



Economic Regulation Authority

Determination on the 2025 weighted average cost of capital for the freight and urban railway networks, and for Pilbara railways

27 August 2025

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1. Introduction

1. Each year, the Economic Regulation Authority determines a long-term Weighted Average Cost of Capital (WACC) to be applied in the establishment of capital costs for regulated railways in that year.
2. Regulated railways are those listed in Schedule 1 to the *Railways (Access) Code 2000*, and are currently the Public Transport Authority network, the Arc Infrastructure network, and The Pilbara Infrastructure and Roy Hill Infrastructure railways (the Pilbara railways).

1.1 Requirements of the Code

3. Schedule 4, clause 3(1) of the Code requires the ERA to make an annual calculation, as at 30 June, of the WACC to be applied to determine the costs for each of the rail networks covered under Schedule 1 of the Code. The ERA must then publish its determination of the WACC for each rail network in the Government Gazette as soon as practicable after it is made (Schedule 4, clause 3(1)(b)):
- 3 Regulator to determine weighted average cost of capital
 - (1) For the purposes of clause 2(4)(a), the Regulator is to –
 - (a) determine, as at 30 June in each year, the weighted average cost of capital for each of –
 - (i) the railway infrastructure associated with the urban network described in items 49, 50A, 50 and 51 in Schedule 1;
 - (ia) the railway infrastructure associated with the part of the railways network described in item 52 in that Schedule; and
 - (ii) the railway infrastructure associated with the railways network described in the other items in that Schedule;
 - and
 - (b) publish notice of each such determination in the *Gazette* as soon as is practicable after it is made.
 4. The Code also requires the ERA to undertake public consultation every fifth year, commencing in 2003, before determining the WACC values for that year (Schedule 4). The ERA undertook this five-yearly public consultation process prior to making its WACC determination for 30 June 2023.
 5. This determination updates the annual calculation, as at 30 June 2025, of the WACC to be applied to determine the costs for each of the rail networks covered under Schedule 1 of the Code for 2025/26.
 6. The update follows the method set out in the 2023 rail WACC final determination.¹

¹ Economic Regulation Authority, *Final Determination 2023 Weighted Average Cost of Capital for the Freight and Urban Networks, and the Pilbara Railways*, September 2023.

1.2 The 2023 rail WACC review

7. The ERA undertook public consultation prior to making its annual WACC determination for the regulatory year commencing 1 July 2023.
8. The ERA released the final determination in relation to the rail WACC method review in September 2023.² The final determination set out the method for the following regulated rail networks:
 - Public Transport Authority
 - Arc Infrastructure
 - The Pilbara railways.

² Economic Regulation Authority, *Final Determination 2023 Weighted Average Cost of Capital for the Freight and Urban Networks, and the Pilbara Railways*, September 2023.

2. The 2025 rail WACC

9. The ERA has determined the following real pre-tax 2025 rail WACC values, to apply to the 2025 regulatory year, from 1 July 2025 to 30 June 2026.
 - Public Transport Authority: 5.31 per cent
 - Arc Infrastructure: 7.79 per cent
 - The Pilbara railways: 9.25 per cent.
10. The annual rail WACC estimate involves the recalculation of the risk free rate, debt risk premium and forecast inflation every year to reflect market conditions. Other WACC parameters tend to be more stable and will remain fixed until the next rail WACC method review.
11. The complete set of parameter inputs contributing to these estimates is shown in Table 1.
12. The complete set of international bond samples contributing to the debt risk premium estimates is shown in Appendix 1.
13. The detailed debt risk premium estimates across the three rail businesses are shown in Appendix 2.

Table 1: The ERA's final determination of the rail WACC for the period as at 30 June 2025

	Public Transport Authority	Arc Infrastructure	Pilbara railways
Cost of equity parameters			
<i>Nominal risk free rate (%)</i>	4.34	4.34	4.34
Market risk premium (%)	5.9	5.9	5.9
Equity beta	0.6	0.9	1.1
Nominal after tax return on equity (%)	7.88	9.65	10.83
Cost of debt parameters			
<i>Nominal risk free rate (%)</i>	4.34	4.34	4.34
Benchmark credit rating	A	BBB+	BBB-
Term of debt (year)	10	10	10
<i>Debt risk premium (%)</i>	1.225	1.547	2.140
Debt issuing costs (%)	0.165	0.165	0.165
Nominal return of debt (%)	5.73	6.05	6.65
Other parameters			
Debt proportion (gearing) (%)	50	25	20
<i>Forecast inflation rate (%)</i>	2.08	2.08	2.08
Gamma	0.5	0.5	0.5
Corporate tax rate (%)	30	30	30
Weighted average cost of capital (%)			
Nominal after-tax WACC	6.81	8.75	9.99
Real after-tax WACC	4.63	6.53	7.75
Nominal pre-tax WACC	7.50	10.03	11.52
Real pre-tax WACC	5.31	7.79	9.25

Source: ERA analysis. Grey italicised cells are subject to annual update to reflect market conditions.

Appendix 1 International bond sample

Table 2: Public Transport Authority sample

Ticker	Issuer (Short name)
BM572667 Corp	AGI Finance Pty Ltd
BQ008260 Corp	AGI Finance Pty Ltd
YT483937 Corp	AGI Finance Pty Ltd
ZJ001370 Corp	AGI Finance Pty Ltd
ZJ494337 Corp	AGI Finance Pty Ltd
BP151662 Corp	Australian Gas Networks Ltd
BP151663 Corp	Australian Gas Networks Ltd
YQ430838 Corp	Australian Gas Networks Ltd
EJ372146 Corp	BHP Billiton Finance Ltd
EJ372241 Corp	BHP Billiton Finance Ltd
EJ651064 Corp	BHP Billiton Finance Ltd
EK875768 Corp	BHP Billiton Finance Ltd
EJ038718 Corp	BHP Billiton Finance USA Ltd
EJ855408 Corp	BHP Billiton Finance USA Ltd
ZI759553 Corp	BHP Billiton Finance USA Ltd
ZI759557 Corp	BHP Billiton Finance USA Ltd
ZI759562 Corp	BHP Billiton Finance USA Ltd
ZI759568 Corp	BHP Billiton Finance USA Ltd
ZL271656 Corp	BHP Billiton Finance USA Ltd
ZL271657 Corp	BHP Billiton Finance USA Ltd
BW018087 Corp	CSL Finance PLC
BW018337 Corp	CSL Finance PLC
BW021641 Corp	CSL Finance PLC
BW023383 Corp	CSL Finance PLC
BW023426 Corp	CSL Finance PLC
ZD961667 Corp	CSL Finance PLC
ZD961668 Corp	CSL Finance PLC
BG207158 Corp	ETSA Utilities Finance Pty Ltd

Ticker	Issuer (Short name)
YQ512535 Corp	ETSA Utilities Finance Pty Ltd
YR909711 Corp	ETSA Utilities Finance Pty Ltd
ZB945450 Corp	ETSA Utilities Finance Pty Ltd
ZK181186 Corp	ETSA Utilities Finance Pty Ltd
ZI107354 Corp	La Trobe University
AZ151179 Corp	Optus Finance Pty Ltd
BK140531 Corp	Optus Finance Pty Ltd
BS422627 Corp	Optus Finance Pty Ltd
ZK040719 Corp	Optus Finance Pty Ltd
YQ148687 Corp	PACCAR Financial Pty Ltd
BS198166 Corp	Rio Tinto Finance USA Ltd
EH437851 Corp	Rio Tinto Finance USA Ltd
EI452667 Corp	Rio Tinto Finance USA Ltd
EJ101048 Corp	Rio Tinto Finance USA PLC
EJ329466 Corp	Rio Tinto Finance USA PLC
YQ306725 Corp	Rio Tinto Finance USA PLC
YQ306726 Corp	Rio Tinto Finance USA PLC
YQ306728 Corp	Rio Tinto Finance USA PLC
YQ306729 Corp	Rio Tinto Finance USA PLC
YQ306733 Corp	Rio Tinto Finance USA PLC
YQ306735 Corp	Rio Tinto Finance USA PLC
YQ306737 Corp	Rio Tinto Finance USA PLC
ZL449457 Corp	Rio Tinto Finance USA PLC
ZL449461 Corp	Rio Tinto Finance USA PLC
AP811577 Corp	Telstra Group Ltd
AX729250 Corp	Telstra Group Ltd
BH885805 Corp	Telstra Group Ltd
YV453818 Corp	Telstra Group Ltd
YV527414 Corp	Telstra Group Ltd
ZD173756 Corp	Telstra Group Ltd

Ticker	Issuer (Short name)
ZD173757 Corp	Telstra Group Ltd
ZK143698 Corp	Telstra Group Ltd
ZL342825 Corp	Telstra Group Ltd
BH621666 Corp	Toyota Finance Australia Ltd
BT335203 Corp	Toyota Finance Australia Ltd
YS593317 Corp	Toyota Finance Australia Ltd
YS593318 Corp	Toyota Finance Australia Ltd
YV320967 Corp	Toyota Finance Australia Ltd
YV698069 Corp	Toyota Finance Australia Ltd
YV698075 Corp	Toyota Finance Australia Ltd
YV698078 Corp	Toyota Finance Australia Ltd
ZD639841 Corp	Toyota Finance Australia Ltd
ZI799370 Corp	Toyota Finance Australia Ltd
ZL951152 Corp	Toyota Finance Australia Ltd
YS745587 Corp	United Energy Distribution Pty Ltd
ZR723028 Corp	United Energy Distribution Pty Ltd
AO674434 Corp	Victoria Power Networks Finance Pty Ltd
AR868580 Corp	Victoria Power Networks Finance Pty Ltd
AS177694 Corp	Victoria Power Networks Finance Pty Ltd
BM363856 Corp	Victoria Power Networks Finance Pty Ltd
BP046707 Corp	Victoria Power Networks Finance Pty Ltd
BQ269730 Corp	Victoria Power Networks Finance Pty Ltd
BQ959130 Corp	Victoria Power Networks Finance Pty Ltd
ZD437914 Corp	Victoria Power Networks Finance Pty Ltd
ZH408409 Corp	Victoria Power Networks Finance Pty Ltd
ZJ908084 Corp	Victoria Power Networks Finance Pty Ltd
BP960220 Corp	Wesfarmers Ltd
BP960362 Corp	Wesfarmers Ltd
BR897356 Corp	Wesfarmers Ltd
ED104267 Corp	WMC Finance USA Ltd

Table 3: Arc Infrastructure sample

Ticker	Issuer (Short name)
YX187560 Corp	Amcor UK Finance PLC
AM796866 Corp	APA Infrastructure Ltd
AX613734 Corp	APA Infrastructure Ltd
BJ085023 Corp	APA Infrastructure Ltd
BO485266 Corp	APA Infrastructure Ltd
BO485268 Corp	APA Infrastructure Ltd
BO485269 Corp	APA Infrastructure Ltd
EK805526 Corp	APA Infrastructure Ltd
EK807839 Corp	APA Infrastructure Ltd
YV698305 Corp	APA Infrastructure Ltd
YV698306 Corp	APA Infrastructure Ltd
YX146400 Corp	Arc Infrastructure Wa Pty Ltd
BO149790 Corp	Aurizon Finance Pty Ltd
YT556032 Corp	Aurizon Network Pty Ltd
ZO072844 Corp	Aurizon Network Pty Ltd
AS344445 Corp	Ausgrid Finance Pty Ltd
BR555926 Corp	Ausgrid Finance Pty Ltd
YS828936 Corp	Ausgrid Finance Pty Ltd
ZD669945 Corp	Ausgrid Finance Pty Ltd
AM402825 Corp	AusNet Services Holdings Pty Ltd
AR226811 Corp	AusNet Services Holdings Pty Ltd
AR408024 Corp	AusNet Services Holdings Pty Ltd
AR408188 Corp	AusNet Services Holdings Pty Ltd
AZ593934 Corp	AusNet Services Holdings Pty Ltd
BG070568 Corp	AusNet Services Holdings Pty Ltd
BK686424 Corp	AusNet Services Holdings Pty Ltd
BK686432 Corp	AusNet Services Holdings Pty Ltd
BK686434 Corp	AusNet Services Holdings Pty Ltd
BK686761 Corp	AusNet Services Holdings Pty Ltd

Ticker	Issuer (Short name)
BV508582 Corp	AusNet Services Holdings Pty Ltd
YQ870361 Corp	AusNet Services Holdings Pty Ltd
ZB809638 Corp	AusNet Services Holdings Pty Ltd
ZJ016898 Corp	AusNet Services Holdings Pty Ltd
ZK599882 Corp	AusNet Services Holdings Pty Ltd
ZD372774 Corp	Australia Pacific Airports Melbourne Pty Ltd
ZK475940 Corp	Australia Pacific Airports Melbourne Pty Ltd
AP138040 Corp	Brambles Finance PLC
ZL510320 Corp	Brambles Finance PLC
YQ674982 Corp	Brambles USA Inc
BK182364 Corp	Brisbane Airport Corp Pty Ltd
ZD308453 Corp	Brisbane Airport Corp Pty Ltd
YQ671442 Corp	Coles Group Treasury Pty Ltd
ZG257510 Corp	Coles Group Treasury Pty Ltd
ZG257511 Corp	Coles Group Treasury Pty Ltd
ZO057190 Corp	Coles Group Treasury Pty Ltd
ZQ348432 Corp	Coles Group Treasury Pty Ltd
AO547987 Corp	Dyno Nobel Inc
BO221169 Corp	Glencore Capital Finance DAC
BO221170 Corp	Glencore Capital Finance DAC
YO950411 Corp	Glencore Capital Finance DAC
ZB653276 Corp	Glencore Capital Finance DAC
ZO292719 Corp	Glencore Capital Finance DAC
EH033131 Corp	Glencore Finance Canada Ltd
EI866858 Corp	Glencore Finance Canada Ltd
EJ410755 Corp	Glencore Finance Canada Ltd
AP678913 Corp	Glencore Funding LLC
AX523734 Corp	Glencore Funding LLC
BP207479 Corp	Glencore Funding LLC
BP207481 Corp	Glencore Funding LLC

Ticker	Issuer (Short name)
BR468470 Corp	Glencore Funding LLC
BR468472 Corp	Glencore Funding LLC
YQ684413 Corp	Glencore Funding LLC
YQ684415 Corp	Glencore Funding LLC
YQ684417 Corp	Glencore Funding LLC
YQ757057 Corp	Glencore Funding LLC
ZB043895 Corp	Glencore Funding LLC
ZB043900 Corp	Glencore Funding LLC
ZB043902 Corp	Glencore Funding LLC
ZH164934 Corp	Glencore Funding LLC
ZH164936 Corp	Glencore Funding LLC
ZH164939 Corp	Glencore Funding LLC
ZK471937 Corp	Glencore Funding LLC
ZK471938 Corp	Glencore Funding LLC
ZO140969 Corp	Glencore Funding LLC
AP094552 Corp	Newcastle Coal Infrastructure Group Pty Ltd
BP375805 Corp	Newcastle Coal Infrastructure Group Pty Ltd
BJ368112 Corp	Newcrest Finance Pty Ltd
BJ368115 Corp	Newcrest Finance Pty Ltd
EI870493 Corp	Newcrest Finance Pty Ltd
YV766850 Corp	NSW Ports Finance Co Pty Ltd
YV766852 Corp	NSW Ports Finance Co Pty Ltd
BS376502 Corp	Port of Newcastle Investments Financing Pty Ltd
BK534344 Corp	QPH Finance Co Pty Ltd
BK534389 Corp	QPH Finance Co Pty Ltd
YR470757 Corp	QPH Finance Co Pty Ltd
YR470758 Corp	QPH Finance Co Pty Ltd
ZH661970 Corp	QPH Finance Co Pty Ltd
YT673568 Corp	Qube Treasury Pty Ltd
YT673569 Corp	Qube Treasury Pty Ltd

Ticker	Issuer (Short name)
BV712840 Corp	South32 Treasury Ltd
AS241348 Corp	Sydney Airport Finance Co Pty Ltd
YQ993142 Corp	Sydney Airport Finance Co Pty Ltd
ZB459059 Corp	Sydney Airport Finance Co Pty Ltd
ZB595113 Corp	Sydney Airport Finance Co Pty Ltd
ZB595114 Corp	Sydney Airport Finance Co Pty Ltd
ZK141749 Corp	Sydney Airport Finance Co Pty Ltd
AO953984 Corp	Transurban Finance Co Pty Ltd
AZ347082 Corp	Transurban Finance Co Pty Ltd
BH496203 Corp	Transurban Finance Co Pty Ltd
ZD419945 Corp	Transurban Finance Co Pty Ltd
ZD419952 Corp	Transurban Finance Co Pty Ltd
ZK169109 Corp	Transurban Finance Co Pty Ltd
ZO408308 Corp	Transurban Finance Co Pty Ltd
ZS562160 Corp	Transurban Finance Co Pty Ltd
AS197471 Corp	Transurban Queensland Finance Pty Ltd
BP151661 Corp	Transurban Queensland Finance Pty Ltd
YO705809 Corp	Transurban Queensland Finance Pty Ltd
YV316803 Corp	Transurban Queensland Finance Pty Ltd
ZH661603 Corp	Transurban Queensland Finance Pty Ltd
BO733251 Corp	WestConnex Finance Co Pty Ltd
ZH096775 Corp	WestConnex Finance Co Pty Ltd
AP044525 Corp	Woodside Finance Ltd
AX393924 Corp	Woodside Finance Ltd
YO502174 Corp	Woodside Finance Ltd
YO502175 Corp	Woodside Finance Ltd
YO502178 Corp	Woodside Finance Ltd
YO502179 Corp	Woodside Finance Ltd
YV527126 Corp	Woodside Finance Ltd
YV527127 Corp	Woodside Finance Ltd

Ticker	Issuer (Short name)
BJ442776 Corp	Woolworths Group Ltd
BR318092 Corp	Woolworths Group Ltd
BR642542 Corp	Woolworths Group Ltd
BR642545 Corp	Woolworths Group Ltd
YQ756204 Corp	Woolworths Group Ltd
YT406629 Corp	Woolworths Group Ltd
YQ386633 Corp	Worley Financial Services Pty Ltd
ZL914868 Corp	Worley Financial Services Pty Ltd

Table 4: The Pilbara railways sample

Ticker	Issuer (Short name)
YX187560 Corp	Amcor UK Finance PLC
AM796866 Corp	APA Infrastructure Ltd
AX613734 Corp	APA Infrastructure Ltd
BJ085023 Corp	APA Infrastructure Ltd
BO485266 Corp	APA Infrastructure Ltd
BO485268 Corp	APA Infrastructure Ltd
BO485269 Corp	APA Infrastructure Ltd
EK805526 Corp	APA Infrastructure Ltd
EK807839 Corp	APA Infrastructure Ltd
YV698305 Corp	APA Infrastructure Ltd
YV698306 Corp	APA Infrastructure Ltd
YX146400 Corp	Arc Infrastructure Wa Pty Ltd
YQ780770 Corp	Aurizon Holdings Ltd
YQ780954 Corp	Aurizon Holdings Ltd
AS344445 Corp	Ausgrid Finance Pty Ltd
BR555926 Corp	Ausgrid Finance Pty Ltd
YS828936 Corp	Ausgrid Finance Pty Ltd
ZD669945 Corp	Ausgrid Finance Pty Ltd
BO357863 Corp	AusNet Services Holdings Pty Ltd
YS699162 Corp	AusNet Services Holdings Pty Ltd
YS699248 Corp	AusNet Services Holdings Pty Ltd
ZO526158 Corp	AusNet Services Holdings Pty Ltd
BK182364 Corp	Brisbane Airport Corp Pty Ltd
ZD308453 Corp	Brisbane Airport Corp Pty Ltd
BP548462 Corp	CIMIC Finance Ltd
ZD823014 Corp	CIMIC Finance USA Pty Ltd
AO547987 Corp	Dyno Nobel Inc
ZL946367 Corp	Northern Star Resources Ltd
YV766850 Corp	NSW Ports Finance Co Pty Ltd

Ticker	Issuer (Short name)
YV766852 Corp	NSW Ports Finance Co Pty Ltd
AR620052 Corp	Pacific National Finance Pty Ltd
BR221504 Corp	Pacific National Finance Pty Ltd
ZR653898 Corp	Pacific National Finance Pty Ltd
BS376502 Corp	Port of Newcastle Investments Financing Pty Ltd
BK534344 Corp	QPH Finance Co Pty Ltd
BK534389 Corp	QPH Finance Co Pty Ltd
YR470757 Corp	QPH Finance Co Pty Ltd
YR470758 Corp	QPH Finance Co Pty Ltd
ZH661970 Corp	QPH Finance Co Pty Ltd
YT673568 Corp	Qube Treasury Pty Ltd
YT673569 Corp	Qube Treasury Pty Ltd
AO951980 Corp	Santos Finance Ltd
AX518215 Corp	Santos Finance Ltd
BP221177 Corp	Santos Finance Ltd
ZI773013 Corp	Santos Finance Ltd
AS197471 Corp	Transurban Queensland Finance Pty Ltd
BP151661 Corp	Transurban Queensland Finance Pty Ltd
YO705809 Corp	Transurban Queensland Finance Pty Ltd
YV316803 Corp	Transurban Queensland Finance Pty Ltd
ZH661603 Corp	Transurban Queensland Finance Pty Ltd
BJ442776 Corp	Woolworths Group Ltd
BR318092 Corp	Woolworths Group Ltd
BR642542 Corp	Woolworths Group Ltd
BR642545 Corp	Woolworths Group Ltd
YQ756204 Corp	Woolworths Group Ltd
YT406629 Corp	Woolworths Group Ltd
YQ386633 Corp	Worley Financial Services Pty Ltd
ZL914868 Corp	Worley Financial Services Pty Ltd

Appendix 2 Debt risk premium estimates

Debt risk premium estimation method

1. The ERA has estimated the debt risk premium as at 30 June 2025 consistent with the method detailed in the 2023 rail WACC final determination.
2. The ERA's revised bond yield approach involves the following steps:
 - Step 1: Determining the benchmark sample – Identifying a sample of relevant domestic and international corporate bonds that reflect the credit rating of the benchmark credit entity.
 - Step 2: Collecting data and converting yields to Australian dollar equivalents.
 - Step 3: Averaging yields over the averaging period – Calculating an average Australian dollar equivalent bond yield for each bond across the averaging period.
 - Step 4: Estimating curves – Estimating yield curves on this data by applying the Gaussian Kernel, Nelson-Siegel and Nelson-Siegel-Svensson techniques.
 - Step 5: Estimating cost of debt – calculating the 10-year return on debt estimate for each of the yield curves in the benchmark sample and augmented benchmark sample. Adjusting the bias of return on debt estimates from the augmented sample.
 - Step 6: Calculating the debt risk premium – calculating the debt risk premium by subtracting the 10-year risk free rate from the 10-year return on debt.
3. These steps determine the debt risk premium at a point in time, being the date of calculation.
4. To mitigate errors that may arise given the data limitations, the ERA augments the bond sample:
 - The Public Transport Authority sample is extended from the A benchmark to A+/A/A-.
 - The Arc Infrastructure sample is extended from the BBB+ benchmark to BBB+/BBB.
 - The Pilbara railways sample is extended from the BBB- benchmark to BBB/BBB-.
5. To mitigate potential bias, the ERA first establishes the direction of the bias:
 - If the bias in an augmented sample-based estimate is likely to be downward, the ERA uses the highest augmented sample-based estimate coming from the three estimation methods. This estimate is then averaged with the highest estimate from the original benchmark rated sample.
 - The opposite approach is conducted if the bias is likely to be upward.

2025 Debt risk premium estimates

6. The 2025 debt risk premium estimates for each of the Western Australian rail networks are summarised as below.

7. In 2025 the samples are augmented as follows:

- The Public Transport Authority sample was extended from the A benchmark to A+/A/A- increasing the sample from 14 to 88 bonds.
- The Arc Infrastructure sample was extended from the BBB+ benchmark to BBB+/BBB increasing the sample from 85 to 127 bonds.
- The Pilbara railways sample was extended from the BBB- benchmark to BBB/BBB- increasing the sample from 16 to 58 bonds.

Table 5: 2025 Public Transport Authority – Augmented and original benchmark sample debt risk premium estimates (%)

Approach	High	Mid	Low
A	1.320	1.247	1.212
A+/A/A-	1.266	1.262	1.237
Average of two lowest estimates			1.225

Source: ERA analysis, Bloomberg. The estimates use an averaging period to 30 June 2025.

8. The augmented Public Transport Authority sample is extended to allow the inclusion of A+ and A- rated bonds. Compared to the small addition of A+ bonds added to the sample, there are substantially more A-bonds added. The larger number of A-bonds with a lower credit rating will tend to bias the estimates upward. For this reason, the lowest of the augmented sample-based estimates (1.237 per cent) is averaged with the lowest A rated sample-based estimate (1.212 per cent) to produce an estimate of 1.225 per cent (see table above).

Table 6: 2025 Arc Infrastructure – Augmented and original benchmark sample debt risk premium estimates (%)

Approach	High	Mid	Low
BBB+	1.688	1.591	1.548
BBB+/BBB	1.653	1.581	1.545
Average of two lowest estimates			1.547

Source: ERA analysis, Bloomberg. The estimates use an averaging period to 30 June 2025.

9. The augmented Arc Infrastructure BBB+ sample is extended to allow the inclusion of BBB rated bonds. The addition of bonds with a lower credit rating will tend to bias the estimates upward on average. In addition, the yield variance might reflect the slightly different levels of risks for the bonds with the same credit rating. To mitigate for the addition of BBB bonds, the lowest BBB+ rated sample-based estimate (1.548 per cent) was averaged with the lowest of the augmented sample-based estimates (1.545 per cent) to produce an estimate of 1.547 per cent (see table above).

Table 7: 2025 Pilbara railways – Augmented and original benchmark sample debt risk premium estimates (%)

Approach	High	Mid	Low
BBB-	2.521	2.267	2.146
BBB/BBB-	1.758	1.683	1.595
Average of two highest estimates	2.140		

Source: ERA analysis, Bloomberg. The estimates use an averaging period to 30 June 2025.

10. The augmented Pilbara railways BBB- sample is extended to allow the inclusion of BBB rated bonds. The addition of bonds with a higher credit rating tended to bias the estimates downward. For this reason, the highest of the augmented sample-based debt risk premium estimates (2.521 per cent) was averaged with the highest BBB-rated sample-based estimate (1.758 per cent) to produce an estimate of 2.140 per cent (see table above).
11. For this final determination, using the averaging period to 30 June 2025, the 2025 debt risk premium estimates across the three rail businesses are:
 - 1.225 per cent for the Public Transport Authority
 - 1.547 per cent for Arc Infrastructure
 - 2.140 per cent for Pilbara railways.