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Presbyterian Church of Aotearoa New Zealand Beneficiary Fund

Calculation of wind-up values as at 30 June 2017 - Actuarial process and assumptions

Index

1	Overview of the process
2	Annuitant members
3	Contributing members who joined before 1 January 2009
4	Contributing members who joined on or after 1 January 2009
5	All contributing members
6	Frozen members
7	Deferred pensioners
8	Statement of Actuarial Assumptions

1. OVERVIEW OF THE PROCESS

Your entitlement represents all of the benefits to which you could have become entitled from the Defined Benefit Section of the Beneficiary Fund (the "Scheme"). The value of each of the benefits has been calculated by the Scheme's independent actuary based on what she has determined to be reasonable actuarial assumptions. In calculating your entitlement she has used your personal details data currently held by the Scheme.

The process of calculating wind-up values involves making a projection of the amount of each of the benefit payments you (or your spouse) would have received from the Scheme in the applicable circumstances, then valuing those benefits as at 30 June 2017 based on the probability of each payment being made. Allowance is made for the fact that the amounts payable on wind-up relate only to the benefits earned by your past service as at 30 June 2017.

The wind-up values are present values of the projected benefit payments. This means the calculations also take account of the ability to earn an investment return in future years on the lump sum that will be paid to you on wind-up.

While each of the Scheme benefits discussed below is taken into account in calculating your entitlement, the main benefits making up your entitlement are your retirement benefits.

In all cases, the wind-up entitlement is at least as great as the benefit you would have received had you left the service of the Church and withdrawn from the Beneficiary Fund as at 30 June 2017.

The wind-up value does not include the amount (if any) attributable to you held in the Complying Section. This is because the wind-up does not affect that part of the Beneficiary Fund. Your Complying Section account balances are not affected and can be found on your member statement.

2. ANNUITANT MEMBERS

The wind-up value the actuary has calculated is the value of your retirement pension benefit plus the value of your surviving spouse benefits (if applicable).

This calculation is based on assumptions about future investment returns, pension increases and mortality, which are described in the section below headed “Statement of Actuarial Assumptions”.

3. CONTRIBUTING MEMBERS WHO JOINED BEFORE 1 JANUARY 2009

Member pension on retirement

Your annual pension from the Scheme was calculated in two parts, both of them percentages applied to the Basic Stipend at the date you retire:

1. the first part is 8.74%, which was a fixed percentage; and
2. the second part was a percentage based on your full-time equivalent service at retirement.

Some exceptions apply. For example, if you had fewer than 10 years of service when you retired you would not have been eligible for a pension but would only have received the withdrawal benefit. If you were aged over 50 when you joined the Scheme, your benefits would also have been reduced. In all cases, the minimum value of your retirement benefits would have been the withdrawal benefit.

The value of your retirement pension benefit included in the amount that the actuary has calculated as your wind-up value is based on a number of assumptions, which are described in the section below headed “Statement of Actuarial Assumptions”.

The actuary has calculated the wind-up value of the pension you have earned by your service up to 30 June 2017, taking into account:

1. the whole of the fixed percentage part of your pension; plus
2. the second part which is based on your full-time equivalent service to date.

Lump sums on retirement

The wind-up value calculation with respect to this benefit has two parts because on retirement you:

- had the option to commute up to 50% of your pension; and
- would have received a lump sum of 6.58 times your annual pension.

In calculating your wind-up value, the actuary has assumed that the likelihood of you choosing to take the maximum 50% commutation available on retirement was 1 in 3. She also assumed that the factors being used for commutation as at Scheme wind-up would be applied. The value of the two retirement lump sum benefit components that are included in your entitlement are based on the annual pension earned by your past service and the same actuarial assumptions, where relevant, are made.

4. CONTRIBUTING MEMBERS WHO JOINED ON OR AFTER 1 JANUARY 2009

Member pension on retirement

Your annual pension from the Scheme would have been a percentage applied to the Basic Stipend at the date you retired. The percentage was based on your full-time equivalent service at retirement.

Some exceptions apply. For example, if you had fewer than 10 years of service when you retired you would not have been eligible for a pension but would have received only the withdrawal benefit. In all cases the minimum value of your retirement benefits would have been the withdrawal benefit.

The value of your retirement pension benefit included in the amount that the actuary has calculated as your wind-up value is based on a number of assumptions, which are described in the section below headed “Statement of Actuarial Assumptions”.

Lump sums on retirement

In calculating your wind-up value, the actuary has assumed that the likelihood of you choosing to take the maximum 50% commutation available on retirement would have been 1 in 3. She has also assumed that the factors being used for commutation as at the Scheme wind-up date are applied. The value of this retirement lump sum benefit that is included in your wind-up value is based on the annual pension earned by your past service and the same actuarial assumptions, where relevant.

5. ALL CONTRIBUTING MEMBERS

Spouse pension if you die after retirement

Scheme benefits included a reduced pension (“spouse’s pension”) payable to your spouse (if any) for his or her remaining lifetime if you had died after your retirement. For this purpose, your spouse is the person to whom you are legally married at the date you retire.

The value of this spouse pension benefit included in the amount that the actuary has calculated as your wind-up entitlement is based on the same actuarial assumptions about you and your pension at retirement. However, for the spouse pension benefit the projected death of your spouse is also taken into account. The same actuarial assumptions are used and, again, the value determined is based on the benefits earned by your past service.

Other benefits

The Scheme also provided:

- funeral benefits after your retirement (to your surviving spouse if you had died and to you if your spouse had pre-deceased you),
- benefits (which differed depending on whether or not you had a spouse) if you had died before retirement,
- benefits if you had left the Scheme before retirement and
- benefits if you had become totally disabled (as defined in the Governing Document) before retirement.

These benefits have been described on the member statements you have received in previous years.

The values of all of these benefits are included in the amount the actuary has calculated as your wind-up entitlement, based on the benefits earned by your past service and the same actuarial assumptions as the valuation of your other benefits.

6. FROZEN MEMBERS

The actuary has assumed that you would remain a frozen member until retirement. The same general process and assumptions have been used in calculating your wind-up value, adjusted as necessary for the different benefits that apply. For example, the retirement pension was based on stipend at date frozen and the death and disability benefits applicable before retirement differed from those of contributing members.

7. DEFERRED PENSIONERS

Again, the same general process and assumptions have been used in calculating your wind-up value, adjusted as necessary for the fact that you had already taken the '6.58 x annual pension' lump sum benefit and, if appropriate, the maximum commutation.

8. STATEMENT OF ACTUARIAL ASSUMPTIONS

Your wind-up value has been calculated by the actuary as the expected future cost to the Scheme of providing your benefits using the following assumptions. The calculations used the Basic Stipend and pensions as at 30 June 2017, future increases have been assumed to apply as set out below:

Investment return:	4.5% per annum after tax and investment expenses.
Stipend increases:	1.6% on 1 July 2017 and 3% on each 1 July after that. The Basic Stipend is increased each year in line with the Labour Cost Index (salary and wages excluding overtime).
Pension increases:	0.8% on 1 July 2017 and 1.5% on each 1 July after that. The Trustee was required to increase pensions by a percentage which was at least half of any percentage increase in the Basic Stipend. In calculating the lump sum value of your pension, allowance has been made for such future pension increases consistent with the assumed stipend increase.
Retirement:	<p>If you are already aged 65 or more on 30 June 2017, you would have retired on 1 July 2017.</p> <p>If you have not reached your 65th birthday on 30 June 2017, you may die or otherwise leave the Scheme before you retire (as below) and retire at age 65.</p>
Mortality:	It is assumed that you (and your spouse) are in average health for Scheme members of your age. Technically this is expressed as applying New Zealand Life Tables 2012-2014, with a 3 year setback in age for both men and women. An age setback means that you and your spouse are assumed to have the mortality of New Zealanders 3 years younger than your actual ages; this is to take into account the actual deaths of pensioners in the past and the fact that those who have well-established community support such as members of a church are known to have longer lives than average. An allowance has also been made for future improvements in mortality of 1.25% p.a. Both the age offset and the mortality improvements work to increase the value of the pension.
Spouse:	Your spouse (if any) does not cease to be your spouse before your death, other than as a result of predeceasing you.
Withdrawal:	Members aged under 50 will leave the Scheme at the rate of 2% each year.
Disability:	Rates of disability are assumed to be in line with the General Section of the Government Superannuation Fund.
Other:	<p>You continue to work at your current rate of full-time / percentage part-time until you retire.</p> <p>There is a one in three chance that you will choose to commute 50% of the pension.</p>