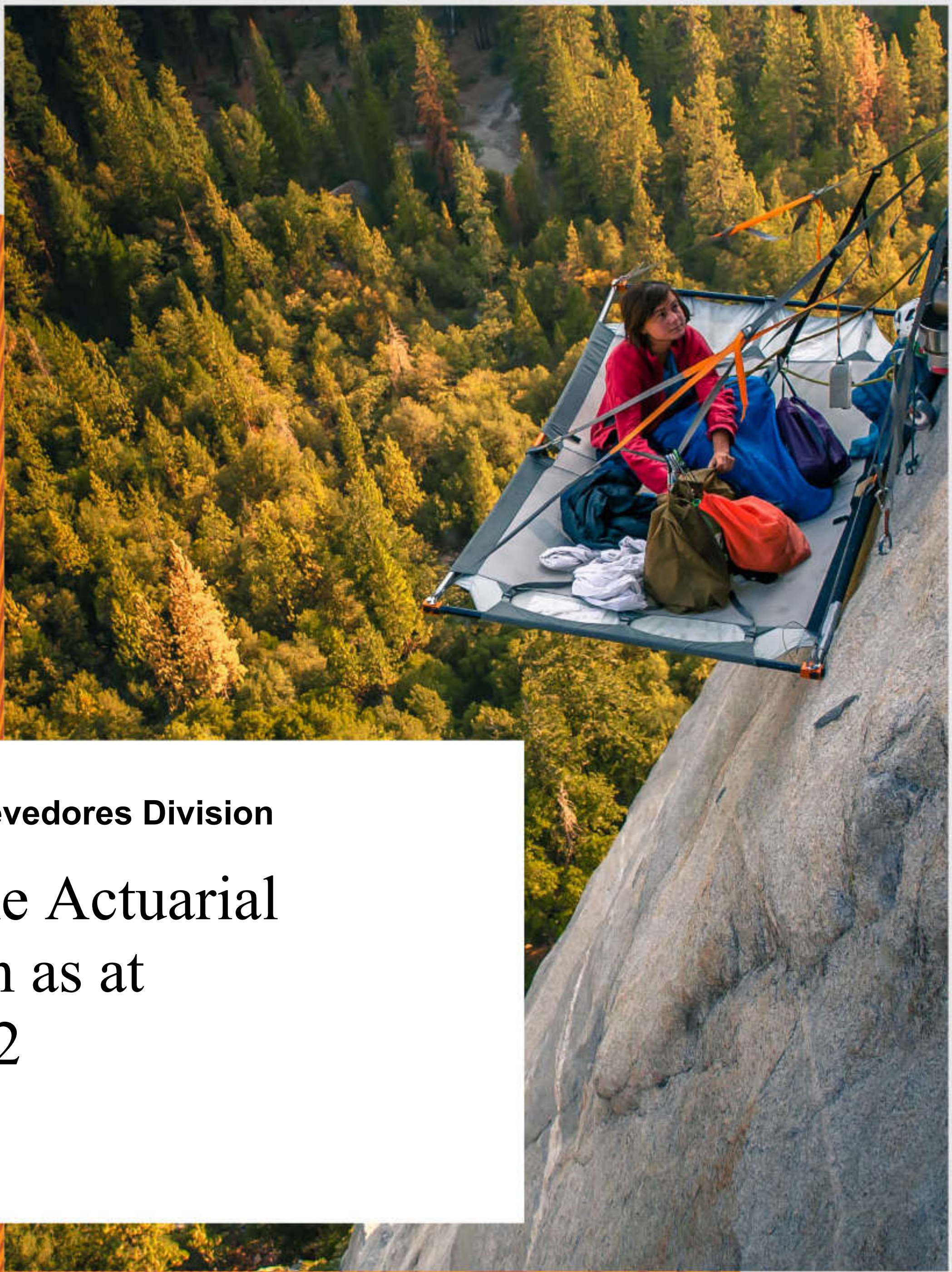

Maritime Super, Stevedores Division

Report on the Actuarial Investigation as at 30 June 2022

wtwco.com

6 December 2022

Summary

I am pleased to present my report to the Trustee of Maritime Super on the actuarial investigation into the Maritime Super, Stevedores Division as at 30 June 2022.

This Summary sets out the key results and recommendations contained in this report.

Summary of Data

The assets of the Division are invested in the Fund's Balanced option through the Hostplus Pooled Superannuation Trust.

A summary of membership numbers and the value of net assets of the Division at 30 June 2022 and 30 June 2020 are show below:

	30 June 2022	30 June 2020
Number of Members (Active)	105	114
Number of Members (FTC & LTC Pensioners)	35	46
Value of Net Assets	$40,936,000	$36,233,000

Solvency

The financial position of the Division has improved over the intervaluation period, as shown in the increased Vested Benefits Index from 109.2% as at 30 June 2020 to 119.6% as at 30 June 2022.

The solvency measures as at 30 June 2022 and 30 June 2020 are also shown below:

Measure	30 June 2022	30 June 2020
VBI	119.6%	109.2%
PVABI	137.5%	124.3%
MRBI	149.0%	131.9%

Contents

Throughout this report the following terms are used:

Fund
Maritime Super

Division
Maritime Super, Stevedores Division

Trustee
Maritime Super Pty Ltd, the Trustee of Maritime Super

Employer
Full Participating Employers and Participating Employers

Trust Deed or Rules
The Fund's Trust Deed dated 1 March 2009 and subsequent amendments

The Investigation Date or Valuation Date
30 June 2022

Funding

I recommend the Employers continue to contribute at the full rate of 12.6% of Classification Base Wage (CBW) for all Permanent Members and member contributions continue at 4.8% of CBW until at least 30 June 2025.

I continue to recommend that the Employers contribute at the required amounts to meet any Superannuation Guarantee, contractual or any other obligations in respect of accumulation liabilities in the Division.

Additionally, I recommend that the Trustee continues to maintain the defined benefit contingency funding component of the insurance reserve previously established for the purpose of meeting the amount of any emerging funding strain.

Other Matters involving Actuarial Oversight

I further recommend that:

- The Trustee to retain the shortfall limit to 98% based on the current investment structure of the Division;
- The Trustee monitor the financial position of the Division quarterly throughout the following investigation period, with the results reviewed by the Actuary;
- The Trustee obtain a letter from the Actuary in the intervening years between regular actuarial investigations which reports to the Trustee on the vested benefit position of the Division; and
- Current external insurance arrangements for death and disablement benefits be retained.

The next actuarial investigation of the Fund should be conducted with an effective date no later than 30 June 2024 based on the APRA determination dated 13 April 2015. Without this determination actuarial investigations would otherwise be required on an annual basis.

The recommended employer contribution rates will be reviewed at that time or at an earlier date if considered appropriate as a consequence of the regular review of the VBI or as required by legislation.

I am not aware of any event since 30 June 2022 that warrants review of the recommendations in this report.

Chris Porter
Fellow of the Institute of Actuaries of Australia

6 December 2022

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Level 4, 555 Bourke Street, Melbourne VIC 3000

DO: HL | TR: EC | CR/ER: CJP

Section 1: Introduction

Scope

This investigation has been prepared effective 30 June 2022 for Maritime Super Pty Ltd, Trustee of Maritime Super, by the actuary to the Fund, Chris Porter, FIAA. The report has been prepared in respect of the Permanent DB members and fixed term (FTC) pensioners of the Stevedores Division, as well as FTC and lifetime (LTC) pensioners who originated from the Seafarers Division, but for whom their underlying assets have been included with the assets of this Division.

The Trust Deed governing the Fund requires an actuarial investigation and report to be due at least every three years. Under subparagraph 14(d) of Prudential Standard SPS 160 Defined Benefit Matters, APRA has determined that the Trustee require regular actuarial investigations of the Fund to be made every two years.

The main aims of the investigation are to examine the current financial position of the Division and the long-term funding of the Division's benefits, and to provide advice to the Trustee on the contribution rate at which the Employers should contribute and on any other matters the actuary considers relevant.

This investigation is primarily interested in the defined benefit liabilities of the Division, and unless otherwise specified, this report relates only to such defined benefit liabilities. The Defined Contribution liabilities of the Division, including those that relate to defined benefit members, are fully funded and do not impact upon the Defined Benefit liabilities. No investigation is required regarding the Defined Contribution liabilities, although in my recommendations I have continued to recommend that the Employers contribute to meet any Superannuation Guarantee, contractual or any other obligations in respect of such liabilities.

This report has been prepared in accordance with Professional Standard 400, dated March 2021, issued by the Institute of Actuaries of Australia.

Background

The Fund is governed by a Trust Deed which was consolidated as at 1 March 2009 and subsequent amendments. The Fund is a complying superannuation fund for the purposes of the Superannuation Industry (Supervision) Act (SIS Act) and for taxation purposes.

The Division is closed to new members. There are no new fixed term or lifetime pension options available.

Results of Actuarial Investigation

Where an actuarial investigation of the Division reveals a surplus, the Trustee with the written agreement of the Full Participating Employers and the Union (the Maritime Union of Australia) may resolve to apply part or all of the surplus to:

a. Increase pensions to existing pensioners; or

b. Improve any benefit of some or all Members; or

c. Meet certain costs or liabilities as permitted under the Trust Deed; or

d. Satisfy or reduce future contributions required of Members and Full Participating Employers; or

e. Adopt some combination of the options above.

Where the result of an investigation reveals a deficiency, the Trustee with the written agreement of the Full Participating Employers and the Union may resolve to remove such deficiency in part or in total by making changes in the terms and contributions of the Division as are considered necessary, subject to approval of the Actuary.

Contributions

The level of Employer contributions payable in respect of each defined benefit contributing member in the Division is set out in Clause 6.1 of Schedule A1 of the Trust Deed:

> *[…] The contributions payable by each Full Participating Employer each year shall be, in respect of each of its employees who is a DB Contributing Member, equal to the sum of:*
>
> f. *An amount equal to 3 percent (or such lesser amount as is determined by the application of Stevedores Rule 11) of each such employee's Classification Base Wage for each week the Member has paid or is deemed to have paid Normal Contributions; and*
>
> g. *An amount equal to 9.6 percent (or such lesser amount as is determined by the application of Stevedores Rule 11) of each such employee's Classification Base Wage for each week the Member has paid or is deemed to have paid Normal Contributions.*

Previous Actuarial Investigation

The previous actuarial investigation of the Division was carried out by Chris Porter, FIAA as at 30 June 2020, with the results of that investigation set out in a report dated 10 December 2020.

The report concluded that the Division was not in an unsatisfactory financial position (as defined by SIS legislation) at that date and recommended that the Employers contribute to the Division at the full rate of 12.6% of CBW for all Permanent Members and member contributions continue at 4.8% of CBW.

I understand that the Employers have contributed amounts consistent with these rates.

Experience since 30 June 2022

Since 30 June 2022 the net return on the Division's assets to 30 September 2022 was approximately -0.6% in respect of assets backing active defined benefit liabilities, and -0.7% in respect of assets backing post-retirement pensions.

The actual experience since 30 June 2022 has deteriorated the financial position of the Division. Because of this, I have taken into account experience since 30 June 2022 when carrying out the projection of the financial position of the Division from that date.

It is my understanding that the Fund is currently in the process of implementing a Successor Fund Transfer (SFT) to Hostplus Superannuation Fund, with an intended transfer date in 2023. I consider that the recommendations set out in this report remain appropriate with consideration to the Hostplus SFT.

Limitations

This report is provided subject to the terms set out herein and in our service agreement dated 24 July 2009 and signed on 3 August 2009, which was originally made with Russell Employee Benefits Pty Ltd and novated in March 2017 to Towers Watson Australia Pty Ltd. This report is provided solely for the Trustee's use and for the specific purposes indicated above. It may not be suitable for use in any other context or for any other purpose.

Except where we expressly agree in writing, this report should not be disclosed or provided to any third party, other than as provided below. In the absence of such consent and an express assumption of responsibility, no responsibility whatsoever is accepted by us for any consequences arising from any third party relying on this report or any advice relating to its contents.

We consent to the Trustee making a copy of this report available on the Fund's website where required in accordance with the relevant legislation.

The Trustee may make a copy of this report available to its auditors, the relevant Employers or Unions and to any person to whom the Trustee may be required to provide a copy under relevant legislation, but we make no representation as to the suitability of this report for any purpose other than that for which it was originally provided and accept no responsibility or liability to the Trustee's auditors the Employers or any third party in this regard. The Trustee should draw the provisions of this paragraph to the attention of its auditors and the Employers or Unions when passing this report to them.

In preparing this valuation, we have relied upon information and data provided to us orally and in writing by the Trustee and other persons or organisations designated by the Trustee. We have relied on all the data and information provided, including Fund and Division provisions, membership data and asset information, as being complete and accurate. We have not independently verified the accuracy or completeness of the data or information provided, but we have performed limited checks for consistency. The data and information we have relied upon is shown in the *Additional Information* section of this report.

In our opinion, all calculations are in accordance with requirements of applicable legislative requirements, and the procedures followed and the results presented conform to applicable actuarial standards of practice.

Section 2: Solvency

Solvency Measures

When assessing the adequacy of the assets and future contribution rates, both the long-term and short-term solvency positions should be considered. To assess the solvency position, I have considered the following funding solvency measures:

- Vested Benefits Index (VBI), the ratio of assets to the vested benefits, which represent the total amount which the Division would be required to pay if all members were to voluntarily leave service (or are payable for benefits in the form of lifetime (LTC) or fixed term (FTC) pensions[1]) on the investigation date;
- The Present Value of Accrued Benefits Index (PVABI), the ratio of assets to the present value of accrued benefits, which represents the value in today's dollars, of expected future benefits payable based on membership completed to the valuation date,[2] and
- The Minimum Requisite Benefits Index (MRBI), the ratio of assets to the portion of the Minimum Requisite Benefits (MRB) as defined in the Fund's Benefit Certificate that relates to defined benefits.[3]

The following table shows the above indices as at the valuation date, as well as the prior valuation date.

	As at 30 June 2022			As at 30 June 2020		
Measure	Value of Liability	Value of Assets	Index	Value of Liability	Value of Assets	Index
VBI	$34,219,000	$40,936,000	119.6%	$33,176,000	$36,233,000	109.2%
PVABI	$29,769,000	$40,936,000	137.5%	$29,160,000	$36,233,000	124.3%
MRBI[4]	$27,475,000	$40,936,000	149.0%	$27,478,000	$36,233,000	131.9%

The VBI and MRBI indices have increased from those at the previous investigation date. This is primarily a result of positive experience of the Division since 30 June 2020, in particular, higher than expected investment performance, partially offset by higher than expected salary increases over the period.

The PVABI has increased from the previous investigation date. The higher gap between the expected level of future investment returns and salary increases has reduced the level of the present value of

[1] The Division holds assets in respect of FTC and LTC pensioners originating from both the Stevedores and Seafarers Divisions of the Fund.
[2] Benefits have been apportioned to past service by calculating the projected benefit payable using only service that is completed to the valuation date in the benefits formula.
[3] The minimum benefits in respect of pensioners or deferred members are the same as their vested benefits. For employee members, the minimum benefits are estimated as these benefits are not maintained by the Fund's administrator.
[4] The value of the MRB at 30 June 2020 represents an estimate on an aggregate Division level. As at 30 June 2022, the MRB has been determined on an individual basis consistent with the MRB defined in the Benefit Certificate effective as at 30 June 2022.

accrued benefits, which in isolation, increased the PVABI by 2.1%. This was compounded by gains due to experience over the intervaluation period.

The VBI is above 100% as at the valuation date, and as such, the Division is to be treated as being in a satisfactory financial position as at that date.

Retrenchment Benefits, Other Discretionary or Contingent Benefits

The benefit payable on retrenchment is materially the same as the resignation benefit, and therefore the Division does not have any material additional funding strain that would be caused by any retrenchments.

The Division has not historically paid any material discretionary benefits, so I have not analysed the impact of such discretionary benefits. There are no other material contingent benefits offered by the Division.

Termination Benefits

Under the Trust Deed, on termination of the Fund, and by implication the Division, the assets of the Division must be used in the following order and the Fund must then be wound up:

a. In meeting costs and expenses of winding up that are not met by Employers, and then

b. To meet in full the expected benefit obligations of pensioners and retained members of the Division, and then

c. To meet in full the benefits of members who have attained their Normal Retirement Age, and then,

d. In satisfying the employer obligations under Superannuation Guarantee legislation, and then

e. To meet the balance of the vested benefits of members, to the extent that this has not already been satisfied, and finally

f. In providing further benefits to members as the Actuary shall certify as being fair and reasonable.

The Trust Deed requires the Trustee to secure an annuity in respect of defined benefit pensioners ahead of any other members. In the event of the termination of the Division, the Trustee must determine if it is obliged to secure pensions by purchasing annuities from a life insurance company or by some other arrangement.

Further, upon termination, it could become necessary to liquidate existing assets. Given the assets of the Fund are invested in the Hostplus Pooled Superannuation Trust investment options, I do not expect there would be any liquidity issues if it became necessary to quickly realise funds, and the full amount of the Division's assets at the date of termination would be available to use for meeting a. to f. (see above). Therefore, I have not allowed for any discount on assets to reflect the sale of illiquid assets in the event of termination.

To broadly illustrate the Division's ability to pay benefits upon termination, I have estimated the cost of purchasing an annuity to secure the pension liability by valuing the pension liability using a discount rate that reflects the yield available on Australian high quality corporate bonds, plus a 10% loading on the liability value to make broad allowance for any administration expenses and profit margins included in the premiums charged by an insurer as well as additional expenses associated with the transfer of liabilities. I note that it is difficult to estimate the true cost of annuity contracts without seeking market quotes from an insurer.

The following table shows the estimated remaining assets available to other members in this scenario, and the ratio of remaining assets to active members to their Vested Benefits and MRBs would be 120.1% and 153.5% under this scenario:

	Coverage for Vested Benefits	Coverage for MRBs
Net Assets at 30 June 2022 in respect of DB members	$40,936,000	$40,936,000
Less: Assets required to secure pension liabilities	$3,657,000	$3,657,000
Assets available to Active Members	$37,279,000	$37,279,000
Vested Benefits / Minimum Requisite Benefits for Active Members	$31,032,000	$24,288,000
Coverage for Vested Benefits / Minimum Requisite Benefits	120.1%	153.5%

Because these percentages are over 100%, I expect the Division to be able to pay the benefits required under the Trust Deed in the event that the Division is terminated. In the event that the Fund is to be wound up, and that assets are not sufficient to pay members' benefits in full at that time, the Trustee has the ability under the Stevedores Rules (Rule 12.2(c)(vi)) to reduce the benefits for members. However, in this event I would expect that the defined benefit contingency funding component of the insurance reserve may be used to meet any funding shortfall in the first instance.

If the Fund was ever terminated, the Trustee would need to seek both actuarial and legal advice at that time to consider the method of determining and payment form of benefits from the Division.

Ability to Pay Pensions

SPS 160 requires the Fund's actuary to certify whether there is a high degree of probability to pay pensions as required by the Trust Deed.

In making this certification, I have considered that in the case of a wind-up of the Division, the assets, after allowing for other liabilities that rank ahead of pensioners such as expenses, currently exceed the current defined benefit pension value by a large margin.

Consistent with the requirements under relevant Professional Standards, discretionary pension increases have not been taken into account.

Allowing for the above, I consider that there is a high degree of probability that the Division will be able to pay pensions as required under the Division's rules. The formal certification is set out in the *Additional Information* section of this report.

Section 3: Funding

This section considers the long-term funding of the Division and sets out the contributions required in order to fund benefits payable in future years. To determine the long-term contribution rates, I have used a projection method as described in the *Additional Information* section of this report.

Long Term Funding results

For the purpose of this section, an actuarial surplus or deficit is defined as the market value of assets less the value of the Total Service Liability.

The table below sets out the funding position of the Division.

	30 June 2022	30 June 2020
A. Value of Total Service Liabilities		
Permanent Member Defined Benefits	$36,226,000	$36,580,000
Pensioner Benefits	$3,187,000	$3,595,000
Total Service Liabilities	**$39,413,000**	**$40,175,000**
B. Value of Assets		
Market Value of Defined Benefit Assets	$40,936,000	$36,233,000
Future Permanent Member Contributions (after tax)	$3,011,000	$3,439,000
Future Full Participating Employer Contributions	$7,903,000	$9,028,000
Expenses – General Administration	($618,000)	($789,000)
Expenses – Plan	($1,811,000)	($2,008,000)
Insurance Premiums	($627,000)	($430,000)
Contributions Tax	($727,000)	($870,000)
Total Net Assets	**$48,067,000**	**$44,603,000**
C. Actuarial Surplus / (Deficit) (B – A)	**$8,654,000**	**$4,428,000**

The table above shows that the Division's position has moved from a surplus of $4.428 million as at 30 June 2020 to a surplus of $8.654 million as at 30 June 2022. This movement is largely due to the change in financial assumptions and the investment return experience over the intervaluation period.

The actuarial surplus of $8.654 million shows that the Division's assets are expected to be sufficient to cover the Total Service Liability as at 30 June 2022, subject to the payment of future recommended contributions by Members and Employers, and the actuarial assumptions being borne out in the future. Despite the anticipated actuarial surplus, after taking into consideration the coverage of vested benefits and current uncertainty in financial markets, I consider that it is prudent to maintain the contributions at the full rate of 12.6% of CBW for all Permanent Members and member contributions of 4.8% of CBW.

Contingency Funding Component of Insurance Reserve

The Fund maintains an insurance reserve which includes a defined benefit contingency funding component in the event that the defined benefit assets of the Division are insufficient to meet residual defined benefit liabilities.

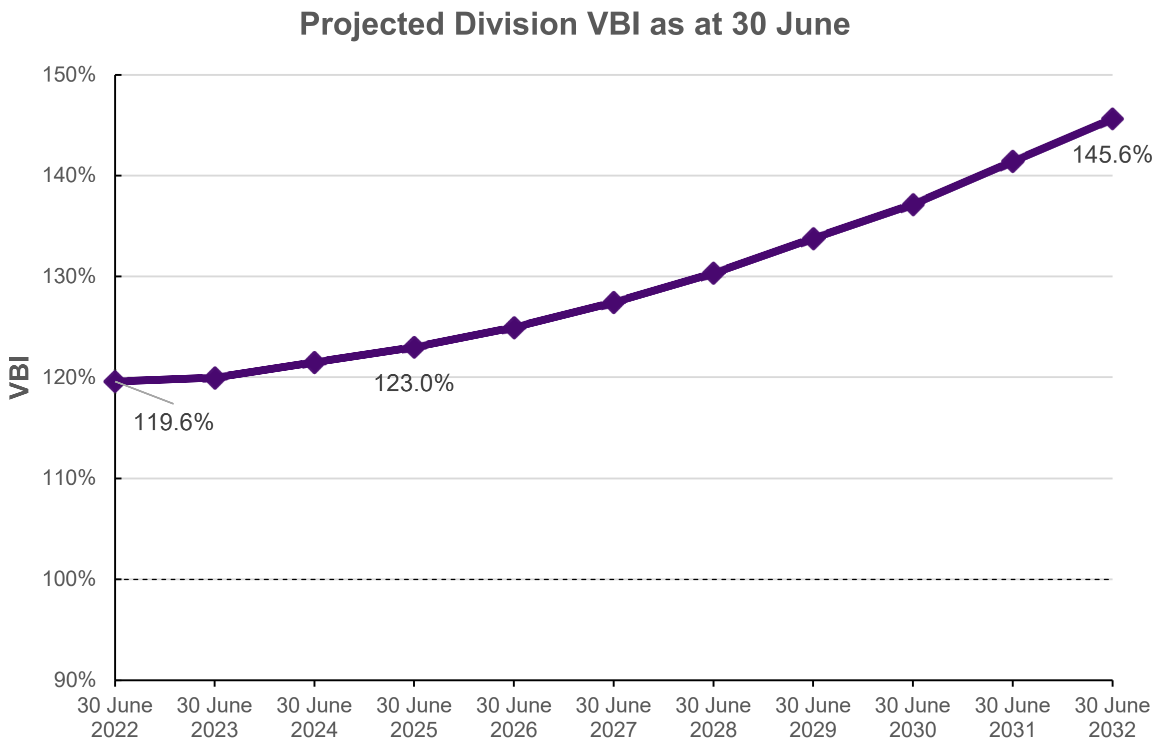
- The value of the DB contingency funding component of the insurance reserve (Reserve) at 30 June 2020 (the date of the last review of the insurance reserve) was $5.2 million;
- Monies may be transferred from the Reserve to the defined benefit assets under any restoration plan required under applicable legislation to restore the VBI to over 100%. It is expected that such transfers would consist of top-ups to under-funded benefits, plus any required capital transfers needed under the restoration plan to meet a funding target;
- Any monies transferred from the Reserve to the defined benefit assets may be returned to the Reserve when the VBI of the Division is in excess of 100%; and
- The Reserve could be further augmented from any source as determined by the Trustee.

A separate review of the insurance reserve is expected to be conducted at a later date.

Vested Benefit Projection

The Trustee has a solvency target for the Division to recognise the multi-employer situation of the Stevedores Division defined benefits in aiming to maintain funding at levels sufficient to provide the current benefit accrual rates and satisfactory coverage of vested benefits.

In order to assess whether the above contributions program is likely to maintain the Division in a satisfactory financial position (i.e. a VBI above 100%), I have projected the Division's Vested Benefits Index over the next ten years based on the contributions recommended above. I have allowed for actual investment return experience to 30 September 2022 in this projection.



As can be seen from the graph, on the basis of the selected actuarial assumptions, the recommended Employer and Member contribution rates of 12.6% and 4.8% of CBW, respectively, is sufficient to maintain a satisfactory financial position.

Sensitivity Analysis

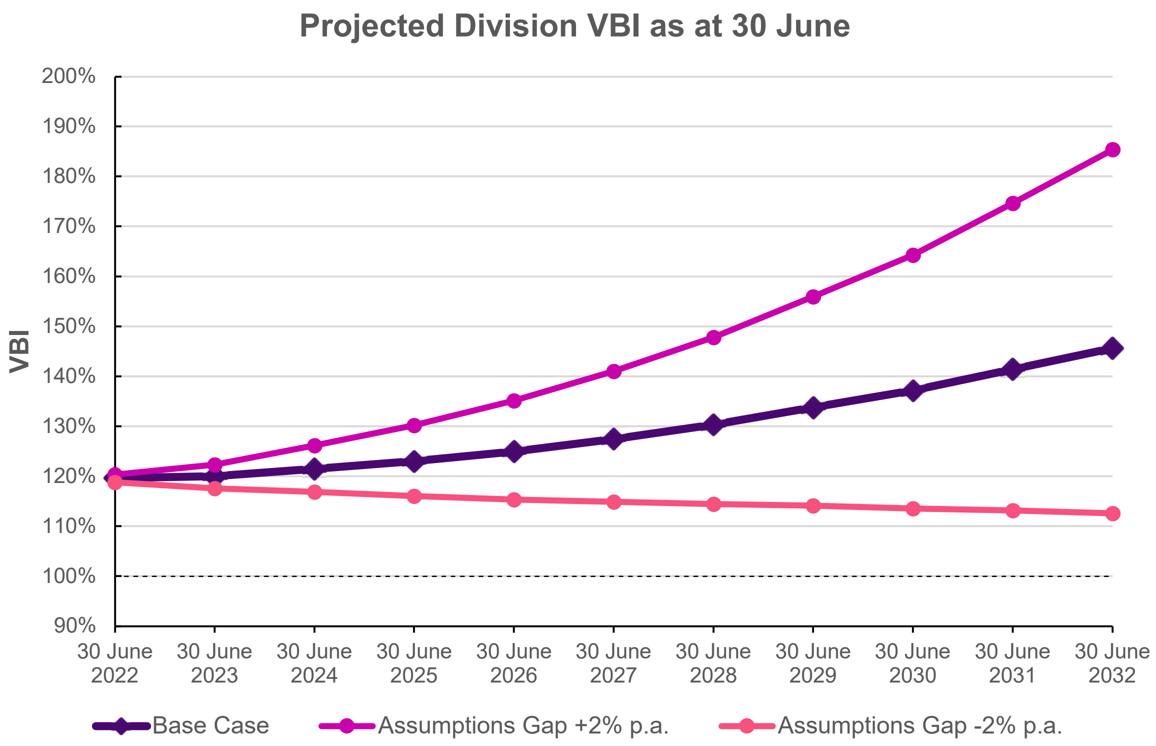
In making a recommendation on the level of contributions that the Employers and Members should make to the Division, it is useful to consider the sensitivity of the analysis above to reasonable variations in the valuation assumptions.

The assumption of major significance in the valuation of the Division's liabilities is the difference (or 'gap') between the assumed discount rate and the expected salary growth. These two assumptions offset each other in their financial effect. The greater the assumed gap, the lower the value placed on the liabilities.

The following table shows the PVABI calculated if the Assumptions Gap had been varied as described below:

	This Valuation Basis	Scenario 1	Scenario 2
Description	**Base Case**	**Assumptions Gap +2% p.a.**	**Assumptions Gap -2% p.a.**
Discount Rate	5.6%	7.6%	3.6%
Expected Salary Growth	2.9%	2.9%	2.9%
Present Value of Accrued Benefits Index	137.5%	154.4%	120.7%

Similarly, the Division's projected VBI over the next ten years under the varied Assumptions Gap are shown in the graph below:



These results show that the PVABI, as well as the Division's projected financial position, is moderately sensitive to long-term actuarial assumptions. While the sensitivities have been selected to be illustrative of reasonable changes in the valuation assumptions, they do not represent the upper or lower bounds of possible outcomes and more extreme outcomes are possible.

Summary

On the basis of the above results, I believe that Employer contributions at the full rate of 12.6% of CBW for all Permanent Members and member contributions of 4.8% of CBW is sufficient to meet the funding requirements of the Division.

Accordingly, I recommend that the Employers contribute at the rates set out above until at least 30 June 2025 in respect of defined benefit members.

I continue to recommend that the Employers contribute at the required amounts to meet any Superannuation Guarantee, contractual or any other obligations in respect of accumulation liabilities in the Division.

I further recommend that the VBI position continue to be monitored quarterly throughout the following investigation period, with the results reviewed by the Actuary, to ensure that these contribution recommendations remain appropriate. I also recommend that the Trustee obtain a letter from the Actuary in the intervening years between regular actuarial investigations which reports to the Trustee on the vested benefit position of the Division.

Section 4: Other Matters Involving Actuarial Oversight

Investments

The net market value of assets is based on the asset values declared by the respective external fund managers at 30 June 2022 which in turn are based on the market values of the assets after allowing for realisation costs.

I note that Professional Standard 404 defines the ‘Fair Value’ of assets as the value of assets before the deduction of transaction costs. Based on the type of assets held by the Fund I do not expect realisation costs to be material. I have therefore used the net market value of assets for the purpose of this investigation.

Investment Strategy

The assets of the Division are invested in the Fund’s Balanced option through the Hostplus Pooled Superannuation Trust.

The Balanced option is a diversified portfolio, including some growth assets and some lower risk investments. The Balanced Option’s target is to invest 76% of the fund in growth assets and 24% of the fund in defensive assets.

The return objective of the Balanced option is:

- Accumulation: to outperform inflation (CPI) by 3.0% p.a. on average over 10 year periods, and by 4.0% p.a. on average over 20 year periods.
- Pension: to outperform CPI by 3.5% p.a. on average over 10 year periods, and by 4.5% p.a. on average over 20 year periods.

The strategic asset allocation of the Balanced option as at 30 June 2022 is shown in the below table:

Asset Class	Allocation
Australian Shares	21%
International Shares	29%
Property	11%
Private Equity	10%
Infrastructure	11%
Credit	7%
Alternatives	3%
Diversified Fixed Interest	3%
Cash	5%
Total Growth Assets	**76%**
Total Defensive Assets	**24%**

In my opinion an investment strategy as described above is suitable for a Division of this type having regard to its financial position, the underlying liabilities and the capacity of the respective employers to meet any funding shortfall.

Unit Pricing and Investment Reserving Policy

As the benefits of Permanent Members of the Division are pure defined benefits, there is no crediting rate applicable to the Division. The exception applies to offset accounts which are credited with interest calculated at the One Year Swap Rate. In my view, this remains appropriate.

Investment reserves are not held as there is no smoothing of investment earnings in the setting of unit prices. This remains appropriate.

Liquidity

I understand that the Fund’s Balanced option currently targets an illiquid allocation of 42% of assets. As at 30 June 2022, the value of the Division’s defined benefit assets represents less than 1% of the total assets held by the Fund, and an immaterial proportion of the total assets under management by the Hostplus Pooled Superannuation Trust. As such, in my opinion the Fund has sufficient liquidity to meet payments from regular cashflows.

Shortfall Limit

The Trustee currently has an approved shortfall limit of 98%.

Based on the Division’s benefit design and its target asset allocation described above, in my opinion the 98% shortfall limit remains reasonable for the Division.

Insurance

Death and Disablement Benefits

At the investigation date, the Division has death and total and permanent disablement (TPD) insurance with MLC Limited in respect of the future service portion of their death and disablement benefits.

The formula used to calculate the level of insurance is:

Death/TPD Benefit *less* Vested Benefit

Where Vested Benefit is the benefit payable if a member were to immediately, voluntarily leave service:

- If the member is over age 55, the Early Retirement Benefit; or
- If the member is under age 55, the member's Resignation Benefit.

Early Retirement Benefit and Resignation Benefit are as outlined in Section 5 of this report.

On this basis, I consider the current insurance arrangements adequate and recommend that the current insurance formula be maintained.

Section 5: Additional Information

Risks

The table below summarises the main risks to the financial position of the Division.

Risk	Approach taken to risk
Investment returns on the existing assets could be insufficient to meet the Trustee's funding objectives	The Trustee takes advice from the Fund Actuary on possible assumptions for future investment returns. In setting the future contributions, the Fund Actuary considers the effect on the future financial position if investment returns are less than expected. The Trustee is able to access additional funding through the defined benefit contingency funding component of the insurance reserve at subsequent valuations if future returns prove insufficient.
Price inflation or salary increases could be different from that assumed which could result in higher liabilities	The Trustee invests in assets that are expected to be correlated to future inflation in the longer term (sometimes referred to as "real" assets). This means that, over the longer term, such assets are expected to keep pace with inflation. Such assets include equities, property and index-linked bonds.
Falls in asset values might not be matched by similar falls in the value of the Division's liabilities	The Trustee considers this risk when determining the Division's investment strategy. To the extent that such falls in asset values result in deficits at future valuations, the Trustee is able to access additional funding through the defined benefit contingency funding component of the insurance reserve.
Liquid assets are not sufficient to meet cashflow requirements of the Division when they fall due	The assets of the Fund are invested in the Hostplus Pooled Superannuation Trust. As such, the total assets under management are sufficient to cover any potential cashflows of the Division.
Division members live longer than assumed	The Trustee adopted mortality assumptions that it regards as prudent estimates of the life expectancy of members.
Legislative changes could lead to increases in the Division's liabilities	The Trustee takes legal and actuarial advice on changes in legislation and consults with the Employers or Unions, where relevant.

Economic risk Demographic risk Legal risk

Benefits summary

Definitions

DB Contributing Member:	A Member who is contributing to the Permanent Section of the Fund in accordance with the Rules.
DB Non-Contributing Member:	A Member who has ceased to make contributions to the Permanent section, or a Member who has ceased contributing because they have reached age 70.
Credited Interest:	Interest at the rate of 5% per annum for the period ended 30 June 1974, 6% per annum for the period ended 30 June 1976, and thereafter at a rate determined in accordance with a policy set out in writing and adopted by the Trustee, having regard to the achieved and expected earning rate of the Fund, and any election the Member has made regarding the investment of the relevant portion of their benefit.
Fund Service Weeks:	Total number of completed weeks of membership of the Fund in respect of which a Contributory Member has made Normal Contributions.
Classification Base Wage ('CBW'):	For Permanent Members, the greater of: • 75% of the Member's base salary; and • $650 p.w. (GWE Members) or $590 p.w. (other Members).
Fund Service Benefit:	18% of CBW for each Fund Service Weeks, with an additional loading applied to pre 1 July 1994 service that increases all weeks accrued up to that date by 10%.
Normal Retirement Date:	The Member's 65th birthday.
Offset Account:	An account containing miscellaneous items in respect of a Permanent Member including the amount of any outstanding Surcharge paid or payable by the Trustee in respect of a Member increased with interest, and any payments or refunds received by the Trustee in respect of the Member.
One Year Swap Rate:	The interest rate identified as the 'One Year Swap Rate' as at the close of business 1 July each year by the Commonwealth Bank of Australia.
Past Service Benefit:	$50 for each full year of Past Service in the industry which was completed prior to the commencement date of the Fund and was recognised for long service leave purposes. Each completed month in any fraction of a year of past service counts pro rata for benefit.
Potential Benefit:	A benefit equal to 18% of CBW for each week in the period from the date of termination to Normal Retirement Date, payable only to eligible Members.

Defined Benefit Members (Permanent Members)

Normal Retirement Benefit

For a Permanent Member retiring after age 65 but before age 70 this benefit comprises the sum of:-

- the Voluntary Contribution Benefit,
- the Fund Service Benefit, and
- the Past Service Benefit, less
- the Offset Account.

Late Retirement Benefit

For a Permanent Member retiring after age 70 this is the benefit at age 70 with Credited Interest.

Early Retirement Benefit

For a Permanent Member retiring on or after age 55 this benefit comprises the sum of:

- the Voluntary Contribution Benefit,
- a percentage of the Fund Service Benefit, the percentage being based on age at retirement in years and completed months (some specimen percentages are shown below), and
- the Past Service Benefit, less
- the Offset Account.

Resignation Benefit

The benefit payable to a Permanent Member comprises the sum of:

- the Voluntary Contribution Benefit,
- a percentage of the Fund Service Benefit, the percentage being based on age at retirement in years and completed months (some specimen percentages are shown below), and
- the Past Service Benefit, less
- the Offset Account.

Retrenchment Benefit

The benefit for a Permanent Member comprises the sum of:

- the Voluntary Contribution Benefit,
- a percentage of the Fund Service Benefit, the percentage being based on age at retirement in years and completed months (some specimen percentages are shown below), and
- the Past Service Benefit, less
- the Offset Account.

Specimen Percentages applied to the Fund Service Benefit in respect of Early Retirement, Retrenchment and Resignation are shown below:

Age in Years	Percentage
42 and under	87
44	89
46	91
48	93
50	95
52	97
54	99
55 and above	100

Total and Permanent Disablement Benefit

The benefit payable to a DB Contributing Member comprises the sum of:

- the Voluntary Contribution Benefit,
- the Fund Service Benefit,
- the Potential Benefit, and
- the Past Service Benefit, less
- the Offset Account.

The benefit payable to a DB Non-Contributing Member comprises the sum of:

- the Voluntary Contribution Benefit,
- the Fund Service Benefit,
- the Potential Benefit (subject to the Trustee’s discretion), and
- the Past Service Benefit, less
- the Offset Account.

Death Benefit

The benefit payable in respect of a Permanent Member is equal to the Total and Permanent Disablement Benefit, plus any additional benefit payable under the Voluntary Death Cover arrangement.

Retained Benefit

Members who leave active service before age 65 may roll their benefit into the Retained Benefits Section of the Fund. This section is an accumulation section which earns Credited Interest. Unrestricted non preserved funds may be withdrawn up to four times a year. Members may also purchase voluntary Death cover.

Allocated Pensions

A Member or dependant who is entitled to a benefit may apply for all, or part of, that benefit to be paid as an allocated pension. Members may also purchase voluntary Death cover.

Fixed Term Income

A Member who is entitled to a benefit may apply for all, or part of, that benefit to be paid as a fixed term pension on such terms as set by the Trustee. This product is now closed.

Short Term Guaranteed Income

A Member who is entitled to a benefit may apply for all, or part of, that benefit to be paid as a short term guaranteed income pension on such terms as the Trustee may determine from time to time. This product is now closed.

Summary of Data Used in this Investigation

Membership Data

Maritime Super has responsibility for maintaining member records, payment of benefits and other administrative tasks of the Division.

Maritime Super provided data in respect of members of the Division as at 30 June 2022, including members who had left the Division since the last investigation date.

I have checked a sample of the membership data for internal consistency and am satisfied as to the accuracy of this sample.

The following tables show a summary of the membership as at 30 June 2022 and 30 June 2020:

Permanent Members (active)

	30 June 2022	30 June 2020
Number of Members	105	114
Average Age	52.4	51.3
Average Service	18.1	17.2
Total CBW (per week)	$171,806	$177,081
Average CBW (per week)	$1,636	$1,553

Pensioners

	30 June 2022		30 June 2020	
	FTC	LTC	FTC	LTC
Number of Members	32	3	43	3
Average Age	80.2	79.2	78.9	77.2
Total Annual Pension	$520,127	$23,824	$692,469	$23,560
Average Annual Pension	$16,254	$7,941	$16,104	$7,853

Assets Data

We have been provided with audited accounts for the Fund as at 30 June 2022. The accounts were audited by Ernst & Young.

In addition to the Fund's accounts, I have also been provided with a breakdown of the Fund's assets into each of the Fund's various Sub-Funds which I understand has been subject to audit review. I have relied on this breakdown in determining the net asset relating to defined benefits in the Division.

The net assets exclude any amount held to meet the Operational Risk Financial Requirement.

I am satisfied that there are no material data discrepancies and that the data provided is suitable for the purpose of this investigation. I have relied on the information provided for the purposes of this investigation. Although I have no reason to doubt the quality of asset information provided, the results of this investigation are dependent on the quality of the asset information. Any changes to the asset values above will have an impact on the outcome of the investigation and any resulting recommendations.

Funding Method, Assumptions and Experience

Funding Method

In this valuation, I have used a variant of the Aggregate Funding Method to assess the adequacy of the Division to provide benefits to existing members. A description of the method is as follows:

- The present value of total benefits (based on both accrued and potential future service and projected CBW) and expenses expected to be paid in the future is calculated.
- Similarly, the member and employer contributions are also projected and discounted to obtain the expected present value of these contributions.
- The Division's surplus or deficit is calculated as the present value of benefits and expenses, less the net assets and the present value of future contributions.

The Fund rules specify that the Permanent DB member and Full Participating Employer contribution rates used to determine the level of surplus or deficit are fixed in the first instance at 4.8% and 12.6% of CBW respectively. The Fund rules further specify the actions which may be taken by the Trustee in the event that the actuarial valuation reveals a surplus or deficit. Note that a change cannot be made to the basis of determination of member or Employer contributions without the consent of the Full Participating Employers and the Maritime Union of Australia.

In producing my recommendations, I have also taken into account the pace of funding required to maintain certain short term solvency measures, in particular, that legislation requires the VBI to be above 100%.

This is consistent with the method used in the previous actuarial investigation. In my view this method remains appropriate.

Valuation of Pension Liabilities

Over the intervaluation period, the Goldman Sachs swap agreement which had previously been held in respect of FTC and LTC pensioners was unwound. As such, I have used a projected unit credit method in determining the liability for FTC and LTC liabilities in this valuation.

I consider this method appropriate having regard to the nature of the liabilities and the underlying assets. Given the relatively low value of pension liabilities, this change in method has not had a material impact on the financial position of the Sub-fund.

Assumptions

In order to determine the value of expected future benefits and Division assets, it is necessary to make assumptions regarding the timing and amount of future benefit payments, expenses and contributions. In doing so it is important to examine the experience of the Division since the last valuation to see whether the previous assumptions have been borne out in practice.

While each of the assumptions used is normally the actuary's best estimate of future experience, in practice, the actual experience in any (short) period can always be expected to differ from the assumptions to some extent. However, it is intended that over longer periods, they will provide a reasonable estimate of the likely future experience and financial position of the Division.

In the short-term, as the actual experience emerges differently to the experience implied by the assumptions, the financial position of the Division will also vary from that expected. However, adjustments to contribution rates, if any, can be made to reflect these differences in the following actuarial investigation.

Financial Assumptions

Valuation assumptions can be broadly divided into demographic assumptions, which relate to characteristics of current and future members of the Division, and financial assumptions, which are assumptions other than demographic assumptions. The following sections first consider the financial assumptions that are to be adopted for this valuation.

Investment Returns

The rate of return on the Division's assets (net of tax and investment expenses that are deducted from the investment return) from 30 June 2020 to 30 June 2022 are set out in the table below:

Year Ending	Net Investment Return[1]
30 June 2021	19.4%
30 June 2022	2.0%
Overall	10.4% p.a.

Over the two-year period to 30 June 2022 the assets held in the Division returned 10.4% p.a. which is higher than the rate assumed in the previous investigation of 4.4% p.a. (net of tax). In isolation, this has had a positive impact on the financial position of the Division.

While short-term differences between actual investment return experience and the actuarial assumption can affect the long-term financial position of the Division as measured by the actuarial investigation, the assumption used in the investigation must be based on long-term expectations since the investigation involves valuing payments in the future.

Based on models of future investment returns developed by WTW, the current expectations of investment returns over the remaining lifetime of the Division, net of taxation and investment management expenses and current strategic asset allocation of the Division is 5.6% p.a. On this basis, I have assumed a long-term investment earning rate of 5.6% p.a. for this investigation, which is higher than the assumed long-term earning rate used for the previous investigation of 4.4% p.a.

[1] Based on the returns of the previous Maritime Super Growth MVP option from 30 June 2020 to 30 April 2021, and the Balanced option thereafter,

Salary Increases

The average salary increases during the investigation period for the members remaining in the Division as at 30 June 2022 was 2.6% p.a. This is higher than the salary increases assumption adopted for the previous actuarial investigation of 2.0% p.a. This has had a negative impact on the financial position of the Division.

A long-term salary increase assumption of 2.9% p.a. is consistent with current long-term expectations of price increases based on modelling by WTW. I have therefore adopted this rate for the purpose of this investigation.

Pension Increases

FTC and LTC pension increases are based on the terms of conversion of the pension, offering either nil increases, increases fixed at 5% p.a., or increases linked to price inflation.

For the previous investigation, a price inflation assumption was not required as future price inflation was implicit in the value of the Goldman Sachs swap arrangement in place at that time. I have adopted a price inflation assumption of 2.9% p.a. for this investigation, based on modelling by WTW.

Administration Expenses and Insurance Costs

For this investigation, I assumed:

- General administration expenses of 0.215% p.a. of assets, in line with the administration expenses levied against all members of the Fund (equivalent to 1.1% of CBW). This is lower than the rate of 0.28% p.a. of assets allowed for in the previous investigation.
- Additional administration costs of $258,000 p.a. (equivalent to 2.9% of CBW). In the absence of updated data regarding this cost, we have maintained the assumption used in the previous investigation. I believe that this is appropriate as this cost is typically regarded as fixed.
- An allowance for insurance premiums of 1.0% of CBW, based on the expected costs of such premiums, having regard to the premium rates charged to members of the Fund and the occupation rating of Division members. This is higher than the rate of 0.6% of CBW allowed for in the previous investigation.

Demographic Assumptions

Rates at which Employee Members Cease Service

I have analysed the rates at which employee members cease service during the intervaluation period from 30 June 2020 to 30 June 2022. There were 9 exits, compared to the 20 expected.

Because of the small number of employee members remaining in the Division, I have retained the same assumed rates as the ones used in the previous investigation.

Sample exit rates per 10,000 members in the Division are shown in the table below:

Age	Death	Disablement	Withdrawal	Retirement
40	6.9	34.5	100	-
45	11.5	57.4	100	-
50	20.6	103.2	100	-
55	38.5	192.6	-	500
60	61.9	309.5	-	1,000
61	69.3	346.7	-	1,000
62	75.4	376.8	-	1,000
63	82.5	412.7	-	1,000
64	86.7	433.3	-	1,000
65	-	-	-	10,000

Pensioner Mortality and Spouse Assumptions

There were 2 FTC and no LTC pensioner deaths over the intervaluation period.

As the number of pensioners in the Division is very small, it is difficult to draw conclusive information from completing a demographic analysis.

For this valuation I have retained the same pensioner mortality assumptions as used in the previous investigation.

The mortality assumptions are based on the mortality studies in respect of the population of Australia. An adjustment to these rates has been applied to reflect that pensioners in the Division are likely to exhibit lighter mortality rates than the general Australian population. Additionally, allowances have been made for future improvements.

Assumption	30 June 2022	30 June 2020
Base Table	70% of ALT 2015-17	70% of ALT 2015-17
Future Mortality Improvements	2% p.a. from 1 July 2016	2% p.a. from 1 July 2016

Statutory Statements Under SPS 160

Maritime Super, Stevedores Division
Actuarial Investigation as at 30 June 2022

The statements required under paragraphs 23(a) to (i) of SPS 160 for interim and regular investigations are set out below:

A. Fund Assets

At 30 June 2022 the net market value of assets of the Division, excluding any amount held to meet the Operational Risk Financial Requirement (ORFR), was $40,936,000.

B. Projection of Defined Benefit Vested Benefit Index

Based on the actuarial assumptions and the recommended contributions set out in G below, I project that the likely future financial position of the Division over the three years following the investigation date will be as follows:

Date	Defined Benefit Vested Benefits Index
30 June 2022	119.6%
30 June 2023	120.0%
30 June 2024	121.5%
30 June 2025	123.0%

C. Accrued Benefits

The value of the accrued liabilities of all members as at 30 June 2022 was $29,769,000.

In my opinion, the value of the assets of the Division at 30 June 2022 was adequate to meet the liabilities in respect of accrued benefits in the Division (measured as the present value of members' accrued entitlements using the actuarial assumptions).

This assessment has been made using assumptions and a valuation method which I regard as reasonable.

D. Vested Benefits

The value of the vested benefits of all members as at 30 June 2022 was $34,219,000.

In my opinion, the financial position of the Fund is not unsatisfactory and the shortfall limit does not need to be reviewed at this time.

E. Minimum benefits

The value of the liabilities in respect of the minimum benefits of members as at 30 June 2022 was $27,475,000 which is less than the value of assets held at that date.

F. Funding and Solvency Certificates

Funding and Solvency Certificates applicable to the Division covering the period from 30 June 2020 to 30 June 2022 required by the Superannuation Industry (Supervision) Act have been provided. In my opinion, I am likely to be able to provide Funding and Solvency Certificates for the Division covering the period from 30 June 2022 to 30 June 2025.

G. Employer Contributions

The report on the actuarial investigation of the Division at 30 June 2022 recommends:

- That the Employers continue to contribute at the full rate of 12.6% of CBW for all Permanent Members and member contributions continue at 4.8% of CBW until at least 30 June 2025; and
- That the Trustee continues to maintain the defined benefit contingency funding component of the insurance reserve established for the purpose of meeting the amount of any emerging funding strain.

H. Payment of Pensions

In my opinion, at the valuation date, there is a high degree of probability that the Division will be able to pay the pensions as required under the Trust Deed and Rules applying to the Division.

I. Pre-July 1988 Funding Credit

No pre-July 1998 funding credits have been granted to the Fund.

Chris Porter
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6 December 2022

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