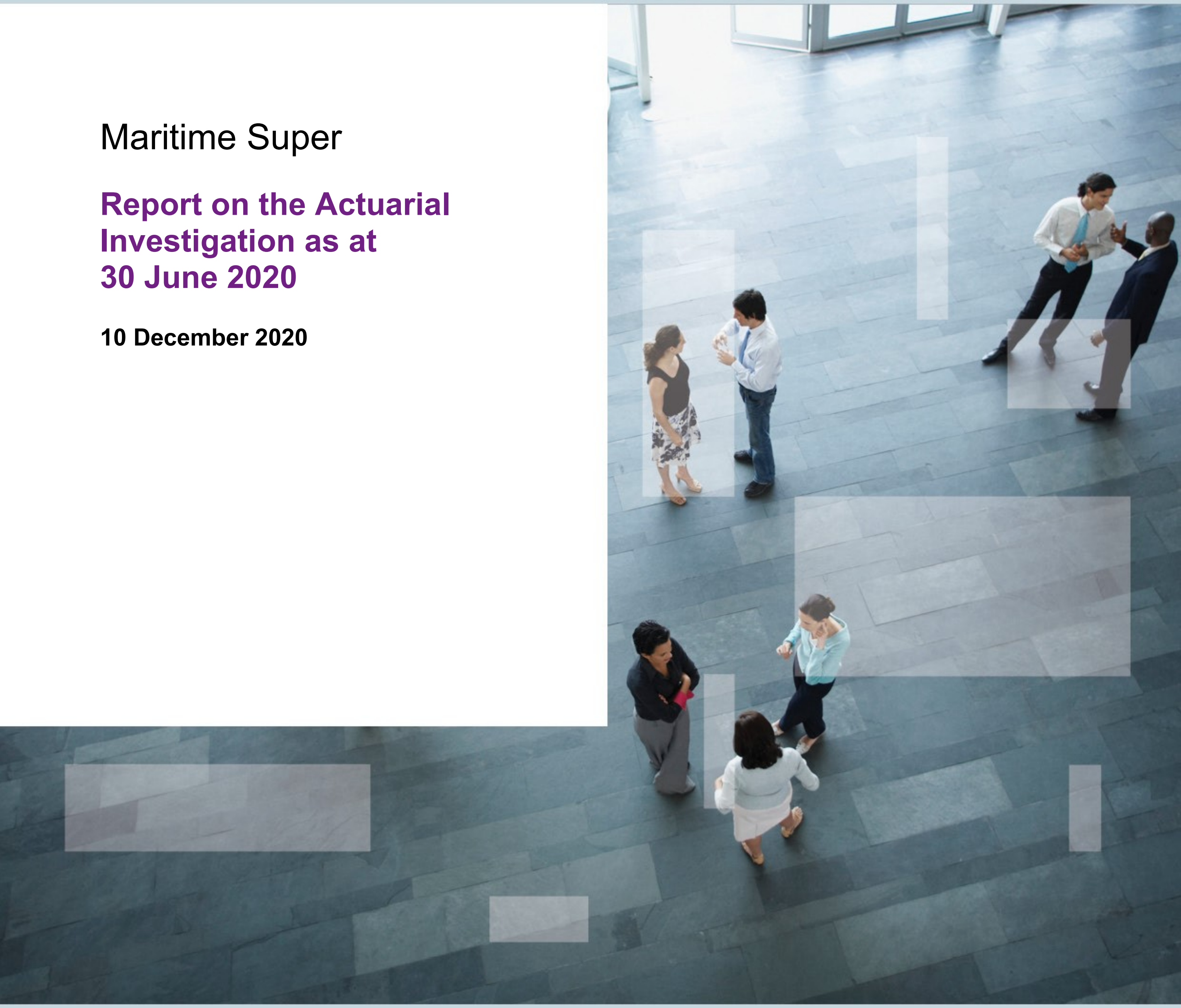
Willis Towers Watson



Maritime Super

Report on the Actuarial Investigation as at 30 June 2020

10 December 2020

Summary

I am pleased to present my summary report to the Trustee of Maritime Super on the actuarial investigations carried out in respect of the defined benefit liabilities of the Fund as at 30 June 2020.

Five separate investigation reports have been prepared in respect of the defined benefit liabilities for each of the following Sections of Maritime Super:

- DB Contributing and DB Non-Contributing members of Section A;
- Section B;
- Section C;
- Section E; and
- Section F

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

Solvency

The solvency measures as at 30 June 2020 and 30 June 2018 are also shown below:

Vested Benefits Index

Section	30 June 2020	30 June 2018
DB Contributing and DB Non-Contributing members of Section A	109.2%	110.6%
Section B	113.5%	108.7%
Section C	104.9%	109.2%
Section E	101.2%	115.5%
Section F	114.0%	122.1%
Total Defined Benefits	**111.7%**	**109.7%**

Contents

Throughout this report the following terms are used:

Fund
Maritime Super

Trustee
Maritime Super Pty Ltd, the Trustee of Maritime Super

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

The Investigation Date or Valuation Date
30 June 2020

Present Value Accrued Benefits Index

Section	30 June 2020	30 June 2018
DB Contributing and DB Non-Contributing members of Section A	124.3%	120.9%
Section B	113.0%	108.5%
Section C	104.8%	108.9%
Section E	101.2%	118.0%
Section F	102.3%	110.1%
Total Defined Benefits	**112.1%**	**110.2%**

Funding

I recommend the following contributions for the period commencing 1 July 2020:

Section	Recommended Contributions
DB Contributing and DB Non-Contributing members of Section A	Employers: 12.6% of Classification Base Wage Employees: 4.8% of Classification Base Wage
Section B	No additional contributions required for the defined benefit guarantee.
Section C	15% of Salaries; plus In respect of any exiting members with Employer consent for a retirement between ages 55 and 60, or as a consequence of retrenchment, an amount to maintain the financial position of the fund equal to the difference between the benefit paid and the vested benefit multiplied by the vested benefit index as measured at the most recent quarter end (if positive) plus contributions tax.
Section E	Additional contributions in respect of defined benefit liabilities are not required,
Section F	22.5% of Salaries; plus When a member elects to receive a lifetime pension on retirement, an additional contribution equal to the difference between the value of the pension and the value of the member's vested (i.e. allowing for 30% pension election).

In addition, 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 Fund.

Summary

Other Matters involving Actuarial Oversight

I further recommend that:

- The Trustee make the following arrangements in respect of the Shortfall Limit for each Section;

Section	Recommended Shortfall Limit
DB Contributing and DB Non-Contributing members of Section A	Retain Shortfall Limit of 98%
Section B	Retain Shortfall Limit of 98%
Section C	Retain Shortfall Limit of 98%
Section E	I recommend that the Shortfall Limit be increased from 97% to 100% as all members of the Section are now lifetime pensioners
Section F	Retain Shortfall Limit of 99%

- The Trustee monitor the financial position of the Sections quarterly throughout the following investigation period, with 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 Sections; and
- Current external insurance arrangements for death and disablement benefits be retained.

The next actuarial investigation in respect of the defined benefit liabilities of the Fund should be conducted with an effective date no later than 30 June 2022. 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 2020 that warrants review of the recommendations in this report.

Chris Porter
Fellow of the Institute of Actuaries of Australia

10 December 2020

ABN 45 002 415 349 AFSL 229921

Level 4, 555 Bourke Street, Melbourne VIC 3000
DO: EC | TR/ CR/ER: CJP

Introduction

Scope

This report represents a summary of the results of the actuarial investigations of the Fund which have been prepared effective 30 June 2020 for Maritime Super Pty Ltd, Trustee of Maritime Super by the actuary to the Fund, Chris Porter, FIAA. The results of the investigation are presented in separate reports for each Section of the Fund.

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.

This investigation is primarily interested in the defined benefit liabilities of the Fund, and unless otherwise specified, this report relates only to such defined benefit liabilities. The Defined Contribution liabilities of the Fund, 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.

The purpose of this report is to provide a summary of the key information and recommendations set out in the actuarial investigations for the benefit of the Trustee. As such this report does not comply with Professional Standard 400, dated March 2020, issued by the Institute of Actuaries of Australia and does not meet the requirements of a report prepared for the purposes of APRA Prudential Standard SPS 160. We confirm, however, that the separate actuarial investigation reports provided for each of the respective Sections have been prepared in accordance with these requirements.

Background

The Fund is covered 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 Fund is composed of three Divisions. These Divisions provide a mixture of accumulation-based benefits, defined benefits, allocated pensions, fixed term pensioners and lifetime pensioners. This actuarial investigation is conducted with respect to the members with defined benefits within the following Divisions.

- General Division
  - Section E members
  - Section F members

- Division 1
  - DB Contributing and DB Non-Contributing Members of Section A
- Division 2
  - Section B members
  - Section C members

In addition, Division 1 includes a number of fixed-term (FTC) pensioners, while Division 2 contains both FTC and lifetime (LTC) pensioners. These pensioners are also included within the scope of the investigations. Because these pensioners share a pooled investment they have been assessed together as part of the review of Section A.

Previous Actuarial Investigation

The previous actuarial investigations in respect of the defined benefit liabilities of the Fund were carried out by Chris Porter, FIAA, as at 30 June 2018.

The investigations concluded that none of the Sections were in an unsatisfactory financial position at that date, and recommended that the following contributions were paid:

Section	Recommended Contributions
DB Contributing and DB Non-Contributing members of Section A	Employers: 12.6% of Classification Base Wage Employees: 4.8% of Classification Base Wage
Section B	No additional contributions required for the defined benefit guarantee.
Section C	15% of Salaries; plus Top-up payments in respect of any exiting members with Employer consent for a retirement between ages 55 and 60, equal to the difference between the member's retirement benefit and vested benefit (if positive) plus contribution tax; plus Top-up payments in respect of any exiting members as a consequence of retrenchment benefit and vested benefit (if positive) plus contributions tax.
Section E	30% of Salaries
Section F	22.5% of Salaries

I understand that contributions have been made in line with these rates.

Experience since 30 June 2020

The actual investment returns since 30 June 2020 have had a material impact on the Fund assets. Because of this, I have taken into account experience since 30 June 2020 when carrying out projections from that date.

Limitations

This report is provided subject to the terms set out herein and in our engagement letter dated 3 August 2009 which was originally made with Russell Employee Benefits Pty Ltd and novated in March 2017 to Towers Watson Australia Pty Ltd and the accompanying Terms and Conditions of Engagement. 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 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 Employer 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 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.

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 Sub-fund would be required to pay if all members were to voluntarily leave service (or are payable for benefits in the form of lifetime pensions or deferred benefits) on the investigation date; and
- 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.[1]

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

Vested Benefit Index

	As at 30 June 2020			As at 30 June 2018		
Section	**Value of Liability ($'000)**	**Value of Assets ($'000)**	**Index**	**Value of Liability ($'000)**	**Value of Assets ($'000)**	**Index**
DB Contributing and DB Non-Contributing members of Section A	33,176	36,233	109.2%	40,123	44,385	110.6%
Section B	257,301	292,040	113.5%	276,291	300,490	108.7%
Section C	39,496	41,416	104.9%	42,318	46,225	109.2%
Section E	13,725	13,891	101.2%	14,909	17,227	115.5%
Section F	13,910	15,855	114.0%	12,350	15,074	122.1%
Total Defined Benefits	**357,608**	**399,435**	**111.7%**	**385,991**	**423,401**	**109.7%**

[1] 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.

Present Value of Accrued Benefits Index

	As at 30 June 2020			As at 30 June 2018		
Section	**Value of Liability ($'000)**	**Value of Assets ($'000)**	**Index**	**Value of Liability ($'000)**	**Value of Assets ($'000)**	**Index**
DB Contributing and DB Non-Contributing members of Section A	29,160	36,233	124.3%	36,700	44,385	120.9%
Section B	258,419	292,040	113.0%	276,774	300,433	108.5%
Section C	39,510	41,416	104.8%	42,438	46,225	108.9%
Section E	13,725	13,891	101.2%	14,598	17,227	118.0%
Section F	15,506	15,855	102.3%	13,694	15,074	110.1%
Total Defined Benefits	**356,320**	**399,435**	**112.1%**	**384,204**	**423,344**	**110.2%**

With the exception of Section B, the VBI and PVABI of each Section has reduced from those at the previous valuation date.

The VBI is above 100% for all Sections at the valuation date, and as such, is to be treated as being in a satisfactory financial position as at that date. For each Section, the vested benefits exceed the minimum requisite benefits and therefore none of the Sections are technically insolvent at the valuation date.

Funding

Vested Benefit Projection

I have projected the long-term financial position for each Section in order to determine whether the current contributions will be sufficient to meet the Section's funding objective. Where the contributions are deemed to be insufficient, I have recommended an alternative rate of contributions that is expected to achieve the funding objectives.

Each Section is expected to be maintained in a satisfactory financial position for a period of three years.

Details of these long-term projections, recommended contributions and sensitivity analyses are set out in the separate reports for each Section.

Summary

I recommend the following contributions until at least 30 June 2023 in respect of defined benefit members.

Section	Recommended Contributions
DB Contributing and DB Non-Contributing members of Section A	Employers: 12.6% of Classification Base Wage Employees: 4.8% of Classification Base Wage
Section B	No additional contributions required for the defined benefit guarantee.
Section C	15% of Salaries; plus In respect of any exiting members with Employer consent for a retirement between ages 55 and 60, or as a consequence of retrenchment, an amount to maintain the financial position of the fund equal to the difference between the benefit paid and the vested benefit multiplied by the vested benefit index as measured at the most recent quarter end (if positive) plus contributions tax.
Section E	Additional contributions in respect of defined benefit liabilities are not required,
Section F	22.5% of Salaries; plus When a member elects to receive a lifetime pension on retirement, an additional contribution equal to the difference between the value of the pension and the value of the member's vested (i.e. allowing for 30% pension election).

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

I further recommend that the financial position of each Section continue to be monitored quarterly throughout the following investigation period, with the results reviewed by the Actuary, to ensure that prompt action can be taken if the financial condition of any Section deteriorates. 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 each Section of the Fund.

Other Matters
Involving Actuarial Oversight

Investments

Members of the Fund with accumulation benefits, including Section B members with a defined benefit guarantee, have the choice of the following investment options for their benefit accounts:

- MySuper Under 55
- MySuper Over 55
- Australian Shares
- International Shares
- Growth and Growth MVP (Managed Volatility Process)
- Balanced
- Indexed Diversified
- Moderate
- Conservative
- Cash Enhanced
- Cash
- Fixed Term Investment Option

As at the respective investigation dates the defined benefit assets of the Fund were invested as follows:

Section	Investment Option
DB Contributing and DB Non-Contributing Members of Section A	Growth MVP
Section B (DB Reserve)	Cash Enhanced
Section C	Growth MVP
Section E	Moderate
Section F	Conservative
LTC and FTC Pensioners[1]	Goldman Sachs Swap plus Cash Enhanced

1 Included within the Section A actuarial investigation.

The net market value of assets is based on the asset values declared by the respective external fund managers at 30 June 2020 which in turn are based on the market value 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 investment objectives of the core investment options are as follows:

- Cash Enhanced Option - to outperform the annual rate of inflation (CPI) and the UBS Australian Bank Bill Index.
- Conservative Option – to outperform the annual rate of inflation (CPI) by around 1% pa after fees and taxes over rolling 10-year periods.
- Moderate Option – to outperform the annual rate of inflation (CPI) by around 2.5% p.a. after fees and taxes over rolling 10-year periods.
- Balanced Option – to outperform the annual rate of inflation (CPI) by around 2.75% pa after fees and taxes over rolling 10-year periods.
- Growth Option – to outperform the annual rate of inflation (CPI) by around 3.5% pa after fees and taxes over rolling 10-year periods.

The Growth MVP option is designed to more actively manage risk during periods of market volatility. The Growth MVP target is to invest 95% of funds according to the target asset allocation of the standard Growth option, and 5% of funds to manage short-term volatility through a futures overlay.

The strategic asset allocations of the Cash Enhanced, Conservative, Moderate, Balanced and Growth options as at 30 June 2020 are shown in the below table:

Asset Class	Cash Enhanced	Conservative	Moderate	Balanced	Growth
Australian Shares	0%	9%	23%	26%	32%
International Shares	0%	11%	27%	29%	37%
Property	0%	3%	8%	8%	8%
Private Equity	0%	2%	5%	5%	6%
Infrastructure	0%	4%	5%	5%	5%
Growth Alternatives	0%	1%	2%	2%	2%
Total Growth Assets	**0%**	**30%**	**70%**	**75%**	**90%**
Defensive Alternatives	0%	20%	12%	12%	4%
Fixed Interest	0%	20%	12%	7%	3%
Cash Enhanced	100%	30%	6%	6%	3%
Cash	0%	0%	0%	0%	0%
Total Defensive Assets	**100%**	**70%**	**30%**	**25%**	**10%**

In my opinion, the investment strategies adopted by the Trustee are suitable for each Section having regard to the financial position, the underlying liabilities and the capacity of the respective employers to meet any funding shortfall.

Shortfall Limit

I recommend the following with respect to each Section's Shortfall Limit:

Section	Recommended Shortfall Limit
DB Contributing and DB Non-Contributing members of Section A	Retain Shortfall Limit of 98%
Section B	Retain Shortfall Limit of 98%
Section C	Retain Shortfall Limit of 98%
Section E	I recommend that the Shortfall Limit be increased from 97% to 100% as all members of the Section are now lifetime pensioners
Section F	Retain Shortfall Limit of 99%

Insurance

The Fund's insurance arrangements in respect of each Section are examined in the respective actuarial investigation reports.

In Summary:

- For all Sections, benefits paid on death and total and permanent disablement (TPD) are insured by MLC Limited.
- The Fund has retained an Insurance Reserve of approximately $33.8 million. This reserve has been managed by the Trustee for a range of approved purposes. No portion of this reserve has been applied as an asset of a Section for the purpose of preparing the recommendations arising from the actuarial investigation.
- There is a small self-insured liability in relation to members in Section C who receive a total and temporary disablement benefit which is paid for more than two years. In practice, the probability of paying a TTD benefit longer than 2 years is very small, as a TPD claim would typically be approved within this period. We are not aware of any TTD payments which have been ongoing for more than two years at the valuation date.
- Overall, we consider that the Fund's insurance arrangements in respect of death, TPD and TTD benefits to be appropriate.

Additional Information

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 Fund.

Maritime Super provided data in respect of members of the Fund as at 30 June 2020.

The following tables show a summary of the membership as at 30 June 2020 and 30 June 2018:

Number of Members	As at 30 June 2020			As at 30 June 2018		
Division/Section	**DB**	**Accum**	**TOTAL**	**DB**	**Accum**	**TOTAL**
Accumulation Advantage	-	7,834	7,834	-	8,488	8,488
Accumulation Basic	-	1,935	1,935	-	2,503	2,503
Accumulation Plus	-	3,309	3,309	-	3,316	3,316
Allocated Pensions	-	3,458	3,458	-	3,453	3,453
AMOU	-	1	1	-	4	4
ASP	-	17	17	-	15	15
Reliance	-	29	29	-	30	30
All other Accumulation Categories	-	68	68	-	59	59
Retained	-	4,971	4,971	-	5,406	5,406
Section A	114	-	114	143	-	143
Section B	1,368	1,042	2,410	1,545	1,789	3,334
Section C	44	110	154	54	121	175
Section E	11	55	66	12	81	93
Section F	9	28	37	9	32	41
Fixed term and Lifetime Pensioners	46	-	46	93	-	93
FTP Pensioners	-	3	3	-	3	3
Total	**1,592**	**22,860**	**24,452**	**1,856**	**25,300**	**27,156**

Assets Data

The Fund provided audited accounts for the Fund as at 30 June 2020. 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 Sections 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 each Section.

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

The funding methods and funding objectives vary between each Section. Full details of the funding method and funding objectives used in respect of each of the Sections are set out in the separate actuarial investigation reports.

Assumptions

In order to determine the value of expected future benefits and 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 relevant experience 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 Fund.

In the short-term, as the actual experience emerges differently to the experience implied by the assumptions, the financial position of the Sections will also vary from that expected. However, adjustments to Employer 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 each Section, 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 assumptions have been set based on models of future investment returns developed by Willis Towers Watson, the current expectations of investment returns over the remaining lifetime of each Section, net of taxation and investment management expenses and current strategic asset allocation of the Section.

The assumptions adopted as at the valuation date are set out in the tables below, along with the assumptions used for the previous investigation and actual investment returns experience from 30 June 2018 to 30 June 2020.

Assumption Effective	Section A	Section C	Section E	Section F
	Growth MVP	**Growth MVP**	**Moderate**	**Conservative**
30 June 2020 (p.a.)	4.4%	4.4%	5.3% (gross)	2.4% (net) 3.6% (gross)
30 June 2018 (p.a.)	4.8%	4.6%	4.9% (gross)	3.4% (net) 3.9% (gross)
Experience 30 June 2018 to 30 June 2020	-0.2% p.a.	-0.2% p.a.	-0.5% p.a. (gross)	1.6% p.a. (net) 1.7% p.a. (gross)

For the Sections shown above, over the two-year period to 30 June 2020 the assets experienced returns which were lower than the assumed rate in the previous investigation. In isolation, this has had a negative impact on the financial position of these Sections.

Section B accumulation account balances are subject to member investment choice. The rate of return assumed for each member reflects the weighted average of the rate of return assumptions and the member's selected investment choice. The rate of return assumption in respect of the defined benefit reserve, as well as the Balanced and Growth investment options (the two most commonly selected Fund investment options) are set out in the table below, along with the assumptions used for the previous investigation and actual investment returns experience from 30 June 2018 to 30 June 2020.

Assumption Effective	DB Reserve Cash Enhanced Option	Balanced Option	Growth Option
30 June 2020 (p.a.)	1.2%	4.2%	4.6%
30 June 2018 (p.a.)	2.6%	4.5%	5.1%
Experience 30 June 2018 to 30 June 2020	1.5% p.a.	1.4% p.a.	1.6% p.a.

Over the two-year period to 30 June 2020 all options shown above experienced returns which were lower than expected. However, the DB Reserve increased by 20% p.a. over the period, mainly as a result of the hedging program held by Section B. In isolation, this has strengthened the financial position of Section B.

Salary Increases

The average salary increases during the investigation period for the members remaining in the Section as at 30 June 2020, as well as the assumptions adopted in this investigation and the previous investigation are shown in the table below.

Assumption Effective	Section A	Section B	Section C	Section F
30 June 2020 (p.a.)	3.0%	3.0%	3.0%	3.0%
30 June 2018 (p.a.)	2.0%	2.0%	2.0%	2.0%
Experience 30 June 2018 to 30 June 2020	0.9% p.a.	1.7% p.a.	1.0% p.a.	2.3% p.a.

The average salary inflation over the intervaluation period was lower than assumed for all Sections. In isolation, this has had a positive impact on the financial position of the respective Sections.

I note that as Section E no longer includes any active members, no salary increase assumption is required.

Other Assumptions

Other assumptions adopted in respect of each of the Sections are set out in the separate actuarial investigation reports.

Section Summary

DB Contributing and DB Non-contributing Members of Section A

This Summary sets out the key results and recommendations of the actuarial investigation for DB Contributing and DB Non-contributing Members of Section A.

Solvency

Measure	30 June 2020	30 June 2018
VBI	109.2%	110.6%
PVABI	124.3%	120.9%

- The Section was not in an unsatisfactory financial position at the valuation date.
- The VBI of the Section reduced since the previous investigation date, primarily as a result of lower than expected investment performance, offset by lower than expected salary increases over the period.
- The PVABI of the Section increased since the previous investigation date as a result of changes in the valuation assumptions, offset by losses due to experience over the intervaluation period.

- In my opinion, at the valuation date, there is a high degree of probability that the Section will be able to pay the pensions as required under the governing rules.

Funding

- The Section had an actuarial surplus of $4.4 million in respect of the long-term funding position at the valuation date.
- 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 a least 30 June 2023.
- 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 any emerging funding strain. The value of the defined benefit contingency funding component is currently maintained at $5.2 million.

Other matters

- The assets in respect of Permanent Members are invested in the Fund's Growth MVP Option.
- In respect of pension assets, the Fund has an existing swap agreement with Goldman Sachs under which the Section's FTC and LTC pension liabilities have been substantially immunised. The Section also holds additional assets in respect of pensioners in the Fund's Cash Enhanced Option.

Investment	Value as at 30 June 2020
Growth MVP Option	$30,851,000
Goldman Sachs Swap Agreement	$4,502,000
Cash Enhanced Option	$880,000
Total	**$36,223,000**

- In my opinion the investment strategy adopted by the Trustee is suitable for a Section of this type having regard to its financial position, the underlying liabilities and the capacity of the respective employers to meet any funding shortfall.
- In my opinion the 98% shortfall limit remains reasonable for the Section.
- I consider the current insurance arrangements adequate and recommend that the current arrangements be maintained.
- Finally, I recommend that the Trustee monitor the financial position quarterly, with results reviewed by the Actuary. The Trustee should also obtain a letter from the Actuary in the intervening years between regular investigations which reports to the Trustee on the vested benefit position of the Section.

Section B

This Summary sets out the key results and recommendations of the actuarial investigation for Section B.

Solvency

Measure	30 June 2020	30 June 2018
VBI	113.5%	108.7%
PVABI	113.0%	108.5%

- The Section was not in an unsatisfactory financial position at the valuation date.
- The indices of the Section increased since the previous investigation date. This is primarily a result of positive experience of the Section since 30 June 2018, in particular the effects of the hedging program held by the Section, but also the relative stability of the Cash Enhanced investment returns compared to other options in which defined benefit members accumulation benefits are invested, and lower than expected salary increases over the period. The DB Reserve increased by 20% p.a. over the period from 30 June 2018 to 30 June 2020, of which approximately 1.5% p.a. was attributable to the returns on the Cash Enhanced investment option. The remaining increase in the DB Reserve was mostly attributable to the effects of the hedging program held by the Section.

Funding

- I believe that there are no current requirements to make additional contributions above the standard contributions required for accumulation members.
- I have concluded that there is a high probability that the DB Reserve will provide for the DB guarantee over the next 10 years if no additional contributions are made to the DB Reserve. Over the next 10 years, the probability that the DB VBI is below 100% increases to 9% over 10 years.

Other matters

- The assets in respect of the DB Reserve are invested in the Fund's Cash Enhanced option.
- Additionally, the Section entered into a hedging program in August 2017 which has the intended aim of reducing the probability of the DB guarantee becoming more onerous than the DB Reserve.
- The assets held in respect of defined benefit Sub-fund members are invested in the investment options selected by members from the available choices.
- In my opinion the investment strategy adopted by the Trustee is suitable for a Section of this type having regard to its financial position, the underlying liabilities and the capacity of the respective employers to meet any funding shortfall.
- In my opinion the 98% shortfall limit remains reasonable for the Section.
- I consider the current insurance arrangements adequate and recommend that the current arrangements be maintained.
- Finally, I recommend that the Trustee monitor the financial position quarterly, with results reviewed by the Actuary. The Trustee should also obtain a letter from the Actuary in the intervening years between regular investigations which reports to the Trustee on the vested benefit position of the Section.

Section C

This Summary sets out the key results and recommendations of the actuarial investigation for Section C.

Solvency

Measure	30 June 2020	30 June 2018
VBI	104.9%	109.2%
PVABI	104.8%	108.9%

- The Section was not in an unsatisfactory financial position at the valuation date.
- The indices of the Section reduced since the previous investigation date, primarily as a result of lower than expected investment performance, offset by lower than expected salary increases over the period.

Funding

- I recommend that the following contributions are paid to the Section by the employer:
  - 15% of Salaries; plus
  - In respect of any exiting members with Employer consent for a retirement between ages 55 and 60, or as a consequence of retrenchment, an amount to maintain the financial position of the Sub-fund equal to the difference between the benefit paid and the vested benefit multiplied by the vested benefit index as measured at the most recent quarter end (if positive) plus contributions tax.
- In addition to the above contributions the employer is also required to pay a contribution of 3% of Salary for certain members which is to be credited to the member's 3% Accumulation Account.

Other matters

- The assets in respect of the Section are invested in the Fund's Growth MVP option.
- In my opinion the investment strategy adopted by the Trustee is suitable for a Section of this type having regard to its financial position, the underlying liabilities and the capacity of the respective employers to meet any funding shortfall.
- In my opinion the 98% shortfall limit remains reasonable for the Section.
- I consider the current insurance arrangements adequate and recommend that the current arrangements be maintained.
- Finally, I recommend that the Trustee monitor the financial position quarterly, with results reviewed by the Actuary. The Trustee should also obtain a letter from the Actuary in the intervening years between regular investigations which reports to the Trustee on the vested benefit position of the Section.

Section E

This Summary sets out the key results and recommendations of the actuarial investigation for Section E.

Solvency

Measure	30 June 2020	30 June 2018
VBI	101.2%	115.5%
PVABI	101.2%	118.0%

- The Section was not in an unsatisfactory financial position at the valuation date.
- The indices of the Section reduced since the previous investigation date, primarily as a result of lower than expected investment performance, and higher than expected pension uptake over the period.
- The indices have increased by 4.6% as a result of assumption changes in isolation, which was more than offset by losses due to experience over the intervaluation period and the additional liability in respect of future administration expenses associated with paying the pension benefits, required under Professional Standard 400 issued by the Institute of Actuaries of Australia.
- I have simulated the Sub-fund's projected financial position over the remaining lifetime of the Sub-fund, allowing for actual returns experienced since 30 June 2020 and estimate a probability of 50% that the Sub-fund can pay all future expected pension payments for the remaining lifetimes of the current pensioner members, including reversion pensions. I am therefore unable to certify that there is a high degree of probability to pay pensions at their current levels.

Funding

- Given the inherent uncertainty associated with the Section now that it consists of entirely lifetime pensioners, I recommend that the Trustee review the key funding policy for the Sub-fund to consider targeting a VBI of 105%, i.e. a 5% buffer, to act as a cushion against adverse investment and longevity experience. The strong results experienced since the valuation date are expected to have improved the Sub-fund's VBI to above 105% at the date of signing this report.
- I consider that no additional Employer contributions are required to meet the funding requirements of the Section at the current time.

Other matters

- The assets in respect of the Section are invested in the Fund's Moderate option.
- In my opinion the investment strategy adopted by the Trustee is suitable for a Section of this type having regard to its financial position, the underlying liabilities and the capacity of the respective employers to meet any funding shortfall.
- I recommend the shortfall limit be increased from 97% to 100% since all members of the Section are now lifetime pensioners in payment. In practice, this higher shortfall limit means that action will need to be taken more promptly if the financial position of the Section deteriorates in the future, with an interim actuarial review required in the event the shortfall limit is breached.
- As there are no active members, the Section has no insurance arrangements with respect to defined benefits.

- Finally, I recommend that the Trustee monitor the financial position quarterly, with results reviewed by the Actuary. The Trustee should also obtain a letter from the Actuary in the intervening years between regular investigations which reports to the Trustee on the vested benefit position of the Section.

Section F

This Summary sets out the key results and recommendations of the actuarial investigation for Section F.

Solvency

Measure	30 June 2020	30 June 2018
VBI	114.0%	122.1%
PVABI	102.3%	110.1%

- The Section was not in an unsatisfactory financial position at the valuation date.
- The indices of the Section reduced since the previous investigation date, primarily as a result of lower than expected investment performance. Additionally, a lower discount rate used in the valuation of pensioner liabilities has resulted in a reduction (in isolation) of all indices.
- In my opinion, at the valuation date, there is a high degree of probability that the Section will be able to pay the pensions as required under the governing rules.

Funding

- I recommend the following contributions are paid to the Sub-fund by the Employer for the period commencing 1 July 2020:
  - 22.5% of Salaries; plus
  - Where a member elects to receive a lifetime pension on retirement, an additional contribution equal to the difference between the value of the pension and the value of the member's vested benefit (i.e. allowing for 30% pension election).

Other matters

- The assets in respect of the Section are invested in the Fund's Conservative option.
- In my opinion the investment strategy adopted by the Trustee is suitable for a Section of this type having regard to its financial position, the underlying liabilities and the capacity of the respective employers to meet any funding shortfall.
- In my opinion the 99% shortfall limit remains reasonable for the Section.
- I consider the current insurance arrangements adequate and recommend that the current arrangements be maintained.
- Finally, I recommend that the Trustee monitor the financial position quarterly, with results reviewed by the Actuary. The Trustee should also obtain a letter from the Actuary in the intervening years between regular investigations which reports to the Trustee on the vested benefit position of the Section.

DO: EC | TR/ CR/ER: CJP