



# METHODOLOGY PAPER

## MySuper Heatmap

December 2022

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# Contents

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Chapter 1 - Introduction	4
Chapter 2 - Heatmap – elements and presentation	5
Chapter 3 - Investment returns	8
Chapter 4 - Fees and costs	14
Chapter 5 - Sustainability of member outcomes	17
Appendix A – Heatmap metrics	20
Appendix B – Indices	24
Appendix C – Example SRP calculation	27

# Chapter 1 - Introduction

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APRA publishes the MySuper Heatmap (the Heatmap) annually to improve transparency and hold trustees accountable for outcomes they deliver to MySuper members. The methodology used to produce the Heatmap is outlined in this paper.

The Heatmap provides credible, clear and comparable information on the investment returns and fees and costs of MySuper products. It highlights areas of poor outcomes for members and enables like-for-like comparisons to foster a culture of continuous improvement across the superannuation industry. The primary users of the Heatmap are RSE licensees, though it provides insights that benefit a wide range of stakeholders including policymakers, advisers and employers.

The results of the legislated annual performance test are incorporated in the Heatmap. This test formed part of a suite of Government reforms that commenced in July 2021 and are designed to optimise member outcomes. The intent of the performance test is to hold RSE licensees accountable for the performance they deliver and to improve their products through greater transparency and legislated consequences.

APRA expects RSE licensees to manage investments and expenses in the best financial interests of members. To support transparency and benchmarking of investment returns and fees and costs, APRA will continue to publish the Heatmap and closely supervise and hold RSE licensees to account in meeting their obligations to members.

The Heatmap does not provide information on all the relevant factors that should be considered in assessing the outcomes or appropriateness of a particular MySuper product to an individual's circumstances. Accordingly, the Heatmap should not be used in isolation to inform decisions regarding an individual employer, adviser or member's choice of a particular MySuper product.<sup>1</sup>

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<sup>1</sup> Useful information for consumers seeking to better understand superannuation can be found on the Australian Securities and Investments Commission's [MoneySmart](#) website.

[ATO's YourSuper comparison tool](#) provides information for consumers to help compare MySuper products. The comparison tool also shows each product's performance under the annual performance test, including which products have failed this test.

# Chapter 2 - Heatmap – elements and presentation

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## 2.1 The Heatmap metrics

The Heatmap metrics are based on data reported to APRA by RSE licensees and benchmark data from index providers. The metrics are:

- the **annual performance test**<sup>2</sup> results for MySuper products;
  - The annual performance test sets a legislated performance benchmark that incorporates investment performance and administration fees. To pass the test, the product's performance measure for the relevant lookback period must equal or exceed -0.50% p.a.
  - MySuper products that failed the test for the latest lookback period are labelled "Fail" in the relevant column of the Heatmap. Those products that also failed for the lookback period of the previous year are additionally identified as "Fail – second consecutive time".
- **investment return metrics** over three, five and eight-year time horizons for MySuper products, and for each lifecycle stage (where relevant);
- **administration and total fees and costs metrics** covering representative member account balances of \$10,000, \$25,000, \$50,000, \$100,000 and \$250,000; and
- **sustainability of member outcomes metrics**, including member account growth and net cash flow measures that provide some insight into the ability for an RSE licensee to continue to provide appropriate outcomes to members.

The Heatmap metrics apply to all MySuper products, including lifecycle products.<sup>3</sup> This is to ensure that the multiple investment strategies of each MySuper lifecycle product are appropriately reflected in APRA's test approach.

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<sup>2</sup> The methodology for the annual performance test can be found in the [Superannuation Industry \(Supervision\) Regulations 1994 \(legislation.gov.au\)](https://www.legislation.gov.au/ulinks/details.aspx?file=1&id=3&docid=1311742).

<sup>3</sup> Lifecycle products contain investment strategies that change based on a member's age to reflect the member's overall risk profile based on industry averages.

When initially developing the Heatmap, APRA engaged external consultants to review the methodology supporting the selection and calculation of the Heatmap metrics. The consultants supported APRA's approach.

## 2.2 Displaying the metrics

The Heatmap is presented with a colour overlay that provides a visual illustration of the outcomes provided by MySuper products relative to peers and benchmarks. The colour overlay particularly focuses on products that have delivered poorer outcomes relative to other products or the relevant benchmarks.

The colour overlay has a continuous colour gradient rather than a small number of discrete colours. This approach has been taken so that the Heatmap emphasises areas of material poor outcomes, and is not categorising products as 'good' or 'bad' overall. The Heatmap metrics have been mapped to the 'heat' colour scale using thresholds that best reflect each individual metric. Further detail on these scales is outlined in each of the chapters on investment returns, fees and costs and sustainability of member outcomes.

## 2.3 Viewing the heatmap

The Heatmap has two views, a concise view and an expanded view. The concise view of the Heatmap shows six key metrics that APRA considers particularly important for assessing member outcomes based on underlying analysis of the data. APRA reviews these metrics over time to ensure the most relevant and important measures of member outcomes are highlighted.

**Table 1. Concise view metrics**

Area	Concise View Metric
Performance test	Annual performance test measure
Investment returns	8-year net investment return (NIR)
Fees and costs	Administration fees on a \$50,000 representative balance
	Total fees and costs on a \$50,000 representative balance
Sustainability of member outcomes	3 year average adjusted total accounts growth rate
	3 year average net cash flow ratio

The Heatmap in its expanded view shows 26 metrics that APRA uses to evaluate the outcomes of MySuper products based on data provided by RSE licensees. The expanded view provides stakeholders with broader insights into investment returns and the impact of fees and costs for different member account balances.

**Table 2. Expanded view metrics**

Area	Expanded View Metrics
Performance test	Annual performance test measure
Investment returns	3, 5 and 8 year NIR
	3, 5 and 8 year NIR relative to a simple reference portfolio
	3, 5 and 8 year NIR relative to the strategic asset allocation benchmark portfolio
	3, 5 and 8 year net return (for \$50,000 representative balance)
Fees and costs	Administration fees on all representative balances (\$10,000, \$25,000, \$50,000, \$100,000 and \$250,000)
	Total fees and costs on all representative balances (\$10,000, \$25,000, \$50,000, \$100,000 and \$250,000)
Sustainability of member outcomes	3 year average adjusted total accounts growth rate
	3 year average net cash flow ratio
	3 year average net rollover ratio

An interactive version of the Heatmap is hosted on the APRA website, which provides a user-friendly interface to view the performance of MySuper products, including filtering and sorting functionality.

## 2.4 Future development of the Heatmap

The Heatmap will be released annually. For each iteration of the Heatmap APRA will:

- review the metrics to ensure appropriate benchmarks and thresholds are being applied to appropriately reflect improvements across the industry;
- establish which metrics should be displayed in the concise view to ensure that the key metrics at the time the Heatmap is released are highlighted; and
- incorporate additional or alternative metrics and/or products and investment options to reflect any changes to collected data.

To assist in developing subsequent iterations of the Heatmap, APRA welcomes input and feedback from stakeholders on areas where the Heatmap can be improved, or additional metrics that could be incorporated to provide greater insights into the performance of RSE licensees and the outcomes they are delivering to their members.

# Chapter 3 - Investment returns

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When evaluating investment returns, each product has its own unique membership, return objectives and risk profile, which influence its investment strategy and the investment returns that are achieved for members. To account for these differences, APRA has analysed a number of different investment metrics to assess returns on a risk-adjusted basis and to consider an RSE licensee's returns relative to peers.

The Heatmap measures investment returns over multiple time horizons using data reported to APRA, where this history exists. APRA notes that the long-term investment return is a critical driver of outcomes for members, and that returns over different time periods provide insights into the sustainability and consistency of investment returns over time and different market cycles<sup>4</sup>. The Heatmap includes returns over three, five and eight-year periods. APRA has used eight-year returns as the longest period currently available, given the commencement of most MySuper products on 1 January 2014. As APRA builds its time series of investment returns, future releases of the Heatmap are expected to include longer time horizons (e.g. ten years).

## 3.1 Benchmark portfolio metrics

APRA has constructed benchmark portfolios as part of the analysis to provide risk-adjusted insights into the return of each product/lifecycle stage. The Net Investment Return (NIR) of each MySuper product/lifecycle stage has been measured against a Simple Reference Portfolio (SRP) and a Strategic Asset Allocation (SAA) benchmark portfolio; both portfolios are product-specific and tailored to reflect the investment strategy and level of risk of the product or lifecycle stage.

Reference and benchmark portfolios are the primary measures APRA uses to evaluate the investment returns of MySuper products. APRA considers these measures to be objective and to provide useful insights into an RSE licensee's ability to add value for its members. Where an RSE licensee's investment process utilises active management, makes tilts to its asset allocation or invests in illiquid or complex assets, it is expected to be able to demonstrate the value add (after fees, costs and taxes) from these activities over time.

The returns on both the SRP and SAA benchmark portfolio have been calculated using SAA data reported to APRA on a quarterly basis, to reflect any changes an RSE licensee may have made to its SAA over time.

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<sup>4</sup> Past performance is not necessarily a reliable indicator of future performance.

Appendix A provides the formulas used to calculate the returns for the SRP and SAA benchmark portfolio.

## 3.2 Simple Reference Portfolio

The SRP is a notional, “a priori” portfolio of passive, low cost, liquid investments. The purpose of the SRP is to measure the value an RSE licensee has generated for its members through its value adding activities, such as its strategic asset allocation decisions. A bespoke SRP is created for each product/lifecycle stage to appropriately reflect its own risk profile.

The risk profile of each product/lifecycle stage has been established by applying a consistent definition of growth and defensive assets as outlined in Table 4 below, to the SAA reported to APRA. APRA considers this an appropriate basis on which to benchmark returns and the ability of an RSE licensee to develop and implement an effective investment strategy. It is important to note that the SRP is not intended to be an indicator of how an RSE licensee should invest; rather it provides a benchmark to assess returns that is suitable for the long time horizon of superannuation and is based on the product’s target risk-return expectations.

The SRP consists of a growth portfolio and a defensive portfolio utilising only equities, bonds and cash (Refer Table 3 below).

**Table 3. Growth and Defensive Portfolio (Asset breakdown)**

Growth Portfolio	%	Defensive Portfolio	%
Australian equity	50	Australian fixed interest	40
International equity (hedged)	25	International fixed interest	40
International equity (unhedged)	25	Australian Cash	20

A return is calculated for both the growth portfolio and the defensive portfolio by applying benchmark index returns (see Appendix B for details of indices used) for each asset class and the weightings in Table 3.

The returns on the growth and defensive portfolios are then combined to determine the benchmark return for each product using the specific growth / defensive asset allocation for each product/lifecycle stage.

**Table 4. Growth/Defensive Classification**

SAA Asset Class	Growth / Defensive classification
Equity, Listed Property, Listed Infrastructure	100% Growth
Unlisted Property, Unlisted Infrastructure	75% Growth, 25% Defensive
Commodities, Other	50% Growth, 50% Defensive
Fixed Interest, Cash	100% Defensive

Property and Infrastructure assets reported by RSE licensees with a “Not Applicable” classification have been treated as being 50% “Listed” and 50% “Unlisted”.

The NIR for each product/lifecycle stage is then compared to the return on its bespoke SRP to determine the return of the product/lifecycle stage relative to the SRP over the period (i.e. whether it under/outperformed the benchmark).

Appendix C provides an illustrative example of how the return of the SRP is calculated and measured relative to a product’s net investment return.

### **3.2.1 SAA benchmark portfolio**

The purpose of the SAA benchmark portfolio is to assess the value generated through an RSE licensee’s implementation of its investment strategy. The SAA benchmark portfolio has been created using the reported SAA for each product/lifecycle stage. The benchmark portfolio assumes investment in passive benchmarks for each asset class, with the exception of unlisted property and unlisted infrastructure. The asset class benchmarks adopted match the indices used in the annual performance test.

In undertaking its analysis, APRA has made a number of assumptions when mapping the reported SAA’s. In particular, a benchmark of 50% domestic and 50% international has been used for asset classes where no domicile has been reported. APRA has also used the reported currency hedging ratios for the International Equities asset class in calculating the performance of the SAA reference portfolio. Fully hedged benchmarks have been used by APRA for international property, infrastructure and fixed interest, where industry practice is that hedging is close to 100%.

### **3.2.2 Adjustments**

To ensure an appropriate comparison can be made between the return of products/lifecycle stages to the reference and benchmark portfolios, APRA has incorporated adjustments in areas such as taxes and fees into the calculations of reference and benchmark portfolio returns. In particular:

- Each asset class benchmark has been adjusted to take into account long term assumptions for actual and accrued tax, based on respective income and capital components. The Australian equity benchmark index has also been adjusted to reflect franking credits. See Appendix B for the tax assumptions used in this analysis.
- Where available, APRA has selected global indices that are adjusted to reflect the withholding taxes applicable for an Australian institutional investor, to remove any potential understatement of index returns arising from the presence of double taxation treaties. APRA considers the use of these benchmarks to be good practice; particularly where there are wider implications such as the payment of performance based fees and remuneration.
- Fee assumptions have been incorporated into the index returns to reflect the fees that would be payable by an institutional investor investing passively. Estimates were derived using relevant exchange traded funds (ETFs) as a reference point. See Appendix B for the fee assumptions used in this analysis.

### 3.2.3 Net return and net investment return metrics

The comparison of return across MySuper products should take into account the investment objectives and level of risk for each product/lifecycle stage to enable a like-for-like assessment of returns. To reflect the varying risk profiles in the industry, the colours in the Heatmap indicate the return of each product/lifecycle stage relative to the returns of its peers based on the growth asset allocation of each product/lifecycle stage. To do this, APRA has taken the return of each product/lifecycle stage and plotted it against the respective average allocation to growth assets over the appropriate timeframe to inform a peer-derived trend line (see a sample NIR vs growth asset allocation chart below). The relative return of each product/lifecycle stage is measured based on the difference between its return and the appropriate reference point on the trend line. This provides a method of comparing the return of each MySuper product/lifecycle stage in the industry on a risk-adjusted basis.

APRA views this approach as superior to the standard industry practice of evaluating peer relative returns based on relatively wide growth allocation bands, which tends to unfairly disadvantage products at the lower end of each band.

**Figure 1. NIR peer comparison on a risk-adjusted basis**



### 3.3 Lifecycle strategies

A lifecycle MySuper product is one that aims to manage investment risk throughout a member's lifetime. The investment strategy of a lifecycle product is broadly characterised by its 'glidepath', which seeks to reflect a member's risk profile by having a larger exposure to growth assets when a member is young and de-risking to a higher proportion of defensive assets as a member is approaching retirement. Assessing the return of lifecycle MySuper products that are implemented through a number of lifecycle stages is challenging, given the investment period analysed is generally shorter than the glidepath. In addition, comparing the return of lifecycle products is complex due to the variability in design and implementation approaches across different products.

The Heatmap assesses the return of each lifecycle stage based on the various metrics and also provides an overall assessment at the lifecycle product level. To assess returns at a product level, APRA has calculated a weighted average of the returns of the underlying lifecycle stages, based on the assets in each lifecycle stage on a quarterly basis<sup>5</sup>.

### 3.4 Combining the investment performance of products over time

Where a MySuper product has had a change in structure or authorisation over time, APRA may combine the investment return before the change with the investment return after the change to achieve one continuous return history. This may occur in two different situations:

1. ***Within-product changes:*** where there have been changes to the structure or nature of the product (for example, single strategy to lifecycle) but the product continues under an existing MySuper authorisation.
2. ***Across-product changes:*** where a product has ceased and members have been transferred into a new product under a new MySuper authorisation.

APRA has developed a number of principles and a methodology for combining the returns of multiple products over time which have been published in an Information Paper<sup>6</sup> on APRA's website.

### 3.5 Colour overlay

The colour scale displayed in the Heatmap is based on the return of the product/lifecycle stage relative to different metrics. The method for colouring each metric is as follows:

- Net Return: Net Return relative to the appropriate reference point in the Net Return / growth asset allocation trend line
- NIR: NIR relative to the appropriate reference point in the NIR / growth asset allocation trend line
- SRP: NIR relative to the SRP
- SAA benchmark portfolio: NIR relative to the SAA benchmark portfolio

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<sup>5</sup> This methodology is consistent with the lifestage weight methodology in the regulations covering the annual performance test.

<sup>6</sup> [Information Paper - Combining MySuper product performance histories - APRA's approach](#)

Colours are applied based on the level of relative return and in line with the colour scale below:



Adopting this approach provides a way of easily distinguishing products/lifecycle stages that are outperforming their reference points and highlights the products/lifecycle stages with returns below the relevant reference points. The highest concentration of colour is applied to the products/lifecycle stages that are delivering returns of more than 0.50% below the corresponding reference point.

### **3.6 The concise view**

The investment metric contained in the concise view of the Heatmap is the longest-term NIR available, measured on a peer relative determined basis as outlined above. NIR was chosen for the concise view as it measures the average investment return that the product/lifecycle stage has generated for members.

# Chapter 4 - Fees and costs

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The Heatmap provides insights into an RSE licensee's fees and costs structure, and its impact on outcomes for members with different account balances. The Heatmap includes metrics for the administration fees, and total fees and costs of MySuper products reported under *Reporting Standard SRS 703.0 Fees Disclosed* (SRS 703.0).<sup>7</sup> APRA expects that these fees and costs metrics will serve as a starting point for RSE licensees when assessing the outcomes delivered to members.

The level of fees and costs paid by a member will vary depending on the fees and costs structure (dollar- or asset-based, and fee caps) adopted by an RSE licensee and the individual account balance of the member. The Heatmap therefore shows fees and costs for a range of account balance levels. The range of account balances used has been determined based on the distribution of MySuper member accounts in the industry: \$10,000; \$25,000; \$50,000; \$100,000 and \$250,000 provides coverage of the majority of account balances in the MySuper population.

APRA acknowledges that different investment approaches and strategies incur different levels of investment fees and indirect costs. This needs to be considered when assessing the overall outcomes delivered to members given the particular investment strategy adopted.

Assessing the fees and costs for lifecycle products is complex due to different fees and costs charged at the lifestage level.<sup>8</sup> The Heatmap adopts a simplified approach and displays the product-level administration fee and uses a representative lifestage (with the highest number of member accounts) to assess the total fees and costs reported under SRS 703.0 for the product. This allows for a more comparable product-level assessment of the member's fees and costs experience between single-strategy and lifecycle products.

## 4.1.1 Adjustments

Lifecycle products may have distinct fees and costs for each lifecycle stage, which cannot be reported under SRS 703.0. APRA has separately collected data for each lifecycle stage of each MySuper product from the latest PDS to provide a more holistic basis for assessing the fees and costs of these products in the Heatmap.

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<sup>7</sup> Total Fees and Costs includes Administration Fees, Investment Fees and Indirect Cost Ratio.

<sup>8</sup> The Indirect cost ratio represents the ratio of the total of the indirect costs for a MySuper product, to the total average net assets of the superannuation entity attributed to the MySuper product.

## 4.2 Colour overlay

The colour scale has been applied on the fees and costs for the representative account balances of \$10,000; \$25,000; \$50,000; \$100,000 and \$250,000 using statistical methods to define thresholds.

The graduating colour scale for fees and costs shows the relative positioning of a product's fees and costs based on Median Absolute Deviations (MAD). MAD is used as the measure of variability, to reduce the impact of distortion of outlier values that impact measures such as standard deviation.

**Table 5. Distributions across the representative member account balances**

Representative Member Account Balance	Colour Graduation
Administration fees disclosed (% of \$10,000 account balance)	1.00% 1.20% 1.40%
Administration fees disclosed (% of \$25,000 account balance)	0.50% 0.65% 0.80%
Administration fees disclosed (% of \$50,000 account balance)	0.35% 0.48% 0.60%
Administration fees disclosed (% of \$100,000 account balance)	0.25% 0.38% 0.50%
Administration fees disclosed (% of \$250,000 account balance)	0.20% 0.30% 0.40%
Total fees and costs disclosed (% of \$10,000 account balance)	1.80% 2.00% 2.20%
Total fees and costs disclosed (% of \$25,000 account balance)	1.30% 1.45% 1.60%

<sup>9</sup> Colour graduation is based on the distribution of reported fees and costs data in the 2019 MySuper Heatmap. The threshold levels have remained unchanged, however threshold levels are reviewed for each subsequent release of the Heatmap.

Representative Member Account Balance	Colour Graduation
Total fees and costs disclosed (% of \$50,000 account balance)	 <p data-bbox="608 398 1225 427">1.15%                      1.28%                      1.40%</p>
Total fees and costs disclosed (% of \$100,000 account balance)	 <p data-bbox="608 526 1225 555">1.05%                      1.18%                      1.30%</p>
Total fees and costs disclosed (% of \$250,000 account balance)	 <p data-bbox="608 654 1225 683">1.00%                      1.10%                      1.20%</p>

### 4.3 The concise view

To provide the most meaningful insights into fees and costs, it is important to consider the impact of both administration fees, and total fees and costs for different account balances. The concise view of the Heatmap shows the administration fees, and total fees and costs for the \$50,000 account balance, which reflects a representative member in the MySuper Product Dashboard.

# Chapter 5 - Sustainability of member outcomes

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Sustainability of member outcomes refers to an RSE licensee's ability to sustain its member outcomes into the future and address areas requiring improvement. The sustainability metrics, in themselves, are not a direct measure of outcomes, but instead are an indicator of an RSE licensee's likely ability to continue to deliver quality member outcomes into the future. The sustainability metrics are calculated at the RSE level.

For example, an RSE that is experiencing a significant loss of members leading to negative account growth may as a consequence, see a decline in its fee revenue. As a result, the RSE licensee may have to take steps to address the loss of revenue that may impact the outcomes they are providing to its members, including changing the fee model, reducing the services provided to members, or increasing investment in technological capabilities.

## 5.1 Scale as a driver of sustainability

Scale of an RSE can influence an RSE licensee's ability to optimise investment outcomes through access to a range of asset classes, as well as its ability to spread fixed costs across a broader member base. Accordingly, APRA has used two representative scale measures (outlined below) to provide a baseline for considering how trend metrics may hinder the ability of an RSE licensee to continue to deliver quality member outcomes in the longer term.

- The **net assets available for members' benefits** includes defined contribution member balances in both the Accumulation and Pension phases, defined benefit entitlements and reserves.
- The **total number of member accounts**, as the number of member accounts will have a material impact on an RSE licensee's ability to spread its fixed costs, affecting its operating efficiency and the appropriateness (or otherwise) of its ongoing fee structure.

## 5.2 Rolling 3-year trend metrics

The Heatmap contains the following rolling 3-year trend metrics – Total Accounts Growth Rate, Net Cash Flow Ratio and Net Rollover Ratio. These three metrics provide insights into trends that are likely to impact sustainability of member outcomes, particularly when considering scale. The metrics are measured at the RSE level. As such, for funds that appear on both the Choice Heatmap and MySuper Heatmaps, the metrics and colour thresholds are identical. To provide more reliable indications of underlying trends, adjustments have been applied to these metrics for specific RSEs that consolidated with other RSEs during the 3-year window.

The trend metrics are presented on a 3-year annualised basis to limit the impact of the data from a single abnormal year and the influence of past data, which may no longer have a bearing on the future direction of the RSE.

### 5.2.1 Adjusted Total Accounts Growth Rate

The Adjusted Total Accounts Growth Rate metric provides a measure of the member growth rate of an RSE over the preceding 3 years.

### 5.2.2 Net Cash Flow Ratio

The Net Cash Flow Ratio metric is a measure of an RSE's overall growth in member benefits, which is based on data relating to member and employer-initiated transactions, such as Superannuation Guarantee (SG) contributions.<sup>10</sup> Using data relating to member and employer initiated transactions provides an understanding of how the total assets of an RSE are growing (or reducing) as a result of employers' and members' active decisions and engagement with the RSE.

### 5.2.3 Net Rollover Ratio

Rollovers represent amounts transferred between different RSEs (excluding SFTs). The Net Rollover Ratio metric provides a measure of net member benefit flows due to active decisions made by members to transfer into or out of the RSE. It is an indicator of the ability of the RSE to attract and retain members.

## 5.3 Colour overlay

A solid binary 'heat' colour of amber is shown on the Heatmap for each of the sustainability trend metrics when an RSE licensee meets any of the combined threshold levels shown below. These threshold levels are established using both the current scale measure and accompanying trend. Refer to Tables 6, 7 and 8.

**Table 6. Net assets in billions (bn) - Net Cash Flow Ratio**

Net assets available for members' benefits	Net Cash Flow Ratio
> \$5bn	<-10%
\$2bn - \$5bn	<-7.5%
\$1bn - \$2bn	<-5%
<\$1bn	<0%

For example, an RSE with net assets of \$40bn with a Net Cash Flow Ratio of -16% on average over the last three years would receive an amber flag.

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<sup>10</sup> The Net Cash Flow Ratio metric does not capture investment return or fees and costs, as they are already assessed under the investment return and fees and costs sections of the Heatmap.

**Table 7. Net assets - Net Rollover Ratio**

Net assets available for members' benefits	Net Rollover Ratio
> \$5bn	<-10%
\$2bn - \$5bn	<-7.5%
\$1bn - \$2bn	<-5%
<\$1bn	<0%

For example, an RSE with net assets of \$4bn with a Net Rollover Ratio of -8% on average over the last three years would receive an amber flag.

**Table 8. Total Member Accounts – Adjusted Total Accounts Growth Rate**

Total Member Accounts	Adjusted Total Account Growth Rate
>20,000	<-10%
15,000 – 20,000	<-7.5%
10,000 – 15,000	<-5%
<10,000	<0%

For example, an RSE with 9,000 accounts with an average annual adjusted total account growth rate of -1% over the last three years would receive an amber flag.

## 5.4 The concise view

The Total Accounts Growth Rate and Net Cash Flow Ratio are included in the concise view for sustainability of member outcomes.

# Appendix A – Heatmap metrics

Metric	Formula	Purpose
<b>Annual performance test measure</b>		
Annual performance test measure	<p><i>Annual performance assessment measure</i>  <math>= (\text{Actual return} - \text{Benchmark return}) + (\text{Benchmark RAFE} - \text{Actual RAFE})</math></p> <p>Where RAFE stands for representative administration fees and expenses.</p> <p>The methodology for the annual performance test can be found in the Superannuation Industry (Supervision) Regulations 1994 (legislation.gov.au).</p>	The annual performance test sets a clear, legislated performance benchmark that superannuation products are required to meet or otherwise face specific legislated consequences. The test incorporates investment performance and administration fees.
<b>Investment Return Metrics</b>		
Net return p.a.	$n \text{ year } NR \text{ p.a.} = \left\{ \prod_{t=1}^{4n} (1 + NR_t) \right\}^{\frac{1}{n}} - 1$ <p>Where <math>NR_t</math> is the quarterly Net Return for quarter t and n is either 3 years, 5 years or 8 years</p>	Return of the product/lifecycle stage after all fees, costs and taxes have been deducted for the \$50,000 representative member.
Net investment return p.a.	$n \text{ year } NIR \text{ p.a.} = \left\{ \prod_{t=1}^{4n} (1 + NIR_t) \right\}^{\frac{1}{n}} - 1$ <p>Where <math>NIR_t</math> is the quarterly Net Investment Return for quarter t and n is either 3 years, 5 years or 8 years</p>	Return of the product/lifecycle stage after investment-related fees, costs and taxes have been deducted.
Net investment return relative to SRP p.a.	<p><i>Performance relative to simple reference portfolio</i>  <math>= n \text{ year } NIR \text{ p.a.} - n \text{ year } \text{Simple Reference Portfolio return p.a.}</math>            where  <math>n \text{ year } \text{Simple Reference Portfolio return p.a.}</math></p> $= \left\{ \prod_{t=1}^{4n} [1 + (W_{G,t-1} \times R_{G,t}) + (W_{D,t-1} \times R_{D,t})] \right\}^{\frac{1}{n}} - 1$	This metric creates a bespoke reference portfolio for the product based on its allocation to growth assets (based on a consistent definition). The reference portfolio is

Metric	Formula	Purpose
	<p><math>W_{G,t-1}</math> and <math>W_{D,t-1}</math> are the product or life stage's strategic allocation to growth and defensive assets at end of quarter t -1 (or start of quarter t);</p> <p><math>R_{G,t}</math> and <math>R_{D,t}</math> is the quarterly index return of the growth and defensive portion of the SRP (adjusted for fees and taxes) to time t;</p> <p>n is either 3 years, 5 years or 7 years</p> <p><i>The SRP assumes rebalancing on a quarterly basis.</i></p> <p><i>The return on the growth portfolio is calculated as:</i></p> $R_{G,t} = \sum_{l=1}^3 \left\{ \left( \frac{1 + \text{Index}_{l,t}}{(1 + \text{Fee}_l)^{0.25}} - 1 \right) \times (1 - \text{ETR}_l) \times w_{G,l} \right\}$ <p><math>\text{Index}_{l,t}</math> is the quarterly return on the index used to benchmark asset class l for quarter t;</p> <p><math>\text{Fee}_l</math> is the fee assumed for asset class l;</p> <p><math>\text{ETR}_l</math> is the assumed effective tax rate for asset class l;</p> <p><math>w_{G,l}</math> is the weight to asset class l in the Growth portfolio. The asset classes in Growth portfolio are Australian equities, International equities (hedged) and International equities (unhedged), as defined in Table 3.</p> <p><i>The return on the defensive portfolio is calculated as:</i></p> $R_{D,t} = \sum_{l=1}^3 \left\{ \left( \frac{1 + \text{Index}_{l,t}}{(1 + \text{Fee}_l)^{0.25}} - 1 \right) \times (1 - \text{ETR}_l) \times w_{D,l} \right\}$ <p><math>\text{Index}_{l,t}</math> is the quarterly return on the index used to benchmark asset class l for quarter t;</p> <p><math>\text{Fee}_l</math> is the fee assumed for asset class l;</p> <p><math>\text{ETR}_l</math> is the assumed effective tax rate for asset class l;</p> <p><math>w_{D,l}</math> is the weight to asset class l in the Defensive portfolio. The asset classes in Defensive portfolio are Australian fixed interest, International fixed interest (hedged) and Cash, as defined in Table 3.</p>	<p>a notional, simple, low cost portfolio consisting only of equities, bonds and cash.</p>
<p>Net Investment Return relative to SAA benchmark portfolio p.a.</p>	<p><i>Performance relative to SAA benchmark portfolio</i>  = n year NIR p.a. – n year SAA benchmark portfolio return p.a.</p> <p>where</p> <p>n year SAA benchmark portfolio return p.a. =</p> $\left[ \prod_{t=1}^{4n} \left( 1 + \sum_{l=1}^A (SAA_{l,t-1} \times R_{l,t}) \right) \right]^{\frac{1}{n}} - 1$ <p><math>SAA_{l,t-1}</math> is the strategic asset allocation to asset class l at end of quarter t -1 (or start of quarter t);</p> <p><math>R_{l,t}</math> is the return on the index used to benchmark asset class l for quarter t after adjustments for the impact of fees and taxes;</p> <p>n is either 3 years, 5 years or 8 years;</p> <p>A is equal to the total number of asset classes</p> $R_{l,t} = \left\{ \frac{(1 + \text{Index}_{l,t})}{(1 + \text{Fee}_l)^{0.25}} - 1 \right\} \times (1 - \text{ETR}_l)$	<p>This metric assesses the value added through an RSE licensee's implementation of the product's strategic asset allocation.</p>

Metric	Formula	Purpose
	<p><math>Index_{l,t}</math> is the quarterly return on the index used to benchmark asset class l for quarter t,  <math>Fee_l</math> is the fee assumed for asset class l,  <math>ETR_l</math> is the assumed effective tax rate for asset class l</p>	
<b>Fees and Cost Metrics</b>		
Administration fees and costs	$\text{Minimum} \left( 100 \times \frac{\$ \text{ admin fee}}{\text{account balance}} + \% \text{ admin fee}, \frac{\$ \text{ admin fee cap}}{\text{account balance}} \right)$	The forward-looking impact of administration fees a member can expect to be charged on their account balance.
Total fees and costs	Administration fee (% of account balance) + ICR (% of account balance) + Investment fee disclosed (% of account balance)	Provides a forward-looking lens on the total fees members can expect to be charged on their account balance.
<b>Sustainability of Member Outcomes Metrics</b>		
Total accounts	<p>3 year adjusted total account growth rate</p> $= \frac{1}{3} \sum_{t=1}^3 \left[ \frac{(\text{Total Accounts}_t + \text{Consolidated Accounts}_t - \text{SFT In}_t + \text{SFT Out}_t)}{\text{Total Accounts}_{t-1} - 1} \right]$	Average inherent growth rate of total member accounts over last 3 years, adjusted for consolidations and SFTs.
Net Cash Flow Ratio	$3 \text{ year NCF ratio} = \frac{1}{3} \sum_{t=1}^3 \left[ \frac{\left( \begin{array}{l} \text{Member benefit flows in}_t \\ + \text{Insurance related inflows}_t \\ - \text{Insurance related outflows}_t \\ - \text{Member benefit flows out}_t \end{array} \right)}{\text{Cashflow adjusted net assets}_t} \right]$	Measure of an RSE's asset growth removing the impact of investment returns and fees and costs. Rollovers are excluded from the numerator definitions of member benefit flows.
Net Rollover Ratio	$3 \text{ year Net Rollover Ratio} = \frac{1}{3} \sum_{t=1}^3 \left[ \frac{(\text{Rollovers in}_t - \text{Rollovers out}_t)}{\text{Cashflow adjusted net assets}_t} \right]$	Measure of members' preference for an RSE and level of active decisions to

Metric	Formula	Purpose
		roll money into or out of an RSE. This measure provides additional insights into the net cash flows of an RSE.

## Appendix B – Indices

The following indices<sup>11</sup> were used when creating the reference and benchmark portfolios:

Asset Class	Index	Fee Assumption	Assumed effective tax rate	Bloomberg Ticker
Australian Equity	S&P/ASX 300 Total Return Index	0.05%	0.00%	ASA52
International Equity (hedged)	MSCI All Country World Ex-Australia Equities Index with Special Tax (100% hedged to AUD)	0.11%	14.00%	DE725341
International Equity (unhedged)	MSCI All Country World Ex-Australia Equities Index with Special Tax (unhedged in AUD)	0.09%	14.00%	DN714533
Australian Listed Property	S&P/ASX 300 A-REIT Total Return Index	0.12%	14.00%	ASA6PROP
International Listed Property	FTSE EPRA Nareit Developed ex Aus Rental 100% Hedged to AUD Net Tax (Super) Index	0.22%	14.00%	RAHRSAH
Australian Listed Infrastructure	FTSE Developed Core Infrastructure 100% Hedged to AUD Net Tax (Super) Index	0.26%	14.00%	FDCIISAH
International Listed Infrastructure	FTSE Developed Core Infrastructure 100% Hedged to AUD Net Tax (Super) Index	0.26%	14.00%	FDCIISAH
Australian Unlisted Property	MSCI/Mercer Australia Core Wholesale Monthly Property Fund Index – NAV-Weighted Post-Fee Total Return (All Funds)	0.00%	14.00%	N/A
International Unlisted Property	MSCI/Mercer Australia Core Wholesale Monthly Property Fund Index – NAV-Weighted Post-Fee Total Return (All Funds)	0.00%	14.00%	N/A
Australian Unlisted Infrastructure	MSCI Australia Quarterly Private Infrastructure Fund Index	0.00%	14.00%	N/A

<sup>11</sup> Indices will be reviewed on a regular basis for appropriateness.

Asset Class	Index	Fee Assumption	Assumed effective tax rate	Bloomberg Ticker
	(Unfrozen) – NAV-Weighted Post-Fee Total Return (All Funds)			
International Unlisted Infrastructure	MSCI Australia Quarterly Private Infrastructure Fund Index (Unfrozen) – NAV-Weighted Post-Fee Total Return (All Funds)	0.00%	14.00%	N/A
Australian Fixed Interest	Bloomberg Ausbond Composite 0+ Index	0.10%	15.00%	BACM0
International Fixed Interest	Bloomberg Global Aggregate Index (hedged in AUD)	0.10%	15.00%	LEGATRAH
Australian Cash	Bloomberg Ausbond Bank Bill Index	0.04%	15.00%	BAUBIL
International Cash	Bloomberg Ausbond Bank Bill Index	0.04%	15.00%	BAUBIL
Other (assets categorised as Other / Commodities)	25% International Equity (hedged), 25% International Equity (unhedged), 50% International Fixed Interest	As per the underlying asset classes		

The benchmarks chosen are considered to be representative of the investable market, appropriate for MySuper and relevant to an Australian superannuation investor. Total return indices (that is, returns inclusive of dividends as well as capital gains) have been used.

## Index provider acknowledgements

**Source:** “Bloomberg®”, Bloomberg Ausbond Bank Bill Index, Bloomberg Ausbond Composite 0+ Index and Bloomberg Global Aggregate Index (hedged in AUD) are service marks of Bloomberg Finance L.P. and its affiliates, including Bloomberg Index Services Limited (“BISL”), the administrator of the index (collectively, “Bloomberg”) and have been licensed for use for certain purposes by APRA. Bloomberg is not affiliated with APRA and Bloomberg does not approve, endorse, review, or recommend APRA’s heatmaps. Bloomberg does not guarantee the timeliness, accurateness, or completeness of any data or information relating to APRA’s heatmaps.

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**Source:** The S&P/ASX 300 Total Return Index and S&P/ASX 300 A-REIT Total Return Index are products of S&P Dow Jones Indices LLC or its affiliates ("SPDJI") and ASX Operations Pty Ltd., and has been licensed for use by the Australian Prudential Regulation Authority ("APRA"). Standard & Poor's® and S&P® are registered trademarks of Standard & Poor's Financial Services LLC ("S&P"); Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); ASX® are trademarks of the ASX Operations Pty Ltd. and these trademarks have been licensed for use by SPDJI and sublicensed for certain purposes by APRA. APRA's publications are not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, their respective affiliates, or ASX Operations Pty Ltd. and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of the S&P/ASX 300 Total Return Index and S&P/ASX 300 A-REIT Total Return Index.

**Source:** The blended returns are calculated by APRA using end of reporting period index level values licensed from MSCI ("MSCI Data"). For the avoidance of doubt, MSCI is not the benchmark "administrator" for, or a "contributor", "submitter" or "supervised contributor" to, the blended returns, and the MSCI Data is not considered a "contribution" or "submission" in relation to the blended returns, as those terms may be defined in any rules, laws, regulations, legislation or international standards. MSCI Data is provided "AS IS" without warranty or liability and no copying or distribution is permitted. MSCI does not make any representation regarding the advisability of any investment or strategy and does not sponsor, promote, issue, sell or otherwise recommend or endorse any investment or strategy, including any financial products or strategies based on, tracking or otherwise utilizing any MSCI Data, models, analytics or other materials or information.

## Appendix C – Example SRP calculation

Product A's strategic asset allocation (SAA) is listed in the table below and has remained unchanged over the analysed period. Based on Product A's SAA, its allocations to growth and defensive assets, based on the definition used in this analysis, are as follows:

Asset class	SAA	Growth asset allocation	Defensive asset allocation
Australian Equity	25%	25%	0%
International Equity (hedged)	15%	15%	0%
International Equity (unhedged)	15%	15%	0%
Australian Unlisted Property	10%	7.5%	2.5%
Australian Unlisted Infrastructure	5%	3.75%	1.25%
Australian Fixed Interest	10%	0%	10%
International Fixed Interest	10%	0%	10%
Cash	5%	0%	5%
Other	5%	2.5%	2.5%
<b>Total</b>	<b>100%</b>	<b>68.75%</b>	<b>31.25%</b>

The returns on the Growth and Defensive portfolios within the SRP are calculated as follows:

Asset class	Allocation	Sample annualised index returns (net of fees and taxes)	Return calculation
International Equity (unhedged)	25%	10%	$25\% \times 10\% = 2.5\%$
International Equity (hedged)	25%	12%	$25\% \times 12\% = 3\%$
Australian Equity	50%	8%	$50\% \times 8\% = 4\%$
<b>Return on Growth Portfolio</b>			<b>9.5% p.a.</b>
Australian Fixed Interest	40%	5%	$40\% \times 5\% = 2\%$
International Fixed Interest	40%	6%	$40\% \times 6\% = 2.4\%$
Cash	20%	2%	$20\% \times 2\% = 0.4\%$
<b>Return on Defensive Portfolio</b>			<b>4.8% p.a.</b>

The return on the bespoke SRP for Product A over the period is 8.0% p.a. ( $68.75\% \times 9.5\% + 31.25\% \times 4.8\% = 8.0\% \text{ p.a.}$ ).

Assuming Product A has a Net Investment Return of 9.0% p.a. over the period, its performance relative to SRP is 1.0% p.a. ( $9.0\% - 8.0\% = 1.0\% \text{ p.a.}$ ).



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