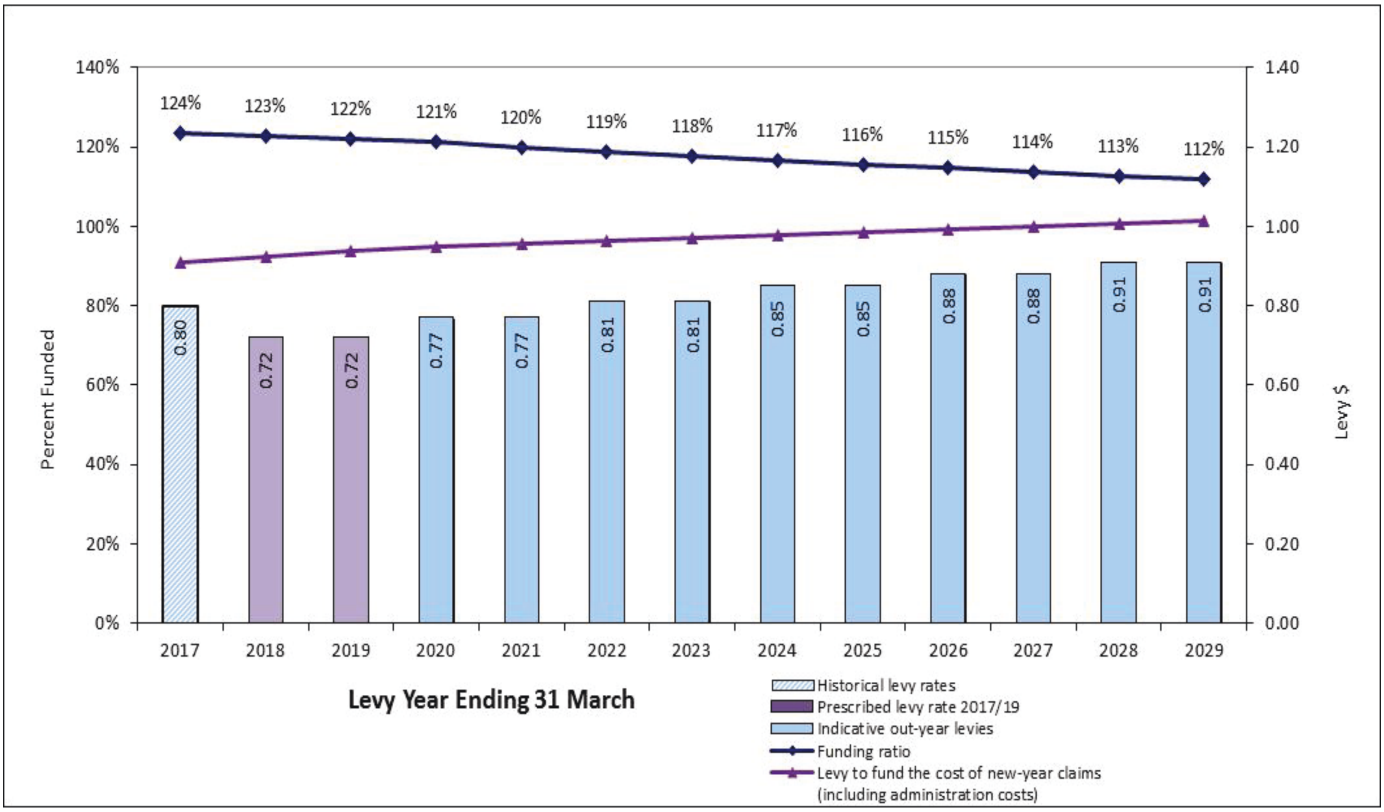
Prescribed Work Account Levy Rates for the 2017/19 Levy Period (1 April 2017 to 31 March 2019)

Following public consultation, the Board recommended that the Government reduce the Work Account average levy by 10%, from $0.80 to $0.72 per $100 liable earnings for the 2017/19 levy period. Expected claims costs have increased, driven primarily by more claims receiving weekly compensation. This has been more than offset by changes in economic factors.

The recommended rates, as well as the indicative out-year levy rates in the Board's consultation, were consistent with the funding policy. Cabinet agreed to the rates recommended by the Board, and the rates have now been prescribed in the Accident Compensation (Work Account Levies) Regulations 2017.

Levy rates have been set at a level below new-year claim costs so as to result in an expected deficit of $82 million for the levy period, and to reduce the expected funding ratio from 124% to 122% by 31 March 2019. Indicative future levy rates, shown below, gradually move the Work Account's funding ratio towards the funding target.

Figure 2: Long-term projected average Work Account levy rates and funding ratios allowing for levy rates prescribed in the Accident Compensation (Work Account Levies) Regulations 2017



B. The Earners' Account

Prescribed Earners' Account Levy Rate for the 2017/19 Levy Period (1 April 2017 to 31 March 2019)

Following public consultation, the Board recommended that the Government raise the Earners' Account levy by 3%, from $1.21 to $1.25 per $100 liable earnings for the 2017/19 levy period. Expected claims costs have increased, driven primarily by more claims receiving weekly compensation and by claims remaining on the scheme for longer than previously projected. The relatively short duration of liabilities for this Account, which don't respond as strongly to changes in economic conditions as the other levied Accounts, means that expected claim costs are only partially offset by changes in discount rates and assumed investment returns.

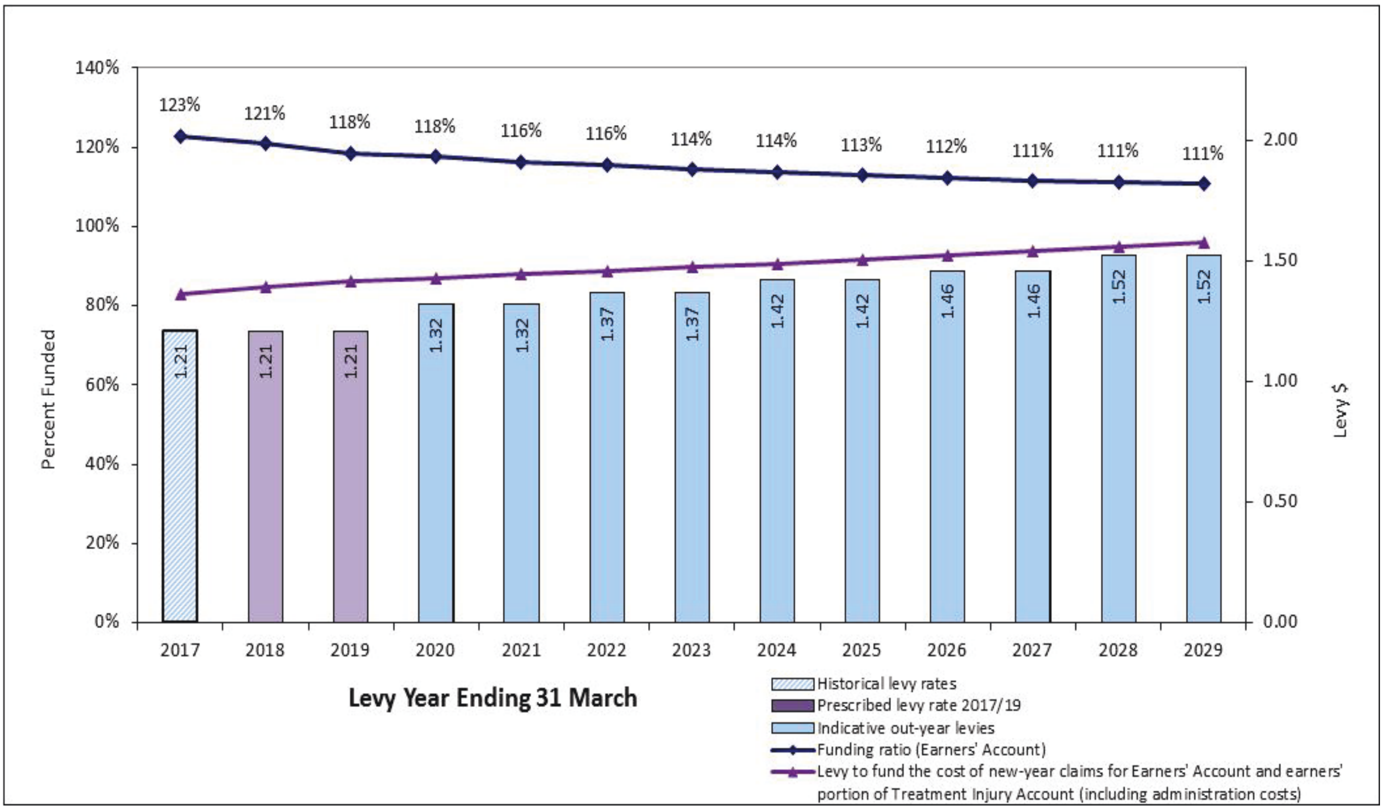
The recommended rate, as well as the indicative out-year levy rates in the Board's consultation, were consistent with the funding policy. Cabinet decided to keep the rate unchanged at $1.21, and this rate has now been prescribed in the Accident Compensation (Earners' Levy) Regulations 2017.

Levy rates have been set at a level below new-year claim costs so as to result in an expected deficit of $213 million for the levy period, and to reduce the expected funding ratio from 123% to 118% by 31 March 2019. Indicative future levy rates, shown below, gradually move the Earners' Account's funding ratio towards the funding target.

Cabinet adopted a lower rate than that recommended by the Board. The impact of this is that over the next two years the funding position will move towards the target more quickly than envisaged under the funding policy. All else being equal, future levy rates will need to increase more quickly than would have otherwise been the case in order for levy rates to ultimately return to the level of new year claim costs.

It is expected, using the assumptions underlying the 2017/19 recommendation, that the Board will recommend that the 2019/21 levy rate increase by 9% ($1.21 to $1.32), instead of by 5% ($1.25 to $1.31). The actual 2019/21 levy rate recommendation will vary from these forecasts depending on claims and economic experience. After this projected initial adjustment for the lower expected 31 March 2019 solvency position, future levy rate increases are expected to be similar to those projected for the 2017/19 consultation, under the funding policy. The probability of the funding position falling below 100% in the short to medium term is low, given the current funding position of the Account.

Figure 3: Long-term projected Earners' Account levy rates and funding ratios allowing for the levy rate prescribed in the Accident Compensation (Earners' Levy) Regulations 2017



Changes Since 31 March 2016

At 31 December 2016 the funding ratios for both Accounts were close to those forecast using 31 March 2016 assumptions. The actual and expected funding ratios are shown in Figure 4 below.

Figure 4: Work and Earners' Accounts—expected and actual funding ratios

	Funding ratio (31 December 2016 as projected at 31 March 2016)	Actual funding ratio (31 December 2016)
Work Account	123%	125%
Earners' Account	123%	122%

The difference between these expected and actual funding ratios will have an immaterial impact on future levy requirements.

Conclusion

The levy rates recommended by the Board to the Minister for ACC were consistent with the funding policy.

Cabinet has set the Earners' Account levy at a rate lower than that recommended by the Board. As a result, all else being equal, future recommended levy rates will be higher than would otherwise have been the case in order to meet the funding target set out in the funding policy. Recommended rates in the next levy round are expected to increase significantly and then increase gradually over time.

HERWIG RAUBAL, BEC, FNZSA, FIAA, Chief Risk and Actuarial Officer, Accident Compensation Corporation.

Appendix A: Work Account

Work Account Long-Term Projections

	Levy year end

Year ending 31 March	Average levy rates ($ per $100 liable earnings)	Levy ($m)	Lifetime cost of new-year claim costs ($m)	Administration costs for new-year claim costs ($m)	Levy required to fund lifetime cost of new-year claim costs (per $100 liable earnings)	Levy required to fund administration costs (per $100 liable earnings)	Accrued assets ($m)	OCL ($m)	Account balances ($m)	Funding ratio
2016/17	0.80	671	616	238	0.66	0.25	8,808	7,130	1,678	124%
2017/18	0.72	626	647	251	0.66	0.26	8,850	7,201	1,649	123%
2018/19	0.72	651	681	268	0.67	0.26	8,880	7,284	1,596	122%
2019/20	0.77	720	710	282	0.68	0.27	8,949	7,390	1,560	121%
2020/21	0.77	743	737	297	0.68	0.27	9,015	7,520	1,496	120%
2021/22	0.81	805	765	306	0.69	0.28	9,123	7,674	1,449	119%
2022/23	0.81	830	794	317	0.69	0.28	9,226	7,843	1,383	118%
2023/24	0.85	897	825	327	0.70	0.28	9,366	8,023	1,343	117%
2024/25	0.85	924	857	338	0.70	0.28	9,509	8,224	1,285	116%
2025/26	0.88	984	891	349	0.71	0.28	9,684	8,444	1,240	115%
2026/27	0.88	1,013	926	361	0.72	0.28	9,858	8,680	1,178	114%
2027/28	0.91	1,078	961	373	0.73	0.28	10,070	8,930	1,140	113%
2028/29	0.91	1,108	998	385	0.73	0.28	10,282	9,183	1,099	112%

The table above presents the projected levy and funding path after applying the funding policy. The table below summarises the key assumptions underlying these projections.

Work Account Key Assumptions

Year ending 31 March	Claim numbers (entitlement claims)	Entitlement claim frequency (claims per 1,000 workers)	Exposure (number of workers not covered by AEP) (000)	Exposure (liable earnings) ($b)	Investment return forecasts (June year)	Risk-free interest rates (June year)	Standard inflation (LCI)
2016/17	31,374	15.17	2,069	94	4.1%	2.0%	1.8%
2017/18	32,224	15.32	2,103	97	4.3%	1.9%	1.8%
2018/19	33,241	15.48	2,147	101	4.4%	2.3%	1.8%
2019/20	33,844	15.54	2,177	105	4.5%	2.6%	1.8%
2020/21	34,178	15.54	2,199	108	4.6%	3.0%	1.8%
2021/22	34,499	15.54	2,219	111	4.8%	3.3%	1.8%
2022/23	34,818	15.54	2,240	115	4.9%	3.5%	1.8%
2023/24	35,135	15.54	2,260	118	5.0%	3.7%	1.8%
2024/25	35,446	15.54	2,280	122	5.1%	3.8%	1.8%
2025/26	35,751	15.59	2,293	125	5.1%	3.9%	1.8%
2026/27	35,947	15.59	2,305	129	5.2%	4.0%	1.8%
2027/28	36,145	15.59	2,318	133	5.3%	4.1%	1.8%
2028/29	36,343	15.59	2,331	136	5.3%	4.1%	1.8%

The following table compares the components of the 2017/19 prescribed average levy rate with those of the 2016/17 rate. The first column shows the components of the 2016/17 prescribed levy rate derived for the 2016/17 levy consultation. The second column shows how the estimates of new-year claim costs and administration costs for the same year differ when calculated using the revised assumptions used for the 2017/19 levy period. The third column then shows how these costs have changed for the new levy period.

Trend in Underlying Costs Levy per $100 liable earnings	Initial 2016/17 (last year's assessment)	Current 2016/17 (this year's assessment)	Prescribed 2017/19 levy rate
To fund the cost of new claims during the new levy year	$0.64	$0.66	$0.67
To fund administration costs	$0.27	$0.25	$0.26
Funding adjustment	-$0.11		-$0.21
Average Work Levy rate	**$0.80**		**$0.72**

The estimate of claim costs for 2016/17 has increased reflecting higher volumes of new claims than anticipated. In addition, projections for claim durations have been increased to reflect recent trends in rehabilitation performance. 2017/19 claim costs are projected to increase compared with the 2016/17 estimate because of medical and rehabilitation cost inflation (above the Labour Cost Index (LCI)).

Appendix B: Earners' Account

Earners' Account Long-Term Projections

	Earners' Account and the earners' portion of Treatment Injury Account						Earners' Account only (levy year end)			
Year ending 31 March	**Levy rates ($ per $100 liable earnings)**	**Levy ($m)**	**Lifetime cost of new-year claim costs ($m)**	**Administration costs for new-year claim costs ($m)**	**Levy required to fund lifetime cost of new-year claim costs (per $100 liable earnings)**	**Levy required to fund administration costs (per $100 liable earnings)**	**Accrued assets ($m)**	**OCL ($m)**	**Account balances ($m)**	**Funding ratio**
2016/17	1.21	1,442	1,398	231	1.17	0.19	8,939	7,274	1,665	123%
2017/18	1.21	1,496	1,481	243	1.20	0.20	9,156	7,580	1,577	121%
2018/19	1.21	1,555	1,566	255	1.22	0.20	9,337	7,885	1,452	118%
2019/20	1.32	1,755	1,639	265	1.23	0.20	9,649	8,208	1,441	118%
2020/21	1.32	1,810	1,707	276	1.24	0.20	9,951	8,552	1,400	116%
2021/22	1.37	1,936	1,780	285	1.26	0.20	10,305	8,922	1,383	116%
2022/23	1.37	1,994	1,856	294	1.27	0.20	10,655	9,319	1,337	114%
2023/24	1.42	2,130	1,935	304	1.29	0.20	11,074	9,738	1,336	114%
2024/25	1.42	2,194	2,020	314	1.30	0.20	11,490	10,183	1,306	113%
2025/26	1.46	2,322	2,108	324	1.32	0.20	11,956	10,651	1,305	112%
2026/27	1.46	2,390	2,199	334	1.34	0.20	12,410	11,137	1,273	111%
2027/28	1.52	2,559	2,293	339	1.36	0.20	12,940	11,641	1,299	111%
2028/29	1.52	2,633	2,392	349	1.38	0.20	13,456	12,161	1,295	111%

The table above presents the projected levy and funding path after applying the funding policy. The table below summarises the key assumptions underlying these projections.

Earners' Account Key Assumptions

Year ending 31 March	**Claim numbers (entitlement claims)**	**Entitlement claim frequency (claims per 1,000 earners)**	**Exposure (number of earners) (000)**	**Exposure (liable earnings) ($b)**	**Investment return forecasts (June year)**	**Risk-free interest rates (June year)**	**Standard inflation (LCI)**
2016/17	60,844	25.15	2,420	119	4.4%	2.0%	1.8%
2017/18	63,432	25.70	2,468	124	4.5%	1.9%	1.8%
2018/19	66,112	26.24	2,519	129	4.6%	2.3%	1.8%
2019/20	67,359	26.36	2,556	133	4.8%	2.6%	1.8%
2020/21	68,038	26.36	2,581	137	4.9%	3.0%	1.8%
2021/22	68,678	26.36	2,606	142	5.0%	3.3%	1.8%
2022/23	69,313	26.36	2,630	146	5.1%	3.5%	1.8%
2023/24	69,944	26.36	2,654	150	5.3%	3.7%	1.8%
2024/25	70,563	26.36	2,677	155	5.4%	3.8%	1.8%
2025/26	71,172	26.44	2,692	159	5.4%	3.9%	1.8%
2026/27	71,562	26.44	2,706	164	5.4%	4.0%	1.8%
2027/28	71,955	26.44	2,721	169	5.5%	4.1%	1.8%
2028/29	72,349	26.44	2,736	174	5.5%	4.1%	1.8%

The following table compares the components of the 2017/19 prescribed average levy rate with those of the 2016/17 rate. The first column shows the components of the 2016/17 prescribed levy rate derived for the 2016/17 levy consultation. The second column shows how the estimates of new-year claim costs and administration costs for the same year differ when calculated using the revised assumptions used for the 2017/19 levy period. The third column then shows how these costs have changed for the new levy period.

Trend in Underlying Costs Levy per $100 liable earnings	**Initial 2016/17 (last year's assessment)**	**Current 2016/17 (this year's assessment)**	**Prescribed 2017/19 levy rate**
Earners' portion only:			
To fund the cost of new claims during the new levy year	$1.04	$1.07	$1.11

To fund administration costs	$0.18	$0.18	$0.18
Funding adjustment	-$0.11		-$0.19
Earners' portion of Treatment Injury:			
To fund the cost of new claims during the new levy year and administration costs	$0.11	$0.12	$0.12
Funding adjustment	-$0.01		-$0.01
Total Earners' Levy rate	**$1.21**		**$1.21**

The estimate of claim costs for 2016/17 has increased, reflecting higher volumes of new claims than anticipated. In addition, projections for claim durations have been increased to reflect recent trends in rehabilitation performance. 2017/19 claim costs are projected to increase compared with the 2016/17 estimate because of medical and rehabilitation cost inflation (above the Labour Cost Index (LCI)). Allowance has also been made for a projected increase in claim numbers above population growth.

Appendix C: Explanatory Notes

Funding Adjustment

This is the adjustment to levy rates which is used to move the funding ratio of an Account towards the funding target. The impact of funding adjustments is that levy rates will be higher or lower than the level needed to fund the cost of new-year claim costs (including administration costs).

Funding Ratio

The funding ratio is the ratio of each Account's assets to liabilities. It is a measure of whether the Accounts have sufficient assets to meet the outstanding claims liability. Solvency is another term for funding ratio.

The liability for incurred but not reported work-related gradual process disease and infection claims is included when calculating the Work Account funding ratio.

Funding Target

ACC's funding target is a funding ratio of 105%. This is the midpoint of the funding band of 100% to 110%.

Investment Returns

The expected returns are based on current strategic asset allocations and are consistent with ACC's long-term expected returns for the various asset classes that make up the total investment reserves. They allow for ACC's tax status.

Labour Cost Index

The Labour Cost Index (LCI) measures changes in salary and wage rates for a fixed quantity and quality of labour input.

New-Year Claim Costs

Claims that occur during a new levy year. New-year claim costs are the net present value of the estimated lifetime cost of those claims.

Outstanding Claims Liability

The Outstanding Claims Liability (OCL) is an actuarial estimate of net present value of all future costs for accidents that have already happened including an allowance for claims incurred but not reported, and re-opened claims.

Risk-free Interest Rates

The risk-free interest rate is the theoretical rate of return of an investment with zero risk. It represents the nominal return an investor would expect from an absolutely risk-free investment over a given period of time.

Footnotes

1. Additional information can be found in the Work and Earners' Accounts 2017/19 Pricing Reports for Consultation, which are available on request from ACC.

2. ACC's levy consultation website is www.shapeyouracc.co.nz. Consultation relating to the 2017/19 levy period took place between 21 September 2016 and 19 October 2016.

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