

Report to the Trustee on the Actuarial Investigation as at 30 June 2020

Penleigh and Essendon Grammar School Superannuation Plan

(a plan in NGS Super)

18 December 2020

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1

Key Results and Recommendations

This report on the actuarial investigation of the Penleigh and Essendon Grammar School Superannuation Plan (the Plan) as at 30 June 2020 has been prepared to meet the requirements of the Plan's governing rules and the SIS legislation. This report should not be relied upon for any other purpose or by any party other than the trustee of the Plan, NGS Super Pty Limited (the Trustee). Mercer is not responsible for the consequences of any other use. This report should be considered in its entirety and not distributed in parts. The Trustee should share this report with the Penleigh and Essendon Grammar School (the School) who contributes to the Plan. The School may consider obtaining separate actuarial advice on the recommendations contained in the report.

Change in Financial Position

The following table summarises the Plan's financial position, at both this and the previous actuarial investigation.

Defined Benefits Only*	Position at 30 June 2020		Coverage at 30 June 2017
	\$000	Asset Coverage	
Assets	5,942		
Liability for Vested Benefits	5,054	117.6%	126.8%
Liability for Actuarial Value of Accrued Benefits	5,279	112.6%	137.7%
Liability for SG Minimum Benefits	3,490	170.3%	187.8%

* The above totals exclude additional accumulation balances for defined benefit members of \$1,383,000 as at 30 June 2020.

The Plan remains well funded, although coverage levels at 30 June 2020 were lower than the levels at the previous actuarial investigation, due to the following items of negative experience:

- In accordance with the recommendations made at the previous actuarial investigation, the School has not made contributions towards the defined benefits (a contribution holiday) during the investigation period;
- Investment earnings of 4.0% p.a., which were lower than the assumed long term rate of 5.0% p.a.;
- Salary growth of 6.2% p.a., which was higher than the assumed increase of 3.0% p.a.; and
- The coverage level of the Actuarial Value of Accrued Benefits funding measure has decreased as a result of the decrease in the gap between the assumed rate of investment earnings and the rate of salary increases from a gap of 2.0% p.a. to 1.0% p.a.

This negative experience was partially offset by Plan membership reducing by four members when coverage levels were above 100%, thereby spreading the surplus over a reduced number of members.

Recommended Contribution Rates and Projections

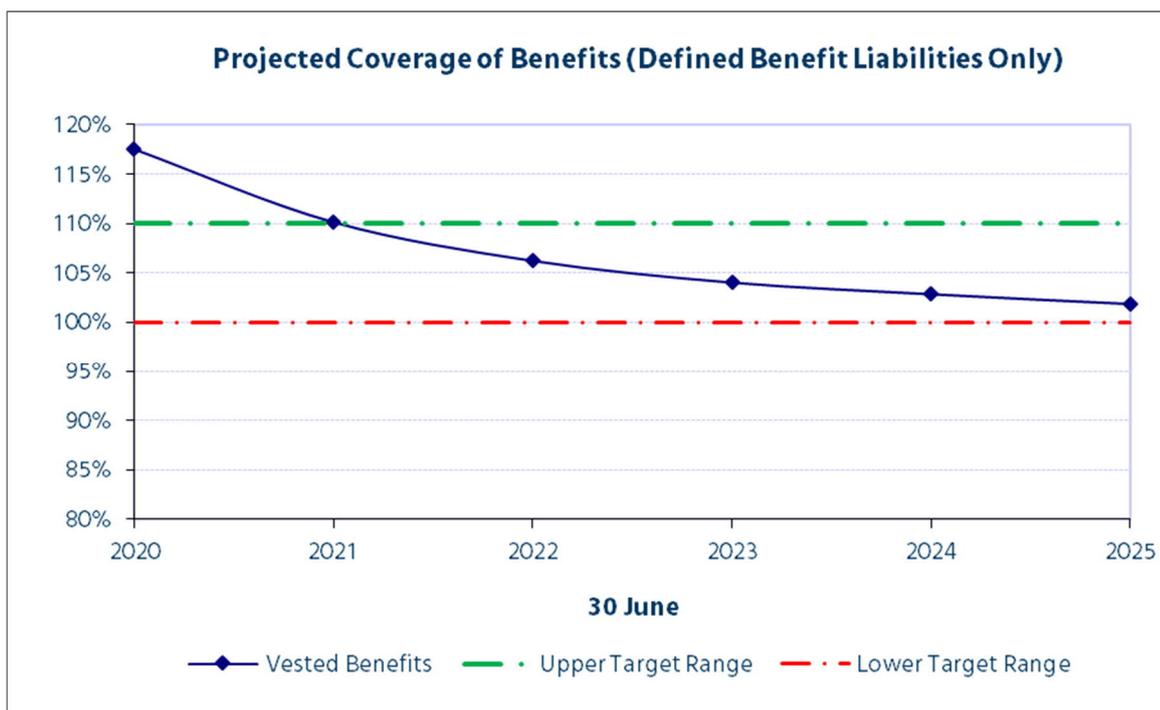
At 30 June 2020, the Plan was in a satisfactory financial position. The 117.6% coverage of the Defined Benefit Vested Benefits was also above the financing objective of between 100% and 110% coverage adopted for this investigation.

Based on the financial position at 30 June 2020 and taking into account the actual investment return of 5.2% for the period from 30 June 2020 to 30 November 2020, I recommend that the School contributes to the Plan in accordance with the following contribution program:

- Continue with the contribution holiday (nil contributions payable) in respect of Executive (PEGS:1) and Staff (PEGS:2) members;
- Commence payment of contributions to cover administration and actuarial expenses as advised by the Trustee (currently totalling \$93,000 p.a.) starting from 1 January 2023;
- 3.0% Award contributions (as required);
- SG% of OTE in excess of salary e.g. bonuses and allowances (allocated to the members' accumulation accounts); and
- 10.0% of salary (subject to a minimum of the SG rate) for members who remain in the Plan after their Normal Retirement Date.

The School should also ensure that the 5.25% of salary member contributions (or 6.18% of salary if paid via salary sacrifice) are paid to the Plan plus any other additional School contributions agreed between the School and a member (e.g. additional salary sacrifice contributions).

Based on the assumptions adopted for this investigation and allowing for any material experience after the investigation date as detailed in this report, I have prepared the following projection of Plan assets and benefit liabilities:



The graph above shows that the recommended contributions are anticipated to result in assets of between 100% and 110% of Defined Benefit Vested Benefits (which is the financing objective adopted in this investigation) throughout the period to 30 June 2023, and take into account the 5.2% investment return from 30 June 2020 to 30 November 2020. This means the Plan is projected to remain in a satisfactory financial position throughout this period.

Ongoing Costs

The membership of the Plan is small and declining. At 30 June 2020, there were only 9 members left in the Plan.

Most of the costs of running the Plan are fixed and therefore the costs of operating the Plan for just 9 members are very high on a per member basis. The Trustee and the School should examine whether members’ entitlements might be able to be converted to an accumulation basis in an appropriate manner, taking account of the Trustee’s obligations under superannuation law.

Risks

The Trustee should note that the above projection is based on the assumptions adopted, which represent a single scenario from a range of possibilities. The future is uncertain and the Plan’s actual experience will differ from these assumptions; these differences may be minor in their overall effect, or they may be significant and material. In addition, different sets of assumptions or scenarios may also be within the reasonable range and results based on those alternative assumptions would be different. However, the coverage ratios will be reviewed by the Plan actuary at least once every year and half-yearly on an approximate basis by the Trustee. The Trustee’s monitoring of the experience specified in

the Notifiable Events section of the Funding and Solvency Certificate will provide a further means of identifying adverse experience which warrants an immediate review of the Plan's financial position.

Sections 7 and 8 provide illustrations of the impact of investment volatility on the projected coverage of Vested Benefits and shows that a 1% pa reduction in the assumed future investment return would result in a 4.8% increase in the assessed value of liabilities.

Sections 8 and 9 discuss other risks associated with the liabilities, including small plan and expense risk, legislative risk and the risks associated with the current valuation method whereby it is assumed that the Plan will continue, with the current investment policy and the ongoing support of the School.

Other Findings and Recommendations

Suitability of Policies

I am satisfied that the following current policies for the defined benefit section of the Plan are suitable:

- The investment policy;
- The crediting rate policy;
- The insurance arrangements;
- The Shortfall Limit (for the purposes of SPS 160); and
- The Trustee's process for monitoring the Plan's financial position.

Other Recommendations

Given the high costs of operating the Plan on a per member basis, the Trustee and School should examine whether members' entitlements might be able to be converted to an accumulation basis in an appropriate manner, taking into account the Trustee's obligations under superannuation law.

Actions Required by the Trustee

The Trustee should consider this report and confirm its agreement (or otherwise) to the contribution and other recommendations.

The Trustee should seek formal agreement from the School to contribute in line with the recommendations.

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Introduction

Background of the Plan

The Plan is operated for the benefit of employees of the School and is a sub-plan of NGS Super. The Trustee of NGS Super holds a Registrable Superannuation Entity Licence under the SIS legislation and operates the Plan as required under the Trust Deed.

The Plan is a resident regulated fund and a complying superannuation fund for the purposes of the SIS legislation. The Plan is taxed as a complying superannuation fund.

The advice contained in this report is given in the context of Australian law and practice. No allowance has been made for taxation, accountancy or other requirements in any other country.

The governing rules of the Plan are set out in the NGS Super Trust Deed dated 8 March 2011 (as amended).

Purpose

I have prepared this report exclusively for the Trustee of the Plan for the following purposes:

- To present the results of an actuarial investigation of the Plan as at 30 June 2020;
- To review Plan experience for the period since the previous actuarial investigation as at 30 June 2017;
- To recommend contributions to be made by the School intended to allow the Plan to meet its benefit obligations in an orderly manner, and to reach and maintain an appropriate level of security for members' accrued benefit entitlements;
- To satisfy the requirements of the Plan's Trust Deed for actuarial investigations of the Plan's financial position; and
- To meet legislative requirements under relevant Commonwealth superannuation legislation.

It has been prepared in accordance with the requirements of the Trust Deed, the Superannuation Industry (Supervision) Act 1993 and associated regulations (SIS legislation), Prudential Standard SPS 160 issued by APRA and Professional Standard 400 issued by the Actuaries Institute setting out requirements for actuarial investigations of defined benefit superannuation funds under SIS legislation.

The previous actuarial investigation was conducted as at 30 June 2017 by Stuart Mules, on behalf of Mercer, and the results are contained in a report dated 12 December 2017.

Significant events since the investigation date

The recommendations in the report take into account the actual investment return of 5.2% over the period from 30 June 2020 to 30 November 2020. I am not aware of any other significant events that have occurred since 30 June 2020 which would have had a material impact on the findings or recommendations in this report.

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Experience since the last review

Membership

The membership of the defined benefit section has changed since 30 June 2017 as follows:

Active members at 30 June 2017	13
Exits	4
New Entrants	0
Active members at 30 June 2020	9
Total salaries at 30 June 2020	\$1,491,000
Average salaries at 30 June 2020	\$166,000
Average age at 30 June 2020	57.8 years

The membership data used for this investigation was taken from the database used to administer the Plan. I have carried out some broad “reasonableness” checks on the data and I am satisfied with the quality of the data and its suitability for this purpose.

Investment Returns

The table below shows the rates of investment earnings (after tax, investment fees and asset based administration fees) for assets supporting defined benefits, and crediting rates applied to defined benefit members’ accounts, over the period since the previous investigation.

Year Ending	Investment Return/Crediting Rate (pa)
30 June 2018	8.0%
30 June 2019	5.5%
30 June 2020	-1.1%
Compound Average	4.0%

The average investment return for the three year period to 30 June 2020 was 4.0% p.a. compared to our long term assumption at the last actuarial investigation of 5.0% p.a. The lower return than assumed had a negative impact on the Plan’s financial position.

However, returns since 30 June 2020 have been strong, with the Plan earning 5.2% from 30 June 2020 to 30 November 2020.

Salary Increases

Salaries for the current defined benefit members increased by an average of 6.2% p.a. over the period compared to our longer term assumption at the last actuarial investigation of 3.0% p.a. The higher salary increases than assumed had a negative impact on the Plan's financial position, as all of the Plan's liabilities are salary related.

Contributions

The School contributions paid since the date of the previous actuarial investigation were as follows:

- Contribution holiday (nil contributions payable) in respect of Executive (PEGS:1) and Staff (PEGS:2) members;
- 3.0% Award contributions (as required);
- SG% of OTE in excess of salary e.g. bonuses and allowances (allocated to the members' accumulation accounts);
- 10.0% of salary (subject to a minimum of the SG rate) for members who remain in the Plan after their Normal Retirement Date; and
- 5.25% of salary member contributions (or 6.18% of salary if paid via salary sacrifice) plus any other additional School contributions agreed between the School and a member (e.g. additional salary sacrifice contributions).

The School contributions paid were in accordance with the recommendations made at the previous actuarial investigation. As the School has not made contributions towards the defined benefits (a contribution holiday) during the investigation period, this has reduced the excess of Plan assets over liabilities.

Changes in Membership/Decrements

During the period under review the number of defined benefit members within the Plan decreased from 13 to 9. As a result, surplus assets are spread over a smaller defined benefit base and accordingly coverage of benefit liabilities (as a percentage) has increased.

Impact of the experience on the financial position

The main experience items affecting the Plan's financial position during the period from 30 June 2017 to 30 June 2020 were as follows:

Item	Assumption at previous review	Plan experience	Comment on effect
Investment returns	5.0% p.a.	4.0% p.a.	Negative effect – investments grew at a lower rate than assumed
Salary increases	3.0% p.a.	6.3% p.a.	Negative effect – benefit liabilities grew at a higher rate than assumed
Contributions			Negative effect – see above
Membership changes			Positive effect – see above

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Actuarial assumptions

The ultimate cost to the School of providing the benefits to members is:

- The amount of benefits paid out; and
- The expenses of running the Plan, including tax;

less

- Members' contributions; and
- The return on investments.

The ultimate cost to the School will not depend on the actuarial assumptions or the methods used to determine the recommended School contribution, but on the actual experience of the Plan. The financing method and actuarial assumptions adopted will however affect the timing of the contribution requirements from the School.

The actuarial process includes projections of possible future Plan assets and benefit liabilities on the basis of actuarial assumptions about future experience.

These assumptions include investment returns, salary/wage increases, crediting rates, the rates at which members leave the Plan for various reasons, and other factors affecting the financial position of the Plan.

It is not expected that these assumptions will be precisely borne out in practice, but rather that in combination they will produce a model of possible future experience that is considered a suitable basis for setting contribution rates.

Economic assumptions

The most significant assumption made in estimating the cost of defined benefits is the difference between:

- The assumed rate of investment earnings; and
- The rate of salary increases used in the projections of future benefit payments.

This difference is commonly referred to as the "gap".

The key economic long term assumptions adopted for this investigation are:

	Assumption
Investment returns (after tax, investment and asset based fees)	4.0% p.a.
Crediting rate (after tax, investment and asset based fees)	4.0% p.a.
General salary increases	3.0% p.a.

The assumption for investment returns is based on the expected long-term investment return for the Plan's current benchmark investment mix, calculated using Mercer's assumptions of the means and standard deviations of returns from the various underlying asset classes and the correlations of returns between those asset classes. It has been adjusted to reflect the term of the liabilities and reduced by 0.1% p.a. and 0.2% p.a. to reflect the investment management fee and passive investment fee respectively.

The salary increase assumption is based on long term economic forecasts for future increases in average weekly earnings (AWOTE) and discussions with the School.

Demographic assumptions

Retirement

The rates at which members are assumed to leave the Plan due to retirement are set out in Appendix B. Given the small size of the Plan, these rates are based on the experience of similar plans administered or advised by Mercer.

Death and Disablement in Service

Given the small size of the Plan and the age profile of the remaining members, no specific allowance is made for the possibility of future member exits due to death or disablement in our calculations.

Resignation

Specimen rates at which members are assumed to leave the Plan due to resignation are set out in Appendix B. Given the small size of the Plan, these are based on the experience of similar plans administered or advised by Mercer.

Retrenchment

The retrenchment benefit is the same as the benefit paid on resignation or retirement.

Other assumptions

New members

The Plan's defined benefit section is closed to new entrants. No allowance has been made for new members.

Expenses

The following expenses have been allowed for as a cost in setting the contribution recommendation:

- Actuarial consulting fees (estimated to be \$35,000 p.a.);
- Administration fees (estimated to be \$58,000 p.a.); and
- Net cost of group life and disablement income insurance (assumed to average 1.7% of defined benefit members' salaries based on recent experience).

Investment fees have been allowed for in setting the investment return assumption (refer to above).

Tax

It is assumed that the current tax rate of 15% continues to apply to the Plan's assessable income, along with current tax credits and deductions.

All future School contributions are assumed to be subject to 15% contribution tax, after deduction of any insurance premiums and administration and management costs. All contribution recommendations quoted in this report are gross of contributions tax.

No allowance has been made for:

- Excess contributions tax, as this is payable by the member.
- Additional tax on contributions (including defined benefit notional contributions) for those with incomes above the threshold (currently \$250,000), which is also payable by the member.

Impact of the changes in assumptions

The following table sets out changes in assumptions from those used in the previous investigation and the reasons for the changes:

Assumption	Investigation at 30 June 2020	Investigation at 30 June 2017	Reason for change
Investment return	4.0%	5.0%	Updated to reflect current investment market outlook and reflect deductions of any asset based fees.
Expenses	Actuarial fees estimated to be \$35,000 p.a. Administration expenses estimated to be \$58,000 p.a. Net cost of group life and disablement income insurance estimated to be 1.7% of defined benefit members' salaries.	Actuarial fees estimated to be \$45,000 p.a. Administration expenses estimated to be \$50,000 p.a. Net cost of group life and disablement income insurance estimated to be 2.1% of defined benefit members' salaries.	Updated to reflect Plan experience and future expectations.

The overall impact of the changes in assumptions was to increase the Actuarial Value of Accrued Benefits by \$233,000.

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Assets

Market value

The net market value of the Plan's assets as at 30 June 2020 amounted to \$7,325,000 (based on the data provided by the Plan's administrator) for the Plan at 30 June 2020.

Calculation of Defined Benefits Assets at 30 June 2020	
Net market value of the Plan's assets as at 30 June 2020	\$7,325,000
Less accumulation accounts for defined benefit members	\$1,383,000
Net assets to support the defined benefit liabilities of the Plan	\$5,942,000

Operational Risk Reserves

The assets to meet the Trustee's Operational Risk Financial Requirement (ORFR) are held separately from the assets of the Plan.

The scope of this Investigation does not include a review of the adequacy of assets held to meet the Trustee's ORFR or the Trustee's ORFR strategy.

Investment Policy

Assets backing defined benefit liabilities

The Plan's strategic asset allocation as at 30 June 2020 for assets supporting defined benefit liabilities currently involves a benchmark exposure of 52.5% to 'growth' assets such as shares and property and a benchmark exposure of 47.5% to 'defensive' assets such as cash and term deposits. Please refer to the table below for the actual and benchmark investment allocations of these assets as at the investigation date. 'Growth' assets are expected to earn higher returns over the long term compared to 'defensive' assets, but at the same time to exhibit more variation in returns from year to year.

The actual asset allocation and Strategic Asset Allocation for the assets supporting the defined benefit liabilities are as follows:

Asset Class	Actual Allocation as at 30 June 2020	Strategic Asset Allocation
Australian Shares	29.2%	30.5%
Overseas Shares	11.7%	11.0%
Property	11.0%	11.0%
Cash	48.1%	47.5%
Total	100%	100%

The current policy is to direct all cash flow via the Cash investment option with the Plan's assets being rebalanced on an annual basis as necessary.

The defined benefit liabilities (other than some aspects of the SG minimum benefit) are not affected by the investment return on the Plan's assets. The volatility of the Plan's investment returns will therefore affect the financial position of the Plan from year to year and is likely to impact on the required level of School contributions.

I am satisfied that the current investment strategy is appropriate in view of the Plan's longer term cash flows and the financial support provided by the School.

This conclusion takes into account my understanding that the School understands the possible variability in future contributions associated with the current investment policy. If the School has a different view, then this policy should be reviewed.

Rebalancing

The Plan's asset allocation is monitored on a half-yearly basis with a formal review and rebalancing exercise completed on an annual basis as necessary.

Given the significant amount of retirement benefits due to become payable in the next few years we recommend that this review process continues.

Based on the assumptions adopted for this valuation, the total assets invested in the Cash option as at 30 June 2020 are expected to be sufficient to pay the benefits over the next 2-3 years (without taking into account other cashflows or rebalancing).

We recommend that the School and Trustee reaffirm the current rebalancing policy, including the allowance for additional cash holdings held outside of the Plan and whether a change in the benchmark allocation is warranted in these circumstances.

Assets backing accumulation benefit liabilities

The Plan provides members with a range of investment options for their accumulation benefits. The assets supporting the Plan's accumulation benefit liabilities are invested according to members' selected investment options and the actual returns on those investments (whether positive or negative) are passed on to members via changes in the unit prices by which member account balances are determined. Thus, the Plan's accumulation liabilities and related assets are matched.

The Plan's investments are expected to provide a high level of liquidity in normal circumstances.

Award Account

Members are provided with investment choice on their Award Account which includes the additional 3% contributions payable by the School (the "Award Account"). The Award Account is payable in addition to all defined benefits other than when the SG benefit is payable (or the Temporary Disability benefit). As such, to an extent the School bears the investment risk chosen by the member for the balance of the Award Account. For example, if investment returns on the Award Account were low as a result of the member's investment choice, the SG benefit may be more likely to apply and hence the additional cost of this higher benefit lies with the School.

Given the structure of the SG benefit compared to the other defined benefits on exit, we believe that the current investment risk to the School posed by allowing investment choice on the Award Account is minimal.

I consider that the Plan's investment policy for assets relating to accumulation liabilities is suitable, having regard to the nature and term of these liabilities.

Crediting Rate Policy

NGS Super has a documented unit pricing policy (September 2011) and the Plan has a documented Crediting Rate policy (dated December 2013).

The following accounts are credited with investment earnings at the Crediting Rate:

- Defined Benefit Member Account and Vested Benefit at 1 July 1992 Account (payable as part of the SG minimum benefit only);
- Surcharge Account;
- DB Offset Account (in relation to partial withdrawals from the DB component of the benefit excluding Family Law Offsets); and
- Defined Benefits after Normal Retirement Date.

The main features of the unit pricing and Crediting Rate policies are summarised briefly below:

- Crediting Rates are determined monthly following the release of NGS Super's last set of unit prices prior to the end of each month.
- The Crediting Rate is determined based on the movement in the underlying unit prices (after allowance for tax, investment costs and 0.1% asset-based administration fees) between the last declared unit price in the previous month and the latest declared unit price in the current month and weighted according to the asset allocation at the beginning of the current month. This figure is then annualised.
- No allowance is made for changes in asset allocations or transactions during the month.
- There is no adjustment made at the end of the financial year to the previously declared crediting rates.
- For benefit payments, interim crediting rates apply for the period up to the date of leaving service for which a declared rate is not yet available. The interim Crediting Rate is determined based on the return of the cash investment option over the previous crediting period.
- Members' defined benefits are crystallised at the date of leaving service. For the period from the date of leaving service to the date of payment of the benefit (or until transferred to the Industry section of NGS Super), late payment interest is payable on the benefit. This is determined based on the movement in the unit price of the cash investment option between the date of leaving service and the date of payment/transfer.
- Members' additional accumulation benefits (where member investment choice has been exercised) are calculated using the latest unit price at the date of payment/transfer.
- The Plan allocates earnings to any Family Law Offset Accounts in relation to defined benefits using AWOTE plus 2.5% per annum.
- Members reaching normal retirement age will be given the option to remain in the Plan and receive accumulation style benefits or transfer to the Industry section of NGS Super. Members leaving service for any other reason will be automatically transferred to the Industry section (unless alternative payment instructions have been received).

Termination of service can result in an automatic change in a member's investment option. If a member remains in the Plan post normal retirement age, the member's crystallised benefit will remain invested in the defined benefit investment option until paid. If transferred to the Industry section (on reaching Normal Retirement Age or exit for any other reason):

- If the member has selected an investment option or options for any additional accounts, the former defined benefit is to be invested according to the nominated investment choice from the date the conversion is processed.
- If the member has not selected an investment option for the additional accounts or does not have any additional accounts, the former defined benefit is to be invested in the default investment option for accumulation members from the date the conversion is processed.
- The member may switch investment options at any time after the processing date.

- NGS Super Management allows certain member transaction requests to be backdated. That is, certain transactions can be processed with an earlier “business effective date” than the actual “processing date”.
- Unit prices are determined on a weekly basis.
- Hard-close unit prices are calculated (monthly and annually) for performance monitoring but are not used for transaction processing or member statements.
- NGS Super maintains a unit pricing reserve to cover any potential errors caused by incorrect calculations of unit prices.
- Contingency arrangements are documented for the Trustee to take action if markets become significantly volatile, including the release of additional unit prices and the suspension of member transaction processing.

Comments

Whilst the monthly update of the interim rate theoretically allows some scope for anti-selection, taking into account the nature of the benefits and that termination of service (with associated notice periods) would generally be required to trigger a payment, I consider that the current frequency of review of interim rates is appropriate.

I consider that the current frequency of review of unit prices is appropriate. Whilst the use of historical unit pricing can result in members being disadvantaged or advantaged (depending on market movement), when considered alongside the contingency arrangements in place I consider the risk is controlled sufficiently.

Backdating of transactions creates a risk for the Plan if markets fall between the business effective date and the actual processing date. Generally the contribution information received is clean and hence there is little delay in the allocation of contributions. We therefore consider the risk to this Plan to be minimal. We also understand that there are limitations in amending the administration system to remove backdating of transactions.

The crediting rate process does not allow for the asset allocations or transactions over the month. This is more of an issue if School contributions cease (in line with our recommendations). Therefore it is important to rebalance the asset allocation on a regular basis (as recommended in 6.1). Whilst allowing for such cash flows would result in the calculation of a more accurate return, I consider that the current process produces a sufficient balance between accuracy and timeliness.

As a member’s exit can result in a change to the member’s investment options, the Trustee should ensure that this and the member’s choices are clearly indicated in any communication provided on and before exit.

Conclusion

The unit pricing and Crediting Rate policy and related procedures are documented. A detailed review of the policy and related procedures is outside the scope of this investigation.

Based on a review of the main features, I consider that the unit pricing and Crediting Rate policy for these benefits is generally suitable taking into consideration the principles of equity between different generations of members and any material risks which may have a significant impact on the Plan (i.e. a market shock or sudden downturn in investment markets).

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The Actuarial Approach

Financing Objective

The financing objective adopted for the previous investigation of the Plan as at 30 June 2017 was to ensure assets were at least equal to 100% of accumulation account balances, plus 100% Defined Benefit Vested Benefits, but to target and then maintain assets at least equal to 100% of accumulation account balances, plus 110% of the Defined Benefit Vested Benefits.

The financing objective adopted for this investigation is to maintain the value of the Plan's assets at least equal to:

- 100% of accumulation account balances; plus
- Between 100% and 110% of Defined Benefit Vested Benefits.

Accumulation account balances are matched by specific assets and do not require any additional margins. However, the defined benefit liabilities are linked to salaries and not to the returns on the underlying assets. A margin of between 100% and 110% coverage of Defined Benefit Vested Benefits is therefore desirable to provide some security against adverse experience such as poor investment returns. I consider the target margin of between 100% and 110% strikes a suitable balance between the Trustee's desire to provide security to members and the unreasonable build-up of surplus.

Based on the assumptions adopted for this investigation, achieving the minimum financing objective of 100% of Vested Benefits for defined benefit members would result in a satisfactory margin of coverage over 100% of SG Minimum Benefits. We also intend to monitor coverage of Actuarial Value of Accrued Benefit on a half-yearly basis. Therefore, it is not considered necessary to adopt specific financing objectives in relation to these benefit liability measures.

I have taken into consideration the provisions of the Trust Deed and any professional requirements as set out below.

Professional Requirements

Under Professional Standard 400 issued by the Actuaries Institute, the funding method selected by the actuary "must aim to provide that:

- (a) members' benefit entitlements (including any pension increases provided by the Trust Deed or in accordance with either precedent or the intentions of the Trustee and/or Fund Sponsor) are fully funded before the members retire; and*
- (b) the assets of the Fund from time to time, after making full provision for the entitlements of any beneficiaries or members who have ceased to be employed, exceed the aggregate of benefits*

which employed members would reasonably expect to be payable to them on termination of membership, including the expenses of paying those benefits, and having regard to the provisions of the Trust Deed and the likely exercise of any Options or Discretions.” (Paragraph 5.5.4 of PS400).

Accordingly the actuary needs to be satisfied that any funding program is expected to provide a level of assets which meets or exceeds immediate benefit entitlements based on members' reasonable expectations. Should assets fall below that level, the funding program needs to aim to lift assets to at least the required level over a reasonable time period and to maintain assets at or above the required level thereafter.

The financing objective has been set on the basis that members' reasonable expectations on termination would be to receive their vested benefit entitlement.

Provisions of the Trust Deed

The rules of NGS Super require that:

- The Trustee ensures an actuarial investigation of the Plan is conducted when required by legislation. Accordingly actuarial investigations are carried out at three yearly intervals at a minimum; and
- The School must contribute at the rate determined by the Trustee, after consulting the School, on the advice of the Actuary to the Plan.

Financing Method

There are various financing methods that could be followed in setting the School contribution level. This investigation uses a "Target Funding" method.

Under this method, the School contribution rate required to provide a target level of coverage of a particular benefit liability measure is determined.

Under this method of financing, the level of the School contribution may vary from time to time to ensure that the Plan remains on course towards its financing objective (between 100% and 110% coverage of Vested Benefits).

I consider that the Target Funding method is suitable in the Plan's current circumstances as it allows the recommended contribution rate to be determined specifically to meet the Plan's financing objective.

Changes in Financing Method

The Target Funding method was used at the previous investigation.

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Financial Position of the Plan

Funding status

Vested Benefits

Vested Benefits are the amounts payable as of right should all active members voluntarily resign or, if eligible, retire at the investigation date.

At 30 June 2020, the Plan assets represented 117.6% of the vested benefits and hence the Plan was considered to be in a “satisfactory financial position” under SIS legislation. The 117.6% coverage of the Defined Benefit Vested Benefits was also above the financing objective of between 100% and 110% coverage adopted for this investigation.

SG Minimum Benefits

SG Minimum Benefits are the minimum benefits required under SG legislation, as defined in the Benefit Certificate (also referred to as Minimum Requisite Benefits or MRBs).

The Plan assets at 30 June 2020 were 170.3% of MRBs and hence the Plan was considered to be “solvent” under SIS legislation.

Actuarial Value of Accrued Benefits

The Actuarial Value of Accrued Benefits is the expected value (as at the investigation date) of all future expected benefit payments, based on membership to date, discounted to the investigation date, taking into account the probability of payment. This value is calculated using the actuarial assumptions and method outlined in the previous sections. In determining the value, I have not applied a minimum of the vested benefits. Further details concerning the calculation of the Actuarial Value of Accrued Benefits are set out in Appendix C.

The Plan Assets as 30 June 2020 represented 112.6% of the Actuarial Value of Accrued Defined Benefits.

The following table shows these funding measures at both the previous and current valuation dates.

Defined Benefits Only*	Position at 30 June 2020		Coverage at 30 June 2017
	\$000	Asset Coverage	
Assets	5,942		
Liability for Vested Benefits	5,054	117.6%	126.8%
Liability for Actuarial Value of Accrued Benefits	5,279	112.6%	137.7%
Liability for SG Minimum Benefits	3,490	170.3%	187.8%

* The above totals exclude additional accumulation balances for defined benefit members of \$1,383,000 as at 30 June 2020.

The coverage levels at 30 June 2020 were lower than the levels at the previous actuarial investigation due to:

- The overall negative experience discussed in Section 3; and
- The changes in the actuarial assumptions resulting in an increase in the actuarial value of the accrued benefits as discussed in Section 4 of this report.

School's Future Service Cost

Based on the assumptions adopted for this investigation, I estimate that the School's long-term defined benefit funding costs (i.e. the normal cost of funding future service defined benefit accruals for each category) are as follows:

Defined Benefit Membership Group	School long-term cost (of future benefit accrual) (% of Salary/Wage)
PEGS:1	12.1%
PEGS:2	9.0%
Overall	10.7%

The School's long-term defined benefit funding cost above includes an allowance for expected insurance premiums (of 1.7% of DB salaries) and contributions tax. The following items are also a cost to the School and are in addition to the long-term defined benefit funding cost above:

- Actuarial fees (estimated to be \$35,000 p.a.);
- Administration fees (estimated to be \$58,000 p.a.);
- 3.0% Award contributions (as required) – allocated to the member's accumulation account;
- SG% of OTE in excess of salary e.g. bonuses and allowances – allocated to the member's accumulation account; and
- 10% of salary (subject to the minimum of the required SG% rate) for members who remain in the Plan after their Normal Retirement Date.

The other expenses of running the Plan (investment) have already been allowed for by a reduction in the investment return assumption (refer section 4).

Recommended Contributions

At 30 June 2020, the Plan was in a satisfactory financial position. The 117.6% coverage of the Defined Benefit Vested Benefits was also above the financing objective of between 100% and 110% coverage adopted for this investigation.

Based on the financial position at 30 June 2020 and taking into account the actual investment return of 5.2% for the period from 30 June 2020 to 30 November 2020, I recommend that the School contributes to the Plan in accordance with the following contribution program:

- Continue with the contribution holiday (nil contributions payable) in respect of Executive (PEGS:1) and Staff (PEGS:2) members;
- Commences payment of contributions to cover administration and actuarial expenses as advised by the Trustee (currently totalling \$93,000 p.a.) starting from 1 January 2023;
- 3.0% Award contributions (as required);
- SG% of OTE in excess of salary e.g. bonuses and allowances (allocated to the members' accumulation accounts); and
- 10.0% of salary (subject to a minimum of the SG rate) for members who remain in the Plan after their Normal Retirement Date.

The School should also ensure that the 5.25% of salary member contributions (or 6.18% of salary if paid via salary sacrifice) are paid to the Plan plus any other additional School contributions agreed between the School and a member (e.g. additional salary sacrifice contributions).

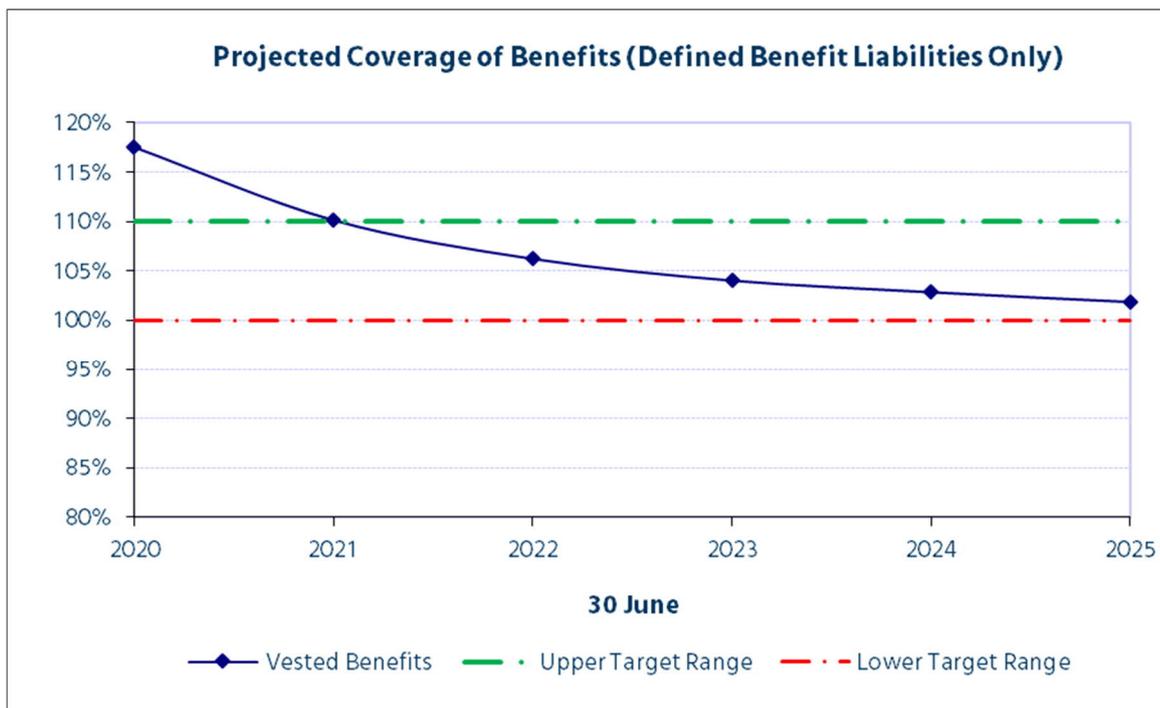
In practice, it is likely to be necessary to vary the School contributions at some point in the future to achieve the Trustee's financing objective.

Projected Financial Position

I have prepared a projection of Plan assets and benefit liabilities based on:

- the actuarial assumptions adopted for this investigation;
- the actual investment return of 5.2% for the 5 months immediately after 30 June 2020; and
- assuming the recommended School contributions will be paid.

The results of the projection are as follows:



The Trustee should note that this projection is based on the assumptions adopted, which represent a single scenario from the range of possibilities. The future is uncertain and the Plan’s actual experience will differ from those assumptions; these differences may be minor in their overall effect, or they may be significant and material. In addition, different sets of assumptions or scenarios may also be within the reasonable range and results based on those alternative assumptions would be different, as discussed below.

The projection above shows that the recommended contributions are anticipated to result in assets of between 100% and 110% of Defined Benefit Vested Benefits (which is the financing objective adopted in this investigation) throughout the period to 30 June 2023. This means the Plan is projected to remain in a satisfactory financial position throughout this period.

Sensitivity Analysis

We have tested the effect of changes to the key assumptions on the value of liabilities and the Plan's net financial position.

The liabilities shown in this report have been calculated using our best estimate assumptions for investment return (4.0% per annum) and salary growth (3.0% per annum). As both future investment returns and future salary increases are unknown, it is almost certain that actual experience will differ from these assumptions.

It is the difference between the investment return rate and salary growth rate (commonly referred to as the 'gap') that is crucial rather than the individual assumptions, because the value of the assets move with investment returns while your defined benefit liabilities grow with salaries.

To quantify the sensitivity of the net financial position to our assumptions, we have calculated the change in liability based on the following scenarios:

- Decrease the long term investment return assumption by 1% pa; and
- Increase the salary growth assumption by 1% pa.

All other assumptions, including the School contribution rates, are assumed to remaining the same.

The effects of these changes are shown below, with the impact of the change as a percentage of assets shown in brackets:

Scenario	Net financial position as at 30 June 2020 (\$000)	Change in net financial position (\$000)
Base assumptions as shown previously	663	
Decrease investment return by 1% pa	410	(253)
Increase salary increase by 1% pa	454	(209)

8

Key Risks

Investment Volatility

Current vested benefits for defined benefit members are fully linked to salaries and not linked to investment returns. Therefore, the Plan's vested benefits coverage is highly sensitive to changes in the investment returns.

I have considered the impact of investment volatility on the Plan's financial position over the next few years using a "high return" and a "low return" scenario. The returns under both scenarios have been derived from assumptions about the likely risk attached to the Plan's defined benefit investment strategy.

Using the investment return model and assumptions adopted, there is approximately a 10% chance of the Plan's cumulative investment return being less than the "low return" scenario over the next 5 years. Similarly, there is approximately only a 10% chance of the Plan's cumulative investment return being greater than the "high return" scenario over the next 5 years.

The cumulative investment return as at 30 June 2025 under the "low return" and "high return" scenarios are 9.1% and 38.1% respectively (equivalent to 1.8% and 6.7% per annum respectively).

Based on fluctuations in investment returns only, and assuming other experience is in line with the assumptions adopted for this investigation, there is approximately an 80% chance that the coverage of assets over Vested Benefits at 30 June 2025 will fall in the range from 85% to 116%.

Please note that the "low return" scenario and the "high return" scenario shown above are illustrations only, and show what may occur under assumed future experiences that differ from our baseline assumptions. These scenarios do not constitute upper or lower bounds and the actual future coverage of Vested Benefits may differ significantly from the range shown above, depending on actual future experience. In fact, there is a 1 in 20 chance that the investment return could be less than minus -8.1% in any year based on the current Plan asset allocation.

In my view, the Trustee should be satisfied with the expected level of security over the next few years if the School contributes at the recommended levels.

Salary Growth Risk

The risk is that wages or salaries (on which future benefit amounts will be based) will rise more rapidly than assumed, increasing benefit amounts and thereby requiring additional School contributions. This risk is borne by the School.

For example, if the assumed future salary increase rate was increased by 1% pa with no change in other assumptions, then the Plan's net financial position would deteriorate by \$209,000 from an excess of \$663,000 million to an excess of \$454,000 as shown in the table in Section 7.

The actual rate of future salary increases may vary (positively or negatively) from the rate assumed at this investigation by much more than the (positive) 1% pa illustrated in the example above.

Legislative Risk

This risk is that the Commonwealth Government could make legislative changes that increase the cost of providing the defined benefits – for example, an increase in the rate of tax on superannuation funds. This risk is borne by the School and is a real risk in the post COVID-19 environment.

COVID-19 Risks

The COVID-19 pandemic had a significant impact on investment markets in the quarter ending 31 March 2020, which is reflected in the value of Fund assets used in assessing the Fund's financial position at the investigation date. In the projection of the Fund's financial position in Section 7, we have also taken into account known investment returns for the period since 30 June 2020.

It is not clear what, if any, impact COVID-19 will have in the medium to long term. We have therefore not made any specific allowance for the future impact of COVID-19 in the investigation, but any impact on investment markets and the Fund's financial position will continue to be monitored over the period to the next investigation.

Small Plan Risk

This risk relates to supporting a defined benefit plan where there are few remaining defined benefit members meaning the law of averages no longer applies and the time horizon of the defined benefit liabilities may have become short. Issues that may require consideration include:

- (i) Funding may have previously been based on the Defined Benefit Plan continuing in the longer-term, which may no longer hold. Therefore greater focus is required on the funding of benefits immediately payable to members (e.g. Defined Benefit Vested Benefits);
- (ii) With few remaining members, the experience of a single member or event will have a proportionately larger impact on the financial position. Therefore more frequent monitoring of the financial position will be required;
- (iii) Contributions required to finance any shortfalls, specifically as a percentage of salary roll of defined benefit members, can become significant;

- (iv) The investment strategy may have been set based on the Defined Benefit liabilities continuing in the longer-term, which may no longer hold. Therefore the strategy may need to be revised to reflect the shorter term of the liabilities;
- (v) Fees in respect of the Plan, particularly relative to the number of defined benefit members and salary roll, can become significant. Most actuarial tasks are essentially the same whether there are one or 100 defined benefit members. As defined benefit funds reduce in membership, the actuarial fees may, in fact, increase because of additional monitoring being required. Industry changes such as the SG rate increase can also result in additional fees, and
- (vi) The expected wind-down of the remaining defined benefit members.

The Plan's Risk Management Statement and Risk Management Plan should identify a full range of risks faced by the Trustee.

9

Insurance and Related Risks

Insurance

The Plan is not permitted to self-insure.

For defined benefit members, the group life sum insured formula currently in use (for both death and total and permanent disablement (TPD) benefits) is:

Sum Insured = Death Benefit – Accrued Retirement Benefit*

*Based on current salary rather than final average salary

The total amount insured should cover the excess of the death/TPD benefits over the Plan's assets, unless there is a funding shortfall. Based on the formula in use at the investigation date, the coverage of death/TPD risk as at 30 June 2020 for the Plan was as follows.

Defined Benefit members		\$000
	Death/Disablement Benefits	7,645
less	Sum Insured	1,931
less	Assets	5,942
	Uncovered Death/Disablement Benefits	(228)

It can be seen that there is a reasonable amount of over insurance at 30 June 2020, largely as a result of the surplus assets in the Plan, but it is not at a level where I consider that a change to the current insurance formula is necessary.

The definition of TPD in the policy is also used to establish a member's eligibility for the benefit under the Plan's governing rules, thus avoiding any definition mis-match risk.

Underwriting is required if the insured benefit exceeds the Automatic Acceptance Limit. If the insurer does not accept an application for cover in excess of the Automatic Acceptance Limit, clause 1.5.2a) of the NGS Super Trust Deed dated 8 March 2011 allows the Trustee to reduce member benefits to the extent that the Policy cover has not been increased. The Trustee will need to have communicated this adequately to the members concerned i.e. through relevant disclosure.

Disability income benefits

The Plan provides for a temporary disablement income benefit of 75% of salary (plus 10% of salary to superannuation) to the earlier of death, TPD, recovery or 31 December after the member turns age 65 (consistent with Normal Retirement Date) after a waiting period of 90 days.

For disability income benefits – the benefit provisions are entirely matched by the insurance cover. As such there is no funding gap and any claims or adverse experience will have no immediate financial impact on the Plan.

In our opinion, the current group life insurance arrangements, including the sum insured formula for defined benefit members, are appropriate and provide adequate protection for the Plan.

Documentation

The insurance arrangements are underwritten by TAL (“the insurer”) and outlined in the latest endorsement to the policy (effective 1 June 2017) between the Trustee and the insurer. The purpose of the insurance policy is to protect the Plan against unexpectedly large payouts on the death or disablement of members.

10

Prudential Standards

The prudential regulator (APRA) has issued a number of Prudential Standards for the superannuation industry, including Prudential Standard (SPS 160) relating to the financial management and funding of defined benefit plans. We have commented below on several requirements arising from SPS 160.

Shortfall Limit

The Trustee must determine a “Shortfall Limit” for each fund, being:

“the extent to which the fund can be in an unsatisfactory financial position with the Trustee still being able to reasonably expect that, because of corrections to temporary negative market fluctuations in the value of the fund assets, the fund can be restored to a satisfactory financial position within a year”.

We understand that the Plan’s Shortfall Limit, determined by the Trustee on the basis of previous actuarial advice, is 98%.

The Shortfall Limit is expressed as the coverage level of the defined benefits vested benefits by the defined benefit assets. It is appropriate to consider the following factors when determining if the Shortfall Limit remains appropriate:

- The guidance provided in the relevant Actuaries Institute Information Note;
- The investment strategy for defined benefit assets, particularly the benchmark exposure of 52.5% to “growth” assets;
- The results of this investigation regarding the extent to which the current and projected Vested Benefits are not linked to the investment return on defined benefit assets (i.e. salary-based benefits) and the current and projected relativity between Vested Benefits and Minimum Requisite Benefits.

Based on the above, we recommend maintaining the current Shortfall Limit.

The projections also indicate that the level of Minimum Requisite Benefits is not expected to be a constraint in determining the Shortfall Limit. We will reassess the suitability of the adopted Shortfall Limit as part of the next regular actuarial investigation. The Shortfall Limit should be reviewed earlier if there is a significant change to the investment strategy for defined benefit assets – in particular a change to a more defensive strategy - or if the Trustee otherwise considers it appropriate to do so.

Monitoring Process

SPS 160 also requires the Trustee to determine and implement a process for monitoring the defined benefit Vested Benefits coverage against the Shortfall Limit for each plan. If this monitoring process indicates that the vested benefits coverage has (or may have) fallen below the Shortfall Limit, then under SPS 160:

- An “Interim Actuarial Investigation” may be required (depending on the timing of the next regular actuarial investigation).
- A Restoration Plan is required to be put in place if an Interim Actuarial Investigation finds the plan has breached its Shortfall Limit. The Restoration Plan must be designed to return the plan to a “satisfactory financial position”, so that the Vested Benefits are fully covered, within a reasonable period that must not exceed 3 years and this must be submitted to APRA.

We understand that the Trustee has adopted a monitoring process which includes the following:

- The defined benefit vested benefits coverage for the Plan is prepared half-yearly;
- A broad estimate of the defined benefit vested benefits coverage for each plan in the Mercer Super Trust is prepared each quarter using an approximate approach which takes into account key factors such as the investment return and top-up contributions (if any) for the quarter (“Trustee’s estimate”);
- If the Trustee’s estimate indicates that the Shortfall Limit has, or may have been breached, action will be taken as required by SPS 160;
- For plans in a satisfactory financial position where there has been a significant reduction in the Trustee’s estimate of defined benefit vested benefits coverage, the Trustee will request a review of the financial position and formal advice from the Plan actuary as to whether or not the current contribution program remains appropriate; and
- For plans in an unsatisfactory financial position, the Trustee will request a review of the financial position and advice from the Plan actuary each quarter as to whether or not the current contribution program remains appropriate or any other action should be taken.

We consider that the adopted monitoring process is appropriate.

The Trustee should also continue to monitor the “Notifiable Events” specified in the Plan’s Funding and Solvency Certificate and advise the Actuary should any actual or potential Notifiable Events occur.

Requirements due to Unsatisfactory Financial Position

Restoration Plan

Under SPS 160, a Restoration Plan is also required to be put in place if the actuary finds in a regular Actuarial Investigation that a plan:

- Is in an unsatisfactory financial position (whether or not the Shortfall Limit has been breached); or
- Is likely to fall into an unsatisfactory financial position.

The Restoration Plan must be designed to return the plan to a “satisfactory financial position”, so that Vested Benefits are fully covered, within a reasonable period that must not exceed 3 years from the investigation date.

An SPS 160 Restoration Plan is not required if the plan is technically insolvent (in which case the insolvency rules must be followed). If an SPS 160 Restoration Plan is already in place then any changes to the contribution program (including its period) must be made within the framework of that Restoration Plan.

As indicated by the financial position and the projections, we consider that:

- The Plan is not in an unsatisfactory financial position; and
- The Plan is not likely to fall into an unsatisfactory financial position.

Hence, the special requirements of SPS 160 for funds in an unsatisfactory financial position do not apply at this investigation.

Actuary’s Reporting Requirements

Section 130 of the SIS Act requires that if an actuary forms the opinion that a plan’s financial position may be unsatisfactory, or may be about to become unsatisfactory, and that opinion was formed in performing an actuarial function, the actuary must advise both the Trustee and the prudential regulator (APRA) in writing immediately. Note: an unsatisfactory financial position applies where assets are less than Vested Benefits.

These requirements do not currently apply as I am of the opinion that the Plan’s financial position is not unsatisfactory (or about to become unsatisfactory).

Under Part 9 of the SIS Regulations, I am required to consider the ability of the Plan’s assets to cover Superannuation Guarantee Minimum Requisite Benefits (MRBs). If assets are not sufficient, the Plan is considered to be ‘technically insolvent’.

The Plan’s assets are sufficient to fully cover the SG Minimum Benefits at 30 June 2020. Therefore, the Plan is not considered to be technically insolvent.

Statements Required by SPS 160

This section provides statements required to be made under APRA Prudential Standard SPS 160. Values cited relate to the Plan as a whole (inclusive of all accumulation members and accounts).

- (a) The value of the Plan's assets as at 30 June 2020 was \$7,325,000. This value excludes assets held to meet the Operational Risk Financial Requirement.
- (b) In my opinion, the value of the liabilities of the Plan in respect of accrued benefits as at 30 June 2020 was \$6,662,000. Hence, I consider that the value of the assets at 30 June 2020 is adequate to meet the value of the accrued benefit liabilities of the Plan as at 30 June 2020. Taking into account the circumstances of the Plan, the details of the membership and the assets, the benefit structure of the Plan and the industry within which the School operates, I consider that the assumptions and valuation methodology used are appropriate in relation to the determination of the accrued benefit liabilities for the purposes of this report. Further comments on the assumptions and valuation methodology are set out in Sections 4 and 6 of this report. Assuming that the School contributes in accordance with my recommendations based on the assumptions used for this actuarial investigation, I expect that assets will remain sufficient to cover the value of accrued benefit liabilities over the period to 30 June 2023.
- (c) In my opinion, the value of the liabilities of the Plan in respect of vested benefits as at 30 June 2020 was \$6,437,000. Hence, I consider that the value of the assets at 30 June 2020 is adequate to meet the value of the vested benefit liabilities of the Plan as at 30 June 2020. Assuming that the School contributes in accordance with my recommendations based on the assumptions made for this actuarial investigation, I expect that assets will remain sufficient to cover the value of vested benefit liabilities over the period to 30 June 2023. Hence, I consider that the financial position of the Plan should not be treated as unsatisfactory as defined in SPS 160.
- (d) In my opinion, the value of the liabilities of the Plan in respect of the minimum benefits of the members of the Plan as at 30 June 2020 was \$4,873,000. Hence, the Plan was not technically insolvent at 30 June 2020.
- (e) A projection of the likely future financial position of the Plan over the 3-year period following 30 June 2020, based on what I consider to be reasonable expectations for the Plan for the purpose of this projection, is set out in Section 7 of this report.
- (f) Based on the results of this investigation, I consider that the Shortfall Limit does not require review. Comments are set out earlier in this section.

(g) In respect of the 3-year period following 30 June 2020, I recommend that the School contribute to the Plan at least:

- Continue with the contribution holiday (nil contributions payable) in respect of Executive (PEGS:1) and Staff (PEGS:2) members;
- Commences payment of contributions to cover administration and actuarial expenses as advised by the Trustee (currently totalling \$93,000 p.a.) starting from 1 January 2023;
- 3.0% Award contributions (as required);
- SG% of OTE in excess of salary e.g. bonuses and allowances (allocated to the members' accumulation accounts); and
- 10.0% of salary (subject to a minimum of the SG rate) for members who remain in the Plan after their Normal Retirement Date.

The School should also ensure that the 5.25% of salary member contributions (or 6.18% of salary if paid via salary sacrifice) are paid to the Plan plus any other additional School contributions agreed between the School and a member (e.g. additional salary sacrifice contributions).

(h) The Plan is used for Superannuation Guarantee purposes:

- All Funding and Solvency Certificates required under Division 9.3 of the SIS Regulations have been issued for the period from the date of the last investigation to 30 June 2020;
- I expect to be able to certify the solvency of the Plan in any Funding and Solvency Certificates that may be required in the three year period from 30 June 2020.

Actuarial Certification

Actuary's certifications

Professional standards and scope

This report has been prepared in accordance with generally accepted actuarial principles, Mercer's internal standards, and the relevant Professional Standards of the Actuaries Institute, in particular PS400 which applies to *"...actuarial investigations of the financial condition of wholly or partially funded defined benefit superannuation funds."*

Use of report

This investigation report should not be relied upon for any other purpose or by any party other than the Trustee of the Plan. Mercer is not responsible for the consequences of any other use. This report should be considered in its entirety and not distributed in parts. The Trustee should share this report with the School who contributes to the Plan. The School may consider obtaining separate actuarial advice on the recommendations contained in the report.

The advice contained in this report is given in the context of Australian law and practice. No allowance has been made for taxation, accountancy or other requirements in any other country.

Actuarial Uncertainty and Assumptions

An actuarial investigation report contains a snapshot of a Plan's financial condition at a particular point in time, and projections of the Plan's estimated future financial position based on certain assumptions. It does not provide certainty in relation to a Plan's future financial condition or its ability to pay benefits in the future.

Future funding and actual costs relating to the Plan are primarily driven by the Plan's benefit design, the actual investment returns, the actual rate of salary growth and any discretions exercised by the Trustee or the School. The Plan's actuary does not directly control or influence any of these factors in the context of an actuarial investigation.

The Plan's future financial position and the recommended School contributions depend on a number of factors, including the amount of benefits the Plan pays, the cause and timing of member withdrawals, plan expense, the level of taxation and the amount earned on any assets invested to pay the benefits. These amounts and others are uncertain and unknowable at the investigation date, but are predicted to fall within a reasonable range of possibilities.

To prepare this report, assumptions are used to select a single scenario from the range of possibilities. The results of that single scenario are included in this report.

However, the future is uncertain and the Plan's actual experience will differ from those assumptions; these differences may be significant or material. In addition, different assumptions or scenarios may also be within the reasonable range and results based on those assumptions would be different. For this reason, this report shows the impact on the {Plan}'s financial position if alternative assumptions were to be adopted.

Actuarial assumptions may also be changed from one investigation to the next because of mandated requirements, Plan experience, changes in expectations about the future and other factors. We did not perform, and thus do not present, an analysis of the potential range of all future possibilities and scenarios.

Because actual Plan experience will differ from the assumptions, decisions about benefit changes, investment policy, funding amounts and benefit related issues should only be made after careful consideration of possible future financial conditions and scenarios, and not solely on the basis of a set of investigation results.

Additional information

The next **actuarial investigation** is required at a date no later than 30 June 2023. At that time, the adequacy of the School contribution levels will be reassessed. Note that the monitoring process recommended may lead to an earlier reassessment ahead of the next full actuarial investigation.

The next **Funding and Solvency Certificate** is required at least 12 months before the expiry of the current Funding and Solvency Certificate (which expires on 1 January 2023).

The next **Benefit Certificate** is required following the expiry of the current Benefit Certificate (which expires 30 June 2023). The current Benefit Certificate is designed to accommodate changes to the legislated Superannuation Guarantee schedule.

Further Information

Please contact me to provide any supplementary information or explanations about this actuarial investigation as may be required.



Tim Jenkins
Fellow of the Institute of Actuaries of Australia

18 December 2020

I have reviewed this report under Mercer's professional Peer Review Policy. I am satisfied that it complies with the applicable professional standards and uses assumptions and methods that are suitable for the purpose.

A handwritten signature in black ink, appearing to read 'C. Cheung'.

Clement Cheung
Fellow of the Institute of Actuaries of Australia

Appendix A

Plan Design

Summary of benefits

A summary of the main benefit provisions in respect of defined benefit members is set out below. Reference should be made to the formal governing documents for definitive statements.

Resignation/Retirement	Multiple x Final Average Salary (maximum benefit of 7 x Final Average Salary)
Late Retirement	Retirement Benefit at Normal Retirement Date plus contributions paid after the Normal Retirement Date accumulated with investment returns
Death / Total and Permanent Disablement (TPD)	Normal Retirement Multiple x Final Average Salary (FAS) (maximum benefit of 7 x Final Average Salary)
Temporary Disability Benefit	75% of salary plus 10% super contributions (unitised basis) 90 day waiting period. Payable to the earlier of death, TPD, recovery or age 65
Accrual Rate (for Multiples)	Executive members (PEGS:1): 16.5% pa Staff members (PEGS:2): 13.75% pa
Final Average Salary	The average of the Salary paid in the 3 years immediately before retirement or resignation. On death/TPD, salary is assumed to continue unchanged to normal retirement age.
Normal Retirement Date	31 December in the year the member turns 65

Additional Voluntary Accounts, Award Account, Rollover/Transfer In Account, negative Surcharge and Family Law Accounts are added to all benefits above except the Temporary Disability Benefit.

Defined Benefit Accounts	Contributions	Deductions
Member Account	5.25% of Salary (6.18% if paid by salary sacrifice)	Tax if paid by salary sacrifice
Award Account	3.0% of Salary plus SG% on OTE in excess of Salary (e.g. SG% on bonuses and allowances)	Tax Non payment transactions fees (FL, switch, financial planning)

The table below indicates the material discretions available to the Trustee and School and the member options specified within the Plan's legal documents, to the extent that these affect benefits. The table also shows the general prevalence of the past exercise of discretions and the options chosen by the members. Please note that past exercises of discretions should not be viewed as precedents that would constrain any future decisions.

We have not reviewed the NGS Super Trust Deed to determine if there are any additional material discretions (with the exception of insurance arrangements which were required to be reviewed separately).

Trustee and Employer Discretions	
Description and Deed Reference	Historical Prevalence
Clause 7 – The Trustee is able to vary by deed the Participation Schedule subject to there being no detrimental effect on members’ benefits, Relevant Law or with written member consent	Not since Plan commencement
Schedule 1 Clause 2.1 – Salary definition variations	Base salary for defined benefit calculations.
Schedule 1 Clause 2.1 – The Trustee, Employer and Member are able to agree on an alternate Normal Retirement Date for the Member	Not since Plan commencement
Schedule 1 Clause 5.2 – Investment of defined benefit assets	Lower risk strategy recommended in Former Fund and adopted in 2009.
Schedule 1 clause 5.2 – Additional employer contributions for members payable in addition to standard benefits	Adjustment to benefits to meet SG legislation (including award contributions) are paid in addition to other benefits and appropriately allowed for in the SG minimum benefit calculations
Schedule 1 Clause 11 – Employer can direct the Trustee to increase the benefit up to the member’s Equitable Share	Not since Plan commencement
NGS Super Trust Deed: Trustees can decide to reduce benefits payable on death and disability in the event of insurance not being provided by the insurer	Not since Plan commencement
Member Options	
Description and Deed Reference	Historical Prevalence
Clause 5.1 – Members are given investment choice on their Supplementary Accounts. This includes the Award Account which could result in investment risk being passed to the Employer if the SG benefit is payable.	Numerous investment option chosen by members. Refer to Section 5 for further comments.

Benefits on leaving service for any reason are subject to a minimum Superannuation Guarantee benefit described in the Plan’s Benefit Certificate.

The Superannuation Guarantee (Administration) Act 1992

This Act requires employers to provide minimum superannuation benefits that are fully vested in their employees within a complying superannuation fund.

The contribution rates recommended in this report and the projected financial positions allow for benefits being augmented as necessary to meet the minimum Superannuation Guarantee (SG) benefit described in the Plan's current Benefit Certificate.

Under current legislation the SG rate will be 9.5% until 1 July 2021 and it will then increase by 0.5% pa until it reaches 12% from 1 July 2025.

Appendix B

Data and Decrement assumptions

Data provisions

To prepare this report, we have relied on financial and participant data provided by the Plan's administrator. The data used is summarised in this report. We have not independently verified or audited the data provided but have performed a range of broad "reasonableness" checks and tested for consistency with previous records. We are satisfied that the data is sufficiently accurate for the purposes of this actuarial investigation.

We have also relied upon the documents, including amendments, governing the Plan as provided by the Trustee. The Trustee is ultimately responsible for the validity, accuracy and comprehensiveness of this information. If the data or Plan provisions are not accurate and complete, the investigation results may differ significantly from the results that would be obtained with accurate and complete information; this may require a revision of this report.

Decrement Assumptions

The following tables show the assumptions that have been made concerning the rates at which members will leave the Plan for a variety of reasons.

Retirement

Age Last Birthday	Percentage of members age x at beginning of year assumed to leave the Plan during the year on account of early retirement
x	%
55	20
56 - 59	5
60	20
61 - 62	15
63	20
64	50
65	100

Death and Disablement

Given the small size of the Plan and the age profile of the remaining members, no specific allowance is made for the possibility of future member exits due to death or disablement in our calculations.

Resignation

Age Last Birthday	Percentage of members age x at beginning of year assumed to leave the Plan during the year on account of resignation
50	3.40
55	0.00
60	0.00

Appendix C

Calculation of the Actuarial Value of Accrued Benefits

The calculation of the Actuarial Value of Accrued Benefits has been carried out using a method of apportionment of benefits between past and future membership that satisfies the requirements of Professional Standard No. 402 of the Actuaries Institute and is acceptable for Australian Accounting Standard AASB 1056 purposes.

Defined Benefits

The past membership components of all defined benefits payable in the future from the Plan in respect of current members are projected forward allowing for assumed future salary increases and credited interest rates and are then discounted back to the investigation date at the investment return rate assumed for the investigation.

The past membership component for the benefits is based on the member's accrued benefit multiple or relevant account balances at the investigation date.

The weighted average term of the accrued benefit liabilities is 4.8 years.

Accumulation Benefits

The value of accumulation benefits has been taken as the sum of the balances held in accumulation accounts at the date of the investigation.

Methodology of Calculating the Actuarial Value of Accrued Benefits

The method used for the determination of Accrued Benefits is the same as that used at the previous investigation.

Appendix D

Information for AASB 1056 Purposes

Penleigh and Essendon Grammar School Superannuation Plan

The calculation of Member Liabilities (representing the actuarial value of accrued liabilities) is provided annually to the Trustee as part of the Plan's 30 June financial update. This figure is included in the relevant financial statements and is suitable for the purposes of Australian Accounting Standard AASB 1056.

The calculation is based on the actuarial assumptions adopted as part of the financial update and would be expected to be consistent with the assumptions adopted as part of the most recent actuarial investigation. For example, the value of Member Liabilities included as part of the 30 June 2020 financial update was calculated using actuarial assumptions adopted as part of the 30 June 2017 investigation. We note that the assumptions have been updated as part of the current actuarial investigation.

Due to the small size of the Plan and potential changes in economic conditions, it is not appropriate to rely on the relationship of the DB Member Liabilities relative to the DB Vested Benefits remaining constant and I recommend that the Trustee continue to use updated calculations at each 30 June to meet its annual financial reporting requirements.



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