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Report on the

GOVERNMENT SUPERANNUATION FUND
Te Pūtea Penihana Kāwanatanga

ACTUARIAL VALUATION as at 30 June 2015

2015

Presented to the House of Representatives pursuant to section 94 of the Government Superannuation Fund Act 1956

Contents

1. INTRODUCTION

This Report has been prepared for the Government Superannuation Fund Authority (the **Authority**). Limitations relating to the use of this Report are set out in Section 10.

The previous actuarial valuation report, as at 30 June 2014, was prepared by Matthew Burgess, FNZSA, FIAA, and dated 11 November 2014.

The requirement for actuarial valuations of the Government Superannuation Fund (the **Fund**) is set out under Section 94 of the Government Superannuation Fund Act 1956 (the **Act**). This states the Authority must obtain an actuarial report that examines the financial position of the Fund as at dates determined by the Minister of Finance but no more than three years apart.

The report must show the financial position of the Fund as at the valuation date and the probable annual contributions required by the Fund to provide benefits falling due within the next three years without affecting or having recourse to the actuarial reserve appertaining to the contributors' contributions.

Under Section 95 of the Act the Authority must certify, after receiving advice from an actuary, as to the share of benefit payments to be met from the Fund assets. The Authority must also certify, after receiving advice from an actuary, the payments to be made to the Fund by employers whose employees are paid from money that is not public money (**funding employers**).

Therefore, the purpose of this Report is to:

1. evaluate the unfunded liability of the Fund in respect of past service as at 30 June 2015;
2. calculate the proportion of benefits payable from the Fund that is to be met from the Fund assets;
3. calculate the probable annual contributions required by the Crown to cover a proportion of the benefits payable over the next five years; and
4. make recommendations in respect of contributions to the Fund to be made by employers of contributors to the Fund with effect from 1 July 2016.

Our report also provides a summary of the data used to calculate the above results, details of the assumptions and methodology adopted and a summary of the benefit design for each of the schemes within the Fund.

2. THE FUND

The Fund is established under the Act, as amended from time to time, which governs a number of separate superannuation schemes. We used the version of the Act reprinted on 1 December 2014. Each of the schemes in the Fund must be treated as if it is registered on the register of managed investment schemes under the Financial Markets Conduct Act 2013 as a superannuation scheme, but Part 4 of that Act does not apply.

Effective 1 December 2014 the Superannuation Schemes Act 1989 was repealed by the Financial Markets (Repeals and Amendments) Act 2013, and replaced by the Financial Markets Conduct Act 2013 and related legislation. We have reviewed the relevant legislation and, in our opinion, there is no material impact from the repealing of the Superannuation Schemes Act 1989 or the introduction of the Financial Markets Conduct Act 2013 and related legislation.

The schemes established under the Act are:

Scheme	Part of the Act
Government Service Superannuation (Old General)	Part 2
New Government Service Superannuation (New General)	Part 2A
Armed Forces Scheme	Part 3A
Judges and Solicitor-General Scheme	Part 5A
Parliamentary Scheme	Part 6
Police Scheme	Part 6A
Prisons Service Scheme	Part 6B

Members under Part 2 or Part 2A of the Act who are or were employed by the Public Services of the Cook Islands, Niue or Tokelau are valued separately and described as "Islands" in this report.

The Judges and Solicitor-General Scheme and the Parliamentary Scheme are managed on a fully pay-as-you-go basis. The remainder of the schemes are managed on a partially funded basis. Contributions from members and funding employers (employers whose employees are paid from money which is not public money) are paid into the Fund and invested. For non-funding employers the employer contributions are paid to the Crown.

Benefits are paid partly from the assets of the Fund and partly by the Crown.

The level of employer contributions and the proportion of the benefits payable from the Fund assets are reviewed at each statutory valuation of the Fund.

The schemes have been closed to new members since 1 July 1992, apart from Islands members who were able to join up until 1995.

3. MEMBERSHIP DATA

The membership data required to produce our actuarial calculations was provided by the Fund Administrator, Datacom Employer Services Limited and is effective as at 30 June 2015.

Where possible, we placed checks on the data to ensure internal consistency.

The Authority has advised that problems with the Ministry of Education payroll system are largely resolved and data provided to the Fund Administrator is now correct for the majority of members. However there are still a relatively small number of members where current salary information is not available. Analysis by the Education payroll staff shows that the average increase in salary for these members between August 2012 and 30 June 2015 is 2.63%. Therefore we have applied an adjustment factor of 2.63% to each member's 30 June 2012 salary to estimate their 30 June 2015 salary.

Other data issues were confined to small groups of members and updating the data to address these inconsistencies would not have been expected to have a material impact on the results.

At 30 June 2015 there were 4,934 contributors with total salaries of $486.5 million. There were 45,967 current pensioners with total pensions of $848.8 million and 4,827 deferred pensioners.

We did not perform data checks in respect of the groups of members commonly known as Inactives(1) and Inactives(2). More information on these groups is set out in Appendix A. These are members who have ceased contributing to the Fund, but have not yet received an entitlement, and for whom insufficient data is available. The impact on the overall liabilities of the Fund from these two inactive groups is modest in relative terms and therefore we are comfortable to make an approximation in the 30 June 2015 valuation. There were 2,018 Inactives(1) and 2,815 Inactives(2) members as at 30 June 2015. Movements in membership of the contributors and inactives groups of the Fund by scheme are shown below.

Scheme	30 June 2014	Retirements	Withdrawals	Deaths	Ill health	Adjustment	30 June 2015
Armed Forces	137	3	-	1	-	-	133
General (ex Islands)	9,388	678	56	14	2	(2)	8,640
Islands	672	10	3	1	-	-	658
Police	313	27	-	-	6	-	280
Prisons Service	55	8	-	-	-	1	46
Judges	8	3	-	-	-	-	5
Parliamentary	7	2	-	-	-	-	5
Total	**10,580**	**731**	**59**	**16**	**8**	**(1)**	**9,767**

The adjustments relate to:

- One Inactive(1) member whose scheme membership was corrected from Prisons Service Scheme to General Scheme. This member is entitled to a refund only, having less than one year of contributory service.
- One pensioner whose retirement election was reversed and the member reinstated as an active contributor.

The movements in the contributor and inactives data for the 2014/15 year are summarised below.

	30 June 2014 category (From)	30 June 2015 category (To)			
		Contributors	Inactives(1)	Inactives(2)	Exits
Contributor	5,731	4,920	156	2	653
Inactives(1)	2,031	14	1,862	-	155
Inactives(2)	2,818	-	-	2,813	5
Total	**10,580**	**4,934**	**2,018**	**2,815**	**813**

Many of the exits shown in the above table will have commenced a pension or become entitled to a deferred pension. New pensions also commence from the previous pensioners, for example a reversionary pension may become payable on the death of a retirement pensioner.

The movements in the pensioner membership, including deferred pensioners, over the year were as follows:

Pensioners at 30 June 2014	51,481
Less pensioners ceasing to receive pensions	(2,160)
Plus new pensioners commencing	1,473
Pensioners at 30 June 2015	**50,794**

For former Armed Forces Scheme members with deferred pensions which have not yet commenced, the pension amount held on the administration system is the pension amount calculated at the date of deferral, with no indexation to the current date. When valuing the liability for these pensioners we have increased the pension amounts to allow for indexation from the date of deferral to 30 June 2015 based on the actual increase in the CPI for the relevant period. We then allow for indexation from 30 June 2015 to the date of commencement of the pension using the assumed future rates of CPI increase.

Key summary membership statistics are provided in Appendix A. Also, Appendix B includes a summary of circumstances where assumptions were necessary to complete our calculations because of the nature of the data.

The data we received was sufficient to carry out this valuation of the Fund.

4. FUND ACCOUNTS AND ASSETS

Assets

The net assets of the Fund had a market value of $4,087 million at 30 June 2015. This figure was obtained from the audited financial statements as at 30 June 2015 provided by the Authority. The information includes the market value of the Fund assets, contributions, benefit payments and expenses information over the period since 30 June 2014.

Asset values in respect of prior years have been taken from the audited accounts included in the Annual Report of the Fund.

The transactions of the Fund for the year ending 30 June 2015, together with the prior year's figures for comparative purposes, are summarised in the following table.

Year ending 30 June:	2014 $M	2015 $M
Opening balances	3,382	3,677
Plus:		
Member contributions	41	37
Funding employers	22	22
Government Subsidies	730	718
Investment income (pre-tax)	490	501
Less:		
Pensions paid	829	842
Commutations	28	25
Refunds and payments on death	3	9
Tax provision	96	(41)
Operating costs	32	31
Closing balances	**3,677**	**4,087**

Total may not add up due to rounding.

The accuracy of our results is dependent upon the accuracy of the underlying data provided. We are confident of the sufficiency and reliability of the information provided for the purposes of this report. We consider that the use of the market value of assets is consistent with the assumptions used in determining the discount rate for valuing liabilities. There are no material contingent liabilities included in the assets of which we are aware.

Investments

The Authority, under Section 15J(2) of the Act, is responsible for investing the assets in a prudent, commercial manner. The Authority has set an Investment Objective which, under current assumptions, is consistent with an expected investment return of 2.5% per annum above the New Zealand Government

Stock Return Index (after tax) measured over rolling 10 year periods. In conjunction with the performance measure the Fund has a risk parameter of having no more than a one in four chance of under-performing New Zealand Government Stock by a cumulative 10% measured over rolling ten year periods. This is contained on page 7 of the 2014 Statement of Intent.

The Authority has determined that the long term strategic asset allocation (also known as the Target Portfolio) for the investments of the Fund from 1 July 2015 is as follows. The asset allocation is set out in the 2015 Statement of Performance Expectations.

Asset Class	Proportion
New Zealand equities	9.3%
International equities	54.7%
Global fixed interest	16.3%
Global tactical asset allocation	3.0%
Catastrophe risk assets	6.0%
Life settlement assets	3.7%
Multi-asset class	7.0%
Total	**100.0%**

At 30 June 2015 the assets of the Fund were invested in accordance with the investment strategy as follows:

Asset Class	$M	Proportion of total assets at 30 June 2015	Proportion of total assets at 30 June 2014
New Zealand equities	372	9.1%	9.4%
International equities (including property)	2,195	53.7%	51.6%
Fixed interest	589	14.4%	17.4%
Commodities	84	2.0%	0.0%
Multi asset and global tactical asset allocation	387	9.5%	8.4%
Insurance linked assets	364	8.9%	7.4%
Short term investments and cash *	96	2.3%	5.8%
Total	**4,087**	**100%**	**100%**

* Includes Derivatives, Prepayments and Receivables

Total may not add up due to rounding.

Market risk means that the investment returns could be volatile, but I am not aware of any other material risks posed by the assets.

Within these asset classes the Fund utilises a range of specialist investment managers. These are listed in the table below.

New Zealand equities	ANZ Investments Limited Direct Capital IV GP Limited (NZ private equity) Harbour Asset Management Limited Pencarrow Private Equity Management Limited Pioneer Capital Management Limited
International equities	Arrowstreet Capital Limited Partnership Genesis Emerging Markets Investment Company Lazard Asset Management, LLC Makena Capital Management (Cayman), LLC Marathon Asset Management, LLP PanAgora Asset Management, Inc Pzena Investment Management, LLC Russell Investment Management Limited Willis Bond and Company Management Limited
Fixed interest	Ashmore Investment Management Limited Brandywine Global Investment Management , LLC Pacific Investment Management Company, LLC Wellington Management Company, LLP
Global tactical asset allocation	AQR Capital Management, LLC
Multi assets	Makena Capital Management (Cayman), LLC
Insurance linked assets	Apollo Global Management, LLC Credit Suisse Securities (Europe) Limited Fermat Capital Management, LLC Nephila Capital Limited
Currency management	ANZ Bank New Zealand Limited State Street Global Advisors, Australia, Ltd
Commodities	AMP Capital Investors (NA) Limited

In our opinion, given the circumstances of the Fund, in particular the long term nature of the benefits and the partially funded status, the assets and the investment strategy are within the range of what is suitable for the purposes of the Fund.

Investment Return

The long term after tax investment return was assumed to be 6.0% p.a. for the purposes of the 30 June 2014 statutory valuation. The estimated return for the 2014/15 year was 15.0%. This has been estimated using the formula $2I/(A + B - I)$, where I is investment income less tax provisions, A is the opening balance and B is the closing balance.

The Fund's financial statements as at 30 June 2015 state that the investment return for the year was 13.3% before tax and after investment fees. The Fund switched to a before tax investment objective from 1 July 2014 and hence investment returns are now reported on a before tax basis.

Returns for prior years, as reported in the Fund's annual reports are shown below. These returns are after tax and investment fees.

Year ended 30 June 2014	10.8%
Year ended 30 June 2013	16.7%
Year ended 30 June 2012	(0.5%)

5. FUND EXPERIENCE

Salary Increases

The average salary increases for the year for contributors at 30 June 2015 are shown in the table below, segregated by scheme. The average only includes members who remain members at the end of the year. The expected increase, based on last year's actuarial assumptions, was 3% plus an assumed promotional salary increase based on a member's scheme and age. Therefore the majority of members had salary increases which were lower than expected and this has the effect of reducing the value of the liabilities slightly. For the schemes with small numbers of members, the salary increases received by only one or two members can have a material impact.

Scheme	Actual salary increase
Armed Forces	9.9%
General	2.4%
Islands	6.6%
Police	4.1%
Prisons Service	2.4%
Judges and Solicitor-General	3.9%
Parliamentary	1.5%

Pension Increases

Pensions were adjusted to reflect an increase in the Consumer Price Index of 0.76% over the year ended 31 December 2014. This was lower than the assumed rate of 2.1% and has resulted in a lower than expected increase in the value of the liabilities.

Pensioner mortality

In preparation for this statutory valuation we carried out a review of the pensioner mortality over the three year period to 30 June 2014. The results of the review are set out in a separate report, dated 14 August 2015.

The experience of both males and females was broadly consistent with the results from the previous mortality investigation conducted in 2012. In particular, the experience for males and females above age 85 confirms a trend that was observed in the previous mortality investigation, and together these provided a strong case that the mortality assumptions at higher ages should be increased.

Based on the mortality experience in the 2011 to 2014 period a set of alternative mortality rates was developed. Broadly, the rates are lower than the current rates below age 85 and higher above, for both males and females.

The data over the 2011 to 2014 period confirmed evidence of a general improvement in mortality across the pensioner group, which is supported by mortality studies of other larger populations.

Based on the experience of the Fund and general population data in New Zealand and Australia a revised set of mortality improvement factors was developed, being 2.5% p.a. up to age 75, 1.0% p.a. after age 83, with smoothed rates between ages 75 and 83 to ensure that there is no discontinuity in the mortality rates.

Demographic Experience

The demographic experience of the Fund, other than the pensioner mortality, was reviewed as part of this statutory valuation using data from the three year period to 30 June 2015. The results of the review are set out in a separate report, dated 11 September 2015. For some schemes, however, the membership is now too small to provide a basis for a meaningful analysis and, in any case, changes to the assumptions will have an immaterial impact on the value of the liabilities.

Based on the analysis, the following changes have been made to the actuarial assumptions:

- The medical retirement and death decrement rates for the General Scheme were reduced to 75% of the previous rates.
- The retirement decrement rates for the General Scheme at ages 66, 67 and 68 were increased from 25% p.a. to 30% p.a.
- The assumed maximum retirement age for the Islands Scheme was changed from 60 to 65 with age based decrement rates introduced between ages 60 and 64.
- The assumed proportion of retirement benefits taken as pension was increased from 90% to 100% for the Police Scheme.
- The assumed proportion of members electing a deferred retiring allowance on resignation was increased from 60% to 75% for the General Scheme and from 20% to 50% for the Islands Scheme.

Impact of assumption changes

We calculated that the combined impact of the alternative pension mortality factors and the new pension mortality improvement factors would lead to a reduction of just over 1% in the Fund's past service liabilities.

The impact of the other changes to the demographic assumptions, i.e. other than the changes to the pensioner mortality assumptions, is very small, resulting in an increase in the past service liability of 0.1% of the total past service liability.

In respect of employer contributions for non-funding employers, the combined effect of all the demographic changes is approximately to increase the General Scheme contribution rate by 0.1% of salary, increase the Police Scheme contribution rate by 1.0% of salary and reduce the Islands Scheme rate by 0.2% of salary. (There will, of course, be other impacts on the contribution rates compared to last year's rates due to the reduction in the discount rate, reduction in price inflation, changes in the active membership and other factors.)

The impact of the demographic assumption changes on the funding employer contribution rates is small, although the impact varies between employers depending on the age distribution of members employed by each employer.

Next review of demographic experience

The next review of the demographic experience will be carried out in respect of the three years to 30 June 2018, unless circumstances are such that an earlier review is required.

Employer Contributions

The employer contributions paid in the 2014/15 year were based on recommendations in the 30 June 2013 statutory valuation report, for non-funded employers, and separate advice provided in December 2013 for funding employers. We are not in a position to check whether contributions were paid in accordance with the recommendations, particularly for non-funding employers, where the contributions are paid directly to Treasury. However, from the Fund's perspective the key funding mechanism is the Crown subsidy, being the sum of the benefit payments arising from members of the Judges and Solicitor-General Scheme and the Parliamentary Scheme and an actuarially recommended proportion of the benefit payments arising for other members. From the financial statements we were able to confirm that the Crown subsidy for 2014/15 was in accordance with recommendations.

In total the contributions received from funding employers in 2014/15 were of the order that we expected.

Administration expenses

The administration expenses of the Fund for the 2014/15 year were $6.709 million, as set out in the financial statements. This represents 0.16% of assets.

Using the method described in Section 6, expenses incurred during the 2014/2015 year were funded based on our recommendations in a letter dated 6 December 2013. The expenses are funded partly by the Crown and partly by a portion of the funding employers' contributions. From the financial statements we were able to confirm that the expense funding was in the order that we expected.

6. VALUATION METHODOLOGY

All members have been valued individually using Russell's proprietary software. Each member's age, gender, category of membership, salary, service, deferred pension, current pension and/or contributions have been taken into consideration.

Valuing the Fund's liabilities involves projecting the benefits payable in future to members and their dependants. Benefits are payable on retirement, death, leaving service, ill health or on withdrawal from the Fund and are calculated using membership at the valuation date. The amount of the entitlement typically depends on the length of membership, the level of salary in the years leading up to the event and the pension increases subsequently given (in the case of the pension entitlements).

There has been no material change to the valuation method or funding method since the previous actuarial investigation. A change made to more accurately reflect the assumed proportions of pensioners that are married in the valuation led to a small increase in the estimated liability.

A summary of the main entitlements for each scheme is provided in Appendix C. This summary has been reviewed and agreed by the Authority.

Past Service Liabilities

The Past Service Liabilities for the Fund are calculated by projecting these payments, using assumptions about the likelihood of an entitlement becoming payable at any future date (the demographic assumptions) and about members' future salary growth and pension increases (the financial assumptions). The projected payments are discounted back to the valuation date using the assumed expected discount rate.

The benefits for contributors are apportioned to past service as follows:

- Retirement/Death/Medical Retirement: the benefit calculated only with service to the valuation date, with allowance for future salary increases to the assumed date of exit and pension increases in line with CPI to the date of payment.
- Resignation: For deferred retiring allowances, the benefit calculated only with service to the valuation date, with allowance for future salary increases to the assumed date of exit and increased in line with CPI to date of payment; for immediate lump sums, the member contribution with interest to the date of payment.

For pensioners, inactive and deferred members the entire benefit relates to past service.

Unfunded Liabilities

The Unfunded Liabilities are then calculated as the difference between the Past Service Liabilities and the Fund assets.

Crown subsidy

The Crown makes contributions (known as the Crown subsidy) to the Fund which are equal to:

- the benefit payments arising from members of the Judges and Solicitor-General Scheme and the Parliamentary Scheme, which are both funded on a pay-as-you-go basis, after deducting member contributions for the period;

- a proportion of the benefit payments arising from other members, with the amount determined by deducting from the total benefit payments in respect of the relevant members the amount received from funding employers and the Fund Share of Benefits; and
- a proportion of the Fund's expenses with the balance met by the funding employers.

Fund Share of Benefits

The Fund Share of Benefits is the proportion of benefits arising, excluding benefit payments from the Judges and Solicitor-General Scheme and the Parliamentary Scheme, which are paid from the Fund.

This proportion is calculated as the ratio of the Fund assets plus expected future member contributions to the total Fund liabilities in respect of past and expected future service. It is calculated using the PBE IPSAS 25 accounting basis, i.e. using the net of tax risk-free discount rates determined by Treasury. The Fund Share of Benefits is expected to be reasonably stable over time, but will vary from year to year based on changes to assumptions and experience. For example, a higher than expected investment return would be expected to increase the Fund Share of Benefits.

This calculation methodology has been used for many years and is one of a number of reasonable approaches that could be adopted. The Fund Share of Benefits is updated annually to reflect the actual experience, which ensures that over time the Crown contributions are adjusted ensuring all benefit payments will be funded.

Employer Contribution Rates

Funding employers (employers whose employees are paid from money which is not public money) make employer contributions to the Fund. Non-funding employers do not make employer contributions to the Fund, but the Government requires employer contributions to be made to the Crown.

The method adopted for determining the employer contribution rates is to use the Standard Contribution Rates calculated using the Attained Age Method. This method calculates the employer contributions required to fund benefits accruing over potential future service by:

- calculating the amount of all benefits expected to be paid in the future in respect of the current Fund members, based on potential future service, and allowing for the contingencies under which benefits can be paid (retirement, death, ill health or resignation), the probabilities of these contingencies arising and for future salary increases;
- projecting future pension benefits for current Fund members allowing for increases arising from cost of living adjustments and for probabilities of survival;
- discounting the stream of expected future benefit and pension payments to determine the present value of future liabilities;
- similarly, discounting the projected stream of expected future member contributions to determine the present value of these contributions and then offsetting this amount from the present value of future liabilities above;
- dividing this net future liability by the present value of 1% of future members' salaries to derive the Standard Contribution Rate; and
- grossing up the calculated rate to allow for Employer Superannuation Contribution Tax (**ESCT**) for the schemes where the tax applies.

In fully funded superannuation schemes where this method is used, the Standard Contribution Rate is usually adjusted to allow for any difference between the scheme assets and past service liabilities. However, since 1 July 2008 employer contributions have been calculated using the Standard Contribution Rates without adjustment. This means the Standard Contribution Rates are only adjusted for emerging experience to the extent future assumptions are updated and to the extent emerging experience is better (or worse) than expected, the Crown contributions reduce (or increase).

Up until 30 June 2008 the Standard Contribution Rates were adjusted with reference to the surplus or deficit of the notional fund for each scheme, calculated commencing 1 July 1992, when the Fund was largely closed to new entrants. The significant reduction in the value of assets as a result of the global financial crisis, combined with the reduced number of contributors made it difficult for stable contribution rates to be maintained under this approach and we understand the current approach was adopted. This approach is expected to result in relatively stable contribution rates with the Crown now bearing all the investment risk under the Fund. However, material changes can occur when a large proportion of an employer's employees leave employment or when assumptions change.

The exception to this is the Prisons Service Scheme, which continues to have a high surplus and for which no contributions are currently necessary.

A consequence of the approach is that for funding employers, there is likely to be a cross subsidy to or from the Crown because of differences between assumptions and experience. The Fund Share of Benefits will adjust over time to reflect the differences ensuring all benefits are funded. For the funding employers the Standard Contribution Rates are calculated based on only their own employees. The approach is intended to fully fund members' benefits by the time they leave employment.

The non-funding employer contribution rates are calculated based on all members of the relevant scheme.

7. ASSUMPTIONS

Financial assumptions

The key financial assumptions are the rate of return on assets, and the rates of salary growth and pension increases.

Discount Rate – Statutory Basis

The valuation of the Fund on the statutory basis provides a picture of the financial condition of the Fund and a determination of the employer contribution rates on an ongoing basis. Therefore a discount rate based on a realistic best estimate assumption of the expected return on assets is required.

We have derived a discount rate from the expected return on assets based on modelling carried out by Russell Investments' in-house capital markets team. The modelling derives a set of expected real returns for each of the major asset classes in which the Fund invests and is combined with the price inflation assumption to develop nominal returns. The discount rate has allowed for the effects of taxation and is expressed net of New Zealand tax. No adjustments for investment expenses were made as they are met by the Crown and the funding employers. The discount rate is calculated based on the long term strategic asset allocation and long term expectations of investment returns net of taxation at the valuation date. The long term strategic asset allocation for the Fund is set out in the Section 4 (page 6) of this report.

Based on this methodology the discount rate assumption is at 5.5% p.a., net of tax. The discount rate assumption for the statutory valuation as at 30 June 2014 was 6.0% p.a, net of tax.

The decrease in this assumption has been driven by changes in market conditions and the related decreases in interest rates across the yield curve over the last year. The decrease in interest rates has decreased the prospective returns on fixed interest and cash investments. Our return assumptions for equities and other risk assets are based on an approximation of "risk free" interest rates plus an equity risk premium. As our estimate of the risk free interest rates has decreased, this has resulted in a decrease in prospective returns for all asset classes.

For the purpose of recommending the employer contribution rates to apply from 1 July 2016 we have used a discount rate of 5.5% p.a., net of tax, which is based on the expected return on assets for the Fund over the expected term of the liabilities in respect of contributors. Although the average term of the liabilities for contributors is longer than that for the whole Fund membership, the Russell Investments modelling predicts similar returns for each term. The discount rate used to determine the employer contribution values for the year to 30 June 2016 was 6.0% p.a., net of tax.

Discount Rate – Fund Share basis

As requested by the Crown, the discount rates for the Fund Share basis are calculated by reference to market prices for New Zealand Government Stock as at the valuation date but are reduced for estimated investment tax.

The discount rates for this valuation and the last statutory valuation are set out in Appendix B.

Pension Increases

The pension increase assumption is linked to expected increases in the Consumer Price Index (**CPI**).
For the purposes of certain accounting valuations Treasury publishes assumptions relating to CPI increases.
In our opinion it is reasonable to also use these assumptions for this valuation. The published CPI increase

assumptions relate to years ending 31 March. We used these to produce a set of blended CPI rates, which are effective for financial years commencing from 1 July 2015. As at 30 June 2015, the assumed CPI increases based on the Treasury rates are 1.63% p.a. for each year until 30 June 2026, gradually increasing to 2.5% p.a. from 1 July 2045 onwards.

For the 30 June 2014 statutory valuation the assumed CPI increases were 2.1% p.a. for each year until 30 June 2023, then increasing by 0.04% each year to 2.5% p.a. in the year ending 30 June 2033 and remaining at 2.5% p.a. thereafter.

The assumption of major significance in the valuation of the Fund's liabilities is the long term difference (or 'gap') between the assumed discount rate and the assumed rate of future pension increases. These two assumptions offset each other in their financial effect, hence the difference between the rates is important rather than the absolute values ascribed to them. The greater the assumed gap, the lower the value placed on the liabilities.

The assumed 'gap' for this valuation is 3.87% for the year ending 30 June 2016, gradually decreasing to 3.0% p.a. from 1 July 2045 onwards. The gap for the 30 June 2014 statutory valuation was 3.9% p.a. for the year ending 30 June 2015, gradually decreasing to 3.5% from 1 July 2034 onwards. In isolation, this means that the value of liabilities will be higher than the liability would be if the 30 June 2014 basis was used.

Salary Growth

The salary inflation assumption is based on market expectations of price inflation and on consideration of Treasury's expected range for inflation, together with an allowance for the margin of salary inflation over price inflation. The salary assumption adopted is a flat salary increase of 3.0% p.a., which is the same as that used for the statutory valuation as at 30 June 2014. In addition, an age-based scale of promotional salary increases has been used, as set out in Appendix B, which is also the same as adopted for the 30 June 2014 statutory valuation.

Demographic Assumptions

The most important demographic assumptions are the rates of pensioner mortality. As explained in Section 5, the pensioner mortality experience was reviewed, based on the experience of the Fund between 30 June 2011 and 30 June 2014.

A set of alternative pensioner mortality rates was developed. Broadly, the rates are lower than the current rates below age 85 and higher above, for both males and females. It is considered the alternative mortality factors are a better representation of the Fund's experience than the existing rates and it was decided the alternative mortality rates be adopted for use. We calculated that adopting the alternative factors would lead to a slightly lower value being placed on the Fund's past service liabilities, when compared with the existing rates.

Based on the Fund experience and other mortality studies a revised assumption was adopted for mortality improvement of 2.5% p.a. at ages up to 75 and progressively smoothed to 1.0% p.a. at aged above 83.

The impact of the proposed changes to mortality improvement on the Fund's past service liability is small initially. In future the liability will not increase as quickly under the new assumptions as the pensioners age.

Other demographic assumptions have been reviewed as part of this statutory valuation, based on the experience of the Fund between 30 June 2012 and 30 June 2015.

As a result of the review the changes were made to the assumptions as set out in Section 5.

The impact of the changes to the demographic assumptions, other than the changes to the pensioner mortality assumptions, was to increase the past service liability by $14 million (0.1% of total past service liability). The combined effect of all the demographic changes increases the General Scheme contribution rate by approximately 0.1% of salary, the Police Scheme contribution rate by 1.0% and reduces the Islands Scheme rate by 0.2% of salary.

Expenses

The expenses of the administration of the Fund are currently met in part by the funding employers, with the balance paid by the Crown as provided by Section 15E of the Act. An allowance for future expenses has been made in the calculations of the contribution rates for funding employers.

Recommendations on the apportionment of expenses between Crown and funding employers for the year ending 30 June 2016 were made in our report dated 30 October 2014. It was recommended the Crown should meet 89% of the expenses of the Authority relating to management and administration, with the balance to be met by funding employers. In addition, it was recommended the expenses to be met by funding employers are recouped through a loading of 2.3% of salaries in the recommended contribution rates (1.6% where ESCT does not apply).

We have provided advice to the Authority on the apportionment of expenses for the year to 30 June 2017. Full details of our calculations and recommendations are set out in a separate report dated 15 October 2015. In summary, our recommendations are that the share of expenses to be met by the Crown and by funding employers are 90% and 10% respectively and the expenses to be met by funding employers is met by a loading of 2.8% of salaries in the recommended contribution rates (1.9% where ESCT does not apply).

Appendix B sets out a summary of the key financial and demographic assumptions adopted.

8. RESULTS

Total Liabilities

The valuation balance sheet at 30 June 2015 under each basis is set out below.

	Statutory valuation $M*	Fund Share valuation $M*
Total Service Liabilities		
Armed Forces	4	6
General (excluding Islands)	2,529	3,742
Islands	75	116
Police	207	312
Prisons Service	15	21
Judges and Solicitor-General	11	14
Parliamentary	6	8
Current pensioners	9,469	12,223
Deferred pensioners	821	1,347
Total Liabilities	**13,138**	**17,790**
Assets	4,087	4,087
Value of Fund Assets		
Present value of future member contributions		
Armed Forces	0	0
General (excluding Islands)	134	153
Islands	4	4
Police	4	5
Prisons Service	0	0
Judges and Solicitor-General	-	-
Parliamentary	-	-
Total Assets	**4,229**	**4,249**
Present value of amounts to be funded by Government subsidies and funding employer contributions	**8,909**	**13,541**
Fund Share of Benefits		**24.3%**

* Total may not add up due to rounding.

The Fund Share of Benefits is calculated as the ratio of the value of assets plus the value of future member contributions to the value of total liabilities. For this calculation the liabilities and contributions in respect of the Judges and Solicitor-General Scheme and the Parliamentary Scheme are excluded. The liabilities for these two schemes (including pensioner liabilities) are $290 million and the value of contributions is nil (when rounded to the nearest million).

The Fund Share of Benefits calculated at the 2014 valuation was 22.3%. The calculation above shows the Fund Share of Benefits at 30 June 2015 has increased to 24.3%. This is primarily due to the strong investment returns over the year but was partly offset by the decrease in the discount rates used to value the liabilities in the short and medium term as at 30 June 2015 compared with those used at 30 June 2014. The decrease in discount rates reflects the decrease in bond yields over the year and results in a higher value being placed on the Fund's liabilities. Other changes will have had smaller impacts.

Past Service Liabilities

The valuation results at 30 June 2015 are:

	Statutory valuation $M*	Fund Share valuation $M*
Past Service Liabilities		
Armed Forces	4	6
General (excluding Islands)	2,236	3,276
Islands	64	98
Police	198	296
Prisons Service	15	20
Judges and Solicitor-General	11	14
Parliamentary	6	8
Total Contributors	**2,533**	**3,719**
Current pensioners	9,469	12,223
Deferred pensioners	821	1,347
Total Pensioners	**10,290**	**13,570**
All Past Service Liabilities	12,824	17,289
Assets	4,087	4,087
Unfunded Past Service Liabilities	**8,737**	**13,202**

* Total may not add up due to rounding

The relationship between the past service liabilities and the assets is unlikely to change materially by the date of the next investigation if the actuarial assumptions are borne out in practice. Almost all of the past service liability in respect of contributors is in respect of retirement benefits.

Financial Reconciliation

The change in the Past Service Liabilities (**PSL**) over the 2014/15 year is detailed below.

	$M	$M
PSL at 30 June 2014		**12,813**
Expected change		
Service cost (including member contributions)	65	
Interest cost	746	
Benefit payments	(918)	(107)
Experience and other (gains)/losses		218
Assumption changes		(100)
Financial (CPI assumption change)	(571)	
Financial (discount rate change)	631	
Demographic	(161)	
PSL at 30 June 2015		**12,824**

*Total may not add up due to rounding

The corresponding movement in the assets over the year was:

	$M	$M
Assets at 30 June 2014		**3,677**
Expected change		
Return on assets	216	
Contributions	774	
Benefit payments	(918)	72
Experience gains/(losses)		
Investment	325	
Other	14	339
Assets at 30 June 2015		**4,087**

*Total may not add up due to rounding.

The movement of the unfunded past service liability (actuarial deficit) over the year is, therefore:

	$M	$M
Unfunded PSL at 30 June 2014		**9,136**
Expected change		
Service cost	65	
Interest cost	746	
Return on assets	(216)	
Contributions	(774)	(179)
Experience and other (gains)/losses		
Assets	(339)	
Liabilities	218	(121)
Change in basis		
Financial (CPI assumption change)	(571)	
Financial (discount rate change)	631	
Demographic	(161)	(100)
Actual Unfunded PSL at 30 June 2015		**8,737**

* Total may not add up due to rounding.

Vested Benefits

Vested benefits are calculated as the amount payable in the event that all contributors ceased membership as at the valuation date. For this purpose, I have assumed that:

- for all Schemes other than the Armed Forces Scheme, contributors with at least 10 years contributory service will receive a deferred retiring allowance commencing at age 50 if they are currently under age 50, otherwise an immediate pension;
- for all Schemes other than the Armed Forces Scheme, contributors with less than 10 years contributory service will receive an immediate withdrawal benefit (there are very few members in this situation);
- all contributors in the Armed Forces Scheme with at least 20 years contributory service receive an immediate retirement pension and other Armed Forces Scheme contributors receive an immediate withdrawal benefit, and
- the pension benefits have been valued using the same assumptions about commutation as were used to value the past service liabilities, as set out in Appendix B.

The vested benefit values are shown in the following table. The ratio of vested benefits to past service liabilities is also shown.

Group	Vested Benefits $M*	As a percentage of past service liability
Contributors and Inactives:		
Armed Forces	4	100%
General	2,432	109%
Islands	65	102%
Police	190	96%
Prisons Service	15	100%
Judges and Solicitor-General	12	109%
Parliamentary	6	100%
Total Contributors and Inactives	**2,725**	**108%**
Pensioners:		
Current Pensioners	9,469	100%
Deferred Pensioners	821	100%
Total Pensioners	**10,290**	**100%**
Grand total	**13,015**	**101%**
Less Assets	4,087	
Shortfall	8,928	

* Total may not add up due to rounding.

The relationship between the vested benefits and the assets is unlikely to change materially by the date of the next investigation.

The implications of the Fund winding up have not been considered in this report due to the nature of the Fund. The Act has no wind up provision. Benefits are underwritten by the Crown. Given the partially funded nature of the Fund, its assets would not be sufficient to pay accrued benefits or to outsource the liabilities.

Projected Subsidy

A projection of the amount of Government subsidy under the Fund Share basis, before any offset for contributions by funding employers and excluding expenses, has been made for the next five years assuming experience will match the valuation assumptions. The results of the projection are shown below.

Year ending 30 June	Projected subsidy $M
2016	720
2017	693
2018	697
2019	701
2020	705

Employer Contributions – Funding Employers

Past legal advice in respect of section 95(2) of the Act led to contribution rates being specified by gender in five age groups in order that the specific membership characteristics of funding employers are recognised. This had been the practice since 1998 for members employed by funding employers, other than Islands members. These rates were then applied to the actual membership of each funding employer to derive an average contribution rate for that employer.

However, the information produced by our valuation software enables us to carry out calculations on an employer by employer basis and calculate a Standard Contribution Rate based solely on the members employed by each employer. We investigated this method and adopted this approach from 1 July 2014. The change of approach did not result in a large change in contribution rate for any funding employer.

We have calculated the contribution rates for funding employers for the year commencing 1 July 2016 and these have been separately advised to the Authority. For the 2016/17 year the recommended contribution rates are in the range 11.3% to 14.9%. For the 2015/16 year the employer contribution rates are in the range 11.1% to 14.1% of salary. There are also a small number of employers who have pre-existing arrangements whereby the Crown has provided that the contribution rates are capped at either 10% or 12%.

To avoid small changes in contribution rates from year to year it has been the standard practice agreed with the Authority to leave an employer's contribution rate unchanged if the most recently calculated rate is within 0.3% of the existing rate. This approach has again been taken.

A sample of average contribution rates at selected ages is set out in the following table. In general the contribution rate of a funding employer can be calculated by weighting together the contribution rates based on the age of their employees. The rates in the table are inclusive of ESCT at 33%.

Age nearest	Males	Females
50	14.7%	14.8%
55	14.8%	14.9%
57	14.6%	14.7%
59	14.3%	14.4%
61	13.9%	14.1%
63	13.0%	13.2%
65	11.3%	11.4%
67	11.5%	11.7%

At most ages there is only a small variation in contribution rates between employees of the same age. However, at ages above 60 the actual contribution rate for an individual at a particular age may differ materially from the average rate at that age, particularly if the individual has had a recent significant change in salary. In this case, if the number of employees of a funding employer is small the calculated contribution rate may differ from the rate that would be estimated based only on the average contribution rates.

The contribution rates are generally higher than those calculated last year due to the reduction in the discount rate from 6.0% p.a. to 5.5% p.a. and an increased allowance for expenses.

Employer Contributions – Islands

The four employers of the Islands members are funding employers. For practical purposes, it is not unreasonable to continue the existing practice to treat the Islands members as a single group for the purposes of calculating the employer contribution rates.

Consistent with the previous actuarial investigation, an allowance for expenses has been included in the recommended contribution rate for the Islands group of members. The expense loading is 1.9% of salaries (net of ESCT) for the 2016/17 year and the recommended contribution rate is 14.0% for Islands members.

Employer Contributions – Non-funding Employers

The recommended contribution rates for non-funding employers, inclusive of ESCT, for the different schemes from 1 July 2016 are:

Scheme	Non-funding employer contribution rates
Armed Forces	14.4%
General	11.5%
Police	15.4%
Prisons Service	Nil

For comparison the contribution rates for the 2015/16 year are 16.2% for the Armed Forces Scheme, 10.7% for the General Scheme, 13.8% for the Police Scheme and nil for the Prisons Service Scheme. The rates for the General Scheme and the Police Scheme have increased due to the reduction in the discount rate. The Police Scheme rate also increased because of the increase in the assumed percentage of members taking their benefit as a pension. The recommended contribution rate for the Armed Forces Scheme is a smoothed rate based on the current rate and calculated standard contribution rate. This approach has been used to reduce volatility in the contribution rate which could arise given the very small number of active members and the fact that all members remaining have reached the point at which they could retire with an immediate pension. This approach has been agreed with the Authority.

The contribution rates may change from year to year depending on changes to assumptions and the emerging experience of each group of Fund members.

The Judges and Solicitor-General Scheme and the Parliamentary Scheme are both funded on a pay-as-you-go basis and therefore there are no recommended contribution rates for these schemes.

The notional fund in respect of the Prisons Service Scheme continues to have a large surplus and no contributions are currently necessary. The notional fund position for the Prisons Service Scheme at 30 June 2015 is as follows.

Notional fund:	$90.7 million
Past service liability:	$15.0 million

Sensitivity of Results

As explained earlier in the report the value of the liabilities is highly influenced by the size of the gap between the discount rate and the assumed rate of future inflation, whether salary inflation or price inflation.

To illustrate the impact of a change in the gap we have re-valued the past service liabilities using discount rates of 6.5% p.a. and 4.5% p.a., whilst keeping all other assumptions unchanged.

The results are shown in the following table.

	Statutory basis $M	6.5% discount rate $M	4.5% discount rate $M
Contributors and Inactives	2,533	2,208	2,938
Current Pensioners	9,469	8,707	10,360
Deferred Pensioners	821	678	1,007
Total past service liabilities	12,824	11,593	14,305
Assets	4,087	4,087	4,087
Unfunded liability	**8,737**	**7,506**	**10,218**

We have also carried out an analysis to show the impact of a 1% increase and a 1% decrease in the assumed CPI inflation rate, whilst keeping all other assumptions unchanged.

	Statutory basis $M	1% increase in assumed CPI rate $M	1% decrease in assumed CPI rate $M
Contributors and Inactives	2,533	2,865	2,257
Current Pensioners	9,469	10,334	8,718
Deferred Pensioners	821	1,007	676
Total past service liabilities	12,824	14,206	11,651
Assets	4,087	4,087	4,087
Unfunded liability	**8,737**	**10,119**	**7,564**

These sensitivity analyses are not intended to show the full range of possible outcomes, but are intended to demonstrate that outcomes are highly dependent on future experience.

9. MATERIAL RISKS

The purpose of this section of this report is to identify the material risks for the Fund which are associated with the actuarial assumptions or actuarial management of the Fund, of which we are aware as Actuary. We also comment on the way in which the identified financial risks are being managed by the Authority.

The material risks are:

Increasing Life Expectancy

The Fund's liabilities relate almost wholly to current and future pensioners. The assumptions regarding pensioner mortality that were used for this valuation allow for future improvements in mortality. However, a future breakthrough in medical diagnosis or treatment which leads to a significant increase in life expectancy could increase the Fund's liabilities and require increased employer and Crown contributions.

Mortality experience should continue to be monitored at least every three years, in conjunction with relevant population data, to assess whether the current assumptions remain valid.

Investment Risk

The risk faced by the Fund is that the investment returns earned on the assets will not be as high as expected over the long term. This means the Crown's share of benefit payments might need to increase.

The Authority has set an Investment Objective which, under current assumptions, is consistent with an expected investment return of 2.5% per annum above the New Zealand Government Stock Return Index (after tax) measured over rolling 10 year periods. In conjunction with the performance measure, the Fund has a risk parameter of having no more than a one in four chance of under-performing New Zealand Government Stock by a cumulative 10% measured over rolling ten year periods.

The Fund has a strategy of using diversified investment vehicles and requires investment managers to themselves invest in a range of underlying securities. Given the level of diversification in the underlying investments, the Fund is unlikely to suffer any significant loss from underperformance by the failure of an individual underlying security.

The Authority has a comprehensive Statement of Investment Policies Standards and Procedures in place for the governance and management of the assets held by the Fund.

Inflation

The Fund's liabilities for active members are linked to salary and therefore a higher than expected rate of inflation could have a negative impact on the required contribution amounts. Salary increases should continue to be monitored at each valuation.

Similarly, pension liabilities are linked to the CPI and increases above those assumed could lead to an increase in Crown contributions.

Liquidity Risk

The majority of the Fund's liabilities relate to current and future pensions which we expect to be paid out over a very long time frame. As the benefit payments are largely covered by Crown and employer contributions, the amount of assets required to be redeemed to meet benefits is relatively small and is quite stable over time. Therefore the Fund is unlikely to be faced with a need to redeem an unexpectedly large amount.

Furthermore, the Authority's Statement of Investment Policies Standards and Procedures includes a number of policies addressing liquidity risk.

In the very long term, as the Fund begins to decline in size, we would expect the assets to move gradually to a predominantly liquid position.

Self Insurance

By self insuring the death and ill health benefits, the Fund runs the risk of higher than expected claims occurring. However, given the high average age of current active members, the value of death or ill health benefits are not materially different from the value of retirement benefits.

Furthermore, in the event of a pandemic affecting the general population, the effect of an increase in deaths amongst active members could be offset to some extent by deaths among the current pensioners.

Other

The Fund faces a variety of operational, legislative and other risks which may in some circumstances lead to cost increases. There are also benefit options able to be elected by retiring contributing members and current pensioners that can increase benefit payments.

We understand that the Authority monitors and takes action on such risks as part of the risk management framework.

10. STATEMENTS AND CERTIFICATION

Fund Share of Benefits

The results in Section 8, carried out using valuation discount rates consistent with the approach taken to valuations for Crown Account purposes, shows a Fund Share proportion of 24.3%. The 2014 valuation resulted in a proportion of 22.3%. As the valuation result is sensitive to the level of actual investment returns received and the assumed discount rates used, I consider the Fund Share of Benefits proportion should be increased to 24.3%.

In terms of Section 95(1) of the Act I certify the proportion of benefits calculated as being provided by member contributions into the Fund is 24.3% for the 2016/17 year.

Funding employer contribution rates

Past legal advice in respect of Section 95(2) of the Act led to rates being specified by gender in five age groups in order that specific membership characteristics of funding employers are recognised. However, as part of the 30 June 2014 valuation, it was recommended that contributions from 1 July 2015 be calculated on an employer by employer basis, based solely on the members employed by each employer. This approach has again been used in this valuation to recommend contributions for the year commencing 1 July 2016.

In terms of Section 95(2) of the Act I certify that the rate of contributions, as from 1 July 2016, required from those employers of contributors whose salaries are payable out of money that is not public money is:

- for contributors who are members under Part 2 or Part 2A of the Act and employed by the Public Services of the Cook Islands, Niue or Tokelau, 14.0% of contributor salaries, exclusive of ESCT; and
- for contributors who are members under Part 2 or Part 2A of the Act, excluding those employed by the Public Services of the Cook Islands, Niue or Tokelau, contributions calculated on an employer by employer basis based only on the contributors employed by that employer. Contribution rates include ESCT and an allowance for expenses. A sample of average contribution rates at selected ages is set out in the following table and for most employers the contribution rate can be calculated by weighting these rates based on the age of their employees who are contributory members. The rates in the table are inclusive of ESCT at 33%.

Age nearest	Males	Females
50	14.7%	14.8%
55	14.8%	14.9%
57	14.6%	14.7%
59	14.3%	14.4%
61	13.9%	14.1%
63	13.0%	13.2%
65	11.3%	11.4%
67	11.5%	11.7%

Non-funding employer contribution rates

The non-funding employers are required to budget for the superannuation contributions as if such contributions were payable to the Fund. These employer contribution rates do not include an allowance for a share of expenses as this is paid directly.

I recommend contributions for non-funding employers are based on the following employer contribution rates, inclusive of ESCT, from 1 July 2016.

Scheme	Non-funding employer contribution rates
Armed Forces	14.4%
General	11.5%
Police	15.4%
Prisons Service	Nil

In accordance with my professional obligations as a Fellow of the New Zealand Society of Actuaries, I make the following statements:

- In carrying out this valuation as required by the Act, in my view I have no conflict with any other of my professional activities.
- I am not aware of any material developments to the Fund or any external events that have had a material effect on the results of the investigation except as described in this report.
- I am not aware of any material events subsequent to the date of the current investigation.
- The Fund has no arrangements for external insurance of the benefits payable on death or disability. Having regard to the size of the Fund, the employer sponsors of the Fund and the nature of the benefits payable on death or disability, it is my view that there is no need for the Fund to hold such insurance.
- This report was prepared in accordance with Professional Standard No. 40 - Actuarial Reporting for Superannuation Schemes - issued by the New Zealand Society of Actuaries. The valuation method and the financial, economic and demographic assumptions have been determined in accordance with the professional judgement of the actuary preparing the report.
- I am not aware of any discrepancy between the Act and subsequent Amendments and the practice of the Authority which would have a material bearing on the results of this investigation.
- The next valuation will be carried out as at 30 June 2016.

Reliances and Limitations

In preparing this report we have relied on information supplied by the Fund Administrator and the Authority. In particular we have relied on the accuracy of the net asset value for the year to 30 June 2015, the membership data as at 30 June 2015 and the information on members ceasing active membership over the period from 1 July 2012 to 30 June 2015.

The content and accuracy of this report are dependent on the completeness and accuracy of the information provided to us. Although independent verification of this information was not undertaken, we have reviewed the information for reasonableness and consistency with our knowledge of the Fund.

This report has been prepared for the purposes of determining the unfunded liabilities of the Fund and the Crown's and employers' contribution requirements. The results may not be appropriate for other purposes.

Matthew Burgess

Matthew Burgess FNZSA, FIAA
Actuary to the Fund
Director, Russell Actuarial

Level 29, 135 King Street
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Australia

This report has been peer reviewed in accordance with Russell Actuarial quality procedures.

L Campbell

Louise Campbell FNZSA, FIAA
Director, Russell Actuarial

27 October 2015

APPENDIX A. MEMBERSHIP DATA

The following tables summarise the membership data as at 30 June 2015 received from the Fund Administrator.

Contributors

A summary of the membership data in respect of contributors split by scheme is as follows:

Scheme	Gender	Age Group	Number of Members	Average Age	Average Membership	Average FTE [1] Salary ($)
Armed Forces			**5**	**48.4**	**28.8**	**106,936**
	F		**2**	**45.2**	**26.4**	**99,959**
		35 to 44	1	*	*	*
		45 to 54	1	*	*	*
	M		**3**	**50.5**	**30.3**	**111,587**
		35 to 44	1	*	*	*
		45 to 54	1	*	*	*
		55 to 64	1	*	*	*
General			**4,387**	**59.4**	**30.0**	**103,250**
	F		**1,629**	**59.4**	**27.2**	**92,383**
		35 to 44	11	43.8	19.1	87,136
		45 to 54	376	51.8	24.7	91,193
		55 to 64	973	60.2	28.2	93,590
		65 and over	269	67.4	27.6	89,895
	M		**2,758**	**59.4**	**31.7**	**109,669**
		35 to 44	14	43.7	23.5	82,346
		45 to 54	529	52.1	28.3	100,434
		55 to 64	1,857	60.1	32.3	110,498
		65 and over	358	67.6	33.5	120,083
Islands			**345**	**50.9**	**28.2**	**30,991**
	F		**171**	**50.5**	**28.2**	**29,925**
		35 to 44	42	42.9	23.1	31,161
		45 to 54	93	50.2	28.1	30,017
		55 to 64	31	58.9	34.4	28,575
		65 and over	5	66.2	34.7	26,207
	M		**174**	**51.3**	**28.1**	**32,040**
		35 to 44	32	42.8	22.5	31,989
		45 to 54	91	50.1	28.3	32,238
		55 to 64	49	58.5	31.6	32,291
		65 and over	2	65.7	25.3	17,644

Scheme	Gender	Age Group	Number of Members	Average Age	Average Membership	Average FTE [1] Salary ($)
Police			**157**	**51.2**	**27.7**	**109,446**
	F		**26**	**49.7**	**26.1**	**103,397**
		35 to 44	3	44.4	23.7	79,616
		45 to 54	22	50.0	26.2	107,482
		55 to 64	1	*	*	*
	M		**131**	**51.4**	**28.0**	**110,647**
		35 to 44	4	44.3	23.3	106,358
		45 to 54	102	50.2	27.5	112,123
		55 to 64	25	57.8	30.8	105,309
Prisons Service			**30**	**59.9**	**28.7**	**71,270**
	F		**4**	**56.3**	**25.7**	**76,867**
		45 to 54	1	*	*	*
		55 to 64	3	58.0	25.9	80,991
	M		**26**	**60.5**	**29.1**	**70,409**
		45 to 54	2	50.4	24.2	66,708
		55 to 64	20	60.2	29.0	72,021
		65 and over	4	67.3	32.1	64,200
Judges and Solicitor-General						
	M		**5**	**66.8**	**25.4**	**358,300**
		55 to 64	1	*	*	*
		65 and over	4	68.0	25.2	347,500
Parliamentary[2]						
	M		**5**	**58.4**	**27.2**	**150,047**
		45 to 54	2	52.0	24.7	150,047
		55 to 64	3	62.7	28.9	150,047
All Schemes			**4,934**	58.5	**29.8**	98,608

[1] Full-Time Equivalent

[2] Back bench salaries are disclosed for Parliamentary members.

Note: In the above table, * signifies that where there was only one member in the age band and the statistics are not shown for privacy reasons.

Inactives

Inactives are members who have ceased contributing to the Fund, but have not yet received an entitlement, and for whom insufficient data is available. These members are split into three groups according to the data available to calculate entitlements:

- Inactives(1A) are members with less than 10 years membership, or with a salary of nil or $1.

- Inactives(1B) are members with at least 10 years membership and a salary
- Inactives(2) are members for whom neither salary nor contribution information was available in order to estimate entitlements

A summary of the Inactives(1) membership data as at 30 June 2015 is as follows:

Inactives(1A) (Withdrawal Benefit)	Number of Members	Average Age	Average Membership	Average Withdrawal Benefit ($)
Armed Forces	25	55.4	2.1	902
General	900	57.3	3.8	9,494
Islands	132	48.6	2.6	1,035
Police	6	61.3	3.6	21,923
Prisons Service	3	58.9	4.5	44,278
Grand Total	**1,066**	**56.2**	**3.7**	**8,413**

Inactives(1B) (Deferred Pension)	Number of Members	Average Age	Average Membership	Average Deferred Pension ($p.a.)
Armed Forces	3	46.7	22.1	12,947
General	779	57.0	20.0	15,172
Islands	46	49.6	18.3	5,010
Police	117	57.5	30.5	30,865
Prisons Service	7	62.9	30.3	20,040
Grand Total	**952**	**56.8**	**21.3**	**16,638**

In addition, there were 2,815 Inactives(2) members as at 30 June 2015.

A summary of the pensioner membership data as at 30 June 2015 is as follows:

	Deferred pensions			Retirement pensions		
	Number	**Average Age**	**Average Pension * ($p.a.)**	**Number**	**Average Age**	**Average Pension ($p.a.)**
Females	**390**	**50.0**	**12,446**	**6,675**	**72.8**	**16,486**
Under age 25						
Age 25 to 49	209	46.1	12,385	3	47.5	3,223
Age 50 to 59	181	54.5	12,517	423	56.6	15,136
Age 60 to 69				2,351	66.0	17,691
Age 70 to 79				2,493	74.3	16,066
Age 80 and over				1,405	86.3	15,649
Males	**4,437**	**52.3**	**12,745**	**26,151**	**74.0**	**23,241**
Under age 25						
Age 25 to 49	1,479	46.2	13,183	15	45.9	5,170
Age 50 to 59	2,958	55.4	12,525	911	57.0	21,432
Age 60 to 69				8,447	65.8	23,291
Age 70 to 79				10,043	74.7	23,665
Age 80 and over				6,735	85.6	22,832
Grand Total	**4,827**	**52.2**	**12,721**	**32,826**	**73.8**	**21,867**

* Pension amounts disclosed for Armed Forces have allowed for indexation from the date of deferral to 30 June 2015 based on the actual increase in the CPI for the relevant period.

	Spousal and dependant pensions		
	Number	**Average Age**	**Average Pension ($p.a.)**
Females	**12,782**	**79.6**	**10,091**
Under age 25	33	14.2	3,122
Age 25 to 49	43	44.3	4,714
Age 50 to 59	347	56.7	8,084
Age 60 to 69	1,740	66.1	9,123
Age 70 to 79	3,902	75.5	9,874
Age 80 and over	6,717	87.3	10,640
Males	**359**	**70.2**	**5,613**
Under age 25	28	14.4	3,262
Age 25 to 49	14	41.4	3,362
Age 50 to 59	21	56.0	5,267
Age 60 to 69	64	65.8	5,598
Age 70 to 79	108	75.1	6,071
Age 80 and over	124	86.5	6,064
Grand Total	**13,141**	**79.4**	**9,968**

APPENDIX B. ACTUARIAL ASSUMPTIONS

FINANCIAL ASSUMPTIONS

The financial assumptions which we have adopted are shown below:

Discount rates (Fund Share):

Year ended 30 June	Discount rate p.a. Fund Share 2015	Discount rate p.a. Fund Share 2014
2016	2.11%	2.91%
2017	2.02%	3.03%
2018	2.15%	3.15%
2019	2.30%	3.28%
2020	2.47%	3.41%
2021	2.66%	3.54%
2022	2.84%	3.66%
2023	2.99%	3.72%
2024	3.11%	3.74%
2025	3.20%	3.77%
2026	3.27%	3.79%
2027	3.30%	3.81%
2028	3.33%	3.84%
2029	3.36%	3.86%
2030	3.40%	3.88%
2031	3.43%	3.90%
2032	3.47%	3.93%
2033	3.51%	3.95%
2034	3.54%	3.96%
2035	3.58%	3.96%
2036	3.61%	3.96%
2037	3.65%	3.96%
2038	3.69%	3.96%
2039	3.72%	3.96%
2040	3.76%	3.96%
2041	3.79%	3.96%
2042	3.83%	3.96%
2043	3.87%	3.96%
2044	3.90%	3.96%
2045	3.94%	3.96%
2046 onwards	3.96%	3.96%

Discount rate (Statutory): 5.5% p.a.

CPI: 1.63% p.a. for each year until 30 June 2026, gradually increasing to 2.5% p.a. in the year ending 30 June 2046 and remaining at 2.5% p.a. thereafter.

Salary increases: 3.0% p.a.

Ministry of Education: In order to adjust for a data collection issue, if the 30 June 2012 and the 30 June 2015 salaries of Ministry of Education employees are identical, the 30 June 2015 salary has been increased by 2.63%. In setting this assumption we have taken account of an analysis of salaries by the Ministry of Education.

Armed forces deferred pensioners: For former Armed Forces Scheme members with deferred pensions which have not yet commenced, the pension amount held on the administration system is the pension amount calculated at the date of deferral, with no indexation to the current date. When valuing the liability for these pensioners we have increased the pension amounts to allow for indexation from the date of deferral to 30 June 2015 based on the actual increase in the CPI for the relevant period. We then allow for indexation from 30 June 2015 to the date of commencement of the pension using the assumed future rates of CPI increase.

DEMOGRAPHIC ASSUMPTIONS

Promotional salary increases

In addition to salary increases from general salary inflation, age related promotional increases have been assumed. Specimen rates are as follows:

Salary increases at each age							
Age	General Schemes	Islands	Armed Forces	Judges	Parliamentary	Police	Prisons Service
30	1.50%	1.00%	1.500%	2.00%	2.00%	2.250%	3.50%
35	1.25%	1.00%	1.125%	1.40%	1.40%	2.188%	2.60%
40	1.00%	1.00%	0.750%	0.95%	0.95%	2.125%	2.00%
45	0.75%	1.00%	0.375%	0.70%	0.70%	2.063%	0.50%
50	0.50%	-	-	0.25%	0.25%	2.000%	-
55	-	-	-	-	-	-	-
60	-	-	-	-	-	-	-

In-service decrements

Specimen rates for the General Schemes are as follows:

Number out of 10,000 members aged X at the beginning of the year assumed to leave the Fund during the year for the following modes of exit					
Age	**Male Death**	**Female Death**	**Resignation**	**Age Retirement**	**Ill-health Retirement**
35	4	2	700	-	4
40	5	3	400	-	4
45	7	5	300	-	23
50	10	7	200	300	41
55	17	12	-	500	60
60	28	20	-	1,000	-
65	48	31	-	3,500	-

Specimen rates for the Islands are as follows:

Number out of 10,000 members aged X at the beginning of the year assumed to leave the Fund during the year for the following modes of exit					
Age	**Male Death**	**Female Death**	**Resignation**	**Age Retirement**	**Ill-health Retirement**
35	13	7	400	-	5
40	16	9	430	-	10
45	22	16	280	-	20
50	34	25	100	1,000	45
55	56	40	-	1,600	85
60	94	65	-	3,000	-
65	-	-	-	10,000	-

Specimen rates (which include age and membership based rates) for the Armed Forces Scheme are as follows:

Number out of 10,000 members aged X at the beginning of the year assumed to leave the Fund during the year for the following modes of exit			
Age	Male Death	Female Death	Ill-health Retirement
35	5	3	5
40	6	4	0
45	9	6	0
50	14	10	0
55	22	16	0
60	38	26	0

Number out of 10,000 members with membership X at the beginning of the year assumed to leave the Fund during the year for the following modes of exit		
Membership	Resignation	Age Retirement
15	100	-
20	-	6,000
25	-	5,125
30	-	4,250
35	-	3,375
40	-	2,500

Specimen rates for the Judges and Solicitor-General Scheme are as follows:

Number out of 10,000 members aged X at the beginning of the year assumed to leave the Fund during the year for the following modes of exit					
Age	Male Death	Female Death	Resignation	Age Retirement	Ill-health Retirement
35	5	3	-	-	-
40	6	4	-	-	-
45	9	6	-	-	-
50	14	10	-	-	-
55	22	16	-	-	-
60	38	26	-	-	-
65	64	41	-	2,000	-

Specimen rates for the Parliamentary Scheme are as follows:

Number out of 10,000 members aged X at the beginning of the year assumed to leave the Fund during the year for the following modes of exit					
Age	**Male Death**	**Female Death**	**Resignation**[1]	**Age Retirement**[2]	**Ill-health Retirement**
35	5	3	2,500	-	-
40	6	4	2,500	-	-
45	9	6	2,500	-	-
50	14	10	2,500	-	-
55	22	16	-	-	-
60	38	26	-	-	-

[1] Assumed 25% of Parliamentary members under age 50 resign every three years coinciding with election years.

[2] Members aged over 50 with at least 9 years service are assumed to retire immediately

Specimen rates for the Police Scheme are as follows:

Number out of 10,000 members aged X at the beginning of the year assumed to leave the Fund during the year for the following modes of exit					
Age	**Male Death**	**Female Death**	**Resignation**	**Age Retirement**	**Ill-health Retirement**
35	5	3	20	-	600
40	6	4	-	-	600
45	9	6	-	-	600
50	14	10	-	250	300
55	-	-	-	10,000	-

Specimen rates for the Prisons Service Scheme are as follows:

Number out of 10,000 members aged X at the beginning of the year assumed to leave the Fund during the year for the following modes of exit					
Age	**Male Death**	**Female Death**	**Resignation**	**Age Retirement**	**Ill-health Retirement**
35	5	3	2,000	-	5
40	6	4	1,400	-	10
45	9	6	800	-	50
50	14	10	450	300	100
55	22	16	200	500	150
60	-	-	-	10,000	-

Pensioner mortality

The underlying mortality for pensioners is based on an experience over the period from 1 July 2011 to 30 June 2014.

Specimen rates are as follows:

Number assumed to die out of 10,000 at each age		
Age	**Males**	**Females**
65	74	55
70	126	80
75	217	140
80	452	307
85	825	591
90	1,631	1,347

In addition, we have made the following adjustments for mortality improvement:

- An allowance for past improvements (from 31 December 2012 to 30 June 2015) at the rate of 2.5% per annum at ages up to 75 and progressively smoothed to 1.0% per annum at ages above 83.
- An allowance for future improvements (from 30 June 2015 onwards) at the rate of 2.5% per annum at ages up to 75 and progressively smoothed to 1.0% per annum at ages above 83.

As an illustration of the impact of the future mortality improvements, life expectancies at age 60 for sample members are shown below:

Sample Pensioners	Life expectancy at age 60
Male aged 60 at 30 June 2015	27.2
Female aged 60 at 30 June 2015	29.5
Male aged 50 at 30 June 2015	28.4
Female aged 50 at 30 June 2015	30.6

Proportion of members with a spouse or partner

It was assumed the percentage of members with a spouse or partner gradually reduces as members age. Specimen rates are as follows:

% of members married at each age		
Age	**Male**	**Female**
35	68	69
40	72	71
45	75	72
50	76	72
55	78	71
60	77	68
65	76	63
70	74	54
75	71	42
80	63	27

Expenses

The administration and investment expenses of the Fund are currently met in part by the funding employers, with the balance paid by the Crown as provided by Section 15E of the Act. An allowance for future expenses was incorporated in the employer contributions recommended for funding employers in this report.

Age difference and length of relationship between pensioners and their spouses or partners

It has been assumed male pensioners were three years older than their spouse or partner while, for female pensioners, it was assumed they were three years younger than their spouse or partner.

It was assumed the length of the relationship between pensioners and their spouses or partners was such that 50% of the pension reverts to the spouse or partner upon the pensioner's death.

Assumed mix of lump sums/pensions

Members were assumed to take their entitlements as a combination of lump sum and pension as follows:

Percentage of pension entitlements taken							
	General Schemes	**Islands**	**Armed Forces**	**Judges**	**Parliamentary**	**Police**	**Prisons Service**
Retirement	90%	75%	100%	75%	75%	100%	75%
Death (spouse pension)	100%	100%	100%	100%	100%	100%	100%
Invalidity	88%	75%	75%	n/a	n/a	88%	75%

Upon resignation, the percentage of members assumed to elect to receive a deferred retiring allowance is as follows:

Scheme	Percentage of resigned members assumed to elect to receive a deferred pension
General Schemes	75%
Islands	50%
Armed Forces[1]	100%
Judges and Solicitor General	n/a
Parliamentary[2]	100%
Police	20%
Prisons Service	20%

[1] eligible after 20 years of service [2] eligible after 9 years of service

It is assumed Parliamentary members will commute 25% of their deferred retiring allowance entitlements. In all other cases, no commutation is assumed.

Other Assumptions

- Where a member has a part time fraction recorded in the 30 June 2015 data file that fraction is assumed to apply to all past and future service.
- For members who have ceased contributions for a period and then re-commenced contributing, we have been advised that the date of commencement of service provided in the data has already been adjusted by the administrator to reflect the alterations to contributory service required under Section 61R of the Act.

Assumptions used for Inactive Contributors

We have split the inactive contributors membership group into Inactives(1) and Inactives(2).

The Inactives(1) group is in respect of contributors who have ceased to be members and have not received an entitlement from the Fund, but for whom salary or contribution information is available. We have valued these members assuming they receive either an immediate refund of contributions (if less than 10 years membership, or with a salary of nil or $1) or are entitled to a deferred pension (if more than 10 years membership and have a salary). The liability in respect of the members entitled to a deferred pension has been valued using the same method as that used for the 30 June 2014 statutory valuation, i.e. 25% of the value of the pension taken as a lump sum, commencement of pension from the later of current age and age 51 and no mortality in deferment.

The assumption that all inactive members with less than 10 years membership receive an immediate lump sum has the effect of bringing forward benefits that will, in practice, not be paid until later years and leads to a small spike in the projected benefit payment amount for the 2015/16 year.

The Inactives(2) group is in respect of contributors who ceased active membership prior to full computerisation of Fund membership records, but includes contributors for whom no reliable valuation data is available. We have taken an approach consistent with the 30 June 2014 statutory valuation and have not valued these members for this valuation, on the basis that these members appear to have very little service and so their liabilities are likely to be covered by the prudent assumptions used in valuing the Inactives(1) group, described above.

Suspended pensioners

There are of the order of 450 pensioners who have a suspended pension – indicated by a suspension code in the data file. This excludes former Armed Forces members who have a deferred pension. For the majority of the suspended pensions it is possible that the pension could be reinstated in the future. We have taken a conservative approach and assumed that all suspended pensions are reinstated immediately, and have valued the liabilities accordingly.

For some types of suspension the pensioner (or his or her dependant) would be entitled to back payment of past pension amounts if the pension is reinstated. We have not allowed for these payments, but consider these are likely to be more than offset by the conservative approach described above.

Pension elections

Pensioners have various options available in respect of structuring the terms of their pension or assigning part of their pension to another person. These options are implemented using sets of actuarial factors which are intended to result in no change to the Fund's liabilities. However, over time, actual experience will be different to expected so the emerging liability will also be different from that assumed. No allowance has been made for any selection that may occur where members who exercise certain options do so based on their individual circumstances. To the extent that pensioners have already exercised these options, and they are not included in the membership data, they will not be reflected in our calculations.

APPENDIX C. SUMMARY OF ENTITLEMENTS

A summary of the entitlements of the seven schemes is set out below:

Membership	Part 2 / Old GS	Employees in Government service electing to join before 30 April 1985
	Part 2A / New GS	Employees in Government service electing to join before 30 June 1992 (1995 for Islands)
	Part 3A / AF	Members of the Armed Forces joining prior to 30 June 1992
	Part 5A and 5B / Judges	Judges and Associate Judges appointed prior to 30 June 1992
	Part 6 / MPs	Members of Parliament initially elected prior to 30 June 1992
	Part 6A / Police	Members of the Police joining prior to 30 June 1992
	Part 6B / PS	Members of the Prisons Service joining prior to 30 June 1992

Member Contributions	Old GS	6% if < 30 at date of joining 7% if 30-34 8% if 35-39 9% if 40-44 10% if 45-49 11% if >50 Some members may have elected, prior to 1 March 1970, to contribute at 1% less than the rates above. All members can elect to contribute at 6% for an entitlement reduced in the same proportion that 6% bears to the standard rate.
	New GS	6.5%
	AF	7.6%
	Judges	8%, until reach 16 years of service, then 0%.
	MPs	11%, until reach 20 years service, then 8%
	Police	7.5%
	PS	8.5% (may cease contributing after 32 years)

Contributory Service	Old and New GS	Actual contributory service for all members
	AF	Actual contributory service plus any accrued leave at date of discharge or release
	Judges	Aggregate of all periods of contributory service as a Judge, temporary Judge or Associate Judge
	MPs	Actual contributory service as a member of Parliament
	Police	For members who joined before 1 May 1985 and are 55 or over at retirement, then service is calculated as potential service up to age 60, further increased by 1/7th, to a maximum of 40 years. For all other members, 125% of actual contributory service as a member of the Police, to a maximum of 40 years If actual contributory service is greater than 40 years, actual contributory service applies.
	PS	125% of actual contributory service as a member of the Prison Service, to a maximum of 40 years If actual contributory service is great than 40 years, actual contributory service applies.

Final Salary	All except Old GS, Judges and MPs	The lesser of salary in the last 12 months and the average of the last 5 years' salary, adjusted for CPI to date of exit.
	Old GS	Average of the last 5 years' salary
	Judges	Salary at date of resignation or date of retirement
	MPs	Salary payable to a backbencher at the date on which the retiring allowance first becomes payable.

Retirement Entitlement Eligibility	Old GS	Age 65, or age 60 and 40 years service, or age 50 and 20 years service with employer consent (other requirements apply to members of NZ Railways Corp or the Police, and certain females)
	New GS	Age 60 or age 50 with 10 years service and employer consent
	AF	20 years service, with at least 10 years in AF
	Judges	68 years or over 50 with 10 years service
	MPs	Over 50 with at least 9 years service
	Police	over 50 with 10 years service with employer consent
	PS	58 years or 50 years with 8 years service and employer consent

Retirement Allowance Multiple	Old GS	70% of 1/60th per year of service up to 40 years plus 120th per year of service after 40 years. For members of the Island Schemes, the 70% factor is not applied.
	New GS	1.05% per year of service adjusted for retirement before or after age 60 (add 0.0168% per year between age 60 and 65, subtract 0.0336% per year between age 55 and 60, subtract 0.0168% per year below 55). For members of the Island Schemes, all accrual rates are divided by 70%.
	AF	1.05% per year of service
	Judges	70% of 1/24th (less 1/750th per year if age under 55) per year of service, to a maximum of 70% of 2/3rds.
	MPs	70% of (1/30th per year of service up to 20 plus 1/120th per year of service over 20)
	Police	1.05% per year of service adjusted for retirement before age 55 (subtract 0.0336% per year between age 50 and 55)
	PS	1.05% per year of service adjusted for retirement before age 58 (subtract 0.0168% per year before age 53, subtract 0.0336% per year between age 53 and 58)

Retirement Entitlement	All parts except AF and MPs	Retirement allowance pension calculated at date of exit as Final Salary times Retirement Allowance Multiple. Pensions in payment are increased annually with CPI in April each year. Commutation of up to 25% of the pension is optional.
	AF and MPs	Retirement allowance pension calculated at date of exit as Final Salary times Retirement Allowance Multiple. Pensions in payment are increased annually with CPI. Commutation of up to 25% of the pension is optional. Members may defer their pension to age 55 or 60 for an additional lump sum.

Medical Retirement Entitlement	All except MPs	Retirement allowance calculated as per normal retirement at date of medical retirement.
	MPs	No special entitlement is payable on medical retirement

Death while Active with spouse	All parts except Old GS and MPs	Either: A .The greater of: • One year's salary at date of death • Refund of member contributions with interest B. 50% of the retirement allowance received if member had medically retired (option to commute part of members pension)
	Old GS	Either: A. The greater of: • 50% of the retirement allowance received if member had retired on date of death • \$390 pa B. Refund of member contributions
	MPs	Before 9 years of service, refund of two times member contributions without interest. With 9 or more years service, either: A. The greater of: • One year's salary at date of death • Refund of two times member contributions without interest B. 50% of the retirement allowance received if member was eligible to retire at date of death (option to commute part of the member's pension)

Death without spouse	All parts except Old GS and MPs	Return of member contributions with interest, less any pension payments already paid
	Old GS	Refund of member contributions without interest, less any pension payments already paid and any child allowance payments paid or payable.
	MPs	Return of two times member contributions without interest, less any pension payments already paid.

Death as Pensioner with spouse	All parts except Old GS and MPs	Either: A. Up to 50% of the pension reverts to an eligible spouse dependant on the length of the relationship. B. Return of member contributions with interest, less any pension payments already paid
	Old GS	Either: A. The greater of: • Up to 50% of pension reverts to an eligible spouse dependant on the length of the relationship. • $390 pa if married before beginning pension, otherwise $0. B. Refund of member contributions, less any pension payments received
	MPs	Either: A. Up to 50% of the pension reverts to an eligible spouse dependant on the length of the relationship. B. Return of two times member contributions without interest, less any pension payments already paid

Death - Child Allowance	All parts	Any member who dies leaving a child or children under 16 years (or are otherwise dependent on the deceased), each child receives an annual allowance of $1,000 increased with CPI since 1982 until they reach age 16 or 18 if in full time education. Child allowances are paid in addition to any other death entitlements, except for Old GS where child allowances are deducted from the return of contributions on death without spouse, but are paid in addition to other death entitlements.

Resignation	All parts except MPs, and Old Scheme	A. Refund of member contributions with interest; or B. With 10 or more years service (8 years if PS), deferred retiring allowance payable from age 50 or later (this option is not available to AF), or C. With 10 or more years service (8 years if PS), transfer value rolled into other superannuation fund equal to: Refund of member contributions with interest x (100%+10% per year of service from 10 to 20)
	MPs	Refund of two times member contributions without interest If have more than 9 years service and less than 50 on resignation, then entitled to a deferred pension payable from age 50 based on an ordinary MPs salary at that age and also commute some to a lump sum to be taken immediately.

Withdrawal	All parts	A. Refund of member contributions without interest (not available to MPs, AF, Police and Judges); or B. If join another employer subsidised scheme and have sufficient service, entitled to a deferred pension from age 50.

Death after resignation or withdrawal with spouse	All parts except MPs	A. Refund of member contributions with interest; or B. 50% pension, where pension is calculated using Final Salary at date of exit/withdrawal, then increased with CPI to date of death.
	MPs	Two times member contributions without interest If ceased before age 50 and has more than 9 years service, then entitlement of 50% spouse pension is payable from death if die before age 50 or from pension commencement age if chose to defer pension to 55 or 60.

Death after resignation or withdrawal without spouse	All parts except MPs	Refund of member contributions with interest to date of death
	MPs	Two times member contributions without interest

Additional Entitlements

Some Parts have entitlements on leave of absence without pay and temporary cessation of contributions. Entitlements are discounted per year of suspended service. Members can surrender up to 50% of their retirement allowance to provide a pension for another person (the assignee). The value of the entitlement is actuarially determined so that the value of the entitlement is unchanged. The assignee's pension also increases with CPI and ceases on the assignee's death.