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Trainline 13

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Cover photograph: IMG/Watco intermodal train at North Quay Rail Terminal (NQRT) in Fremantle, Western Australia. Photo courtesy of IMG/Watco.

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At a glance

Outcomes

- In 2024–25, intermodal tonnages on the interstate North–South corridor were mostly down relative to the previous financial year. On the East–West corridor between Cootamundra West and Crystal Brook tonnages were down, but either unchanged or slightly up between Melbourne (Tottenham) and Perth (Forrestfield).
- In 2024–25, there were some significant increases and decreases in non-intermodal tonnages on the interstate network relative to the previous financial year. These changes tended to be region specific and were partly due to variations in grain traffic stemming from crop harvest sizes and changes in mining operations whose products are moved by rail.
- Iron ore export tonnages, almost all of which travels to port by rail, grew by less than one per cent in 2024–25 compared to the previous financial year.
- In 2024–25, reported coal throughput at Australian ports declined by less than one per cent. Tonnages were slightly down at Newcastle and all Queensland Ports, except Brisbane, which had a 50% increase.
- In 2024–25, TasRail's total freight task, measured in net tonne kilometres (NTK), decreased by about 3.5% compared to the previous financial year, but 'general intermodal freight' twenty-foot-equivalent unit volumes increased by almost five per cent.
- In (October) 2025, there were 118 scheduled capital city-to-capital city intermodal designated train services per week on the interstate network. This was a reduction of 19 compared to (February) 2024.
- Average scheduled transit times for intermodal trains on both the North–South and East–West corridors mostly decreased, slightly.
- Total urban heavy rail patronage in 2024–25 was approximately 678 million passenger journeys, an increase of approximately 8.1% from the previous financial year. Patronage grew in all cities, from 2.7% in Melbourne, to 16.2% in Brisbane.
- Total recorded light rail patronage for 2024–25 was almost 234 million passenger journeys, an increase of 2.7% from the previous financial year. The Gold Coast had the strongest growth, at 21% while patronage in Newcastle declined by just over five per cent.
- Total non-urban rail patronage in 2024–25 was approximately 57.9 million passenger journeys, a decline of about 0.3% compared to the previous financial year. V/Line and Queensland Rail had patronage increases of 11.5% and 20% respectively, but Sydney Trains intercity patronage declined by about eight per cent. NSW TrainLink patronage declined by about 1.5%. Transwa patronage declined by about 8.5%.
- Sydney (Metro), Melbourne, and Adelaide urban heavy rail passenger transport operators met or exceeded their punctuality targets in 2024–25, while Sydney (Sydney Trains), Brisbane, and Perth fell short. All light rail service providers met or were close to meeting their punctuality targets. Sydney fell marginally short. Data is not available for Newcastle.
- For non-urban passenger services, all operators failed to meet punctuality targets in 2024–25, except Transwa's Avonlink service.
- An analysis of Melbourne–Albury passenger train operations for the month of January 2026 showed, on average, services in both directions of travel tended to run close to time and maintained point-to-point average speeds according to schedule.

- In 2024–25, there were 89 notified fatalities on Australian railways that the Office of the National Rail Safety Regulator regulates, an increase of three compared to the previous financial year. There were 76 serious injuries, compared to 95 in the previous financial year.
- BITRE estimates that in 2024–25, rail transport's greenhouse gas emissions in Australia grew by less than one per cent. Over the 10-year period until 2024–25, rail transport has been the source of approximately five per cent of total domestic transport emissions.

Infrastructure and assets

In 2026:

- Australia had an estimated 31,311 route-kilometres of operational heavy railways. Of these, approximately 11% of were electrified. Approximately 56% of the network was standard gauge, with the remainder being narrow gauge (approximately 35%), broad gauge (approximately eight per cent), and dual gauge (less than one per cent). There were an estimated 1,589 route-kilometres of urban heavy railways.
- There were an estimated 338 route-kilometres of operational light railways, all standard gauge, in Melbourne, Sydney, Adelaide, Gold Coast, Canberra, and Newcastle.
- An estimated 105 route-kilometres of heavy and light railways were under construction.
- There was railway construction underway in Queensland, New South Wales, Victoria, and the Australian Capital Territory.
- There were an estimated 18 mainline heavy rail infrastructure managers.
- The Thornlie–Cockburn line in Perth and the Metro Tunnel in Melbourne had opened, while the Armadale line (extended to Byford) in Perth had re-opened.
- The New South Wales Government RNEW Program, which replaces the Fixing Country Rail Program, had begun.
- Tasmania was in the fourth (and final) tranche of the Tasmanian Freight Rail Revitalisation Program (TFRRP).
- Western Australia was upgrading targeted sections of its regional rail freight network through the Agricultural Supply Chain Improvements (ASCI) program.
- An estimated 4,994 urban heavy rail cars (both electric and diesel, formed into multiple unit sets) were in service. This is a slight reduction on the previous estimate in July 2024. Old rollingstock in Melbourne and Brisbane had been or was being withdrawn, which was mostly offset by new vehicles in Melbourne and Perth.
- An estimated 655 operational light rail vehicles were in service.
- There were an estimated 1,308 non-urban cars and carriages (mostly electric multiple unit (EMU) and diesel multiple unit (DMU) sets, with the remainder being locomotive-hauled), and 62 locomotives for non-urban passenger train haulage duties.

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Chapter 1 – Introduction

Trainline is a compendium of statistics on Australia's rail industry. It provides data and an analysis of the industry.

This includes:

- Freight tonnages carried by rail transport, including on the interstate network and by some above-rail operators;
- Commodity specific flows, including iron ore, coal, and grain;
- The transportation of freight for export by rail from regional Australia to its ports;
- Patronage. This includes on urban heavy and light rail networks, and non-urban (heavy rail) networks;
- Rail transport performance, including passenger rail transport timeliness, scheduled transit times for both passenger and freight rail transport services, and service frequency;
- Rollingstock;
- Details of and changes to Australia's heavy and light rail infrastructure;
- Safety in rail transport; and
- Rail transport's carbon emissions.

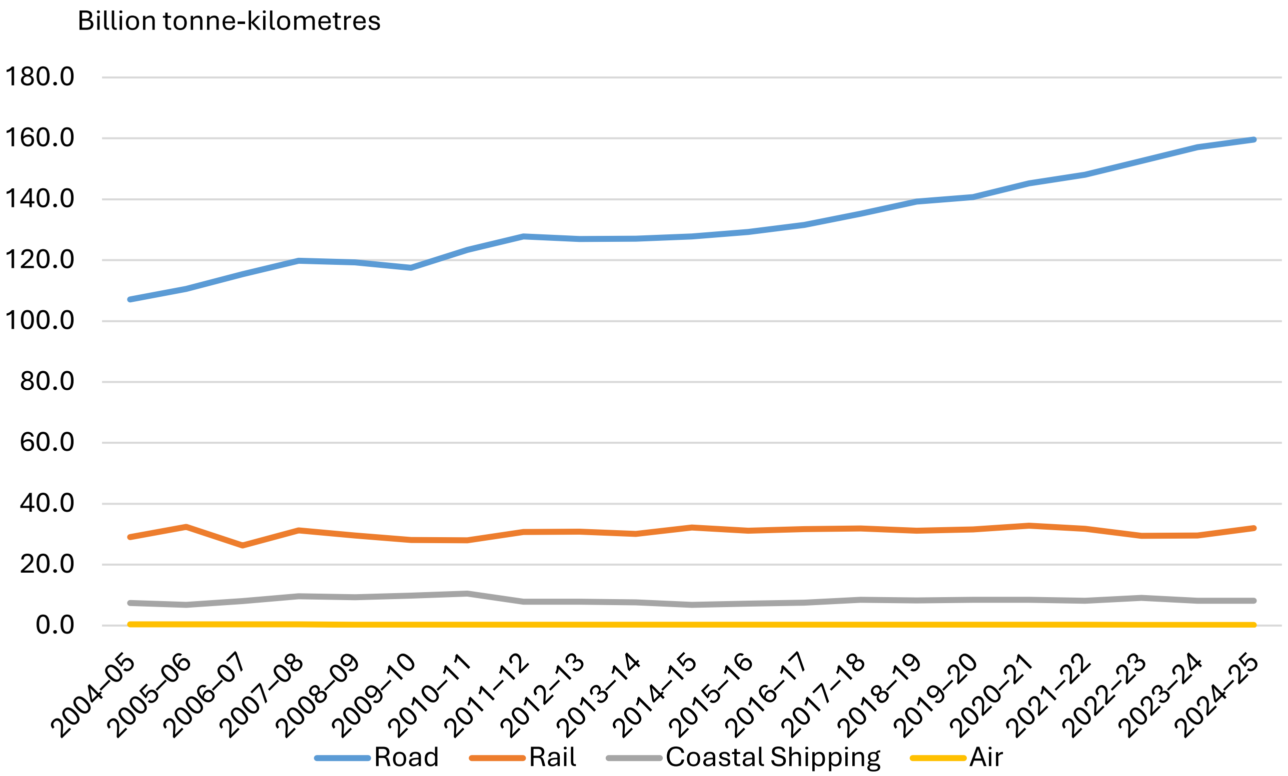
Chapter 2 – Freight transport results

No current combined data source covers the entire Australian network. Individual data sources report part or aspects of the freight task only, such as by commodity, location, infrastructure manager, or operator, and they are typically comparable over time.

BITRE's Freightline series also discuss freight flows by commodity (BITRE 2014 and BITRE 2014a, BITRE 2016, BITRE 2018, BITRE 2018a, BITRE 2018b). While explicit rail traffic data is not generally available for Pilbara railways or for east coast coal ports, the export iron ore and coal from those ports is almost entirely moved to the ports by rail. Discussion and data sources for each of those ports can be found in Australia's Bulk Ports (BITRE 2013).

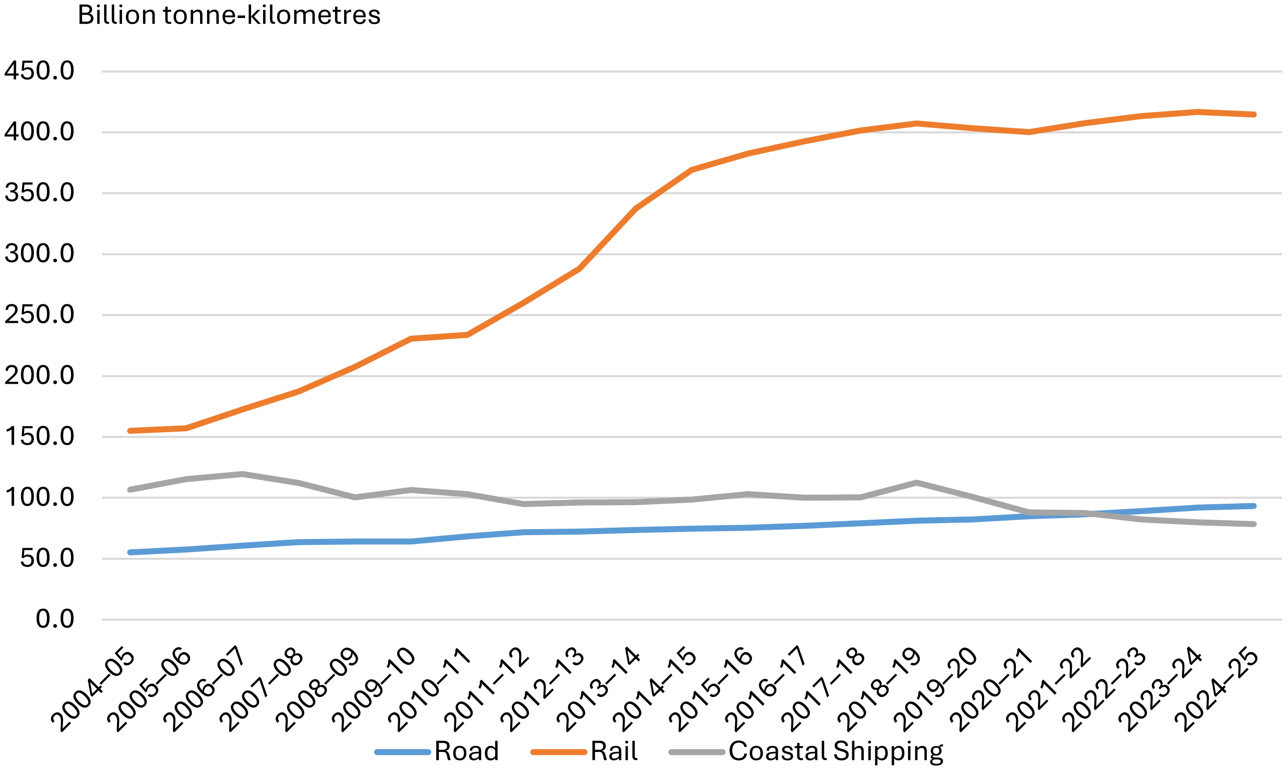
Freight transport by rail's role in the Australian economy has increased sharply this century; see Figure 3. By weight, rail accounts for more than one-half of Australian freight transport activity (approximately 57% in 2024–25), up from approximately 40% in 2004–05.

Figure 1 Australian domestic freight by transport mode (non-bulk)



Source: Figure produced using data from BITRE (2025), (Table 1.1b).

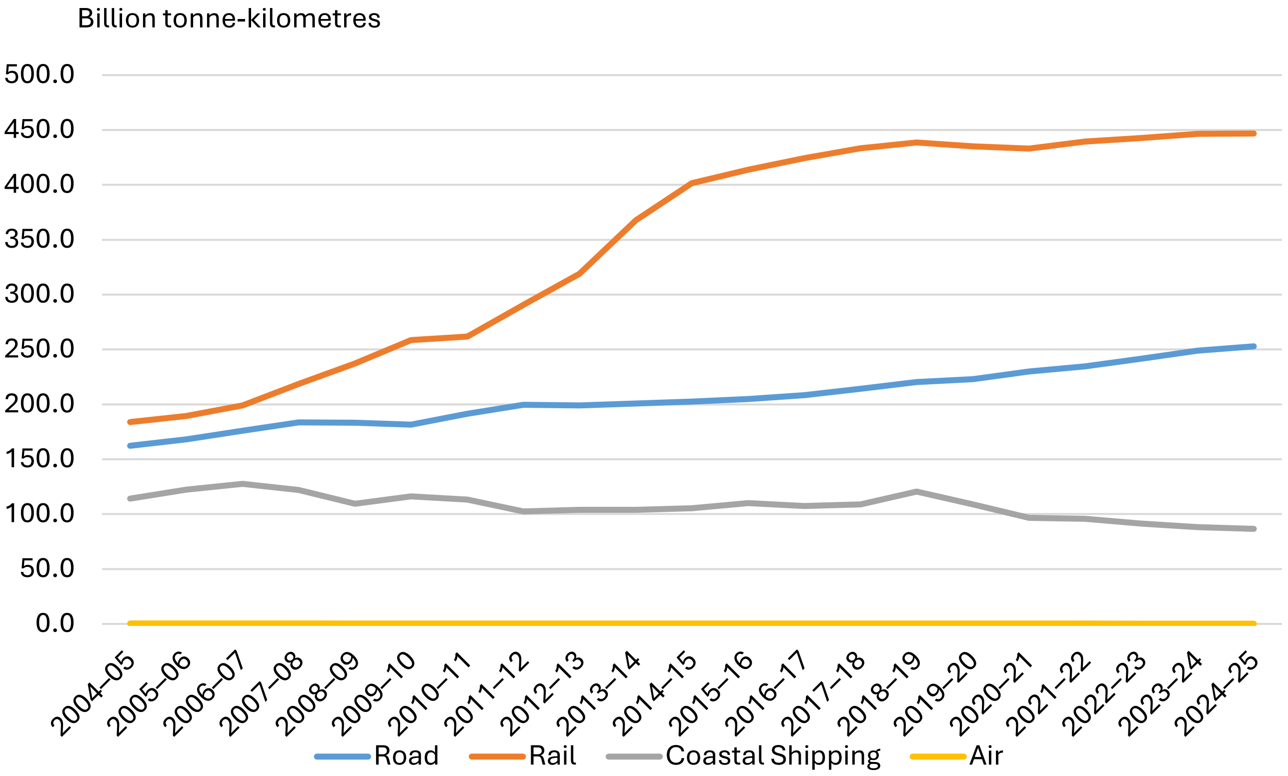
Figure 2 Australian domestic freight by transport mode (bulk)



Note: Bulk tonnages by air not applicable.

Source: Figure produced using data from BITRE (2025), Table 1.1a.

Figure 3 **Australian domestic freight by transport mode (bulk and non-bulk)**



Source: Figure produced using data from BITRE (2025), Table 1.1c.

As Figure 1 shows, road transport dominates the (more contestable) non-bulk freight task, whereas Figure 2 shows rail dominates the (less contestable) bulk freight task. Iron ore and coal comprises the vast majority of the bulk freight task by weight and almost all of it travels by rail. Because bulk freight dominates the combined freight task and most of it travels by rail, rail transport has such a majority mode share of the combined freight task, as Figure 3 shows[1].

In November 2023, the Australasian Railway Association (ARA) and the Freight on Rail Group (FORG) released *The future of freight summary report*. According to its estimates, rail transport has 68% market share of bulk freight transport in Australia, and 17% market share of non-bulk freight transport (Australasian Railway Association/Freight On Rail Group 2023, p.6).

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[1] In 2024-25, for example, bulk freight comprised approximately 75% of the total freight task, by weight. This is based on the tonnages shown in Figures 1-3.

Table 1: Rail transport mode share

Freight corridor	Headhaul[2]	Backhaul	Comments in report
North coast line (intrastate Queensland)	53%	42%	Intense competition between road and rail transport. Rail dominates for distances over 1,500 kilometres, while road dominates for distances of less than 1,000km.
North–South corridor (Victoria–New South Wales–Queensland)	11%	7%	Road dominates the market share due to the shorter distances of key routes. Rail's modal share is strongest on the Melbourne–Brisbane route
East–West corridor (Victoria–South Australia–Western Australia)	65%	77%	Rail dominates this corridor, especially between Melbourne, Sydney and Perth.

Source: Australasian Railway Association/Freight on Rail Group (2023), p.7.

Traffic volumes reflect rail transport's competitiveness with other transport modes (particularly for intermodal traffic) and prevailing economic conditions.

National rail freight task, tonnages

Freight type defined

Trainline uses specific definitions for bulk and non-bulk freight. In principle, bulk freight is large quantities of homogenous product that is mostly conveyed in purpose-built wagons, such as grain hoppers, although some is containerised. Non-bulk freight is typically any general freight that is either containerised or otherwise carried, such as in louvre vans. Steel may also be deemed non-bulk, particularly on trains that carry both intermodal and steel products on intermodal designated trains.

Interstate network freight traffic

Table 2 and Table 3 show gross freight tonnages on the ARTC and Arc Infrastructure interstate networks. The tables show intermodal, non-intermodal, and total gross tonnes by line segment.

Tonnages are calculated as gross. Empty wagons and locomotive weights are therefore included. Where freight does not travel the entire length of a segment, it has been weighted by the proportion of the segment travelled. Coal, where it travels on the interstate network, is excluded.

Intermodal designated tonnages only include freight travelling on capital city to capital city trains, inclusive of regional/export traffic that is attached/detached en-route. SCT Logistics' Brisbane–Melbourne services, which pick up and drop off freight at Barnawartha in Victoria, is an example. Tonnages for regional intermodal trains, such as QUBE Holding's Bomen–Port Botany trains are captured in non-intermodal tonnages. This is because they are not capital city to capital city trains, despite being intermodal by nature. Non-intermodal tonnages also include other non-coal freight, such as grain, and minerals.

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[2] Headhaul is one-way destination for a freight load. Backhaul is freight that is transported on an operator's return journey.

Table 2: Gross tonnes by line segment, North–South corridor (million gross tonnes)

	Intermodal			Non-intermodal			Total		
Financial year	2022–23	2023–24	2024–25	2022–23	2023–24	2024–25	2022–23	2023–24	2024–25
Acacia Ridge to Casino	2.13	2.15	2.09	0.03	0.03	0.03	2.16	2.18	2.12
Casino to Acacia Ridge	3.18	3.20	3.03	0.03	0.03	0.03	3.21	3.23	3.06
Acacia Ridge–Casino	5.30	5.35	5.12	0.06	0.06	0.06	5.36	5.41	5.18
Casino to Islington	2.15	2.18	2.11	0.22	0.22	0.20	2.37	2.40	2.31
Islington to Casino	3.18	3.21	3.04	0.24	0.23	0.23	3.43	3.45	3.28
Casino–Islington	5.33	5.39	5.15	0.46	0.45	0.43	5.79	5.84	5.59
Chullora to Sefton Park	5.12	4.65	4.28	13.58	12.79	14.36	18.70	17.44	18.63
Sefton Park to Chullora	5.74	5.53	4.98	15.07	14.59	14.86	20.81	20.13	19.83
Chullora–Sefton Park	10.86	10.18	9.25	28.65	27.39	29.22	39.50	37.57	38.47
Sefton Park to Macarthur	3.70	3.46	3.32	3.81	3.78	4.95	7.51	7.24	8.26
Macarthur to Sefton Park	3.64	3.26	2.88	8.41	8.12	9.16	12.05	11.38	12.04
Sefton Park–Macarthur	7.34	6.72	6.20	12.22	11.90	14.10	19.56	18.62	20.31
Macarthur to Tahmoor	3.75	3.66	3.64	5.31	4.96	4.82	9.06	8.62	8.47
Tahmoor to Macarthur	3.68	3.46	3.24	11.50	11.24	10.86	15.17	14.70	14.10
Macarthur–Tahmoor	7.42	7.11	6.88	16.81	16.20	15.69	24.23	23.32	22.57
Tahmoor to Moss Vale	3.75	3.63	3.64	6.13	5.67	5.53	9.88	9.30	9.17
Moss Vale to Tahmoor	3.68	3.46	3.24	13.92	13.60	13.17	17.60	17.06	16.41
Tahmoor–Moss Vale	7.42	7.09	6.88	20.06	19.27	18.70	27.48	26.36	25.59
Moss Vale to Marulan	3.80	3.73	3.69	7.17	6.59	7.00	10.98	10.32	10.69
Marulan to Moss vale	4.07	4.03	3.78	16.25	15.11	16.05	20.32	19.14	19.83

	Intermodal			Non-intermodal			Total		
Moss Vale–Marulan	7.87	7.76	7.47	23.43	21.70	23.06	31.29	29.46	30.53
Marulan to Goulburn	3.80	3.73	3.69	4.83	4.26	4.82	8.63	7.99	8.50
Goulburn to Marulan	4.07	4.03	3.78	14.46	13.09	14.14	18.53	17.12	17.92
Marulan–Goulburn	7.87	7.76	7.47	19.30	17.35	18.96	27.16	25.11	26.43
Goulburn to Cootamundra West	3.80	3.73	3.69	2.78	2.21	2.65	6.58	5.93	6.34
Cootamundra West to Goulburn	4.07	4.03	3.79	7.21	6.02	7.48	11.28	10.05	11.26
Goulburn–Cootamundra West	7.87	7.76	7.47	9.99	8.22	10.13	17.86	15.98	17.60
Cootamundra West to Junee	3.27	3.23	3.21	3.80	2.93	3.44	7.07	6.16	6.65
Junee to Cootamundra West	2.81	2.64	2.60	4.61	3.99	4.40	7.42	6.62	7.00
Cootamundra West–Junee	6.08	5.87	5.81	8.41	6.91	7.84	14.49	12.79	13.65
Junee to Albury	3.27	3.23	3.22	3.59	3.52	3.86	6.86	6.76	7.08
Albury to Junee	2.81	2.64	2.61	3.48	3.40	4.33	6.29	6.04	6.95
Junee–Albury	6.08	5.88	5.83	7.07	6.92	8.19	13.15	12.80	14.02
Albury to Tottenham	3.32	3.31	3.34	3.09	2.69	3.03	6.41	6.00	6.37
Tottenham to Albury	2.80	2.64	2.63	1.39	1.21	1.30	4.19	3.84	3.93
Albury–Tottenham	6.12	5.95	5.97	4.48	3.90	4.33	10.60	9.85	10.29

Note: Totals are subject to rounding.

Source: Data provided by ARTC.

Table 3: Gross tonnes by line segment, East–West corridor (million gross tonnes)

	Intermodal			Non-intermodal			Total		
Financial year	2022–23	2023–24	2024–25	2022–23	2023–24	2024–25	2022–23	2023–24	2024–25
Cootamundra West to Parkes	0.54	0.50	0.49	1.89	1.43	2.20	2.43	1.93	2.69
Parkes to Cootamundra West	1.27	1.41	1.20	5.01	3.55	5.19	6.28	4.96	6.38
Cootamundra West–Parkes	1.80	1.91	1.68	6.90	4.99	7.38	8.70	6.89	9.07
Parkes to Broken Hill	1.60	1.86	1.77	0.87	1.32	1.34	2.48	3.17	3.12
Broken Hill to Parkes	1.82	1.90	1.63	1.40	1.30	1.47	3.22	3.19	3.11
Parkes–Broken Hill	3.42	3.75	3.41	2.27	2.61	2.82	5.69	6.37	6.22
Broken Hill to Crystal Brook	1.58	1.84	1.77	1.45	2.50	2.06	3.03	4.34	3.83
Crystal Brook to Broken Hill	1.80	1.89	1.60	0.81	1.32	1.22	2.61	3.21	2.82
Broken Hill–Crystal Brook	3.38	3.72	3.37	2.27	3.82	3.27	5.64	7.55	6.65
Tottenham to Dimboola	5.32	5.02	5.21	2.25	2.76	2.40	7.57	7.78	7.61
Dimboola to Tottenham	4.08	3.72	3.85	3.58	4.84	3.70	7.66	8.56	7.55
Tottenham–Dimboola	9.40	8.75	9.06	5.83	7.60	6.10	15.23	16.35	15.16
Dimboola to Tailem Bend	4.27	3.99	4.03	1.38	1.45	0.87	5.65	5.44	4.90
Tailem Bend to Dimboola	3.44	3.08	3.10	0.58	0.65	0.43	4.01	3.73	3.53
Dimboola–Tailem Bend	7.71	7.07	7.14	1.95	2.10	1.29	9.66	9.17	8.43
Tailem Bend to Dry Creek	4.32	4.01	4.04	1.40	1.45	0.88	5.71	5.46	4.93
Dry Creek to Tailem Bend	3.47	3.10	3.11	0.57	0.61	0.43	4.05	3.70	3.54
Tailem Bend–Dry Creek	7.79	7.10	7.16	1.97	2.06	1.31	9.76	9.16	8.46
Dry Creek to Crystal Brook	6.02	5.88	5.92	1.24	1.21	0.87	7.26	7.09	6.79
Crystal Brook to Dry Creek	5.01	4.78	4.73	2.80	2.59	1.44	7.81	7.38	6.17

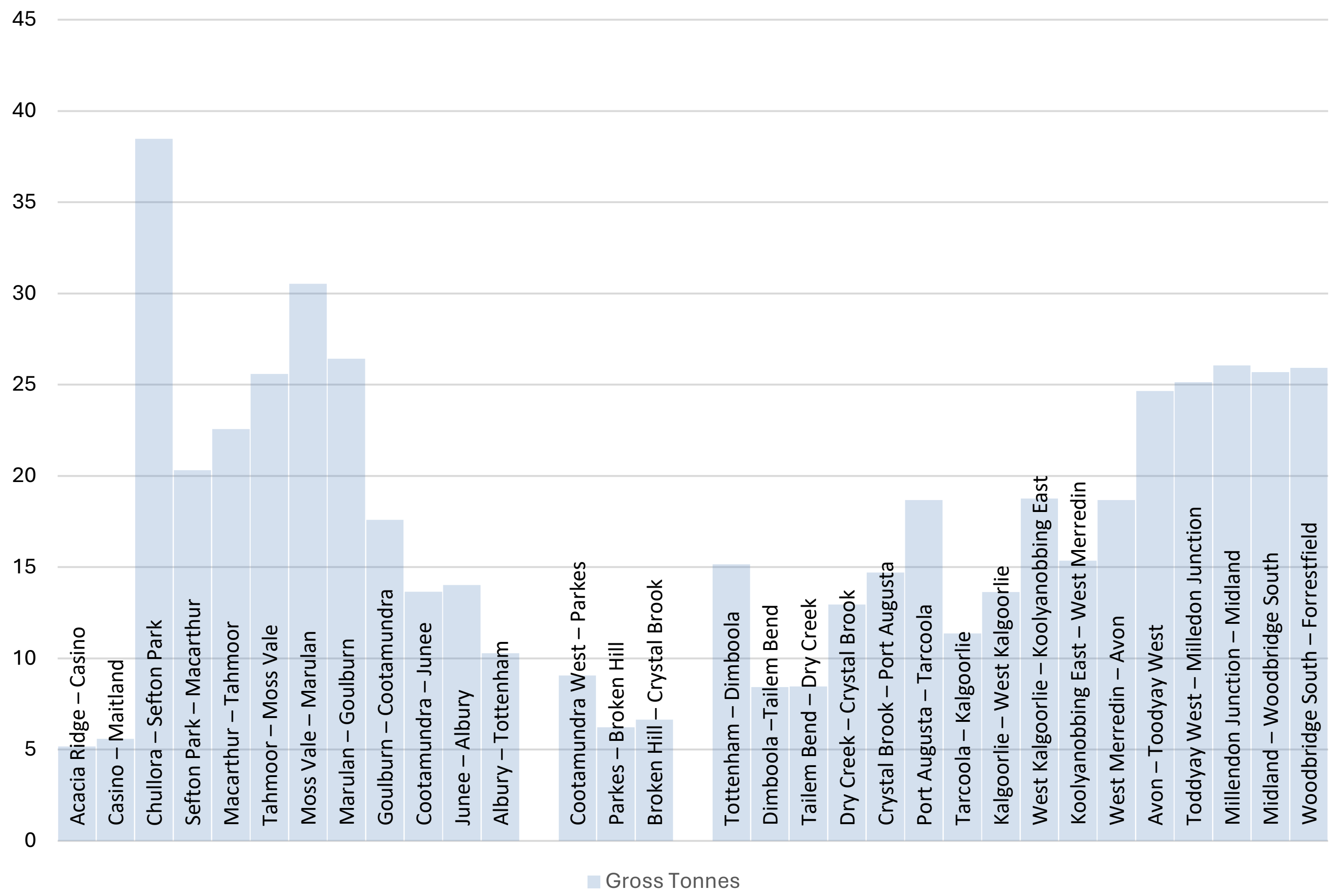
	Intermodal			Non-intermodal			Total		
Dry Creek–Crystal Brook	11.03	10.66	10.65	4.04	3.80	2.31	15.07	14.47	12.96
Crystal Brook to Port Augusta	6.82	6.89	7.22	1.17	1.04	0.98	7.99	7.93	8.19
Port Augusta to Crystal Brook	6.06	5.83	5.96	1.32	0.60	0.55	7.38	6.43	6.51
Crystal Brook–Port Augusta	12.87	12.73	13.18	2.50	1.64	1.53	15.37	14.36	14.70
Port Augusta to Tarcoola	6.74	6.69	6.86	1.28	1.52	1.77	8.01	8.21	8.62
Tarcoola to Port Augusta	5.97	5.72	5.70	2.87	3.46	4.34	8.84	9.18	10.04
Port Augusta–Tarcoola	12.71	12.41	12.56	4.15	4.98	6.11	16.85	17.39	18.67
Tarcoola to Kalgoorlie	5.45	5.45	5.58	0.68	0.82	0.77	6.13	6.27	6.35
Kalgoorlie to Tarcoola	4.19	4.17	4.30	0.74	0.76	0.71	4.93	4.93	5.02
Tarcoola–Kalgoorlie	9.64	9.62	9.88	1.42	1.58	1.48	11.06	11.20	11.36
Kalgoorlie to West Kalgoorlie	5.69	5.87	5.90	1.67	1.48	1.62	7.36	7.35	7.52
West Kalgoorlie to Kalgoorlie	4.27	4.32	4.40	1.89	1.77	1.7	6.16	6.09	6.10
Kalgoorlie–West Kalgoorlie	9.97	10.19	10.30	3.55	3.24	3.33	13.52	13.43	13.63
West Kalgoorlie to Koolyanobbing East	5.69	5.82	5.90	4.66	4.52	2.43	10.35	10.34	8.33
Koolyanobbing East to West Kalgoorlie	4.22	4.27	4.35	13.46	13.27	6.09	17.68	17.54	10.44
West Kalgoorlie–Koolyanobbing East	9.92	10.09	10.25	18.11	17.79	8.51	28.03	27.88	18.76
Koolyanobbing East to West Merredin	5.65	5.81	5.90	2.46	2.37	2.04	8.11	8.18	7.94
West Merredin to Koolyanobbing East	4.22	4.28	4.35	3.17	3.15	3.06	7.39	7.43	7.41
Koolyanobbing East–West Merredin	9.88	10.09	10.25	5.61	5.53	5.1	15.49	15.62	15.35
West Merredin to Avon	5.66	5.81	5.90	5.27	4.58	4.67	10.93	10.39	10.57
Avon to West Merredin	4.22	4.28	4.35	3.92	3.75	3.75	8.14	8.03	8.10
West Merredin–Avon	9.88	10.09	10.25	9.18	8.33	8.42	19.06	18.42	18.67

	Intermodal			Non-intermodal			Total		
Avon to Toodyay West	5.65	5.81	5.90	11.67	9.84	9.31	17.32	15.65	15.21
Toodyay West to Avon	4.22	4.28	4.35	5.73	5.29	5.09	9.95	9.57	9.44
Avon–Toodyay West	9.87	10.09	10.25	17.39	15.13	14.4	27.26	25.22	24.65
Toodyay West to Millendon Jcn	5.65	5.81	5.90	11.69	10.23	9.68	17.34	16.04	15.58
Millendon Jcn to Toodyay West	4.22	4.27	4.35	5.74	5.41	5.2	9.96	9.68	9.55
Toodyay West–Millendon Junction	9.87	10.09	10.25	17.43	15.63	14.88	27.30	25.72	25.13
Millendon Junction to Midland	5.65	5.81	5.90	12.60	10.97	10.4	18.25	16.78	16.30
Midland to Millendon Junction	4.22	4.26	4.35	6.03	5.62	5.41	10.25	9.88	9.76
Millendon Junction–Midland	9.87	10.07	10.25	18.63	16.59	15.81	28.50	26.66	26.06
Midland to Woodbridge South	5.65	5.80	5.90	12.40	10.77	10.21	18.05	16.57	16.11
Woodbridge South to Midland	4.22	4.27	4.35	5.84	5.43	5.22	10.06	9.70	9.57
Midland–Woodbridge South	9.87	10.07	10.25	18.24	16.20	15.43	28.11	26.27	25.68
Woodbridge South to Forrestfield	5.65	5.81	5.90	12.57	10.95	10.34	18.22	16.76	16.24
Forrestfield to Woodbridge South	4.22	4.27	4.35	6.00	5.60	5.35	10.22	9.87	9.70
Woodbridge South–Forrestfield	9.88	10.08	10.25	18.55	16.55	15.68	28.43	26.63	25.93

Note: Totals are subject to rounding.

Sources: Data provided by ARTC and Arc Infrastructure.

Figure 4 Gross tonnages on the interstate network, by line segment, 2024–25



Sources: Data provided by ARTC and Arc Infrastructure.

The following explains some variations in intermodal traffic across the interstate network, in addition to market factors:

- Changing intermodal train composition: ARTC-provided intermodal tonnages are calculated from train type designations (for example 'intermodal' or 'minerals') that trains use, not the actual products on each train. For example, some Pacific National and SCT Logistics intermodal designated trains also carry steel products[3]. As such, ARTC-reported intermodal volumes are the sum of volumes from all capital city to capital city intermodal designated trains, including those that carry steel.
- Temporary changes to routes taken for operational reasons: Intermodal and steel trains sometimes take alternative routes due to temporary track closures.

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[3] Steel is moved along the East–West corridor between New South Wales (Newcastle and Port Kembla) and South Australia and Western Australia (Port Augusta, Whyalla and Perth). Steel trains also operate between Melbourne and Port Augusta and Perth. On the North–South corridor, there are also steel movements primarily between Port Kembla and the interstate capitals.

- Intermodal traffic on the North–South corridor between Sydney (Chullora) and Cootamundra West includes some traffic that enters/exits the East–West corridor (via Broken Hill) at Cootamundra West[4].
- Some intermodal traffic originates/terminates at terminals in Parkes/Goobang for the East–West Corridor (via Broken Hill). Pacific National operates shuttle trains to/from Sydney and Parkes, where the freight is added to Sydney to Perth trains, which are longer and double-stacked west of Parkes, and vice versa. Most Sydney to Perth intermodal designated trains travel via Lithgow on the Sydney Trains and UGL Regional Linx networks and details of its tonnages is thus not captured, while all eastbound traffic travels via Cootamundra West, on the ARTC network, and details of its tonnages is thus captured.
- Higher intermodal designated traffic west of Crystal Brook (relative to other sectors) reflect the convergence of Melbourne/Adelaide–Perth and Sydney/Parkes–Perth, and Adelaide–Darwin traffic.
- Intermodal designated traffic decreases west of Tarcoola; the junction with the Darwin line.
- Some intermodal designated trains pick up and drop off freight at regional locations en route (for example SCT Logistics' Logic Terminal at Barnawartha in Victoria and CRT's Ettamogah terminal in New South Wales).

Key Findings

North–South corridor (intermodal)

- Sefton Park to Chullora (northbound) recorded the greatest tonnages on the corridor, at 4.98 million gross tonnes.
- Tonnages on all sectors in both directions of travel between Acacia Ridge and Islington decreased by approximately 3–5%.
- Between Chullora and Cootamundra West (where Sydney–Perth trains diverge from/converge with Brisbane/Sydney–Melbourne trains), combined direction of travel tonnages were down by approximately 3-9% on all sectors. The declines were greater for northbound traffic in all sectors.
- Between Cootamundra West and Tottenham, tonnages were roughly unchanged for both directions of travel.

East–West corridor (intermodal)

- Crystal Brook to Port Augusta (westbound), recorded the greatest tonnages on the corridor, at 7.2 million gross tonnes.
- Between Cootamundra West and Crystal Brook there were decreases on all sectors and in both direction of travel. This ranged from two per cent (Cootamundra West to Parkes) to 15% (Parkes to Cootamundra West and Crystal Brook to Broken Hill).
- On all other sectors of the East–West corridor, for both directions of travel, there was little change compared to 2023–24. Changes ranged from a decline of one per cent (Crystal Brook to Dry Creek) to almost five per cent growth (Crystal Brook to Port Augusta).

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[4] Until 2020, about half of Sydney to Perth trains travelled via Cootamundra West with the other half travelling via Lithgow. Now, most Sydney to Perth trains travel via Lithgow and all Perth to Sydney trains continue to travel via Cootamundra West.

North–South corridor (non-intermodal)

Non–intermodal tonnages on both the North–South and East–West corridors tend to fluctuate far more than intermodal tonnages. This is because the grain transport component can rise or fall significantly each year due to fluctuating crop sizes, which are in turn weather dependent. This is particularly the case in southern and western New South Wales. Minerals also comprise a proportion of the non–intermodal component. Mines coming online or going offline (that use rail transport to haul their product) can also have a significant influence on changes to tonnages.

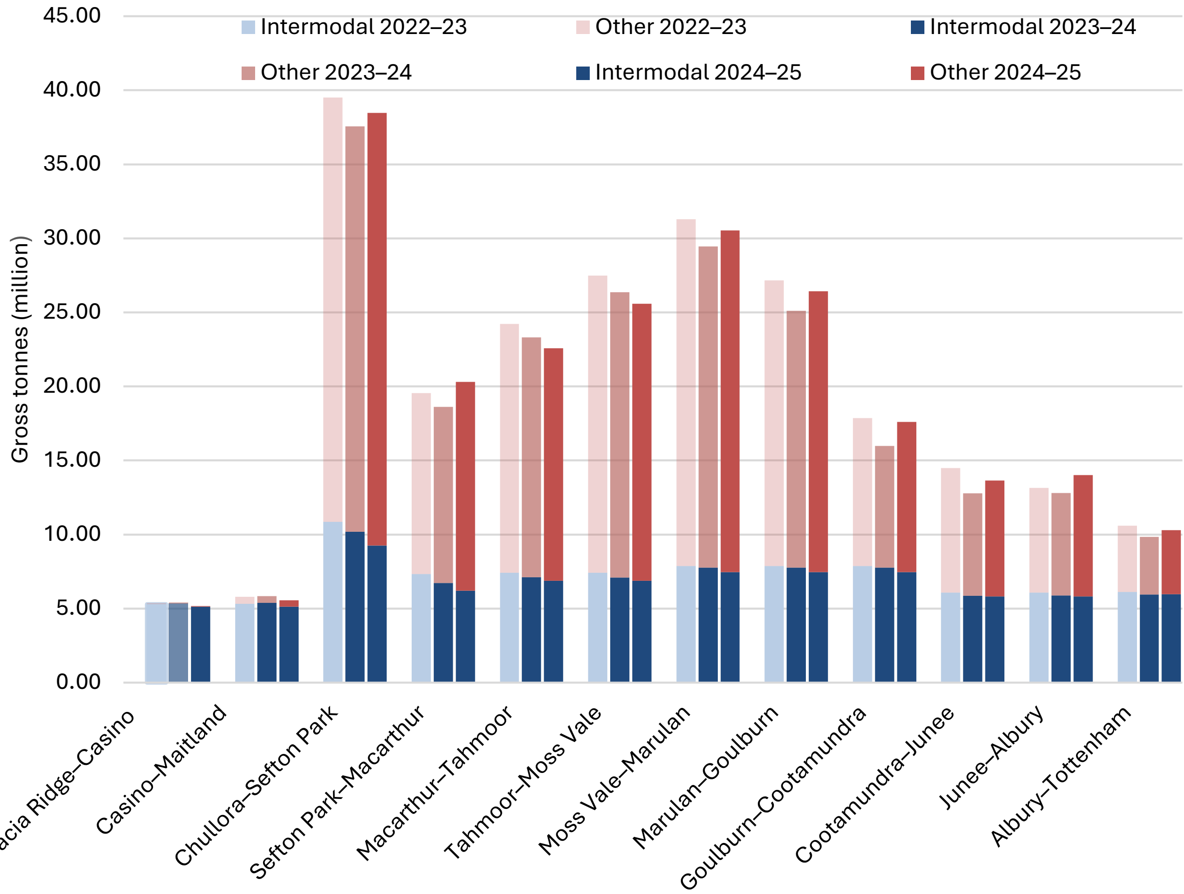
- Tonnages on the sectors between Acacia Ridge and Casino were unchanged, except Casino to Islington, where tonnages declined by nine per cent.
- Between Chullora and Macarthur tonnages grew from between 2–31%, possibly due to the opening of the interstate terminal at Moorebank Intermodal Precinct in April 2024.
- Between Macarthur and Moss Vale tonnages dropped by approximately 2–3%.
- Between Moss Vale and Tottenham tonnages increased, in all sectors and in both directions of travel. The Goulburn–Cootamundra West sector saw the most growth, ranging from 20% (Goulburn to Cootamundra West) to 24% (Cootamundra West to Goulburn). Albury–Tottenham had the smallest combined directions of travel growth, at 11%.

East–West corridor (non-intermodal)

- Combined directions of travel tonnages on the Cootamundra West–Parkes sector increased by almost 50%, with similar increases for each direction of travel. According to advice from ARTC, this was mostly driven by increased grain haulage.
- Broken Hill to Parkes tonnages grew by about 13%, while it grew by 1.5% in the opposite direction of travel. This was due to fluctuations in all (non-intermodal) freight type tonnages.
- On the Broken Hill–Crystal Brook sector, there was a combined direction of travel decrease of about 14.5%. This, however, followed large increases in tonnages the previous financial year.
- On the Tottenham–Dry Creek sectors, where grain traffic dominates the non–intermodal task, there were declines in tonnages on all sectors in both directions of travel. This ranged from 13% (Tottenham to Dimboola), to 40% (Dimboola to Tailem Bend). However, as the baseline tonnage figures are relatively small, year on year changes appear significant when expressed as percentages.
- Tonnages were down on the Dry Creek–Crystal Brook sector in both directions of travel. This was approximately 28% (Dry Creek to Crystal Brook) and 44% (Crystal Brook to Dry Creek) These declines were also due to decreased grain haulage.
- On the Crystal Brook–Port Augusta sector, tonnages were also down, for both directions of travel — almost six per cent (Crystal Brook to Port Augusta), and 8.3% (Port Augusta to Crystal Brook). This was mostly due to the cessation of some minerals traffic, which dominates the non–intermodal task by tonnages across the sector.
- Tonnages increased on the Port Augusta–Tarcoola sector, for both directions of travel — 16.5% (Port Augusta to Tarcoola), and 25.5% (Tarcoola to Port Augusta). This was mostly due to strong growth in some minerals traffic, which also dominates the non–intermodal task on the sector.
- Tonnages decreased by 6–7% for each direction of travel on the Tarcoola–Kalgoorlie sector.
- Between Kalgoorlie and Perth tonnages were down on most sectors, for both directions of travel, by an average of 4.4%. According to advice from Arc Infrastructure, this was largely due to decreased minerals traffic by a mining company. The exceptions were Kalgoorlie to West Kalgoorlie, where tonnages grew by almost 9.5% and both directions of travel on the West Kalgoorlie–Koolyanobbing East sector, where the combined tonnages for both directions of travel declined by just over 52%. This decline was due to another mining company winding up operations. Another company has since

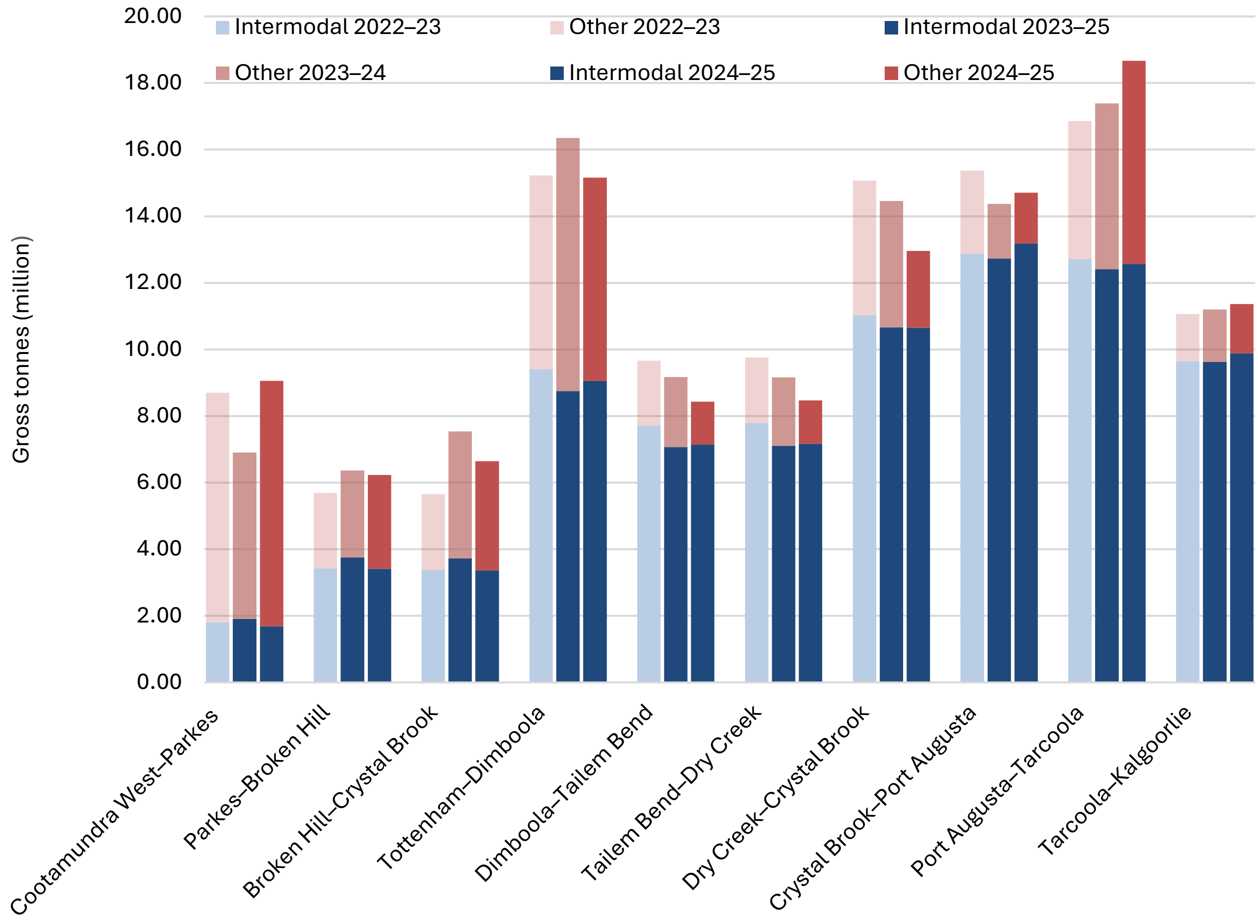
taken over these operations, but the resumed tonnages hauled by rail does not appear in the 2024–25 financial year.

Figure 5 Gross tonnages on the North–South corridor, by line segment, 2022–23 to 2024–25



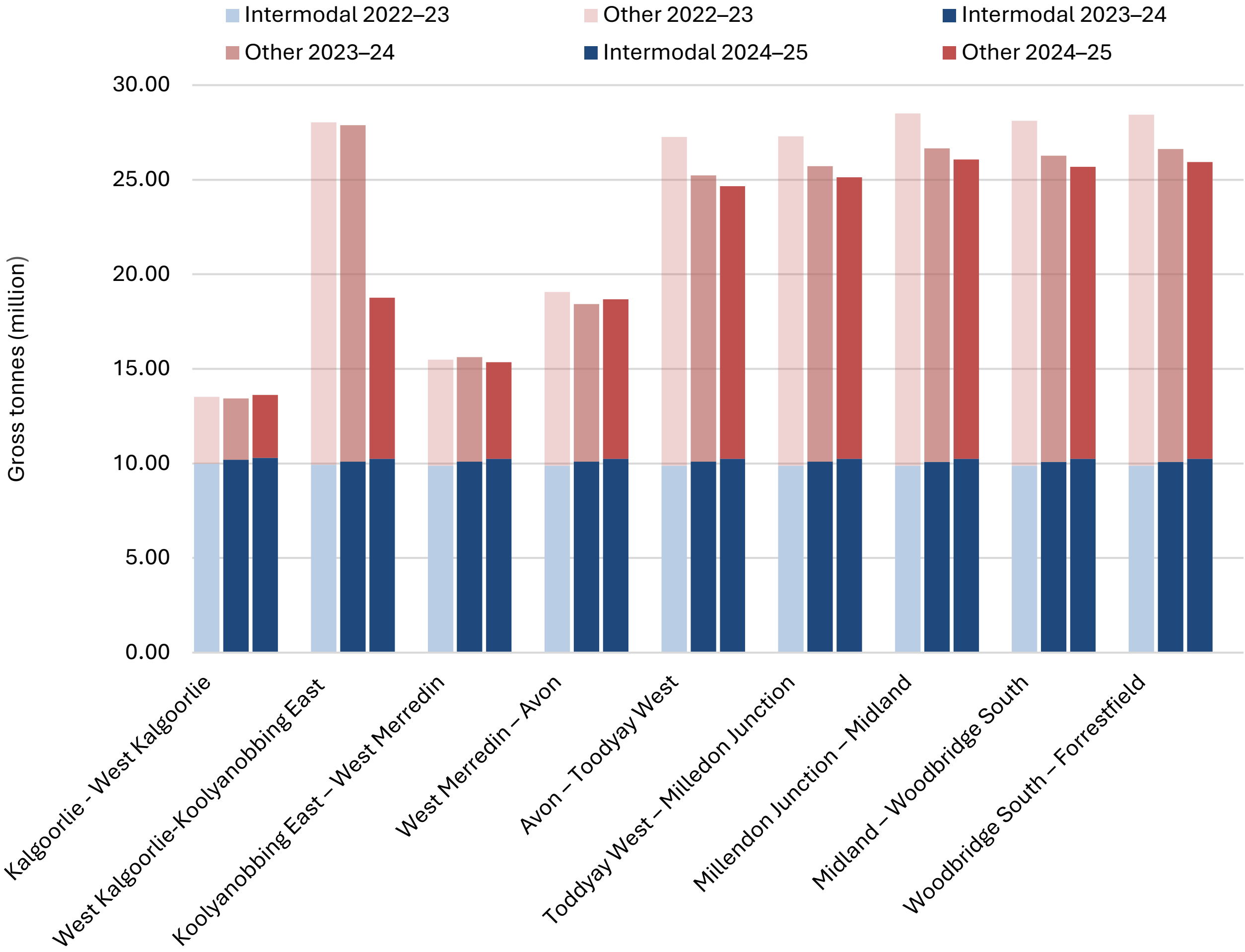
Source: Data provided by ARTC.

Figure 6 Gross tonnages on the East–West corridor, by line segment (ARTC component), 2022–23 to 2024–25



Source: Data provided by ARTC.

Figure 7 **Gross tonnages on the East–West corridor, by line segment (Arc Infrastructure component), 2022–23 to 2024–25**



Source: Data provided by Arc Infrastructure.

Figure 8 Pacific National intermodal train

Note: The image above shows Pacific National Brisbane to Melbourne intermodal service 7BM4 stopped at Junee, New South Wales, for a crew change on 25 June 2025. Photo courtesy of Rodney Avery.

Tonnages, by operator

Due to an ongoing data shortage from freight train (above-rail) operators, Trainline is unable to report aggregated national above-rail tonnages[5]. There is, however, some publicly-available data on rail freight activity that reports parts of the national freight task and which is comparable over time.

ARTC Hunter Valley Network Coal Network

ARTC reports coal throughput (tonnes) on the Hunter Valley Coal Network, which it manages. Figure 9, below, shows coal throughput on the network, both planned and actual from 2014–15 to 2024–25. On average, actual throughput was approximately 90.5% of planned throughput over the 11 year period. Actual throughput was highest in 2021–22, at 165.1 million tonnes, and lowest in 2022–23 at 146.5 million tonnes and lowest in 2022–23, at 146.5 tonnes (ARTC, n.d.).

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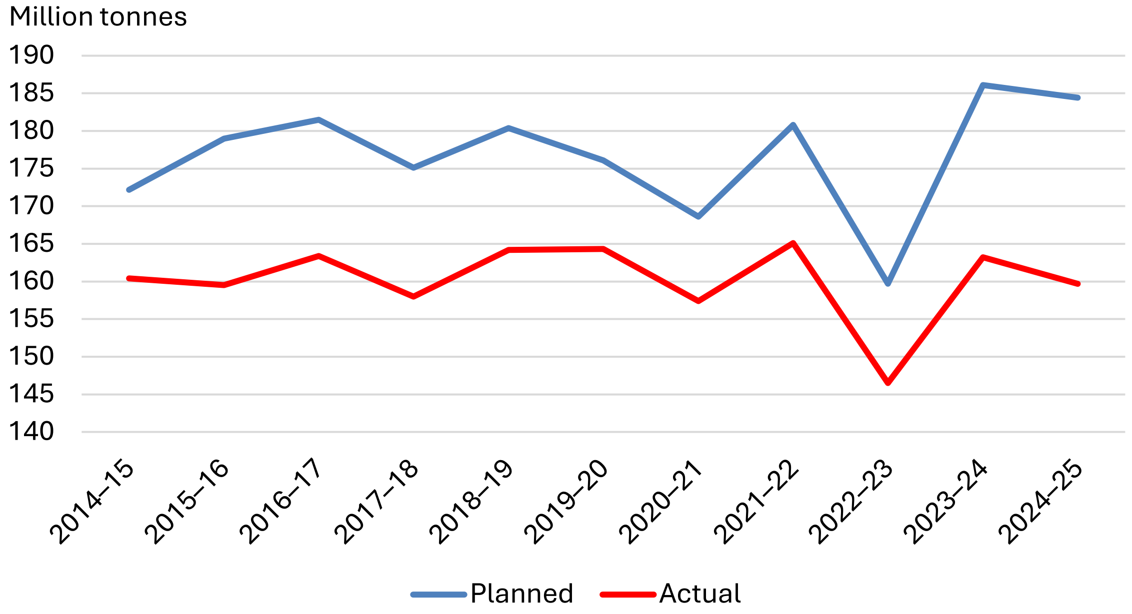
[5] BITRE has been unable to report above rail tonnages since 2015-16. For historical data from 2001-02 to 2015-16, see Trainline 9 at https://www.bitre.gov.au/sites/default/files/train_006.pdf.

Figure 9 ARTC Hunter Valley Coal Network tonnages



Source: ARTC (n.d.).

Aurizon

Aurizon reports its data to the Australian Stock Exchange (ASX) and on its website. That material forms the basis of the data shown in Table 4 to Table 8, below.

Table 4: Aurizon above-rail tonnages hauled (million tonnes)

Financial year	2019–20	2020–21	2021–22	2022–23	2023–24	2024–25	Change FY 24 to 25
Coal							
CQCN	150.1	143.7	141.1	133.6	132.5	133.7	+0.91%
NSW and SEQ	63.8	58.4	52.9	51.4	56.5	58.5	+3.54%
Total	**213.9**	**202.1**	**194**	**185**	**189**	**192.2**	**+1.69%**
Bulk freight	48.1	51.2	50.8	68.2	66.6	55.3	-16.97%
Coal and bulk total	**262**	**253.3**	**244.8**	**253.2**	**255.6**	**247.5**	**-3.17%**

Note: CQCN: Central Queensland Coal Network.

SEQ: Southeast Queensland.

Bulk includes mining, metal, industrial and agricultural freight.

Sources: Aurizon (2025), p.30; Previous editions of Trainline, citing Aurizon's public reporting.

Table 5: Aurizon above-rail coal NTKs hauled (billion tonne kilometres)

Financial year	2019–20	2020–21	2021–22	2022–23	2023–24	2024–25	Change FY 24 to 25
CQCN	37.8	35.3	35.3	33	33.1	33.0	-0.30%
NSW and SEQ	12.2	11.3	9.9	9.2	10.3	10.6	+2.91%
Total	**50**	**46.6**	**45.2**	**42.2**	**43.4**	**43.6**	**+0.46%**

Note: Totals are subject to rounding.

Sources: Aurizon (2025), p.30; Previous editions of Trainline, citing Aurizon's public reporting.

Table 6: Aurizon above-rail coal hauled by system (million tonnes)

Financial year	2021–22	2022–23	2023–24	2024–25	Change FY 24 to 25
CQCN					
Newlands	17.8	16.1	13.2	12.2	-7.58%
Goonyella	61.5	60.1	58.2	59.8	+2.75%
Blackwater	49.5	44.4	46.8	46.5	-0.64%
Moura	12.3	13.0	14.3	15.2	+6.29%
Total	**141.1**	**133.6**	**132.5**	**133.7**	**+0.91%**
NSW and SEQ					
West Moreton	2.7	2.1	3.5	5.1	+45.71%
Hunter Valley and Illawarra	50.2	49.3	53	53.4	+0.75%
Total	**52.9**	**51.4**	**56.5**	**58.5**	**+3.54%**
Grand total	**194.0**	**185.0**	**189**	**192.2**	**+1.69%**

Sources: Aurizon (2025), p.35; Previous editions of Trainline, citing Aurizon's public reporting.

Table 7: Aurizon network (below-rail) tonnages hauled (million tonnes) and NTKs (billion tonne kilometres)

Financial year	2019–20	2020–21	2021–22	2022–23	2023–24	2024–25	Change FY 24 to 25
Tonnages	226.9	208.3	206.5	207.6	209.6	208.0	-0.76%
NTKs	56.2	52.4	51.9	50.3	51	50.7	-0.59%

Note: This table denotes tonnages hauled by all operators on the Aurizon managed CQCN.

Sources: Aurizon (2025), p.30; Previous editions of Trainline, citing Aurizon's public reporting.

Table 8: Aurizon interstate containerised freight twenty-foot equivalent (TEU) units

Financial year	2022–23	2023–24	2024–25	Change FY 24 to 25
TEUs	96,930	158,802	205,745	+29.56%

Note: In 2022–23, Aurizon recommenced intermodal operations. This included its Adelaide–Darwin services following Aurizon's acquisition of One Rail Australia in July 2022, and new Melbourne–Perth, Melbourne–Brisbane, and Sydney–Perth services.

Does not include Queensland intrastate 'hook and pull' services that Aurizon provides for Linfox.

Sources: Aurizon (2025), p.30.

TasRail

TasRail reports its freight task in its annual report. Table 9, below, shows and TasRail's freight task for the three financial years to 2024–25.

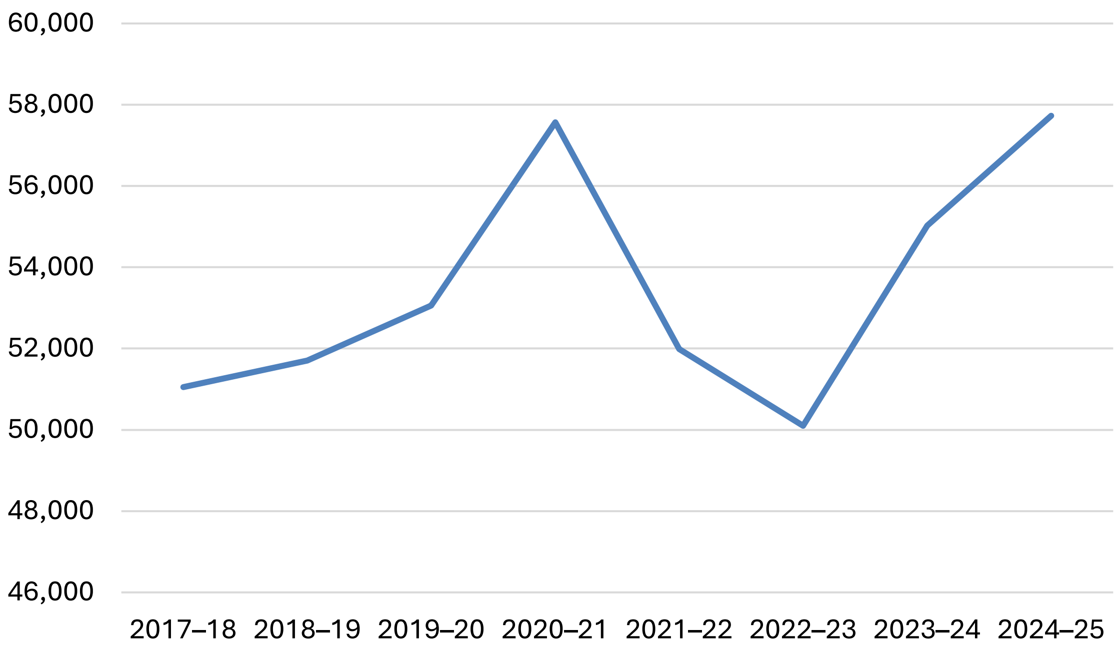
Table 9: TasRail freight task (NTKs)

Financial year	2022–23	2023–24	2024–25	Change FY 24 to 25
Total	485,616,262	516,452,742	498,314,404	-3.5%

Source: TasRail (2025), p.26; Previous editions of Trainline, citing TasRail annual reports.

According to TasRail's annual report, the decline in NTKs in 2024–25 occurred due primarily to the lower average weight of some of its intermodal services (TasRail 2025, p.26).

Figure 10 TasRail intermodal TEUs



Source: Data provided by TasRail, as represented in TasRail (2025).

Figure 10, above, shows TasRail's 'general intermodal freight volumes' results, expressed as TEUs, from 2017–18 to 2024–25 (data provided by TasRail). Compared to 2023–24, TEU volumes in 2024–25 increased by almost five per cent. Whilst there was a dip in 2021–22 and 2022–23, 2024–25 volumes had rebounded and were 13% higher than 2017–18.

Box 1 Further freight operator traffic data resources

No single data source covers the entire Australian network. Data sources include train operator data and rail infrastructure manager data. Much of this data is not public information.

While explicit rail traffic data is not available for the Pilbara iron ore network, the iron ore is generally moved to the ports by rail. Published iron ore export volumes through the Pilbara ports thus gives insight into iron ore tonnages being transported in the Pilbara network (see Table 13). Discussion and data sources for each of those ports can be found in Australia's Bulk Ports (BITRE 2013).

BITRE's Freightline series also report freight flows by commodity (BITRE 2014, BITRE 2014a, BITRE 2016, BITRE 2018, BITRE 2018a, and BITRE 2018b).

Intermodal freight train reliability on the interstate network

ARTC publishes performance indicators about service quality, including reliability. Detailed information regarding reliability by city pair is available on ARTC's website[6].

Train and infrastructure issues affect reliability. Problems for train operators include mechanical issues with rollingstock, delays at terminals, flow on problems from other train operators' delays, and problems beyond operators' and infrastructure managers' control, such as trespass and vandalism. These problems can cause significant delays across the network and for trains entering the network. This requires infrastructure managers to allocate train paths without compromising their obligations to other operators.

Infrastructure issues also affect reliability. Track quality problems can result in (temporary) speed restrictions and track closures. Signalling failures also cause delays. Infrastructure maintenance and renewal, as well as weather conditions, are important aspects in infrastructure reliability.

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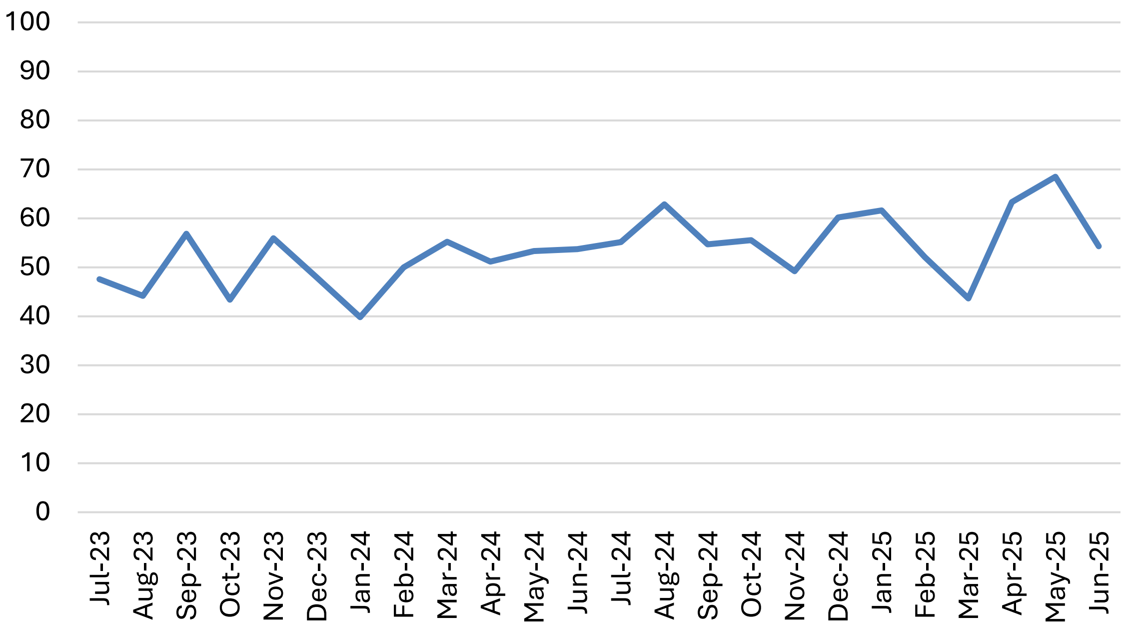
[6] See https://www.artc.com.au/performance-indicators/currentreporting/.

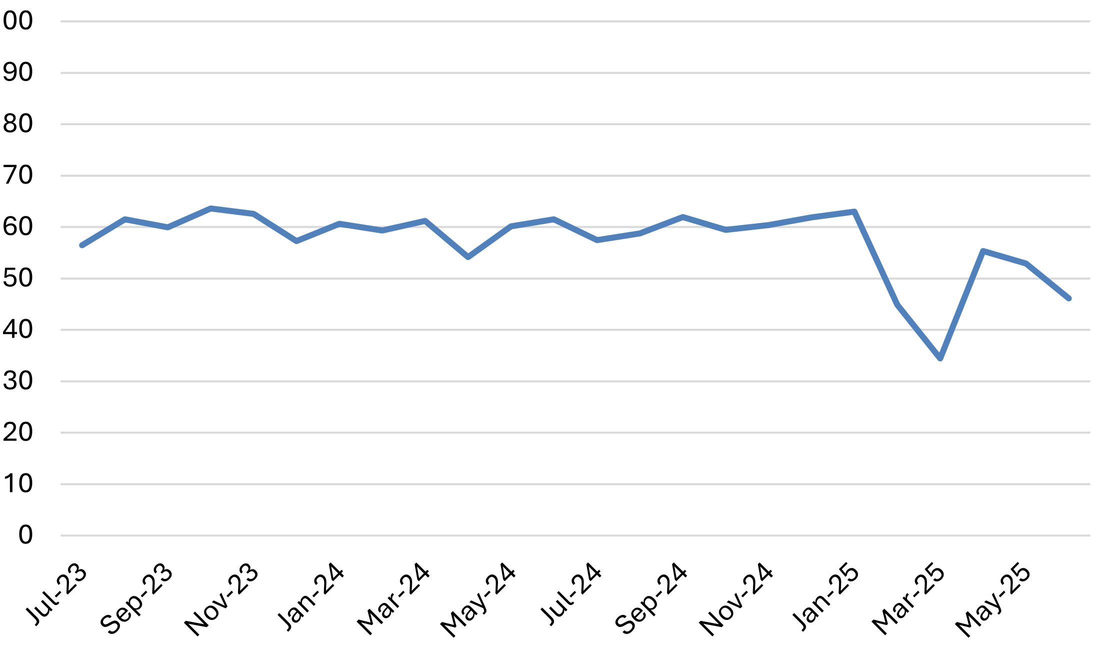
Figure 11 **North–South corridor, percentage of intermodal trains exiting the network within 30 minutes of schedule**



Source: Data provided by ARTC.

Between July 2023 and June 2025, approximately 53.5% of intermodal trains exited the network within 30 minutes of schedule, on average. Reliability was lowest in January 2024, at approximately 40% and highest in May 2025, at approximately 68.5%.

Figure 12 **East–West corridor (ARTC component), percentage of intermodal trains exiting the network within 30 minutes of schedule**



Source: Data provided by ARTC.

Between July 2023 and June 2025, approximately 57.3% of intermodal trains exited the network within 30 minutes of schedule, on average. Reliability was lowest in March 2025, at approximately 34.5% and highest in October 2023, at approximately 63.5%.

When comparing the two corridors for the reporting period, intermodal trains on the East–West corridor tended to be slightly more reliable than those on the North–South corridor.

Intermodal freight train frequency on the interstate network

Table 10 below, shows the weekly number of scheduled intermodal designated trains (allocated train paths) that originate and terminate in the given city pairs in (October) 2025. These origins and destinations are those of trains, not the freight on the trains. For example, Melbourne–Perth trains dwell in Adelaide where freight is loaded and unloaded. In 2025, there were 118 scheduled intermodal services per week. This was a reduction of 19, compared to (February) 2024.

Caution is needed when comparing numbers of scheduled services. The numbers are of allocated train paths, for which the train operators pay a flagfall fee and this may differ from the actual numbers of services an operator runs. Changes to the number of scheduled services from one year to another may reflect adjustments to the actual number of services that typically run each week. For example, an operator may pay for five path allocations per week from city A to city B, but only use four of them. The operator may then have the fifth path allocation removed as they are paying for the path but not using it. Lower train numbers can also be offset by longer train lengths. Train operators sometimes also operate ‘ad hoc’ intermodal services when required and they are in addition to what appears in the master timetable.

Changes in the number of scheduled intermodal services per week relative to 2024 are:

- No Brisbane to Adelaide and Adelaide to Brisbane services (previously two in each direction);
- Brisbane to Sydney: down by one;
- Sydney to Brisbane: up by one;
- Sydney to Melbourne: down by seven;
- Melbourne to Sydney: down by six;
- Brisbane to Melbourne: up by two;
- Melbourne to Brisbane: up by one;
- Melbourne to Perth: down by one; and
- Sydney to Perth and Perth to Sydney down by two each.

The biggest decline was in the number of Sydney to Melbourne and Melbourne to Sydney scheduled services. This was mostly due to the removal of Qube Logistics’ allocated train paths.

Table 10: Number of scheduled weekly intermodal designated train services, by city pair

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
North–South corridor											
Brisbane to Sydney	2	5	5	6	5	3	3	4	4	4	3
Sydney to Brisbane	2	5	5	4	5	2	2	2	2	2	3
Sydney to Melbourne	1	1	2	2	5	6	5	5	8	11	4
Melbourne to Sydney	0	0	0	3	5	5	3	2	6	8	2
Brisbane to Melbourne	16	12	16	16	10	10	11	11	10	11	13
Melbourne to Brisbane	16	12	16	16	10	10	12	13	13	13	14
Brisbane to Adelaide	2	2	2	1	2	2	2	2	2	2	0
Adelaide to Brisbane	2	2	2	1	2	2	2	2	2	2	0
East–West corridor											
Melbourne to Adelaide	6	6	5	5	5	5	5	6	6	6	6
Adelaide to Melbourne	6	6	6	5	5	5	5	6	6	6	6
Melbourne to Perth	20	18	18	15	13	13	15	16	16	19	18
Perth to Melbourne	20	19	19	15	14	14	15	16	16	19	19
Sydney to Perth	8	7	7	7	7	6	7	9	9	11	9
Perth to Sydney	9	7	7	7	7	6	7	9	9	11	9
Central corridor											
Adelaide to Darwin	6	6	6	6	6	6	6	6	6	6	6
Darwin to Adelaide	6	6	6	6	6	6	6	6	6	6	6

Sources: Working timetables of infrastructure managers (ARTC, Sydney Trains, Arc Infrastructure, UGL Regional Linx, and Aurizon) as at October 2025.

Table 11, below, shows the number of scheduled weekly interstate intermodal and steel trains on each line segment. This shows how intensely the interstate network is used, by schedule. Table 11 differs from Table 10 because it includes all interstate trains that travel along a given corridor, including those that continue on to another corridor, and steel trains. For example, BITRE counts a train travelling from Melbourne to Perth on all line segments of that route. The Cootamundra West–Melbourne sector also includes all Melbourne–Griffith intermodal services.

Crystal Brook–Port Augusta remains the busiest segment. This is because it is a convergence point for intermodal and steel trains travelling to and from Perth and Melbourne; intermodal trains to and from Sydney and Perth, intermodal trains to and from Adelaide and Darwin; and steel trains from Newcastle, Melbourne, Adelaide, and Perth to and from Port Augusta and Whyalla.

The Sydney–Cootamundra West and Cootamundra West–Melbourne segments remain the busiest on the North–South corridor. In addition to intermodal and steel trains, passenger and bulk commodity (mostly grain) trains use these segments extensively.

All segments had declines compared to 2024. Total declines in some segments was partially offset by increased origin–destination traffic passing through that segment. For example, the Brisbane–Sydney segment lost seven services (four Brisbane–Adelaide (intermodal), one Brisbane to Sydney (intermodal), one Brisbane to Sydney (steel), and one Sydney to Brisbane (steel)), but gained four (two Brisbane to Melbourne (intermodal), one Melbourne to Brisbane (intermodal), and one Sydney to Brisbane (steel)).

Table 11: Total scheduled weekly interstate intermodal and steel trains, by line segment

Year	2021	2022	2023	2024	2025
North–South corridor					
1. Brisbane–Sydney	42	50	48	48	45
2. Sydney–Melbourne					
Sydney–Cootamundra West	64	64	71	80	65
Cootamundra West–Melbourne	55	54	61	65	55
East–West corridor					
3. Sydney–Crystal Brook					
Sydney–Parkes via Lithgow	9	11	11	11	8
Cootamundra West–Parkes	19	21	21	25	20
Parkes–Crystal Brook	33	36	36	40	32
4. Melbourne–Crystal Brook					
Melbourne–Adelaide	45	48	48	54	51
Adelaide–Crystal Brook	54	54	54	60	52
5. Crystal Brook–Perth					
Crystal Brook–Port Augusta	78	83	82	92	84
Port Augusta–Tarcoola	63	70	70	80	72
Tarcoola–Perth	51	58	58	68	60

Sources: Working timetables of infrastructure managers (ARTC, Sydney Trains, Arc Infrastructure, UGL Regional Linx, and Aurizon) as at October 2025.

Figure 13 Pacific National Sydney to Brisbane train

Note: The image above shows Pacific National Sydney to Brisbane service 2SB3 crossing the Hastings River at Wauchope, New South Wales, on a wet October 2025 day. Photo courtesy of Rodney Avery.

Intermodal train flow patterns on the interstate network

Intermodal train flow patterns based on scheduled running times give information about the planned movement of such trains across the interstate network. Table 12, below, gives timetable information about intermodal designated services, which share the line with other trains such as bulk goods trains, steel designated trains and passenger trains. Changes to the nature and scale of other train types' operations may influence intermodal train flow patterns in the infrastructure managers' path planning. Assessing what influences other trains' operations may have on intermodal train movement patterns is outside the scope of this publication. Actual times for individual trains may differ due to operational reasons.

Table 12: Scheduled inter-capital intermodal train flow patterns

	Number of weekly services		Average speed (kph)		Average number of stops		Average transit time (minutes)		Average dwell time (minutes)		Average dwell time (per cent of total trip)		Average dwell per stop (minutes)	
Year	**2024**	**2025**	**2024**	**2025**	**2024**	**2025**	**2024**	**2025**	**2024**	**2025**	**2024**	**2025**	**2024**	**2025**
North–South corridor														
Brisbane to Sydney	17	16	53	54	9	8	1,098	1,077	180	161	16	15	21	19
Sydney to Brisbane	17	17	53	54	7	7	1,082	1,066	170	155	16	14	25	23
Sydney to Melbourne	22	17	59	62	5	4	956	911	172	131	18	14	36	35
Melbourne to Sydney	21	14	65	68	4	3	859	830	86	58	10	7	23	19
Brisbane to Melbourne	11	13	53	53	14	13	2,151	2,198	436	495	20	23	30	37
Melbourne to Brisbane	13	14	54	59	10	11	1,990	1,988	310	302	16	15	30	28
East–West corridor														
Melbourne to Adelaide	25	24	66	66	3	3	767	768	74	82	10	10	24	25
Adelaide to Melbourne	25	25	58	58	6	5	873	866	171	161	20	18	31	30
Adelaide to Perth	19	18	64	65	15	15	2,464	2,447	389	376	16	15	26	26
Perth to Adelaide	19	19	58	58	18	19	2,741	2,716	692	631	25	23	39	34
Melbourne to Perth	19	18	60	60	19	18	3,491	3,464	723	705	21	20	38	38
Perth to Melbourne	19	19	52	51	25	25	4,053	4,120	1,299	1,328	32	32	52	53
Sydney to Perth (via Lithgow)	8	6	63	66	18	15	3,729	3,596	691	555	18	15	38	36
Sydney to Perth (via Cootamundra West West)	3	3	59	59	26	21	4,181	4,190	1,022	970	24	23	39	45
Perth to Sydney (all via Cootamundra West West)	11	9	57	58	24	23	4,316	4,230	1,176	1,078	27	25	49	47
Central corridor														
Adelaide to Darwin	6	6	69	69	6	7	2,564	2,567	374	374	15	15	62	55
Darwin to Adelaide	6	6	65	63	9	9	2,740	2,812	472	524	17	19	54	57

Sources: Working timetables of infrastructure managers (ARTC, Sydney Trains, Arc Infrastructure, UGL Regional Linx, and Aurizon) as at October 2025.

North–South corridor

Notable changes from 2024 are as follows:

- There were no scheduled Brisbane to Adelaide and Adelaide to Brisbane services (previously there were two each week in each direction).
- The number of scheduled trains on the Sydney to Melbourne and Melbourne to Sydney corridor was significantly down. This was due to the cessation of all Qube Logistics' allocated train paths, but which was partly offset by the inclusion of two new Aurizon Brisbane to Melbourne and Melbourne to Brisbane train paths (which also operate on the Sydney–Melbourne corridor).
- Average scheduled transit times were down on all sectors, from two minutes (Melbourne to Brisbane) to 45 minutes (Sydney to Melbourne), except Brisbane to Melbourne, whose average scheduled transit times increased by 47 minutes. This increase was due to the Aurizon services, including the two new services, having relatively longer dwell times at its Sydney terminal than those of the other operators.

East–West corridor

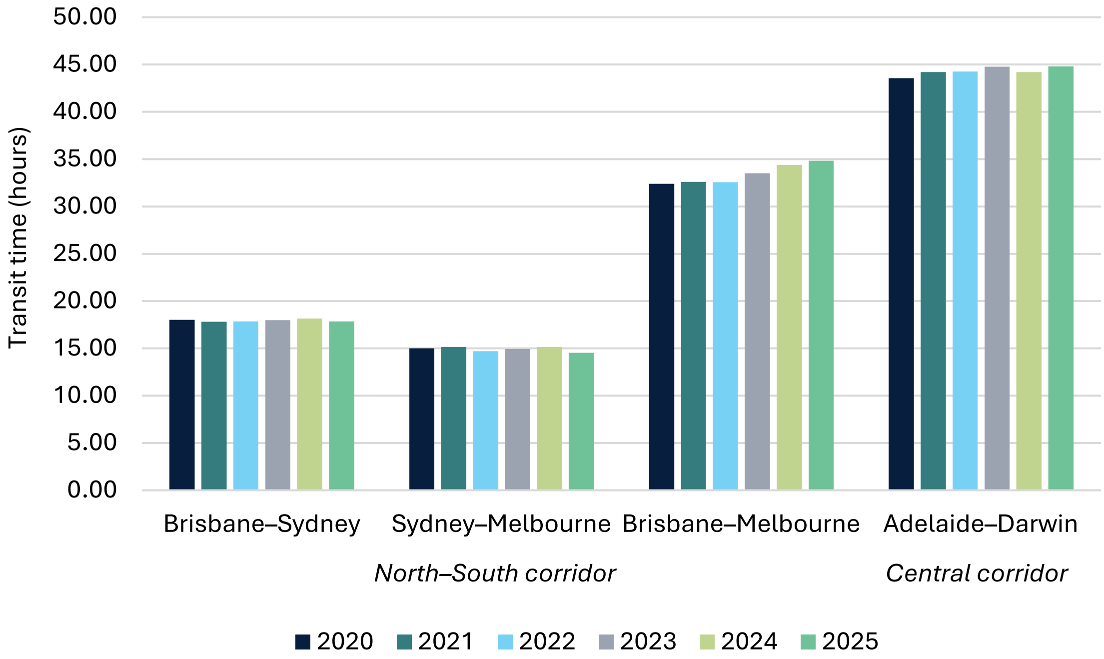
Notable changes from 2024 are as follows:

- Average Sydney to Perth (via Lithgow) scheduled transit times decreased by more than two hours. This was mostly due to the cessation of two services, both of whose transit times were significantly higher than both the 2024 and 2025 average for the route.
- While Sydney to Perth trains (via Cootamundra West) had on average five fewer scheduled stops, the average total dwell time increased by almost an hour and the average scheduled transit time increased by nine minutes.
- Average scheduled Melbourne to Perth and Perth to Adelaide transit times decreased by 27 and 25 minutes respectively.
- Average Perth to Sydney (all via Cootamundra West) transit times decreased by 86 minutes. There was, on average, one fewer stops and dwell times decreased by 98 minutes.
- Average Perth to Melbourne scheduled transit times increased by 67 minutes. Average dwell times increased by 29 minutes.

Central corridor

There have been no significant changes in travel patterns since 2024.

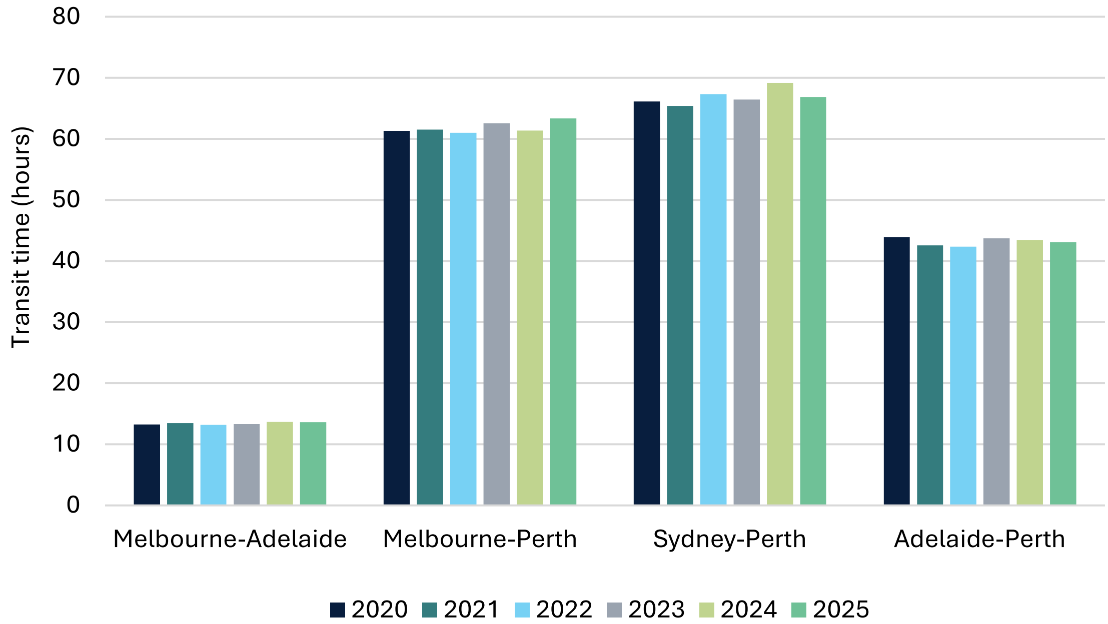
Figure 14 **Average scheduled transit times, North–South and Central corridors, 2020 to 2025**



Notes: Calculations include all intermodal designated trains on a given line segment travelling in both directions. The Sydney–Melbourne calculations, for example, include Brisbane–Melbourne trains.

Sources: Working timetables of infrastructure managers (ARTC, Sydney Trains, and Aurizon) as at October 2025.

Figure 15 Average scheduled transit times, East–West corridors, 2020 to 2025



Notes: Calculations include all intermodal designated trains on a given line segment. The Melbourne–Adelaide calculations therefore include Melbourne–Perth trains.

Most Sydney to Perth services travel the shorter route via Lithgow while the others take the longer route via Cootamundra West. The proportion of trains take either route can vary from year to year, and this affects the average results. All scheduled Sydney to Perth services travel via Cootamundra West.

Sources: Working timetables of infrastructure managers (ARTC, Sydney Trains, Arc Infrastructure, and UGL Regional Linx) as at October 2025.

Bulk rail freight traffic, by commodity

Iron ore and coal are the rail industry's two largest bulk freight flows.

Iron ore traffic

Australia exports most of its iron ore, almost all of which is moved to port by rail. The scale of the task means rail is best suited for transporting iron ore from mine to port. The largest flows are in the Pilbara region of Western Australia.

In 2025, the Gold Valley Group began transporting by rail iron ore from its West Australian Wiluna West Iron Ore Project at Malcolm (near Leonora) to Esperance, via Kalgoorlie. The iron ore travels first from Wiluna West to Malcolm by road (approximately 330 kilometres), where it is transferred to rail transport for the onward leg to Esperance — approximately 620 kilometres. The iron ore previously travelled by road from Wiluna West to Kalgoorlie by road, then transferred to rail for transport to Esperance. To facilitate the shift and anticipated volumes growth, Arc Infrastructure is conducting an expanded program of resleepering and rerailing works on both the Leonora and Esperance Branch Lines (Arc Infrastructure, 2025).

In November 2025, Aurizon began hauling iron ore for Yilgarn Iron in Western Australia, under contract to December 2029. Under the contract, Aurizon hauls up to 4.4 million tonnes per annum from Koolyanobbing to the Port of Esperance for export (Aurizon, 2025a).

Iron ore also travels by rail from the Karara mine to Geraldton in Western Australia (Karara Mining Limited, 2025).

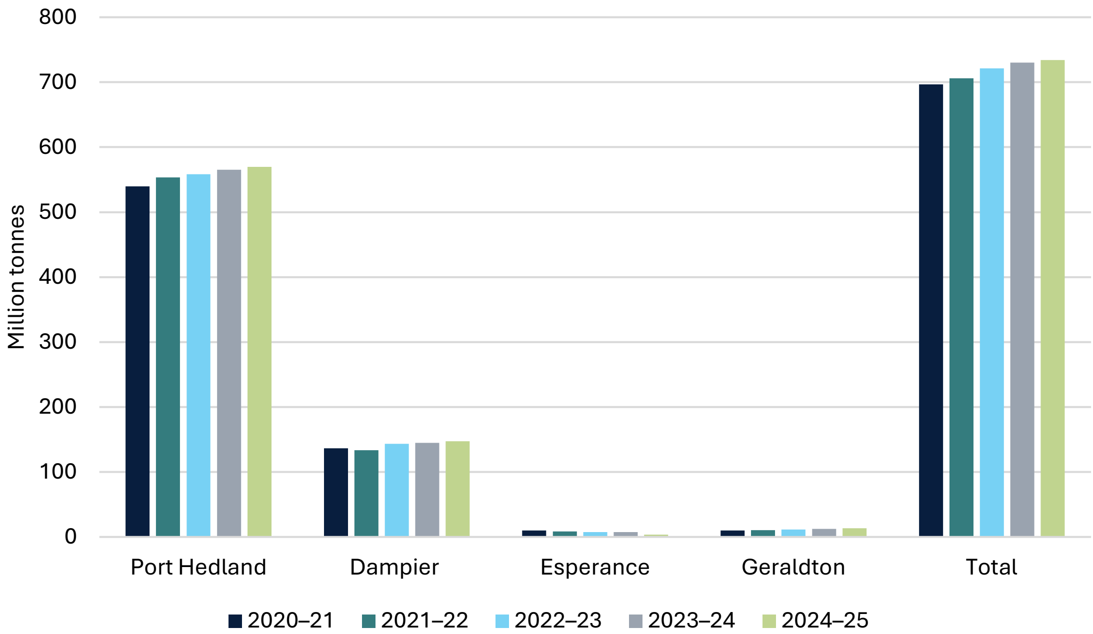
Table 13: Iron ore exports by port, by financial year, million tonnes

Port	2023–24	2024–25	Change (per cent)
Port Hedland	565.2	569.8	+0.8
Dampier	144.9	147.1	+1.5
Esperance	7.5	3.8	-49.6
Geraldton	12.5	13.6	+8.8
Total	**730.1**	**734.3**	**0.6**

Note: Totals subject to rounding.

Sources: Pilbara Ports Authority (n.d.); Southern Ports (2025), p.30; Mid West Ports (2025), p.12.

Figure 16 Iron ore exports by financial year



Sources: Pilbara Ports Authority (n.d.); Southern Ports (2025), p.30; Mid West Ports (2025), p.12; previous editions of Trainline, citing port authority reporting.

Figure 17 Iron ore transport by rail corridors

Coal traffic

Similar to iron ore, rail is the best and dominant mode for hauling coal from mine to port, particularly given Australia's coalfields are mostly located inland. Most Australian (black) coal extraction is in Queensland and New South Wales. Queensland coal is predominantly metallurgical (used in steel making) while the New South Wales coal is predominantly thermal (typically used in electricity generation)[7].

Aurizon and Pacific National dominate coal haulage, with involvement also by Bowen Rail Company (Queensland), Magnetic Rail Group (Queensland and New South Wales), Southern Shorthaul Railroad (New South Wales),[8] and TasRail (Tasmania). Aurizon is the main operator in Queensland, while Pacific National dominates in the Hunter Valley. Coal extracted in Tasmania is used domestically.

Table 14, below, shows Australian coal export tonnages by port for 2024–25 and Figure 18 shows port specific coal exports over the five years 2020–21 to 2024–25.

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7 BITRE (2013, p. 9) gives an overview of coal attributes.

8 Bowen Rail Company operates coal trains in Queensland for Bravus Mining and Resources, while Southern Shorthaul Railroad operates coal trains in New South Wales for Centennial Coal.

Table 14: Coal exports, by principal ports, million tonnes, 2024–25

Newcastle	Hay Point	Gladstone	Abbot Point	Brisbane	Total
146.20	96.17	64.29	34.03	4.96	345.65

Note: Data for Port Kembla not available.

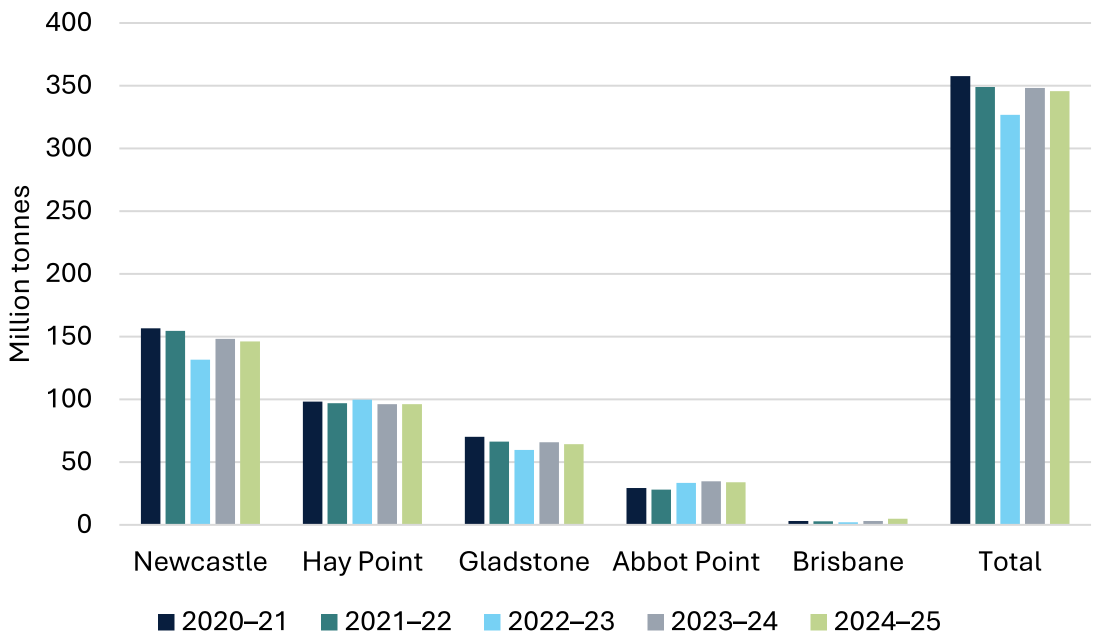
Sources: Port of Newcastle (n.d.); North Queensland Bulk Ports Corporation (n.d.); Gladstone Ports Corporation (n.d.); Port of Brisbane (n.d.).

Percentage changes for the individual ports and the combined total, compared to the previous financial year, were as follows:

- Newcastle: -1.30;
- Hay Point: -0.07;
- Gladstone: -2.53;
- Abbot Point: -1.82;
- Brisbane: +54.04; and
- Total: -0.74

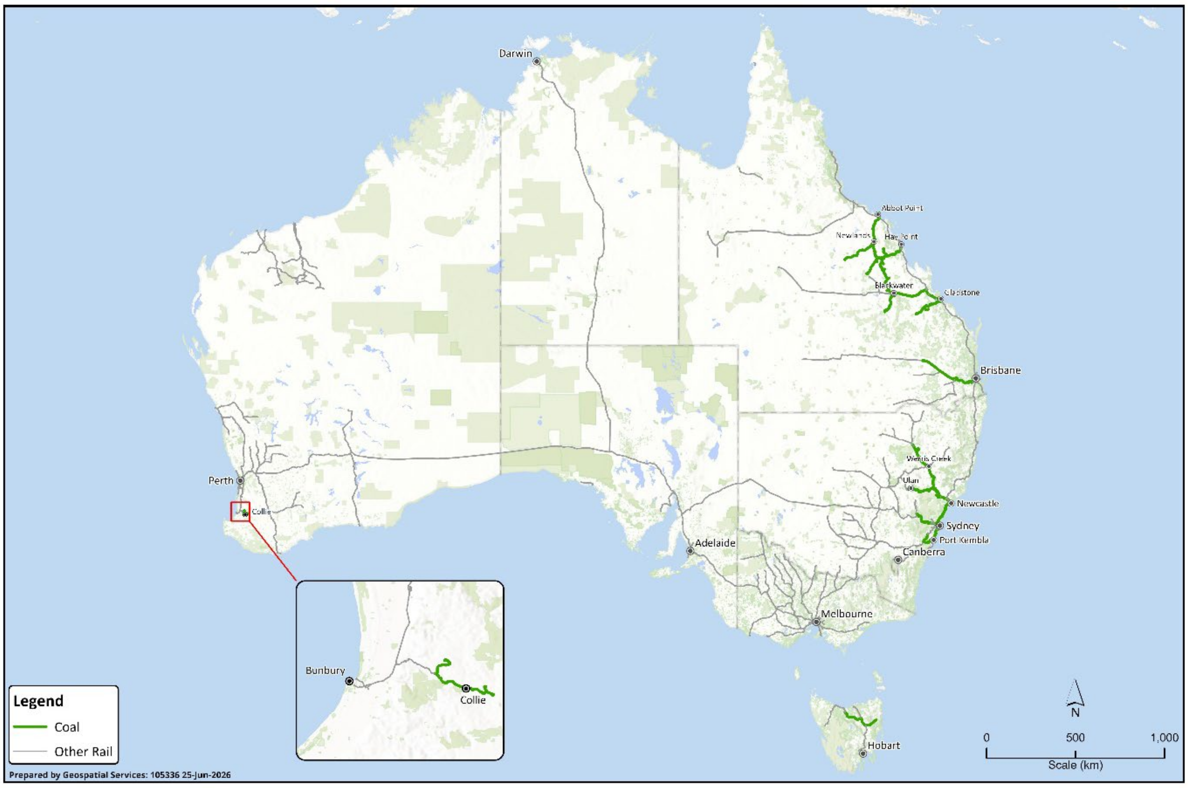
Throughput was slightly down at all ports except Brisbane, which saw more than 50% growth. This was on top of a greater than 50% growth the previous financial year. Because exports through Brisbane are much smaller than the other ports, however, these large increases had only minimal effect on total tonnages. According to advice from the Port of Brisbane, the growth in 2024–25 was due in large part to further production increases at NHC Acland Stage 3.

Figure 18 Coal exports by financial year



Sources: Port of Newcastle (n.d.); North Queensland Bulk Ports Corporation (n.d.); Gladstone Ports Corporation (n.d.); Port of Brisbane (n.d.).

Figure 19 Coal transport by rail corridors



Grain traffic

Another major role for Australia's railways is hauling agricultural produce from rural areas to ports for export and, to a lesser extent, domestic consumption. Following bumper harvests rail's grain haulage task increases significantly[9]. Grain harvests are predominated by cereal grains (for example wheat and barley), but also pulses and oilseeds. Rail has traditionally dominated grain transport over long distances, while road transport becomes more competitive over shorter distances or when taking grain from farmgate to consolidation point. Figure 20 shows grain flows by rail. This traffic largely uses dedicated grain haulage branch lines of varying quality, which connect with main lines.

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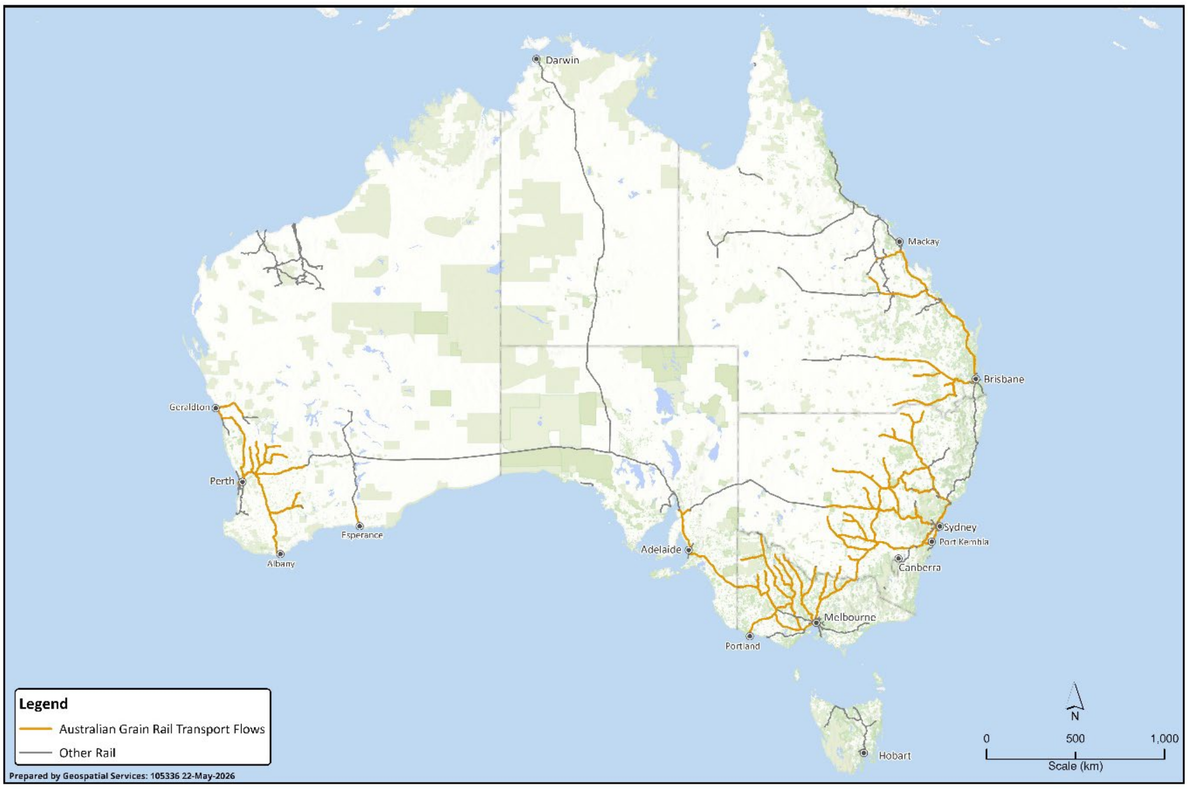
[9] Unlike iron ore and coal, BITRE does not have data on grain transport by rail tonnages.

Figure 20 Grain transport by rail flows



While rail transport has a traditional advantage for bulk grain transportation over long distances, its advantage is not absolute and has been partially eroded by other factors that have improved road transport's competitiveness or restricted rail transport's efficiency[10]. These include:

- Variable infrastructure quality across the networks, slower speeds, the need in places to change locomotives from mainline types to branch line types, chokepoints and short crossing loops at strategic locations[11];
- Variable rollingstock age;
- Degrees of grain handlers' investment in grain receival sites, including closures of smaller sites;
- Improved roads and road transport services, including more widespread use of bigger and heavier trucks;
- Increased containerisation of grain, although this is still usually transported by rail;
- Deregulation of grain export marketing, which has seen smaller shipments being moved on diverse pathways for a broader range of bulk handlers and export marketers;

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[10] *Trainline 3* discusses in detail these changes and challenges to grain transport by rail. (See BITRE, 2015).

[11] For more information on track infrastructure constraints, from a grain grower's perspective, see (Grain Central, 2017).

- Increased on-farm grain storage that is more suited to road transport, including for smaller shipments;
- Increased number of farming cooperatives based around road transport;
- Rail industry restructuring, funding and ownership changes;
- Rail transport and infrastructure availability;
- Increased domestic grain consumption of wheat produced in New South Wales, for which road transport is better suited;
- Coordinating train loading times with port receival times; and
- Weather events, where smaller harvests in droughts reduce the export grain task and are focused on the domestic grain task that is mostly sent by road.

While poor quality track infrastructure may reduce rail transport's efficiency, this should be seen in the context of how much grain travels on the lower grade lines in the first place.

Figure 21 Southern Shorthaul Railroad grain train

Note: The image above shows Southern Shorthaul Railroad train 3340 loading grain at Barellan in New South Wales, June 2025. Photo courtesy of Rodney Avery.

Short-haul and regional rail freight traffic

Short-haul (a distance that is shorter than that which intermodal rail transport is usually considered competitive) and regional rail freight movements are both containerised and non-containerised. Examples of such traffic includes the Kilmore East–Brooklyn/Westall quarry train (Victoria), the Berrima–Maldon clinker train (New South Wales), the Railton–Devonport cement train (Tasmania), the Kevin–Thevenard gypsum train (South Australia), and the Banksmeadow and Clyde–Tarago garbage train (New South Wales). Short-haul traffic is often thought to be uncompetitive with road freight, due to the relative short distances over which the freight is moved. It can, however, be successful. To succeed, short-haul rail traffic needs:

- Minimal truck costs between the hinterland and rail terminal;
- Low line haul and high road haul costs; and
- A convergence of parties who encourage short haul and viable hinterland terminals (BITRE 2016a, pp v–vi)[12].

Landbridge and regional movements

Rail services also undertake maritime oriented tasks (for import, export, and Bass Strait traffic) that can be classified as follows:

- Landbridge movements, from one port to another. Container movements from around Hobart, to the Port of Burnie (for export or transfers to and from the mainland), is an example;
- Regional export movements, from inland terminals to the port. This traffic includes agricultural commodities such as grain, hay, sugar, cotton, grains, livestock, wine and logs;
- Single commodity and/or a single company logistics-based hub export operations, such as agricultural products from the Fletcher International terminal at Dubbo;
- Regional import operations (usually regional trains carrying imported products on their return leg from the ports); and
- Urban import and export movements. These are short-haul container movements, linking the port terminal with urban logistics centres (where boxes are de-stuffed, stored or distributed to local businesses around the terminals). These local rail services also shift empty containers[13].

Queensland

Figure 22 shows the rail container flows between Queensland intermodal terminals and the ports of Brisbane (Fisherman Islands) and Townsville.

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[12] BITRE 2016a (*Why short-haul intermodal rail services succeed*), provides an in-depth discussion on the (potential) viability of short-haul rail transport in Australia.

[13] Rail (and road) volumes of containers through the primary capital city ports are reported in BITRE's regular Waterline series. (BITRE, 2024, gives the latest figures.)

Figure 22 Rail containerised freight operations serving the ports of Brisbane and Townsville

The only currently known containerised freight for export travelling to the ports of Brisbane and Townsville by rail is refrigerated meat from Rockhampton to Brisbane, and minerals and chemicals from Mount Isa to Townsville.

Sydney Ports — Port Botany

Figure 23 Rail containerised freight operations serving Sydney Ports – Port Botany

Rail moves a range of containerised commodities, primarily agricultural, to Port Botany. This includes:

- Narrabri: specialised grain, Viterra pack cereals (wheat and barley), oilseeds, pulses, cotton;
- Dubbo: specialised grain, oilseeds, pulses, and refrigerated meat;
- Coonamble: specialised grain;
- Narromine: specialised grain;
- Warren South: cotton;
- Wee Waa: cotton;
- RiFL/Bomen[14]: paper, cotton, grain, oilseeds, pulses, refrigerated meat, timber, other agricultural products;
- Trangie South: cotton;
- Kelso (Bathurst): grain;

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14 The Riverina Intermodal Fright and Logistics Hub (RiFL) opened in December 2022. Paper products that were previously loaded on to trains at Harefield, about 15 kilometres from the hub, are now loaded at RiFL. For more information about the hub see https://wagga.nsw.gov.au/projects/past-projects/completed-projects/2022-projects/rifl.

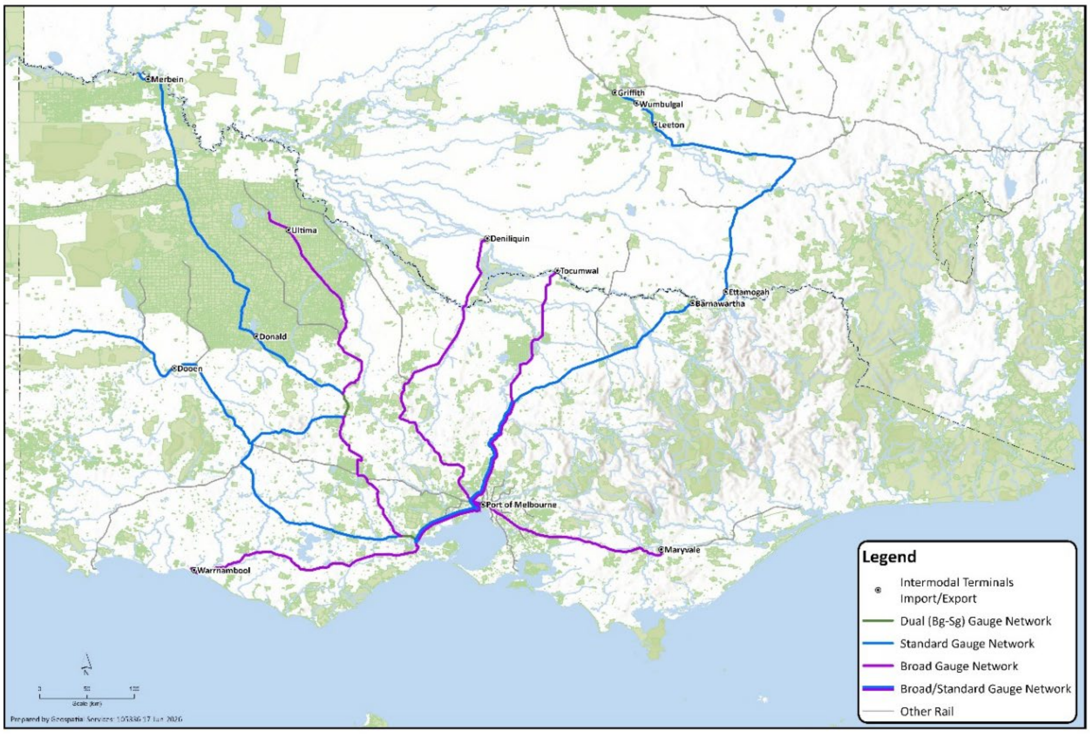
- Werris Creek: grain, meat and other agricultural products; and
- Tamworth: refrigerated meat, agricultural products.

In 2025, cotton and other agriculture commodities producer, Australian Food and Fibre (AFF), signed a deal with Rail First for rollingstock to haul its containerised agricultural freight by rail across its New South Wales network to Port Botany (Rail Express, 2025). While AFF had previously used rail transport, the deal sees AFF running its own trains from Narrabri and Warren to Enfield in Sydney. It leases its rollingstock from Rail First and Sydney Rail Services crews the trains. From Enfield, Swift Transport provides a shuttle service to Port Botany. Since becoming its own train operator, AFFs TEU throughput has risen from 6,400 in 2022 to 23 000 in 2025. While focused on hauling its own freight, AFF provides containerised rail transport services to other customers.

Port of Melbourne

Figure 24 shows the major regional container export flows by rail through the Port of Melbourne. It does not show rail container flows through the port that originate from or are destined for Tasmania.

Figure 24 Rail containerised freight operations serving the Port of Melbourne



There are regional flows, both from within Victoria and from and southern New South Wales. Products transported by rail are as follows:

Intrastate Victoria:

- Merbein (Mildura): grain, wine, fruit;
- Donald: peas, grain;

- Warrnambool: meat, dairy products, machinery and ingots;
- Dooen (near Horsham): grain, hay, and pulses;
- Maryvale in the Latrobe Valley: paper;
- Ultima: hay, grain, and mineral sands (trucked from Balranald); and
- Barnawartha: import/export trade for solar farms, grain, cotton, resin, meat, biodiesel, machinery and wine.

Due to the cessation of white paper production at Maryvale, rail services from Maryvale now only operates seven days per fortnight, instead of the previous 13 services per fortnight. Additional services run if required when there is additional demand.

Southern New South Wales:

- Tocumwal: grain and hay;
- Griffith and the Wumbulgal terminal: wine, rice, grain, cotton;
- Rice and pelleted feeds for animals, from Leeton;
- Deniliquin: rice, grain; and
- Paper and bottled water from the Ettamogah Rail Hub.

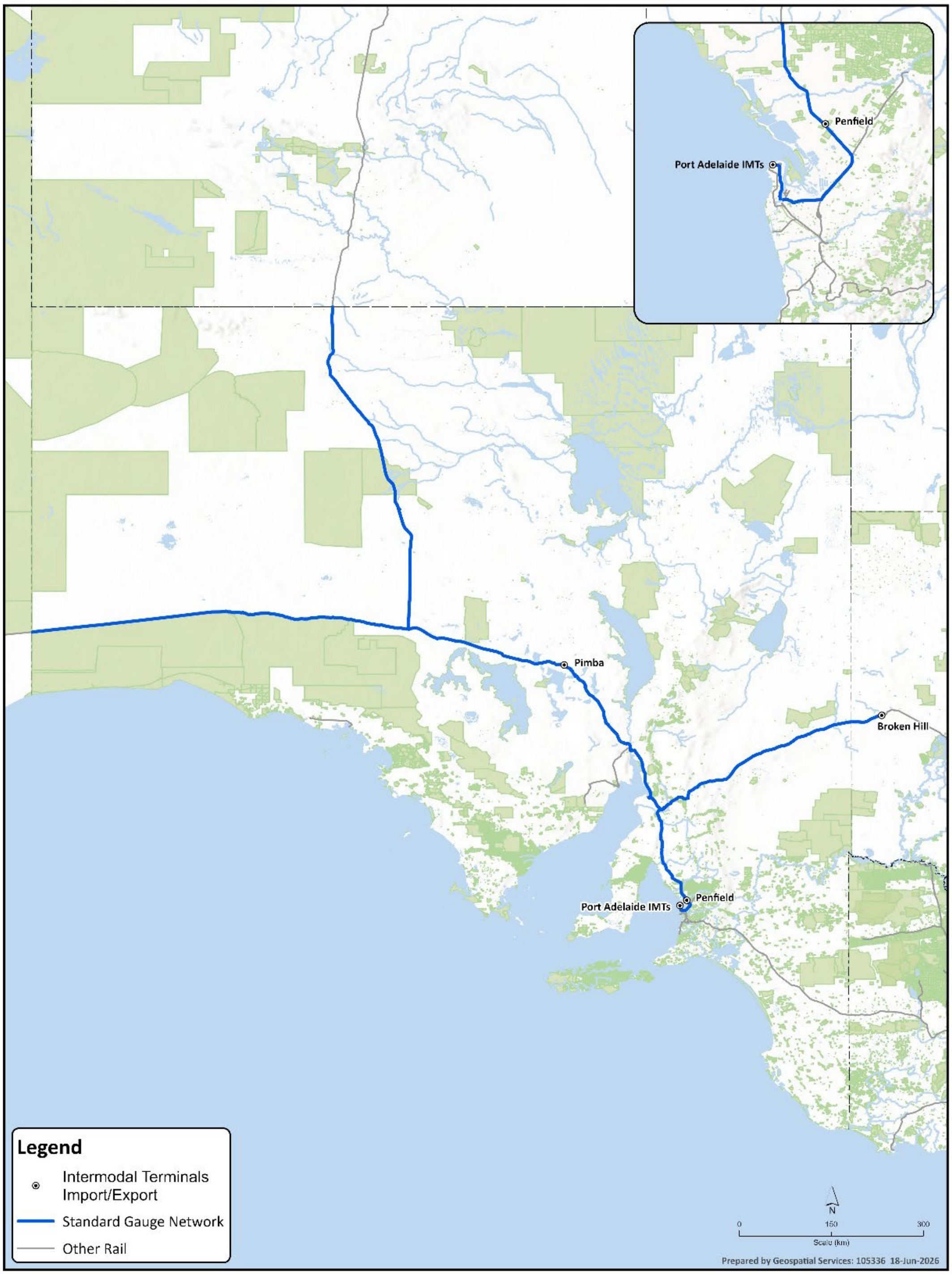
Kwinana

Figure 25　Rail containerised freight operations serving Kwinana

The primary regional container export flows are rare earth minerals and nickel from Leonora and Malcolm and nickel products from a nickel smelter south of Kalgoorlie.

Port Adelaide

Figure 26 Rail containerised freight operations serving the Port of Adelaide



According to advice from the Port of Adelaide, purpose-built bulk containers are used to haul minerals sands, such as from the Murray Basin in New South Wales, to Broken Hill for further processing, then on to Adelaide. Minerals sands are exported through Inner Harbor at Berth 29.

Broken Hill Mines use Qube Logistics (after acquiring Bowmans Rail) to deliver containerised zinc concentrates from Rasp Mine at Broken Hill to Port Adelaide every two weeks. Aurizon runs copper concentrate and cathode trains from Pimba to the Port Adelaide Inner Harbor at Berth 29 rail terminal for BHP[15].

Trains operate between Qube Logistics' intermodal terminal and the Flinders Adelaide Container Terminal (FACT) (Outer Harbor). FACT is used for the export of agricultural products such as hay, pulses, and project materials. The facility is also used as a consolidation point for a range of commodities, a task that would otherwise be done at the port. SCT Logistics operates a service from Penfield, on the northern outskirts of Adelaide, to Outer Harbor. This service predominantly carries export wine products (Treasury Wines).

Tasmania

With modernised terminals located at Burnie, Brighton and George Town (Bell Bay), TasRail provides freight haulage and storage services throughout the state. Containerised freight services connect major industrial producers to Tasmania's premier shipping ports where freight is moved across Bass Strait. Bulk freight services provide efficient, integrated, end-to-end supply chain services and the haulage of bulk commodities to storage facilities for onward export. TasRail also operates Tasmania's only publicly-owned bulk handling, storage and ship loading facility for bulk minerals, which is located within the Port of Burnie.

Figure 27 Rail containerised operations serving Tasmanian ports

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15 In June 2025 Aurizon announced it had entered an agreement with BHP to move about 1.3 million tonnes of copper concentrate and cathode from its Olympic Dam, Prominent Hill, and Carrapateena mines via a newly built intermodal terminal at Pimba in South Australia (Aurizon, 2025b).

Rail traffic terminals in Tasmania include:

- George Town: A multi modal-terminal with a container storage area capable of handling containerised general freight, metal ingots and bulk log freight (TasRail also has direct rail access to two woodchips mills within Bell Bay.);
- Devonport: A freight terminal handling containerised general freight;
- Burnie: An upgraded multi-modal freight terminal, which handles containerised general freight, bulk metal concentrates, paper products, and metal ingots;
- Launceston: A freight terminal handling containerised general freight; and
- Brighton: A multi-modal freight terminal with container hardstand and storage area that handles containerised general freight, bulk log freight, and metal ingots.

TasRail also hauls zinc ingots, bulk minerals concentrates, bulk cement, coal, finished paper products, sugar, recycled metal, glass bottles, fish food, fertiliser, construction materials, consumer goods, groceries and aluminium ingots.

Urban maritime container movements

Urban shuttle trains provide a rail link from seaports to nearby intermodal (distribution) centres. These services are advantageous by virtue of the fact they reduce road congestion into and out of the ports and connecting arterial roads. Examples include:

- Somerton–Port of Melbourne (approximately 30 kilometres);
- Yennora–Port Botany (approximately 34 kilometres);
- St Marys–Port Botany (approximately 55 kilometres);
- Minto–Port Botany (approximately 50 kilometres);
- Moorebank–Port Botany (approximately 42 kilometres);
- Enfield–Port Botany (approximately 18 kilometres);
- Direk/Penfield–Outer Harbor, Port Adelaide (approximately 33 kilometres);
- Kenwick–Fremantle (North Quay) (approximately 35 kilometres);
- Forrestfield/Kewdale–Fremantle (Inner Harbour) (approximately 39 kilometres); and
- Fremantle (North Quay)–Kwinana (approximately 28 kilometres).

In November 2025, freight train services began at the Intermodal Terminal Company's open access Melbourne Intermodal Terminal (MIT), in the outer Melbourne suburb of Somerton (Rail Express, 2025a). Southern Shorthaul Railroad currently operates one daily return shuttle train between the MIT and the Port of Melbourne, transporting containerised export logs. Coinciding with this, the Port of Melbourne has established and is funding a start-up incentive to support the movement of import containers from the Port of Melbourne to the MIT by rail. The incentive offers $100 for every TEU and $200 for every forty-foot equivalent unit (FEU). The registration of interest process began in December 2025 and closed in February 2026 (Port of Melbourne, 2025).

The Yennora and Minto operations handle imports and exports. The terminals conduct logistics activities for imported goods, including storage, consolidation and deconsolidation, and onwards road distribution to nearby warehouses. Exports include empty container transfers to the port. In May 2024, DP World announced the launch of its new Yennora–Port Botany rail service. This involves a twice daily return rail service from the Yennora Intermodal Terminal to Port Botany, with an expected annual capacity of 160,000 TEUs (DP World, 2024).

The Western Australian Government subsidises the movement of (loaded) containers by rail to/from intermodal terminals at Forrestfield, Kenwick, Rockingham and Kwinana to/from North Quay at Fremantle Ports' Inner Harbour. The subsidy is $50 per TEU. Empty containers are not subsidised.

Intermodal Group (IMG)/Watco operate train services between Fremantle and Forrestfield, with 2–3 trains per day, 6–7 days a week. IMG/Watco also operate train services between Fremantle and Kenwick, with two trains per day, 6–7 days a week. Each IMG/Watco train can haul up to 100 import/export containers. Aurizon operates 1–2 trains per day, five days per week between Kwinana and North Quay.

Figure 28 IMG/Watco train

Note: The photo above shows the unloading and loading of IMG/Watco wagons at its North Quay Rail Terminal (NQRT) in Fremantle. Photo courtesy of IMG/Watco.

In 2024–25, a record 23.5% (208 699 TEUs) of containerised freight was transported by rail through Fremantle Port's Inner Harbour, which exceeded the West Australian Government's target of 20% (Government of Western Australia, 2025).

Box 2 Further resources on non-bulk freight activity

Most of Australia's major ports report throughput statistics by freight type, freight origin, and freight destination on their websites, through a search facility, or in their annual reports.

BITRE's Waterline series reports quarterly data on rail traffic volumes through the mainland state capital city ports (where traffic is measured in, TEU containers).

Chapter 3 – Urban passenger transport results – heavy rail and light rail

Each of the mainland state capital cities operate urban heavy rail passenger services. Melbourne, Sydney, Adelaide, Canberra, the Gold Coast, and Newcastle operate light rail services. They provide an alternative to private cars, which reduces road congestion.

Patronage

Table 15: Urban heavy rail patronage (millions of journeys), 2024–25

Sydney	Melbourne	Brisbane	Perth	Adelaide	Total
359.2	187.4	54.9	61.9	14.6	678

Notes: Sydney's patronage is the sum of Sydney Trains and Sydney Metro services. The breakdown is 296 million for Sydney Trains and 63.2 for Sydney Metro. The Sydney Trains component includes all Opal and non-Opal patronage.

On 1 July 2024, Sydney Trains began operations of 'intercity' passenger services formerly operated by NSW TrainLink. The Sydney Trains component of the total in this table is that of Sydney Trains' designated 'suburban' network only.

Sources: Public Transport Authority of Western Australia (2025), p.26; Department for Infrastructure and Transport (2025), p.50; Queensland Rail (2025), p.17; Sydney Metro (2025), p.46; Department of Transport and Planning (2025), p.38; advice from Transport for NSW.

Total urban[16] heavy rail patronage for 2024–25 was approximately 678 million passenger journeys, up from 627 million passenger journeys the previous financial year. This was an increase of approximately 8.1%. Patronage grew in all cities:

- Sydney: 10.5%;
- Melbourne: 2.7%;
- Brisbane: 16.2%;
- Perth 3.7%; and
- Adelaide: 19%.

While combined Sydney Trains and Sydney Metro patronage grew, the Sydney Trains component decreased by approximately two per cent. Sydney Metro patronage grew by approximately 171%, following the opening of the Sydney Metro City line on 19 August 2024.

Despite growth in Melbourne's patronage, the result fell short of the Victorian Department of Transport and Planning's target patronage for the year of 231.8 million passenger journeys (Department of Transport and Planning, 2025, p.38).

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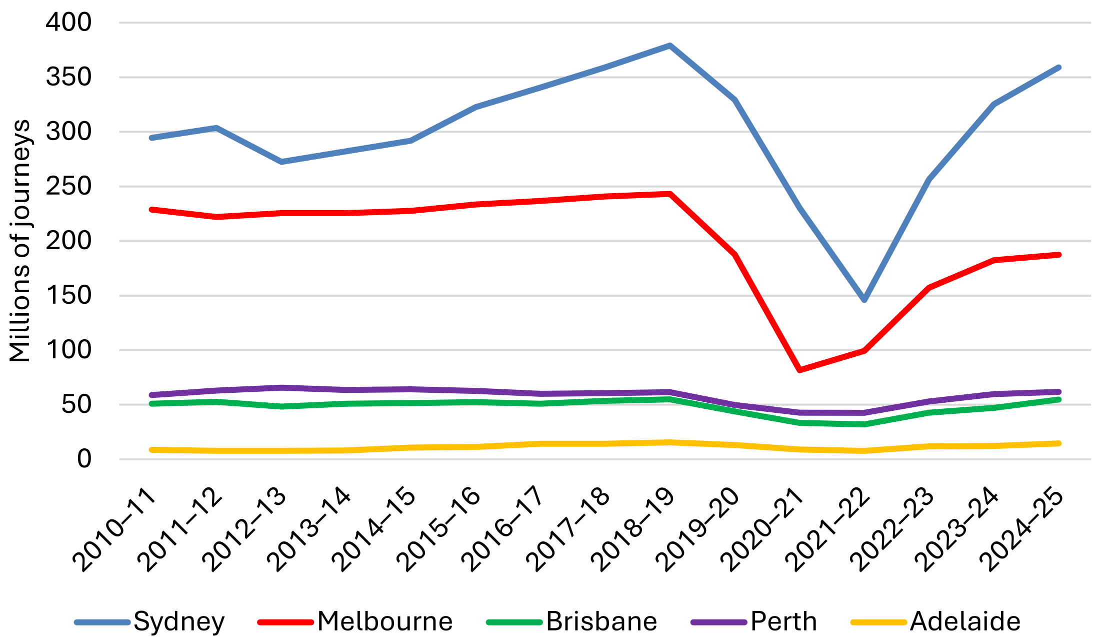
[16] Urban in this instance is defined as the networks of each city's service provider, namely Queensland Rail (Citytrain), Sydney Trains (suburban), Sydney Metro, Metro Trains Melbourne, Adelaide Metro, and Transperth.

Queensland Rail attributed part of the increased patronage to its introduction of the 50 cent fares, which came into effect in August 2024 (Queensland Rail, 2025, p.18).

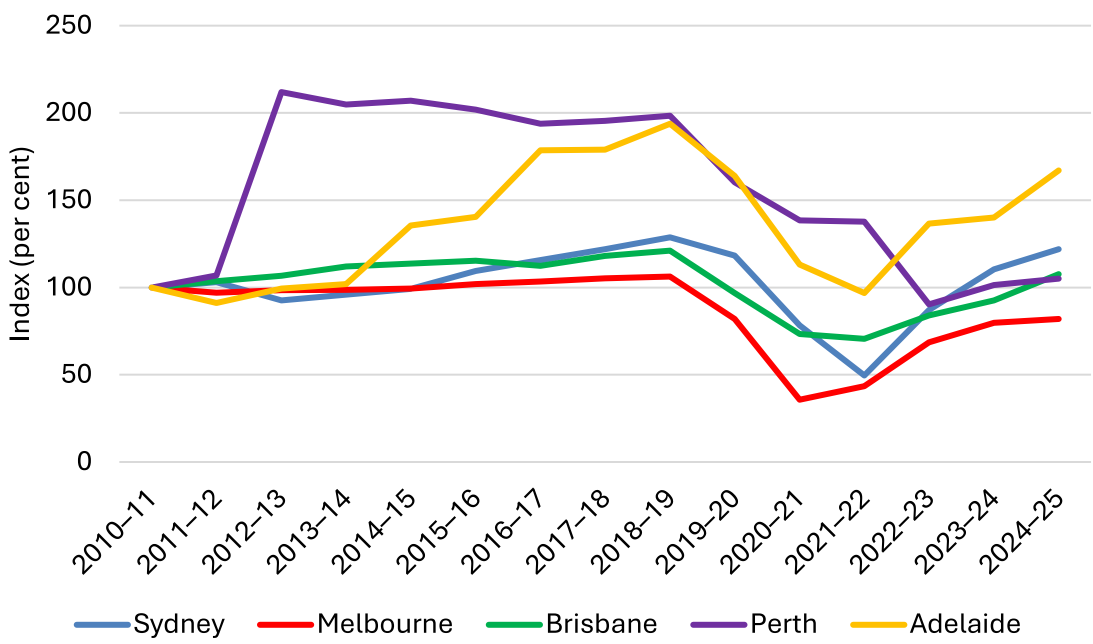
While the Armadale line in Perth recorded a patronage drop of more than 60% (coinciding with its temporary closure for infrastructure upgrades), this was offset elsewhere on the Transperth network, including the newly opened Ellenbrook and Thornlie–Cockburn lines, and the extension of the Joondalup line to Yanchep (Public Transport Authority of Western Australia, 2024, p.26). The Armadale line also partially re-opened to Beckenham Station in June 2025.

Figure 29 Heavy rail patronage in Australian cities



Sources: Public Transport Authority of Western Australia (2025), p.26; Department for Infrastructure and Transport (2025), p.50; Queensland Rail (2025), p.17; Sydney Metro (2025), p.46; Department of Transport and Planning (2025), p.38; advice from Transport for NSW; previous editions of Trainline, citing service provider reporting and advice.

Figure 30 Index of urban heavy rail patronage in Australian cities



Sources: Index based on reported patronage data.

Table 16: Light rail patronage (millions of journeys), 2024–25

Sydney	Melbourne	Adelaide	Gold Coast	Canberra	Newcastle	Total
49.9	160.2	9.0	13.8	n/a	.99	**233.9**

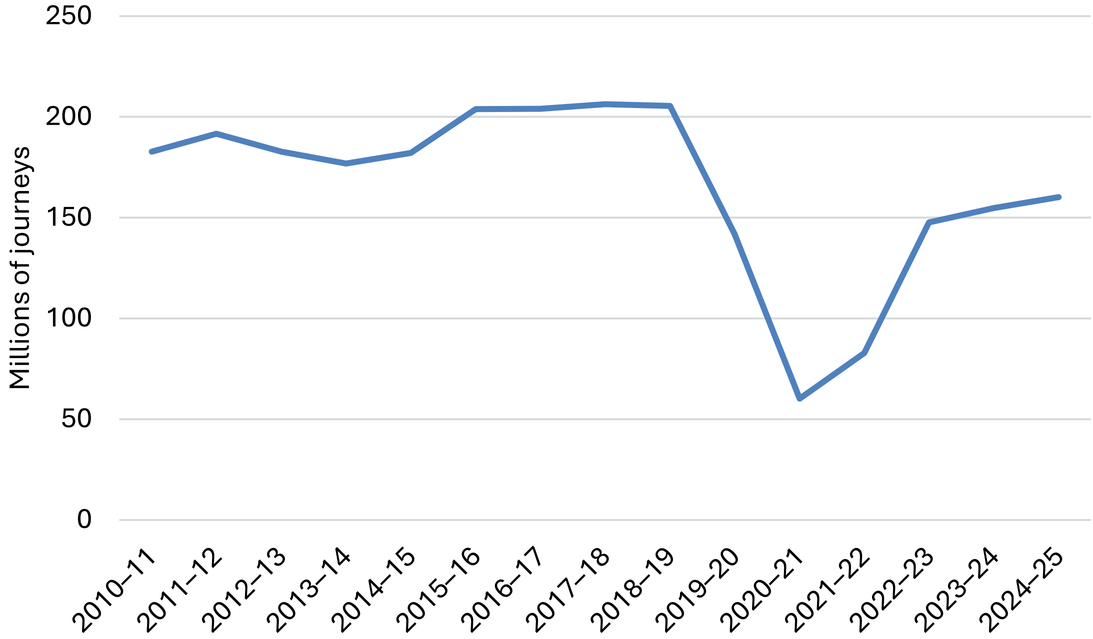
Notes: The Transport for NSW annual report cites approximately 50.9 million light rail journeys for NSW. According to NSW Transport Open Data, patronage for Newcastle was approximately .99 million passenger journeys. Subtracting this from the New South Wales total gives the Sydney total. Data not available due to for Canberra due to ongoing transition to new ticketing system. Numbers are subject to rounding.

Sources: Department for Infrastructure and Transport (2025), p.50; Department of Transport and Main Roads (2025), p.19; Transport for NSW (2025), p.12; NSW Transport Open Data (n.d.-a); advice from Department of Transport and Planning (Victoria).

Total recorded light rail patronage in 2024–25 grew by approximately 2.7%. Data is not available for Canberra due to the ongoing transition to a new ticketing system. Had data for Canberra been available, total recorded growth would have been higher. Recorded patronage grew in all cities, except Newcastle. Changes were as follows:

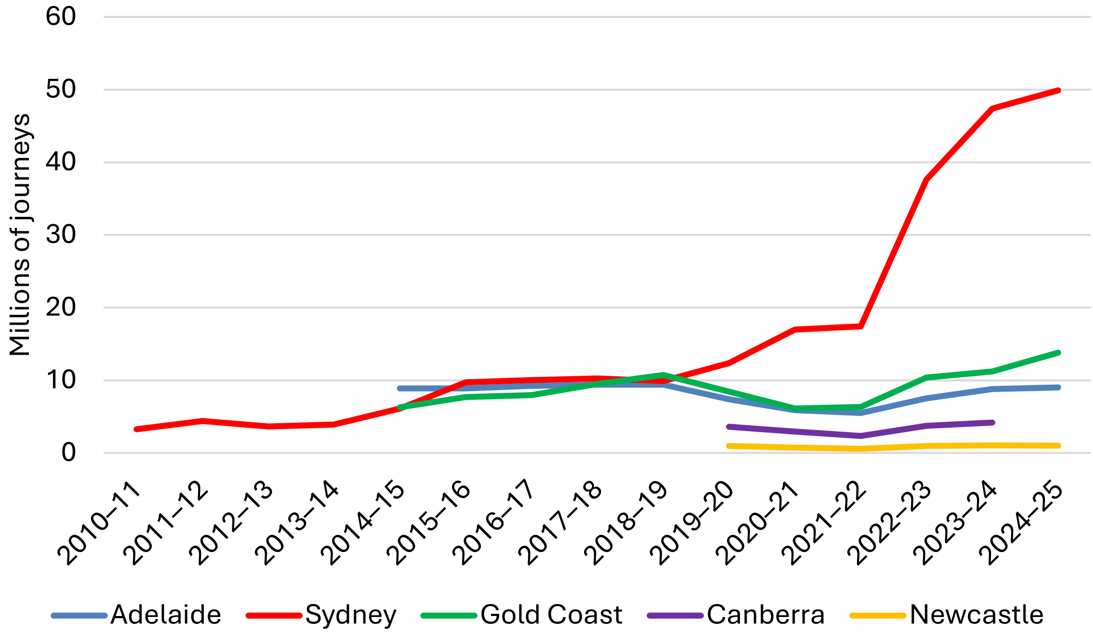
- Sydney: 5.2%;
- Melbourne: 3.5%;
- Adelaide: 2.4%;
- Gold Coast 21%;
- Newcastle: -5.1%; and
- Canberra: n/a.

Figure 31 **Melbourne light rail patronage**



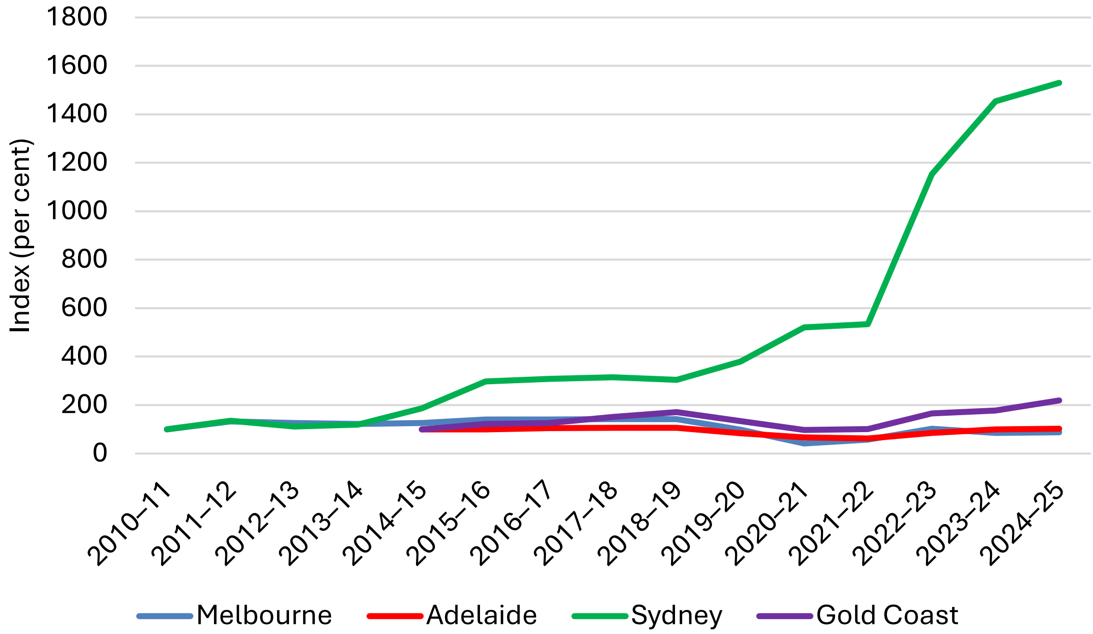
Source: Advice from Department of Transport and Planning (Victoria); historical annual reports.

Figure 32 **Sydney, Adelaide, Gold Coast, Canberra and Newcastle light rail patronage**



Note: Pre 2014–15 data for Adelaide is not shown due to a patronage calculation methodology change.
Sources: Department for Infrastructure and Transport (2025), p.50; Department of Transport and Main Roads (2025), p.19; Transport for NSW (2025), p.12; NSW Transport Open Data (n.d.-a).

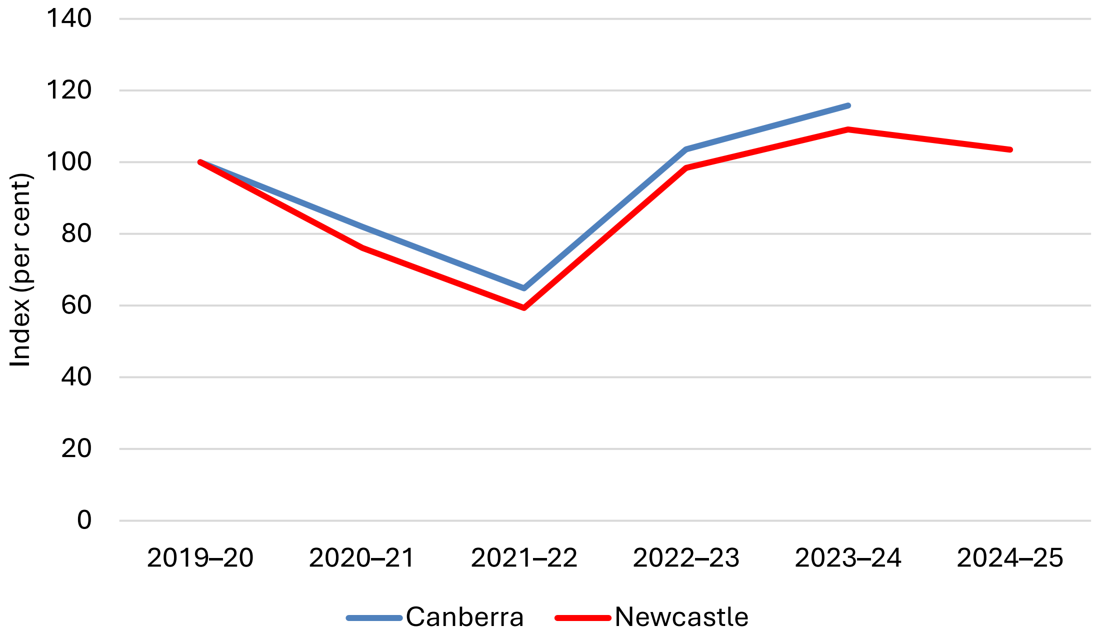
Figure 33 Index of light rail patronage Melbourne, Sydney, Adelaide and Gold Coast



Note: The index base year for Melbourne has been re-set from 2004–05 to 2010–11, for graph formatting reasons.

Sources: Index based on reported patronage data.

Figure 34 Index of light rail patronage Canberra and Newcastle



Note: 2024–25 data for Canberra not available.

Sources: Index based on reported patronage data.

Commuting Mode Share

Urban passenger rail services are largely aligned to service weekday commuter demand to and from city centres. The task is skewed to the morning and afternoon peak periods. Table 17, below, shows urban rail journey-to-work mode share, according to the results of the 2021 Australian Census.

Table 17: Urban rail journey-to-work mode shares (per cent), 2021

	Brisbane	Sydney	Melbourne	Adelaide	Perth	Canberra
Heavy rail	4.8	8.9	6.3	1.7	6.5	-
Light rail	-	0.2	2.0	0.6	-	1.7

Notes: All cities except Canberra refer to greater metropolitan areas. Canberra refers to Canberra and Queanbeyan.

Mode shares defined as persons who caught a train/tram for all or part of their journey-to-work. Calculations exclude census respondents who did not specify travel mode, worked at home or did not go to work.

Tram/light rail census data includes respondents who: caught a tram/light rail; caught a train and tram/light rail; or caught a bus and tram/light rail. The tram/light rail data is therefore an underestimate because it does not include all possibilities, for example, car and tram/light rail.

Source: Australian Bureau of Statistics (2022).

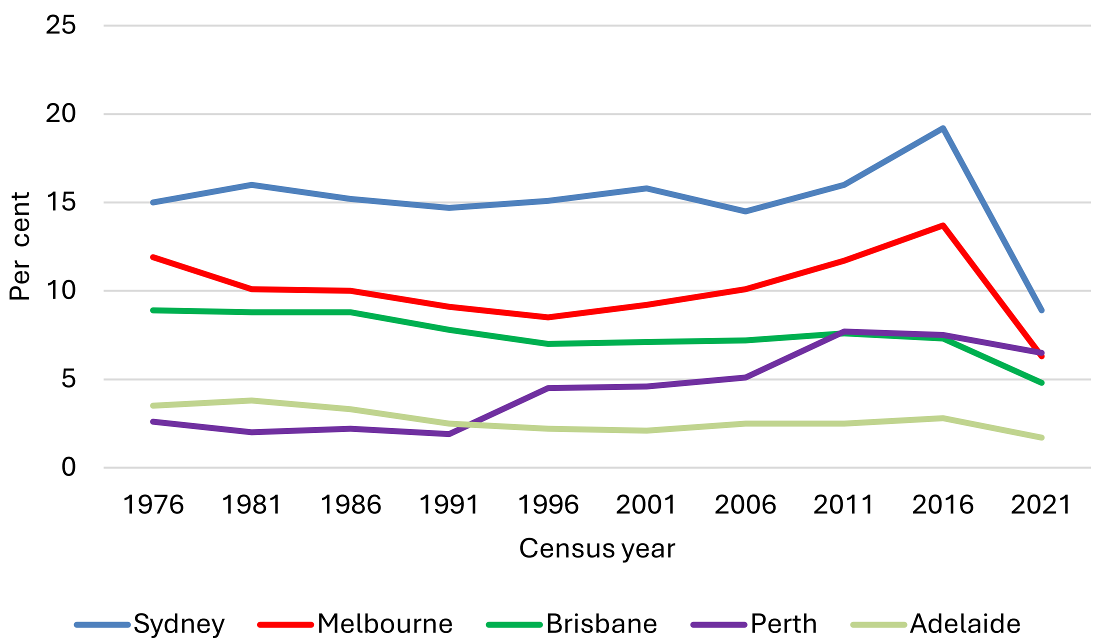
Following long-term declines in urban rail patronage for all cities from the mid-1970s, ridership began recovering in the 1990s. Figure 35, below, shows the journey-to-work mode share data for heavy rail, derived from the census results since 1976.

In 2021, during the COVID pandemic, urban heavy rail's mode share decreased sharply in all cities compared to 2016, except Perth, which had a more modest decline. Details of these declines are as follows:

- Sydney: 54%;
- Melbourne: 54%;
- Brisbane: 34%;
- Adelaide: 39%; and
- Perth: 13%.

By way of comparison, mode share for travel by bus also halved in Sydney, Melbourne, and Brisbane, while it remained relatively unchanged in Adelaide and Perth. Travel by private motor vehicle as a proportion of total mode share, however, increased in each city.

Figure 35 Journey-to-work mode share, urban heavy rail, 1976–2021



Note: Cities refer to greater metropolitan areas.

Sources: Australian Bureau of Statistics (2022), Mees and Groenhart (2012).

Punctuality

Punctuality is important to rail's competitiveness. Poor punctuality not only worsens the transport experience but can affect the commercial (work) and personal activities of those that depend on reliable transport services.

Passengers particularly rely on timetables for infrequent services. Punctuality is therefore part of a journey's perceived time. Punctuality is less significant for frequent 'turn up and go' services. Real-time information at railway stations, light rail stops, online and through smart phone applications are playing a growing trip-planning role. Measures of punctuality are largely determined by the definitions of 'on time', which varies between operators.

Table 18: Urban heavy rail punctuality, on time performance, 2024–25

Network	Result (%)	Target (%)	Measure
Sydney Trains	87.5	92	Percentage of passengers that arrive at their destination within five minutes of their planned end-to-end public transport journey.
Sydney Metro	99.3	98	'Headway within tolerance'
Melbourne	93.5	92	'Train services are deemed as being on time if they are delivered between 59 seconds early, and 4 minutes and 59 seconds late.'
Brisbane	94.5	95	Arriving within 3 minutes 59 seconds of schedule for suburban trains and within 5 minutes 59 seconds of schedule for inter-urban services
Adelaide	96.7	94	No more than 4 minutes 59 seconds after the timetabled arrival time at the destination
Perth	91.9	95	Arriving within 4 minutes of schedule

Sources: Department of Transport and Planning, Victoria (2025), p.38; Public Transport Authority of WA (2025), p.86; Queensland Rail (2025), p.13; Sydney Metro (2025), p.46; Sydney Trains (2025), p.33; Adelaide Metro (n.d.).

Table 19: Light rail punctuality, on time performance, 2024–25

Network	Result (%)	Target (%)	Measure
Melbourne	82	82.7	Arrives no later than four minutes and 59 seconds after and departs no earlier than 59 seconds before the timetable
Sydney (Central Station–Dulwich Hill)	90	90	Calculated as the percentage of services within the maximum journey time plus four minutes tolerance, measured along the full length of the route.
Sydney (Circular Quay–Randwick and Randwick–Kingsford)	91	90	Calculated as the percentage of services within the maximum journey time plus four minutes tolerance, measured along the full length of the route.
Sydney Parramatta	91	90	Calculated as the percentage of services within the maximum journey time plus four minutes tolerance, measured along the full length of the route.
Adelaide	97.3	99	No more than 4 minutes 59 seconds after the timetabled arrival time at the destination
Gold Coast	96.2	95	The percentage of services that arrive and depart on time when compared with the contract timetable. Punctuality is only measured at key stations.
Canberra	98	98	A service arriving within 2 minutes of its scheduled arrival time at predetermined timing points.
Newcastle	n/a	n/a	n/a

Note: The Adelaide result is the average monthly result for the financial year. The result is based on Adelaide Metro's KPI 1.1 that 'measures all frequent trips (15-minute frequency or less) at the commencement of the trip.' The Canberra result is the average monthly result for the financial year.

Sources: Adelaide Metro (n.d.); Department of Transport and Planning, Victoria (2025), p.41; Transport for NSW (2025), p.44; Canberra Metro Operations (n.d.); Translink (n.d.-a).

Reliability

Reliability is the number of scheduled services that run, namely the total number of scheduled services minus cancellations. Reliability results for urban heavy rail and light rail, where available, are shown in Table 20 and Table 21.

Table 20: Urban heavy rail reliability, 2024–25

Operator	Result (%)	Target (%)
Sydney Trains	n/a	n/a
Sydney Metro	99.77	n/a
Melbourne	98.85	n/a
Brisbane	99.61	99.50
Adelaide	99.70	n/a
Perth	n/a	n/a

Note: The Melbourne result is the average of the monthly results Metro Trains Melbourne publishes.

Sources: Metro Trains Melbourne (n.d.); Sydney Metro (2025), p.46; Queensland Rail (2025), p.13; advice from Department for Infrastructure and Transport, (South Australia).

Table 21: Light rail reliability, 2024–25

Operator	Result (%)	Target (%)
Gold Coast	99.8	n/a
Newcastle	n/a	n/a
Sydney	n/a	n/a
Canberra	99.26	n/a
Melbourne	n/a	n/a
Adelaide	n/a	n/a

Note: The Gold Coast and Canberra results are the average of the monthly published results.

Sources: Translink (n.d.-a); Canberra Metro Operations (n.d.).

Speed and stopping patterns

Heavy rail

Figure 36 shows the relationship between station spacing and corresponding average train speeds for selected Australian urban passenger heavy rail lines. The results are for a selected morning peak[17] inbound service on each selected line. Station spacing shown is based upon a mix limited stops and all stops services. For limited stops services, station spacing is based on distances between stations where a given service stops, not the number of actual stations on the given line. Services with the fewest stops and fastest transit times were selected.

Australia's older passenger lines have relatively short station spacing (for all stops services) and, thus lower average speeds. In contrast, newer lines, such as Mandurah–Perth, have longer station spacing, which allows higher average speeds plus they have higher maximum speeds. (On the Mandurah–Perth line the maximum speed is 130 kilometres per hour). In addition to speed, longer station spacing allows for simpler train schedules because there is little need for express services. Wide station spacing, however, reduces the capacity for passengers to access railway stations by walking. Integration of the rail services with other modes of transport, such as the provision of feeder bus services, whose arrival and departure times are aligned to that of train services, and park and ride facilities is therefore crucial. Limited stops services help overcome short station spacing by skipping certain stations. The number of stops between origin and destination for limited stops services varies by time of day and service origin.

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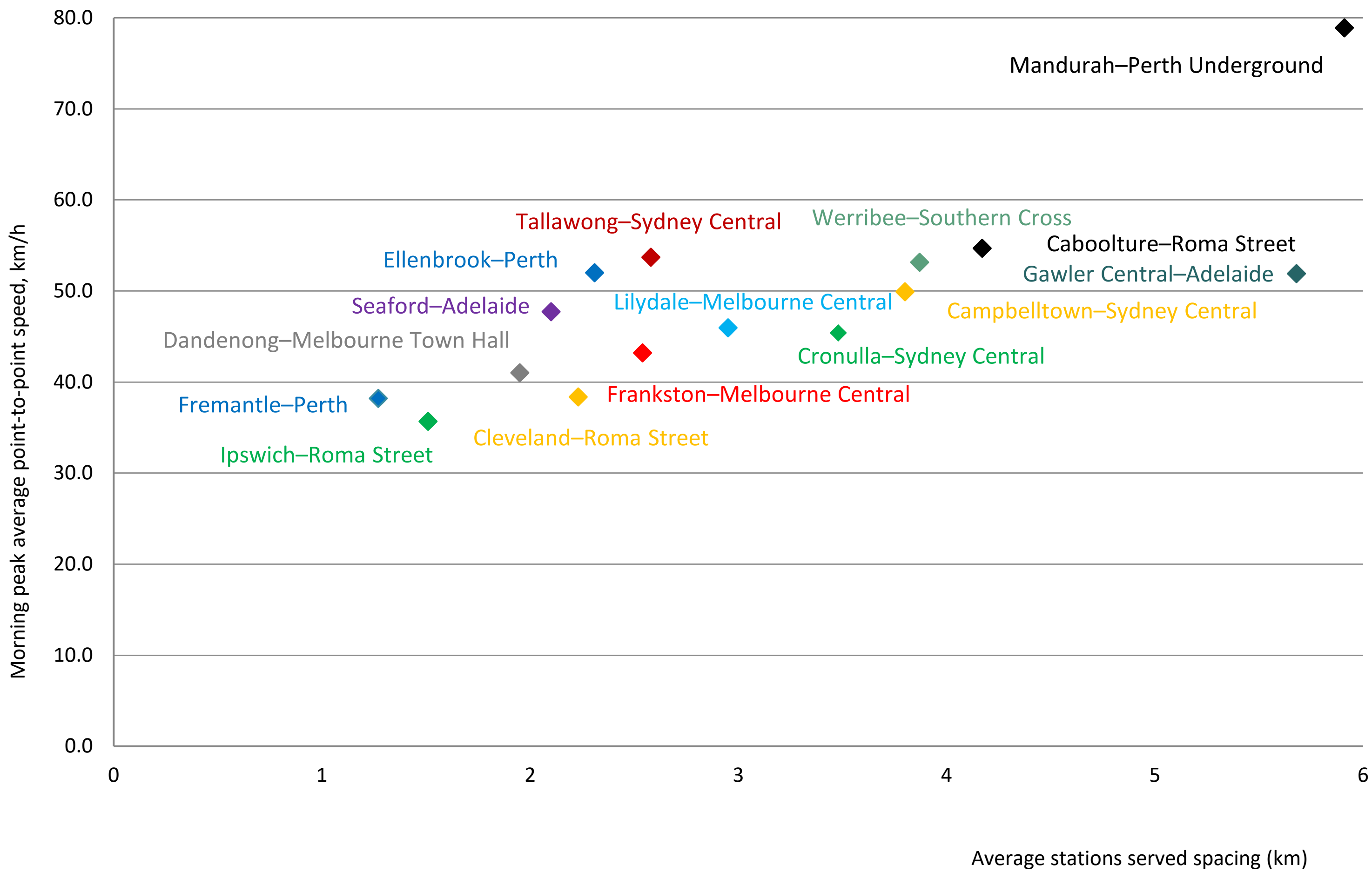
[17] Arriving at the service's destination between 0700-0900 hours on weekdays.

Figure 36 **Heavy rail station spacing and illustrative train speeds, 2026**



Source: BITRE analysis of published route timetables, January 2026 and February 2026 for Melbourne.

Light rail

Average scheduled light rail speeds also generally correlate to stop spacing, together with integration with/segregation from road traffic and pedestrian traffic.

Table 22: Light rail stop/station spacing and scheduled speeds, 2026

	Gold Coast	Sydney (Route L4)	Melbourne (Route 6)	Melbourne (Route 109)	Adelaide	Canberra	Newcastle
Average stop spacing (metres)	1,130	800	300	450	540	920	540
Average point to point scheduled speed (km/h)	27	25.7	16.3	18	19.1	30	13.5

Notes: Route L4 calculations are based on travel from Carlingford terminus to Westmead terminus.

Route 6 calculations are based on travel from Glen Iris terminus to Melbourne University stop.

Route 109 calculations are based on travel from Port Melbourne terminus to Southern Cross Station stop.

Adelaide calculations are based on travel from Glenelg terminus to Adelaide Railway Station.

Source: BITRE analysis.

Light rail average speeds depend largely on a light railway's function and its operating environment. Lines through dense pedestrianised zones have lower speeds than segregated corridor lines with wider station/stop spacing.

Sydney's light rail operates mostly on segregated lines. Canberra's light rail network is entirely segregated, except for intersections, where variable frequency traffic signals mostly prioritise light rail traffic. The Gold Coast and Newcastle are also segregated. The Gold Coast and Canberra lines have the widest station/stop spacing in Australia. This, combined with its traffic segregation and priority traffic signalling (in Canberra), enables the light rail vehicles to achieve the highest average scheduled speeds in Australia. Newcastle's light rail, which runs on battery power with charging at each stop, has approximately half the average distance between stations/stops and less than half the scheduled average speed than Canberra and the Gold Coast.

Most Melbourne's light rail network is shared with road traffic. In the example of Route 6 (Glen Iris terminus to the Melbourne University stop component) (shown above) this, combined with narrow spacing between stops, causes it to have an average scheduled speed that is just over half that of the Gold Coast and Canberra lines. Along the St Kilda Road section, Route 6 light rail vehicles share the line with an increasing number of other light rail vehicles from other routes as they enter St Kilda Road, heading to Melbourne University, and this increases line congestion and reduces speed.

Frequency

Figure 37 to Figure 43, below, show, urban heavy rail service frequency. The figures show the average time between arrivals at the relevant city central stations during sampled peak periods (0700–0900 hours weekdays) and sampled off peak periods (1300–1500 hours Saturdays). Greater service frequency translates to shorter average times between service arrivals. The figures show services originating from end of line stations and services from major centres and junctions across the networks.

Changes in service frequency in the two sample periods do not always mean there has been an overall change in service frequency; rather it means there has been a change in service frequency in the sample period(s). As a hypothetical example, a reduction of one service in the peak period may just be due to a train having a new scheduled arrival at 0901 hours (outside the assessed peak period) instead of the previous 0900 hours (inside the assessed peak period).

Frequency affects service quality and, therefore, mode choice. Frequency also influences overall travel times. It can affect how long passengers wait for a train and how closely the train departure (or arrival) time is to a passenger's preferred time. Passengers' perceptions of service frequency are therefore closely related to their perception of total journey times (including waiting time, in-vehicle journey time and transfer times).

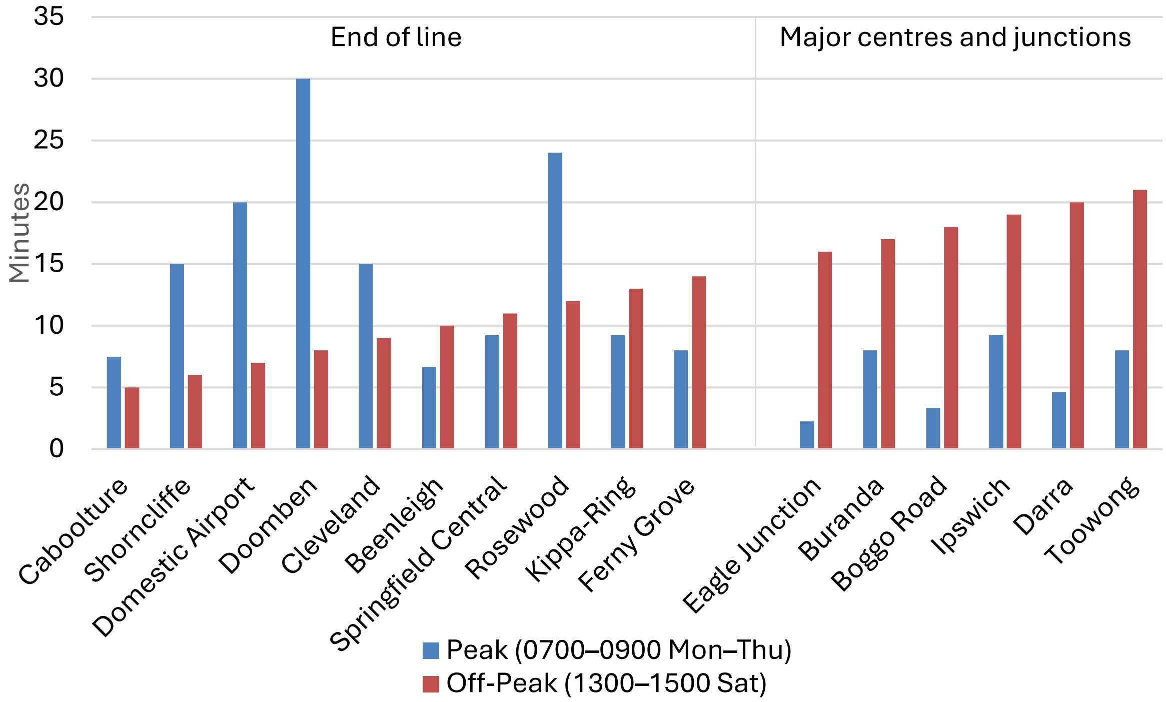
Frequency is also important in integrating rail services both with other services on the same network and other transport modes. Services may have coordinated arrival and departure times for passenger interchanges between services. However, the scale of large urban networks can make coordination unfeasible. In these cases, high frequency is crucial in reducing passengers' interchange waiting times. Major centres and junction stations generally have high service frequencies due to service densification. As Figure 37 to Figure 43, below, show, all Australian capital cities with urban heavy rail services mostly have greater service frequency during the defined peak periods.

Heavy rail

Brisbane

In 2026, service frequency in Brisbane was unchanged from 2025, except for one additional service each from Caboolture and Eagle Junction.

Figure 37 Average time between services arriving at Brisbane Roma Street Station, 2026



Source: Translink (n.d.-b).

Sydney

There are two heavy rail operators in Sydney — Sydney Trains, and Sydney Metro. Sydney Trains serves all stations throughout the Sydney conventional heavy rail network. Sydney Metro operates Tallawong–Sydney Central–Sydenham services on the separate, driverless Sydney Metro network. Metro services from Tallawong to Chatswood started in May 2019. The line was later extended from Chatswood to Sydney Central and Sydenham, which began revenue operations in August 2024. Both conventional and metro services now operate to Sydney Central from the co-located Epping, Chatswood, and Sydenham stations. This has increased service frequency from those stations significantly.

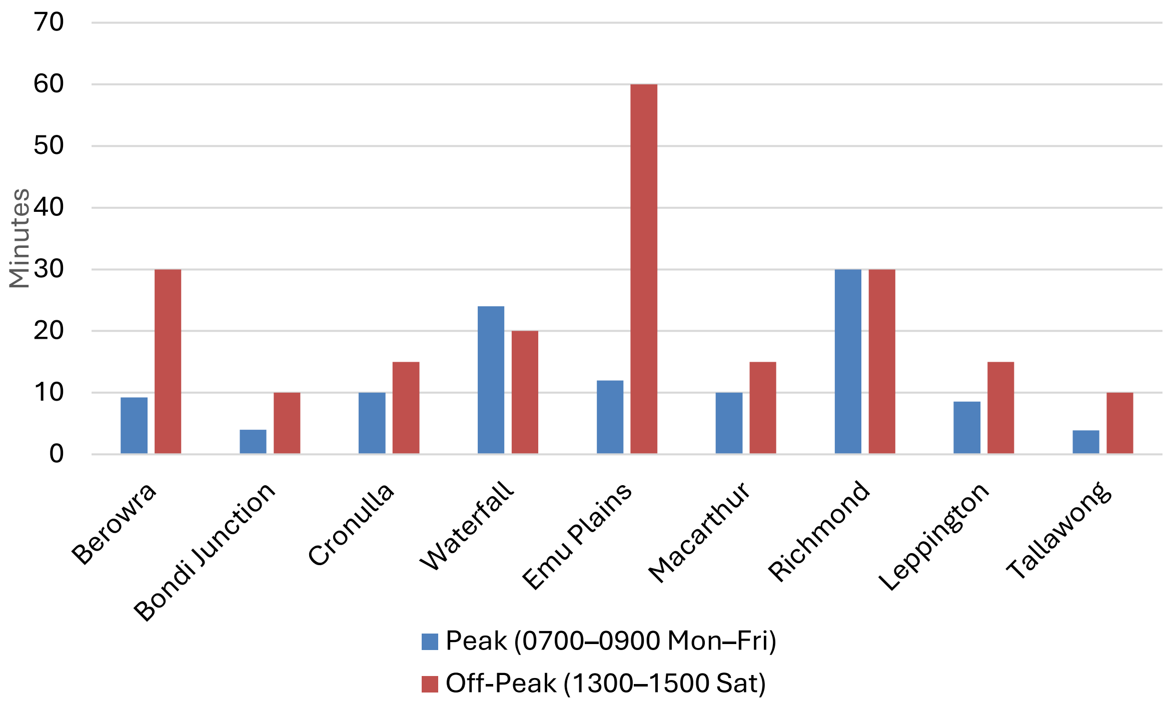
Changes to service frequency since 2025 are as follows:

- Cronulla: one more peak hour service;
- Emu Plains: one more peak hour service;
- Macarthur: three more peak hour services;
- Richmond: one less peak hour service;
- Leppington: one more peak hour service;
- Tallawong: one more peak hour service;
- Campbelltown: six more peak hour services;
- Liverpool: one less peak hour service;

- Strathfield: one more non-peak service;
- Hornsby: three less peak hour services and one less non-peak service;
- Epping: six more peak hour services and one more non-peak service;
- Chatswood: five less peak hour services; and
- Sydenham: 11 fewer peak-hour services and two more non-peak services.

The reduction in peak hour services from Sydenham is that of Sydney Trains services and it appears to be due to the temporary closure of the Bankstown line, for conversion to Metro operations. Despite the reduction, there were still 13 more peak hour services in 2026 compared to 2023, before the start of Metro services from the station.

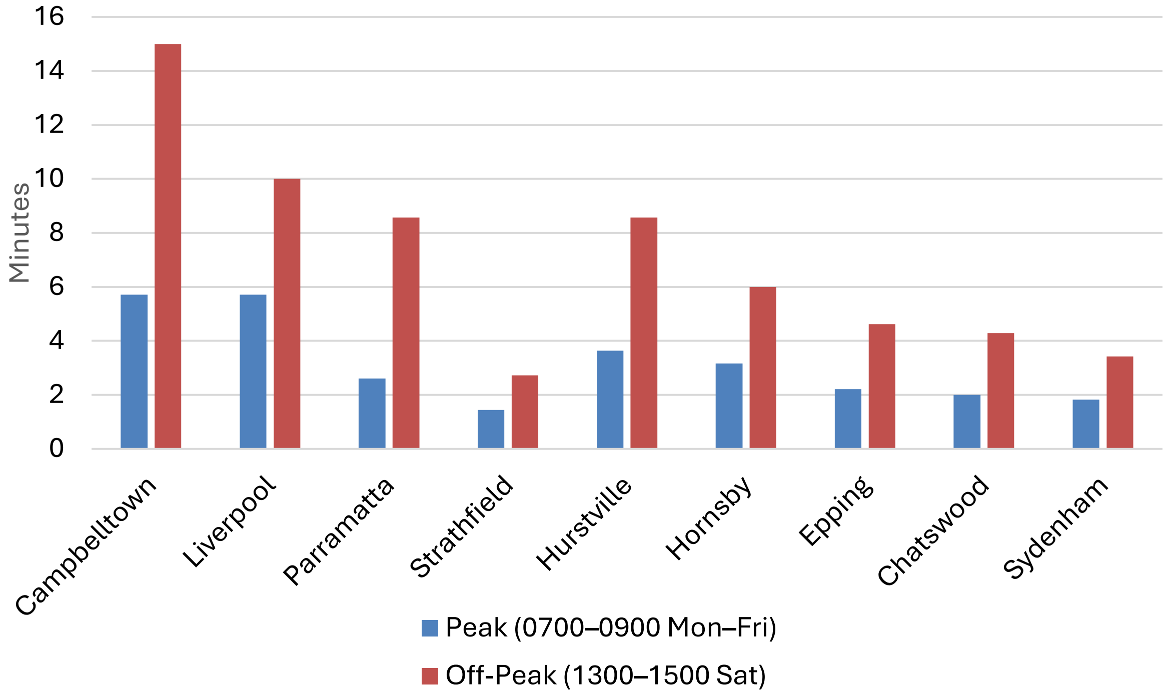
Figure 38 Average time between services arriving at Sydney Central from end of line stations, 2026



Note: Tallawong services operated by Sydney Metro.

Source: Transport for NSW (n.d.).

Figure 39 Average time between services arriving at Sydney Central from major centres and junctions, 2026



Note: Epping, Chatswood, and Sydenham figures denote combined conventional and metro services serving those (co-located) stations.

Source: Transport for NSW (n.d.).

Melbourne

There were changes to Melbourne's service frequency in 2026 — mostly relating to the opening of the Metro Tunnel — compared to the 2025 analysis. In 2026, there were five and two additional peak hour services from Cranbourne and East Pakenham respectively. There were also two additional peak period services on the Sunbury line[18]. Other peak period changes included two less Belgrave services, three more Craigieburn services, one additional Mernda service, and one less Werribee service. For the non-peak period, the only change was five additional services from Sunbury. There continued to be no direct non-peak services from Alamein.

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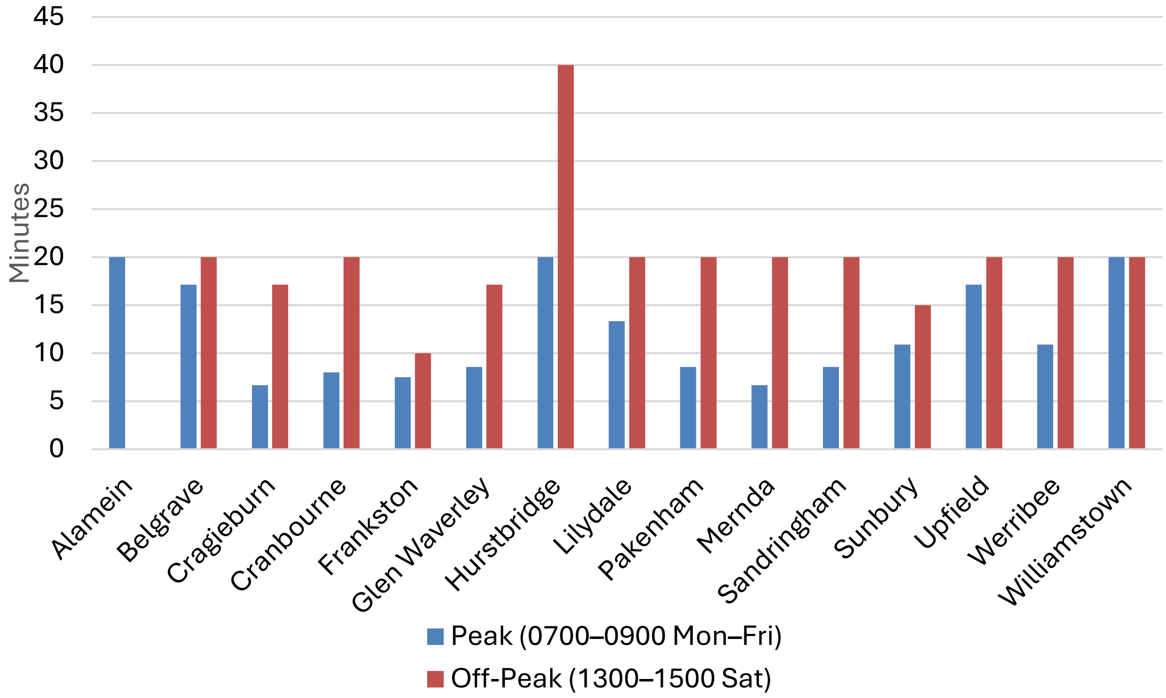
[18] The Sunbury count includes Bendigo line V/Line services that take on passengers at Sunbury travelling to the Melbourne CBD. While these services terminate at Southern Cross station, they are included due to the station's close proximity to Flinders Street Station.

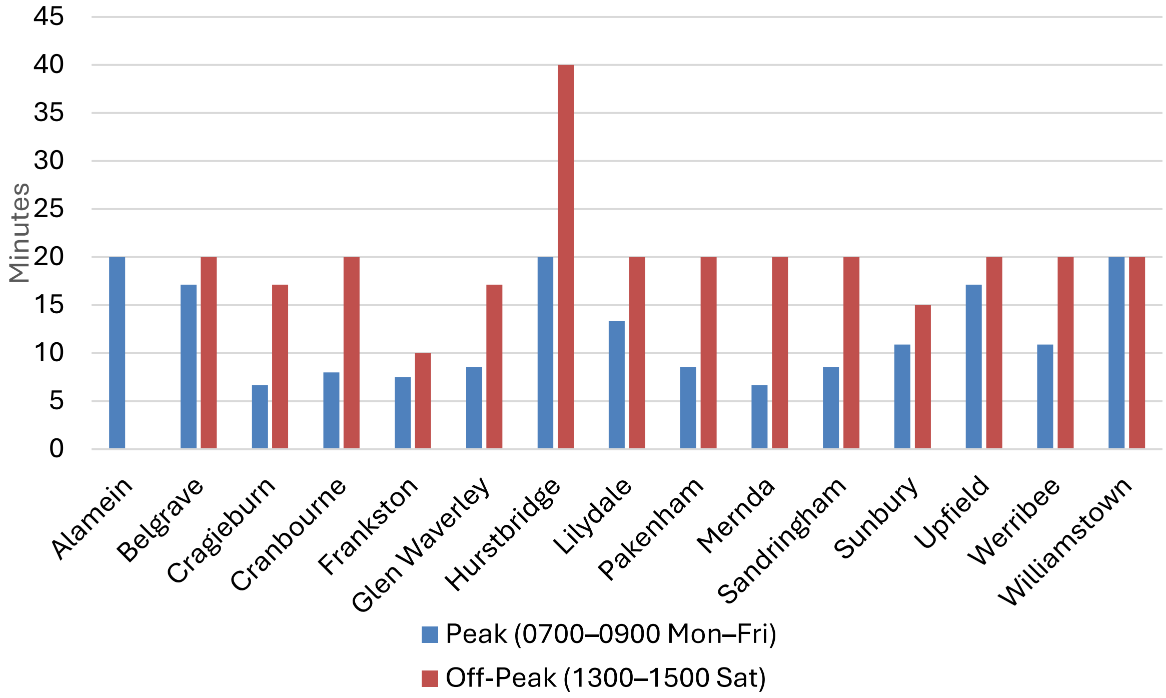
Figure 40 **Average time between services arriving at Flinders Street or Town Hall stations from end of line stations, 2026**



Source: Public Transport Victoria (n.d.).

There were also changes in service frequency from major centre and junction stations. For the peak period, there were seven more services from Dandenong, eight more from Caulfield, and seven more from Footscray. Conversely, there were 24 fewer services from South Yarra. This reduction is due to the opening of the Metro Tunnel line. Trains on the East Pakenham and Cranbourne lines, which previously stopped at South Yarra Station, now use the Metro Tunnel line, which bypasses South Yarra Station. For the non-peak period, there was one more service from Caulfield, and seven more from Footscray. There were 11 fewer services from South Yarra.

Figure 41 **Average time between services arriving at Flinders Street or Town Hall stations from major centres and junctions, 2026**

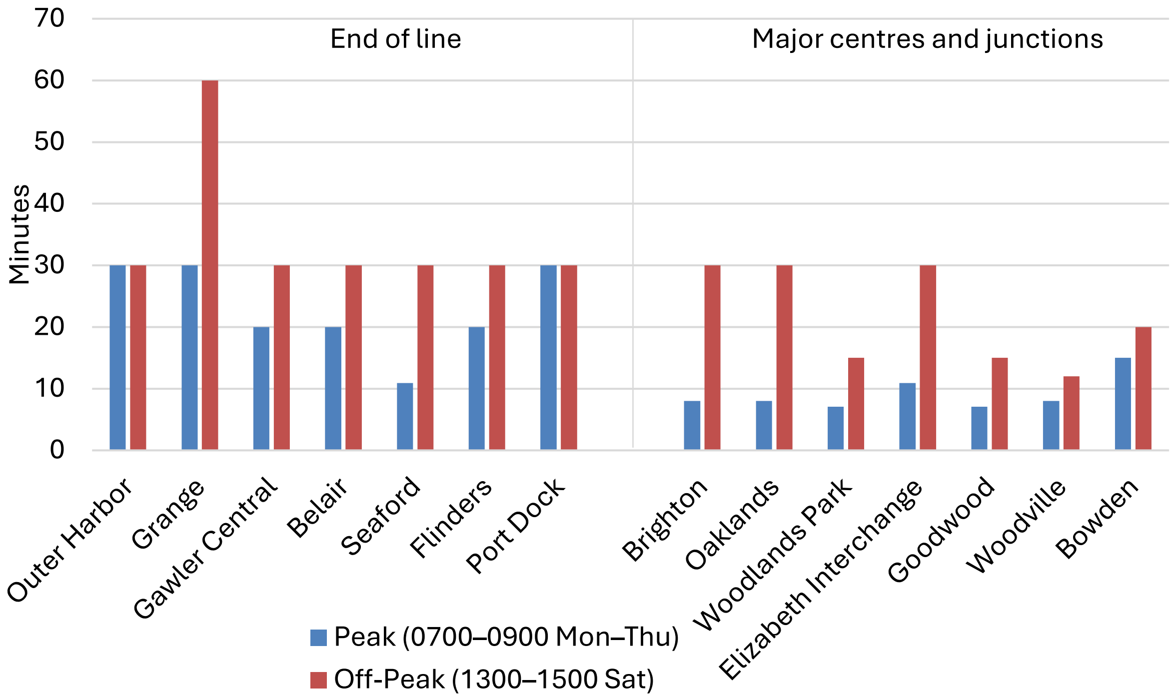


Source: Public Transport Victoria (n.d.).

Adelaide

Adelaide heavy rail service patterns are strongly geared to peak-period commuting to Adelaide Railway Station. Adelaide's lower service levels reflect its modest patronage compared to the other networks. There was no change in service frequency in 2026 compared to 2025.

Figure 42 Average time between services arriving at Adelaide Railway Station, 2026

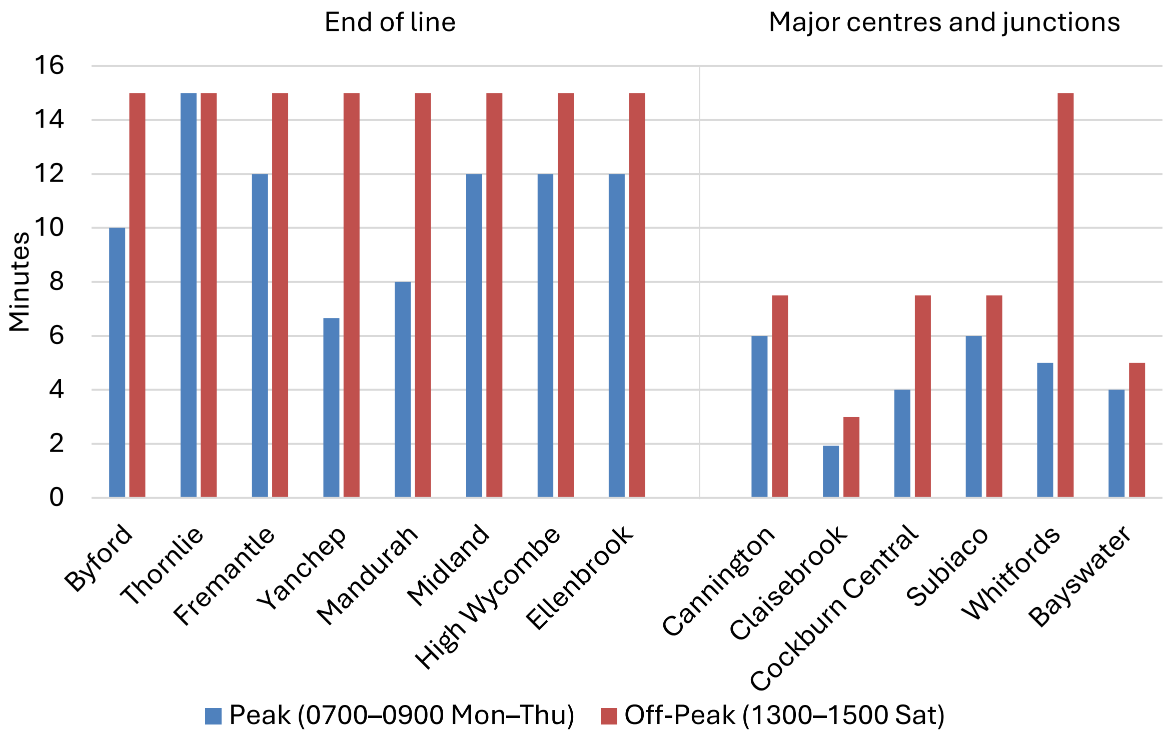


Source: Adelaide Metro (n.d.-a).

Perth

There have been numerous changes in Perth since 2025 that have affected service frequency. In 2026, the Thornlie–Cockburn line had opened, and the Armadale line, extended to Byford, had re-opened. This increased service frequency at the junction station of Claisebrook — through which all Byford and Cockburn Central (via Thornlie) services pass — by 26 in the peak period and eight in the non-peak period. Service frequency at Cockburn Central station, which is served by both Mandurah line and Cockburn–Thornlie line services had increased by eight each in the peak and non-peak periods. Elsewhere, there were two more Mandurah and one more Yanchep peak services.

Figure 43 **Average time between services arriving at Perth Central and Perth Underground stations, 2026**



Source: Transperth (n.d.).

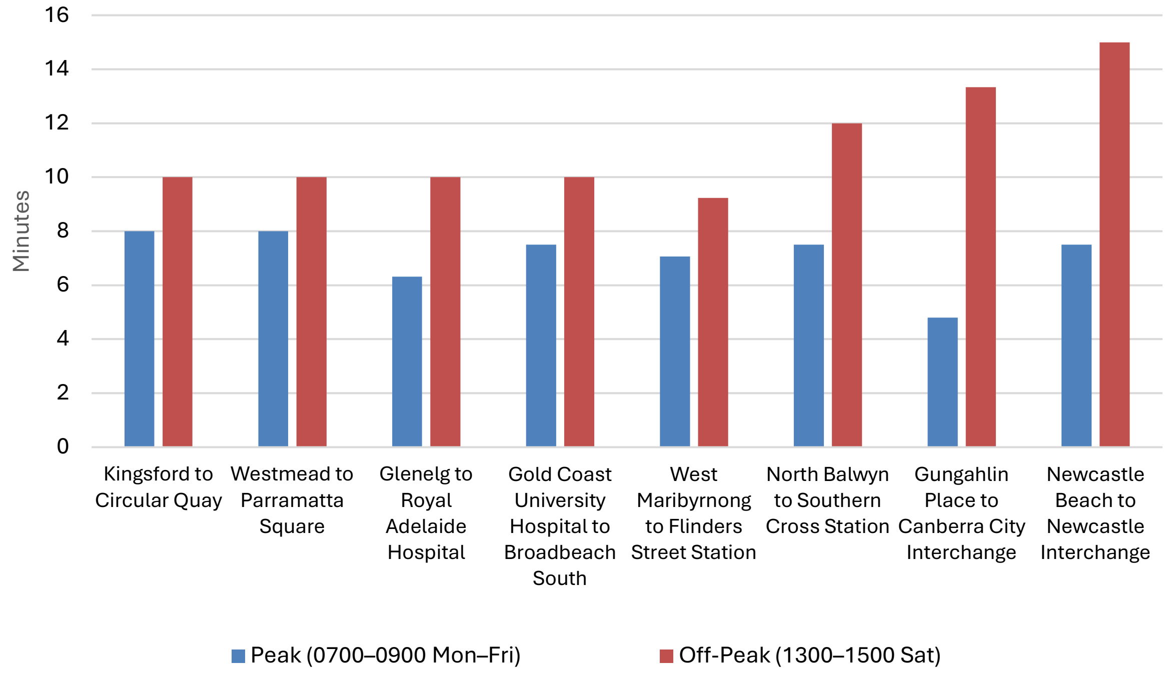
Figure 44 **Transperth B-series train set at Yanchep Railway Station**

Source: Photo courtesy of Public Transport Authority of Western Australia.

Light rail

Figure 45, below, shows light rail service frequency in a sample of Australian light rail services. Peak hour frequency in the samples shown is mostly less than ten minutes. Off-peak times are between 6–15 minutes.

Figure 45 Average time between light rail services, by route and direction, 2026



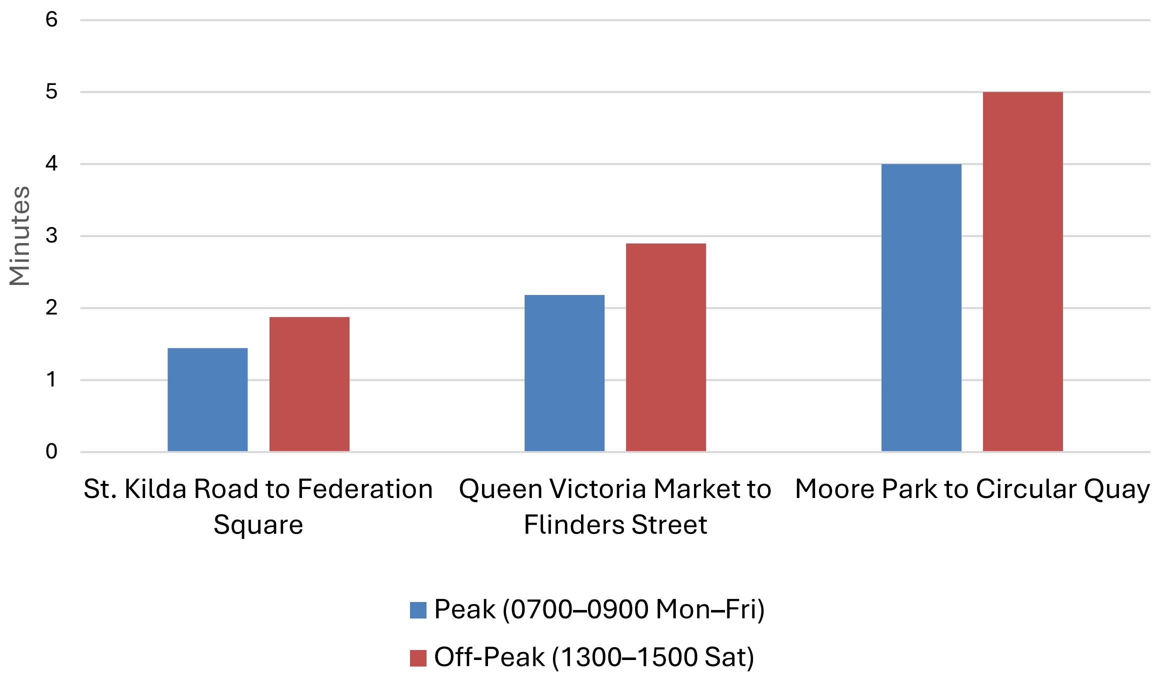
Notes: Melbourne and Sydney services have a separate timetable for Fridays. As such, calculated peak hour frequency as shown above is based on the published Monday–Thursday timetables.

Peak hour calculations are based on peak hour directions of travel.

Sources: Transport for NSW (n.d.); G:link (n.d.); Public Transport Victoria (n.d.); Adelaide Metro (n.d.-a); Canberra Metro (n.d.).

Care is needed when comparing Melbourne to other Australian cities with light rail services. Many Melbourne routes share tracks (converged routes), particularly in and near the CBD, which increases service frequency. This means a passenger waiting at a converged routes stop may not have to wait as long as they otherwise would, depending on their destination. For example, someone travelling from Federation Square to the Toorak Road/St Kilda Road stop is served by seven routes. That same person travelling from Federation Square to Camberwell, however, is served by only one route (which travels via the Toorak Road/St Kilda Road stop before diverging from the converged route corridor).

Figure 46 Average times between light rail services – converged routes, 2026



Sources: Public Transport Victoria (n.d.); Transport for NSW (n.d.).

Figure 46, above, shows average times between light rail services on a sample of converged route corridors in Melbourne and Sydney. For Melbourne, it is for seven converged services departing Stop 22 (St. Kilda Road/Toorak Road), with Federation Square as the arrival point[19], and three converged services departing Queen Victoria Markets, with Flinders Street as the arrival point[20]. For Sydney, it is for the L2 and L3 converged services departing Moore Park, with Circular Quay as the arrival point. Frequency along St. Kilda Road is high because seven routes share the corridor. Frequency is slightly less on the Queen Victoria Markets to Flinders Street corridor due to the lower number of routes serving the corridor. For services to Circular Quay, frequency is lower again as only two routes serve the corridor.

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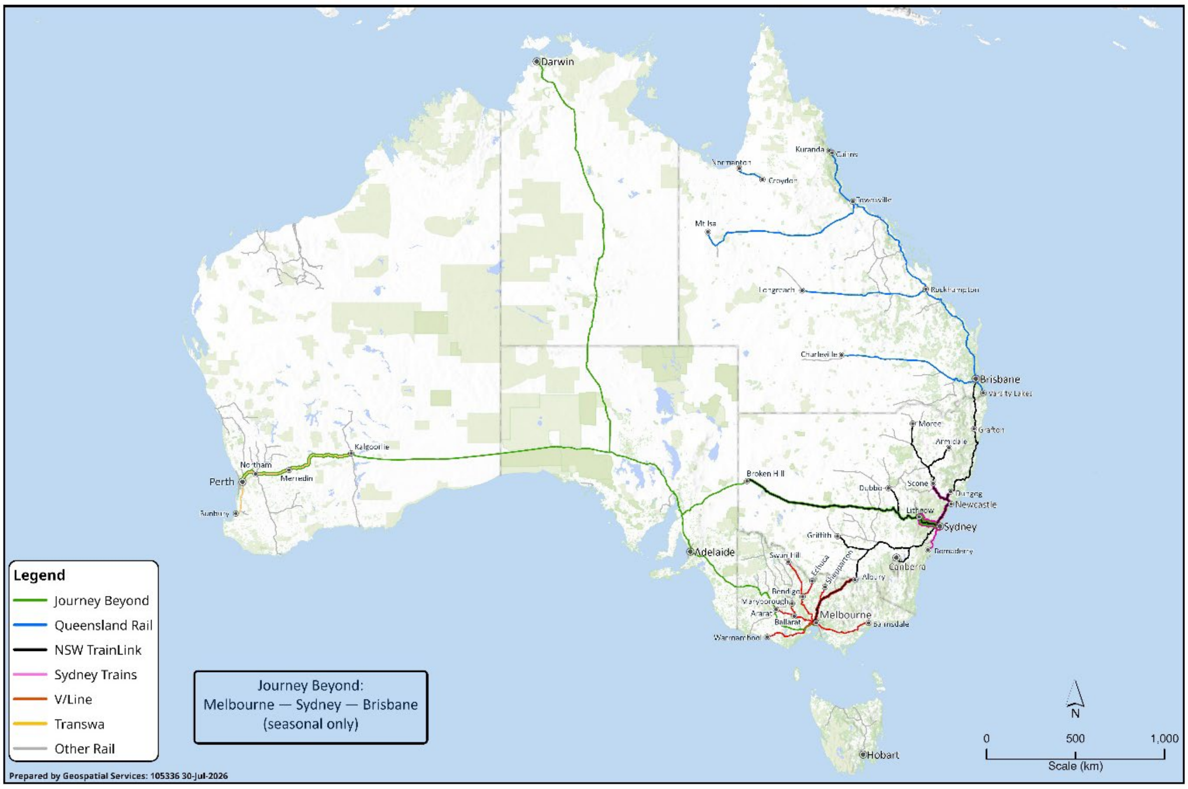
19 These services are routes 3(a), 5, 6, 16, 64, 67, and 72.
20 These services are routes 57, 59, and 19.

Chapter 4 – Non-urban passenger transport

Non-urban passenger transport by rail broadly includes:

- 'Intercity' or commuter travel, such as Sydney–Hamilton, Brisbane–Nambour, and Melbourne–Bendigo. Such services include daily commuting or day-return business or leisure travel.
- Long-distance travel. This includes regional long-distance and interstate services such as Melbourne–Bairnsdale, Sydney–Brisbane, Brisbane–Cairns, and Perth–Kalgoorlie.
- (Premium) tourist-focused services such as the Kuranda Scenic Railway (Queensland Rail), and Adelaide–Darwin (Journey Beyond)[21].

Figure 47 Non-urban passenger services, by operator



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21 Performance data for Journey Beyond's services, other than publicly available timetable data, is not available, and thus is not reported here.

Patronage

The scale of an operator's passenger task is largely determined by the function of their services. Railways with a large commuter task have higher patronage and greater service frequency than those which cater largely to long-distance travel. Table 23, below, shows patronage statistics, by operator, for 2024–25.

Table 23: Non-urban rail patronage, by operator, 2024–25 (millions of passenger journeys)

Queensland Rail	Sydney Trains/NSW TrainLink		V/Line	Transwa	Total
	Intercity	Regional			
.73	30.7	1.3	25	.14	57.87

Notes: Data excludes patronage on services delivered under the Queensland "TransLink" brand. TransLink data is reported in urban patronage.

Sources: Transport Open Data (n.d.-b); Public Transport Authority of Western Australia (2025), p.28; Queensland Rail (2025), p.16; V/Line (2025), p.12; advice from Transport for NSW.

Total patronage in 2024–25 was 57.87 million passenger journeys. Compared to 2023–24, this was a decline of approximately 0.3%. V/Line's and Queensland Rail's patronage increased by 11.5% and 20% respectively, but this was offset by a decline of approximately eight per cent for Sydney Trains (Intercity) and approximately 1.5% (NSW TrainLink). Transwa patronage declined by approximately 8.5%, but this occurred in the context of the ongoing suspension of the Australind train service to Bunbury (due to infrastructure upgrade works and constructing replacement rollingstock). Patronage on all other Transwa rail services grew.

V/Line notes in its annual report, patronage in 2024–25 was the highest ever recorded on the V/Line network (V/Line, 2025, p.10)[22]. V/Line further notes travel on weekends and school holidays and on long-distance services was particularly popular, like the previous financial year (V/Line 2025, p.10).

Sydney Trains (annual report) did not comment on the reasons for its patronage decline. NSW TrainLink also did not comment on the reasons for its patronage decline, but the suspension of all Sydney–Grafton train services from 28 April 2025 may be a factor[23].

The bulk of V/Line's and all of Sydney Trains' patronage is intercity commuter services, such as Katoomba to Sydney and Geelong to Melbourne, while almost all of Queensland Rail's and Transwa's patronage is from longer distance non-commuter travel.

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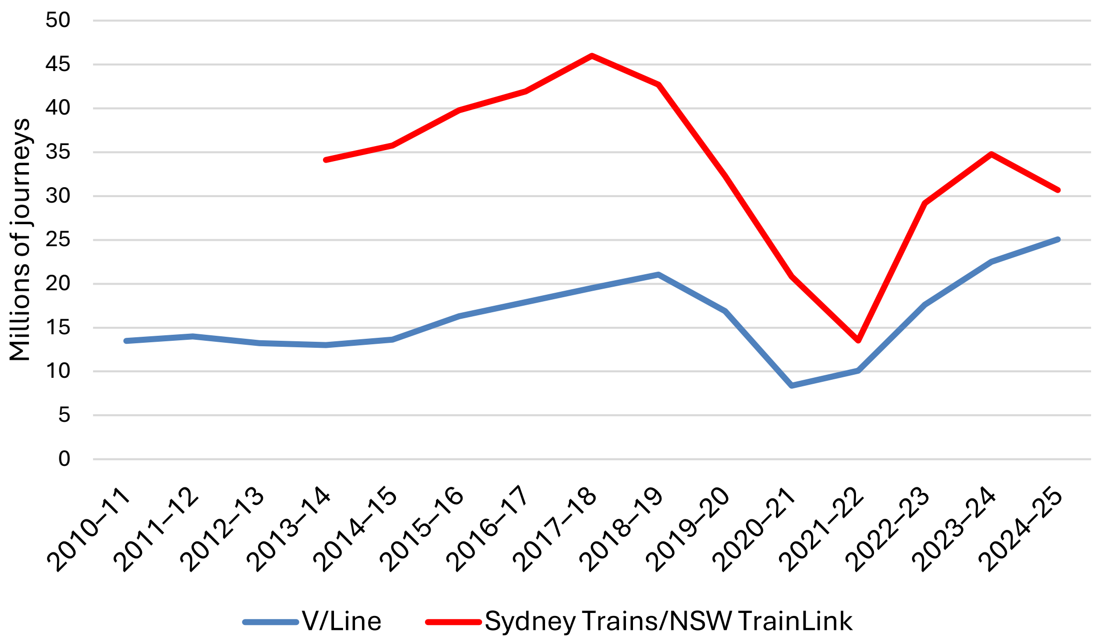
22 This statement refers to combined rail and coach patronage of 26.4 million passenger journeys, of which coach patronage comprised about five per cent.

23 NSW TrainLink suspended the Sydney–Grafton rail service as part of the XPT Life Extension Program. Road coach services replaced the train services until XPT train services resumed on 28 April 2026.

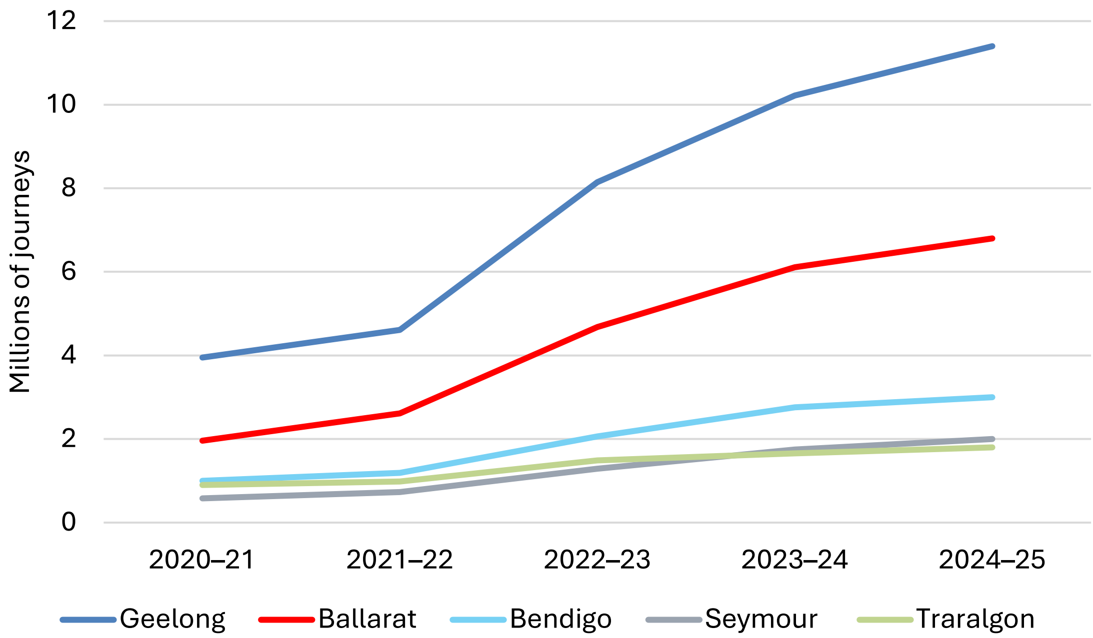
Figure 48 **Non-urban rail patronage – Sydney Trains/NSW TrainLink and V/Line**



Note: The Sydney Trains/NSW TrainLink figures are the sum of regional/interstate and intercity patronage. There is no data prior to 2012–13 due to the formation of TrainLink in July 2013, which merged regional and intercity services under one operator. Including previous years' data would not be comparing 'like for like'.

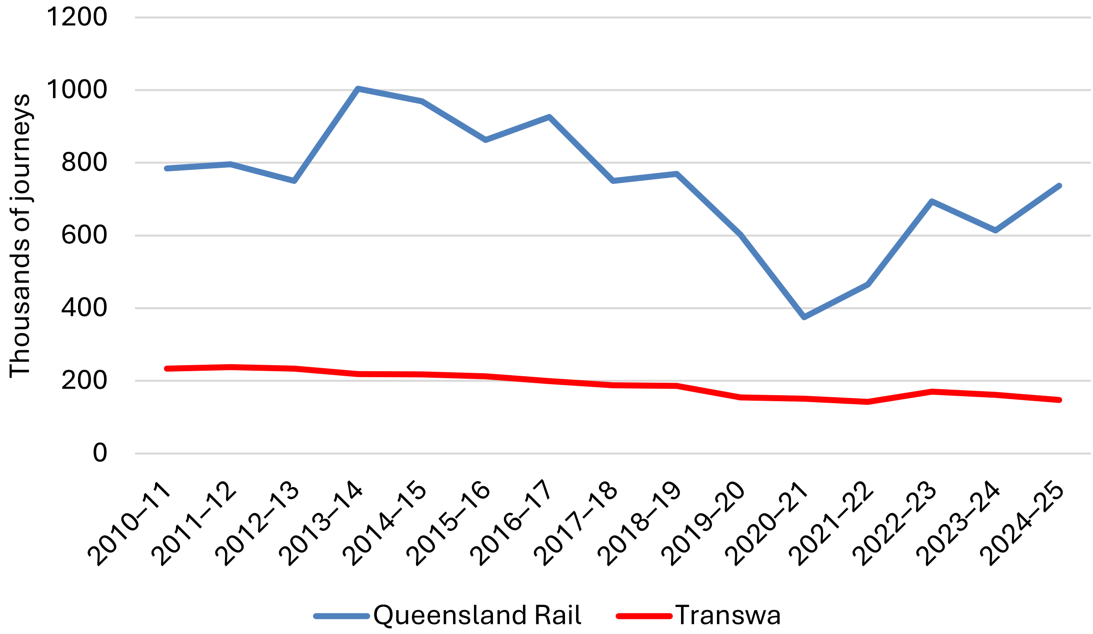
Sources: Transport Open Data (n.d.-b); advice from Transport for NSW; V/Line (2025), p.12; previous editions of Trainline.

Figure 49 **V/Line patronage by line**



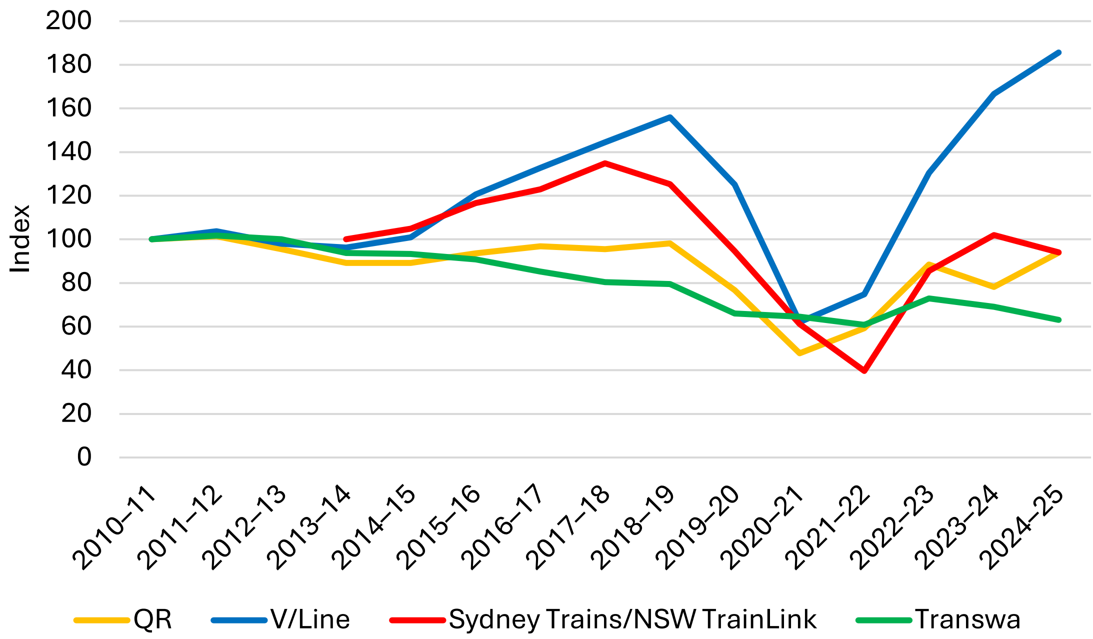
Source: V/Line (2025), p.11.

Figure 50 **Non-urban rail patronage – Queensland Rail and Transwa**



Sources: Queensland Rail (2025), p.16; Public Transport Authority of Western Australia (2025), p.28; previous editions of Trainline.

Figure 51 **Index of non-urban rail patronage, by operator**



Notes: The Sydney Trains/NSW TrainLink index is the sum of intercity (Sydney Trains) and regional/interstate (TrainLink) rail patronage.

Sources: Index based on reported patronage data.

Punctuality

Table 24: Punctuality, on time performance 2024–25

Operator	Service type	Result (%)	Target (%)	Measurement
Queensland Rail	QR Traveltrain	73.34 (adjusted for force majeure)	75	Arriving within 15 minutes
Sydney Trains	Intercity	75	>92	Arriving within six minutes
NSW TrainLink	Regional & interstate	52.5	78	Arriving within 10 minutes
V/Line	Commuter	88.5	92	Arriving on time to five minutes and 59 seconds
	Long distance	88.4	92	Arriving on time to 10 minutes and 59 seconds
Transwa	Australind	n/a[1]	90	Arriving within 10 minutes
	Prospector	50.16	80	Arriving within 15 minutes
	MerredinLink	65.54	90	Arriving within 10 minutes
	AvonLink	91.96	90	Arriving within 10 minutes

Note: The Queensland Rail result excludes the Kuranda Scenic Railway, Gulflander, and heritage services.

Australind data for 2024–25 is not applicable due to the suspension of the service.

Sources: V/Line (2025), p.13; Sydney Trains (2025), p.33; NSW TrainLink (2025), p.34; Queensland Rail (2025), p.13; Public Transport Authority of Western Australia (2025), p.87.

Punctuality targets for non-urban rail services are generally higher for markets which are likely to have a higher value-of-time. For example, trains which service intercity commuter corridors, such as Sydney Trains' intercity services have a target of at least 92% and with a smaller margin for being considered on time. Conversely, Transwa's long-distance Prospector train has a lower target and greatest margin.

Sydney Trains attributes punctuality results for its suburban and intercity networks to '…various infrastructure failures, vandalised rail property that affected our ability to run timetabled services, and ongoing protected industrial actions during the year' (Sydney Trains, 2025, p.32). NSW TrainLink attributes delays to its services to '…infrastructure impacts such as rail defects resulting in temporary speed restrictions, security incidents such as protest groups halting trains, rolling stock defects due to an ageing fleet, and service delays caused by blocked paths from freight trains' (NSW TrainLink 2025, p.34).

V/Line's punctuality improved by 1.2% compared to 2023–24. According to the V/Line annual report, the improvement '… was largely driven by V/Line's *Enterprise Performance Improvement Plan 2024-25*, which successfully delivered on a number of targeted initiatives designed to improve performance results' (V/Line 2025, p.14).

Transwa's annual report states: 'A number of delays were experienced including delays associated with crossings (71% with 605 instances), track and signal related issues (11% with

96 instances) due to other traffic on the freight line or maintenance works' (Public Transport Authority of Western Australia 2025, p.87).

Reliability

Reliability is the number of scheduled services that run, namely the total number of scheduled services minus cancellations.

Table 25: Non-urban Reliability, 2024–25

Operator	Service type	Result (%)	Target (%)
Queensland Rail	QR Traveltrain	99.4 (adjusted for force majeure)	93 (adjusted for force majeure)
Sydney Trains NSW TrainLink	Intercity	n/a	n/a
	Regional and interstate	n/a	n/a
V/Line	Commuter	n/a	n/a
	Long distance	n/a	n/a
Transwa	*Australind*	n/a	n/a
	Prospector	97.24	n/a
	MerredinLink	88.76	n/a
	AvonLink	93.53	n/a

Note: Australind data is not applicable for the reporting period due to the temporary replacement of all Australind rail services with road coach services due to infrastructure upgrades and the impending replacement of the train's rollingstock. The Transwa results included train services replaced by coach services due to natural disasters, track unavailability, and rollingstock unavailability.

Sources: Queensland Rail (2025), p.13; advice from Public Transport Authority of Western Australia.

Actual time running analysis of the Melbourne–Albury corridor

This section compares actual running times of Albury to Melbourne and Melbourne to Albury passenger train services against scheduled times (as shown in the ARTC Master Train Plan (timetable)). The comparison is for the period 1–31 January 2026. BITRE used the online 4Trak tool for extracting the trip details (trip reports) from which it did its analysis. For the purpose of this analysis, 'Melbourne' is Southern Cross Railway Station and 'Albury' is Albury Railway Station. Two operators provide the train services — V/Line and NSW TrainLink. The results are aggregated. No operator specific figures are shown. BITRE calculated the Melbourne–Albury journey distance as 317.5 kilometres, based on ARTC's published line diagrams[24].

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[24] See: https://www.artc.com.au/customers/maps/system/melbourne-crystal-brook/.

4Trak sometimes has either no record or only a partial record of a given service. This is why the results, shown in Table 26 and Table 27, below, list more scheduled services than fully recorded and partially recorded[25] services and why the number of services results do not always balance. The fact there is no record of a given service does not in itself mean there was no service[26]. It just means there is no record (available) of the service under the train's identifier for the given day.

Where there was a partial record of a service, BITRE recorded the information that was available, even though it was unable to record the entire trip details. For example, a partially recorded service may have an arrival time but no departure time. The number of fully recorded services figures are only for those services for which there is a complete trip record.

The analysis recorded:

- the time train services commenced their journey;
- the time train services completed their journey;
- average point-to-point speeds; and
- total journey times.

From this, the analysis calculated totals and averages for the period recorded, by direction of travel.

BITRE acknowledges there are numerous factors that affect how close to schedule a train service runs or whether a service is cancelled. For example, some services did not run in the sampled period due to bushfires. Some may also have travelled slower on a given day due to high summer temperatures.

The analysis is not a performance review or measure of either the infrastructure managers or the train operators. The term 'later than schedule' used here should not be confused with 'late'. 'Later than schedule' means later than the published departure or arrival time to the minute. V/Line and NSW TrainLink have their own measures of punctuality, as shown in Table 24.

Table 26 and Table 27, below, show the results, noting the number of scheduled services is the sum of those recorded on the corresponding ARTC Mater Train Plan for the assessed period. There were 10 daily scheduled services over the period assessed, five in each direction, except for Saturdays Albury to Melbourne, when there was an additional service, and Sundays Melbourne to Albury when there was also an additional service. Scheduled times for each service was the same for each day of the week. V/Line ran six daily services— three in each direction, and the two additional weekend services. These services, all using VLocity sets, operated exclusively between Melbourne and Albury. NSW TrainLink ran four daily services — two in each direction. They operated between Sydney and Melbourne via Albury, all using XPT sets. The analysis only recorded the Melbourne–Albury component of these services. Flow on factors affecting journey times along the Sydney–Albury component could influence the Albury–Melbourne component.

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[25] Partially recorded services included are those that have either a recorded departure or arrival time only. Partial records that do not have either a departure or arrival time are excluded.

[26] It is not known why there are sometimes no records or only partial records for a given service. BITRE in no ways claims or suggests there is a problem with 4Trak when this happens.

Table 26: Albury to Melbourne (southbound) results

Number of scheduled services	160	Average scheduled transit time (hours: minutes: seconds)	03:41:10
Number of fully recorded services	105	Average actual transit time	03:46:11
Number of partially recorded services	9		
		Transit	
Transit number on time to the minute	11	Average scheduled speed (kilometres per hour, point to point)	86.73
Transit number faster than schedule	52	Average actual speed	85.23
Transit number less than 30 minutes greater than schedule	33		
Transit number 30 minutes or greater than schedule	9		
		Departures	
Average departure from Albury earlier than schedule	0:01:45	Number departing on time to the minute	53
Average departure from Albury later than schedule	0:22:33	Number departing earlier than schedule	4
Average variation from schedule	0:11:26	Number departing less than 30 minutes greater than schedule	40
		Number departing 30 minutes or greater than schedule	17
		Arrivals	
Average arrival at Melbourne earlier than schedule	0:08:46	Number arriving on time to the minute	8
Average arrival at Melbourne later than schedule	0:28:44	Number arriving earlier than schedule	36
Average variation from schedule	0:21:14	Number arriving less than 30 minutes greater than schedule	40
		Number arriving 30 minutes or greater than schedule	21

Table 27: Melbourne to Albury (northbound) results

Number of scheduled services	159	Average scheduled transit time (hours: minutes: seconds)	03:28:48
Number of fully recorded services	93	Average actual transit time	03:41:31
Number of partially recorded services	2		
		Transit	
Transit number on time to the minute	8	Average scheduled speed (kilometres per hour, point to point)	91.40
Transit number faster than schedule	41	Average actual speed	86.95
Transit number less than 30 minutes greater than schedule	31		
Transit number 30 minutes or greater than schedule	13		
		Departures	
Average departure from Melbourne earlier than schedule	0:01:36	Number departing on time to the minute	49
Average departure from Melbourne later than schedule	0:18:31	Number departing earlier than schedule	5
Average variation from schedule	0:07:52	Number departing less than 30 minutes greater than schedule	32
		Number departing 30 minutes or greater than schedule	7
		Arrivals	
Average arrival at Albury earlier than schedule	0:05:07	Number arriving on time to the minute	11
Average arrival at Albury later than schedule	0:35:43	Number arriving earlier than schedule	34
Average variation from schedule	0:22:58	Number arriving less than 30 minutes greater than schedule	26
		Number arriving 30 minutes or greater than schedule	24

The tables show the following key findings.

Services to Melbourne (southbound):

Transit times

- Average actual transit times for the fully recorded services was approximately five minutes more than scheduled times.
- Average actual speeds for the fully recorded services was approximately 1.5 kilometres per hour less than average scheduled speeds.
- Almost 50% of fully recorded services completed their journey faster than schedule. Approximately 31.5% took 1–29 minutes longer than schedule. Approximately 10.5% of services completed their journey according to schedule, to the minute. Approximately 8.5% of services completed their journey 30 minutes or more than schedule.

Departures

- The average variation from schedule, either earlier or later than schedule, was approximately 11.5 minutes.
- Approximately 46.5% of recorded services departed Albury on time to the minute.
- Approximately 3.5% of services departed early.
- Approximately 35% of services departed 1–29 minutes later than schedule.
- Approximately 15% of services departed Albury 30 minutes or later than schedule.
- Of all the departures that were later than schedule, the average delay was approximately 22–23 minutes.

Arrivals

- The average variation from schedule, either earlier or later than schedule, was approximately 21 minutes.
- Approximately 34.5% of recorded services arrived at Melbourne earlier than schedule. On average, these services arrived approximately nine minutes earlier than schedule.
- Approximately 38% of services arrived 1–29 minutes later than schedule.
- Approximately 20% of services arrived at least 30 minutes later than schedule.
- Approximately 7.5% of services arrived on time to the minute.
- Of all the later than schedule arrivals, the average delay was approximately 29 minutes.

Services to Albury (northbound):

Transit times

- Average actual transit times for the fully recorded services was approximately 13 minutes longer than average scheduled times.
- Average actual speeds for the fully recorded services was approximately 4.5 kilometres per hour less than average scheduled speeds.
- Approximately 44% of recorded services completed their journey in a shorter time than schedule. Approximately 33.5% took 1–29 minutes longer than schedule. Approximately 8.6% vof services completed their journey on time to the minute. Approximately 14% of services completed their journey at least 30 minutes longer than schedule.

Departures

- The average variation from schedule, either earlier or later than schedule, was almost eight minutes.

- Approximately 53% of recorded services departed Melbourne on time to the minute.
- Approximately five per cent of services departed earlier than schedule.
- Approximately 34.5% of services departed 1–29 minutes later than schedule.
- Approximately 7.5% of services departed at least 30 minutes later than schedule.
- Of all the later than schedule departures, the average delay was 18–19 minutes.

Arrivals

- The average variation from schedule, either earlier or later than schedule, was almost 23 minutes.
- Approximately 11.5% of recorded services arrived on time to the minute.
- Almost 36% of recorded services arrived at Albury earlier than schedule. On average, these services arrived about five minutes earlier than schedule.
- Approximately 27.5% of services arrived 1–29 minutes later than schedule.
- Approximately 25% of services arrived at least 30 minutes later than schedule.
- Of all the later than schedule arrivals, the average delay was almost 36 minutes.

In sum and based on the results discussed above, on average:

- A typical Albury to Melbourne service during the assessed period departed Albury either on time to the minute or no more than 29 minutes later than schedule. It completed its journey in a time close to schedule at a point-to-point speed that was also close to schedule. It arrived into Melbourne either early or on time to the minute, or, failing that, no more than 29 minutes later than schedule.
- A typical Melbourne to Albury service departed Melbourne on time to the minute or less than two minutes ahead of schedule. It took slightly longer than schedule to reach Albury and it arrived into Albury either slightly earlier than schedule or less than 30 minutes later than schedule.

Analysis of the individual trip reports for each service shows some services that arrived at Melbourne later than schedule lost time between Sydney and Albury and the delay flowed through to Melbourne and, in some instances, the return journeys back to Albury (and Sydney). Services that lost time en route often did so due to temporary speed restrictions along parts of the route, extended stops at stations, or (extended) unscheduled stops between stations.

The lack of recorded services tended to be clustered around individual dates, which suggests no services ran on the given day. This may have been due to force majeure events, such as bushfires, causing all services on a given day to be cancelled. Some services that originated in Sydney terminated in Albury, thus the Albury–Melbourne components of those services were cancelled.

BITRE is able to provide more detailed (aggregated) analysis of the results upon request.

Figure 52 Southern Cross Station

Note: Photo courtesy of Rodney Avery.

Travel times

Travel times are important for commuter travellers as one factor in determining rail transport's competitiveness against other transport modes. These travellers may consider comparative door-to-door travel times rather than the speed of a given service when making transport mode choices. For non-urban services, the value of travel time varies according to the market and purpose of travel. Time-rich tourist travellers are likely to value comfort and enjoyment of the journey more than time. The opposite tends to apply to commuters who are time poor.

Transit times shown in Table 28, below, show the running characteristics of selected non-urban passenger rail services. The characteristics of some services, particularly the shorter distance commuter services, can vary. Some services stop at all stations while others, particularly those operating in peak hours, may have only minimal scheduled stops, which enables them to achieve faster point to point speeds and shorter travel times. For example, the Melbourne to Bendigo service cited below is able to achieve a higher average point to point speed by skipping nine of the usual 11 stops along its 162-kilometre course. By way of comparison, one sample all stops non-peak service on the same line takes approximately 10 minutes longer to complete its journey, at an average point-to-point speed almost 10 kilometres per hour slower[27].

The running times of the services cited below show little variance compared to 2025.

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[27] This is the weekday 1206 service that arrives at Bendigo at 1357 hours.

Table 28: Illustrative travel times, 2026

Route	Operator	Gauge	Distance (km)	Electrified	Scheduled transit time	Average speed (km/h)	Stopping stations en route
Brisbane to Nambour	QR (TransLink)	Narrow	105	Yes	1h 52m	56	20
Brisbane to Varsity Lakes	QR (TransLink)	Narrow	89	Yes	1h 22m	65	12
Newcastle Interchange to Muswellbrook	Sydney Trains	Standard	123	No	1h 36m	77	12
Sydney to Newcastle Interchange	Sydney Trains	Standard	165	Yes	2h 34m	64	12
Sydney to Wollongong	Sydney Trains	Standard	82	Yes	1h 27m	56.5	7
Sydney to Katoomba	Sydney Trains	Standard	110	Yes	1 h 52m	59	11
Sydney to Bathurst	Sydney Trains	Standard	238	No	3h 40m	65	9
Sydney to Goulburn	Sydney Trains	Standard	215	No	3h 15m	66	20
Melbourne to Ballarat	V/Line	Broad	118	No	1h 16m	93	6
Melbourne to Bendigo	V/Line	Broad	162	No	1h 42m	92.5	3
Melbourne to Warrnambool	V/Line	Broad	276	No	3h 17m	84	11
Melbourne to Geelong	V/Line	Broad	81.5	No	53m	92	4
Melbourne to Seymour	V/Line	Broad	99	No	1h 35m	62	10
Melbourne to Traralgon	V/Line	Broad	158	No	2h 20m	63	12
Melbourne to Albury	V/Line	Standard	317.5	No	3h 36m	88	10
Midland to Northam	Transwa	Standard	102	No	1h 20m	79.5	1
Perth to Bunbury	Transwa	Narrow	181	No	2h 30m	72.4	11
Townsville to Mount Isa	QR Travel	Narrow	977	No	20h 55m	47	8
Brisbane to Charleville	QR Travel	Narrow	777	No	16h 35m	47	15

Route	Operator	Gauge	Distance (km)	Electrified	Scheduled transit time	Average speed (km/h)	Stopping stations en route
Brisbane to Cairns	QR Travel	Narrow	1,681	No	25h 20m	66	26
Brisbane to Rockhampton (electric Tilt Train)	QR Travel	Narrow	639	Yes	8h 05m	79	11
Sydney to Canberra	NSW TrainLink	Standard	319	No	4h 9m	77	9
Sydney to Dubbo	NSW TrainLink	Standard	462	No	6h 26m	72	15
Sydney to Armidale	NSW TrainLink	Standard	579	No	8h 2m	72	19
Sydney to Brisbane	NSW TrainLink	Standard	852	No	14h 12m	69	21
Sydney to Melbourne	NSW TrainLink	Standard	946	No	10h 50m	87	17
Melbourne to Swan Hill	V/Line	Broad	345	No	4h 45m	73	7
Perth to Kalgoorlie	Transwa	Standard	653	No	6h 55m	95	17
Melbourne to Adelaide	Journey Beyond	Standard	828	No	10h 25m	79	8

Notes: The speed shown is the point-to-point speed over the length of the service, including stops.

'Newcastle' denotes Newcastle Interchange.

Sources: Queensland Rail Travel (n.d.); Transport for NSW (n.d.); Translink (n.d.-b); Transwa (n.d.); V/Line (n.d.); Journey Beyond Rail Expeditions (n.d.).

Average speeds of non-urban services are also influenced by:

- Track quality, curves, level crossings and capacity;
- Rollingstock standards and quality, influenced by its power, propulsion, in-cab signalling and the existence of a tilting mechanism;
- Railway procedures, including crew changes, loading and unloading passengers/luggage and right-of-way priority relative to other trains;
- Station (stop) spacing; and
- For tourist-focused trains such as the Ghan and the Indian Pacific, scheduled extended stops en route for passengers to do off train tours.

There is a wide dispersion of transit times across V/Line services, due to different stopping patterns that cater for different markets and differing track conditions. In addition to fewer stops in peak periods, V/Line's Melbourne–Geelong, Melbourne–Ballarat, and Melbourne–Bendigo commuter services are relatively fast due to the VLocity DMU sets used (which operate at speeds of up to 160 kilometres per hour) and the Regional Rail Link and Regional Fast Rail infrastructure on which they operate. The Melbourne to Traralgon service, which also uses VLocity rollingstock on the Regional Fast Rail infrastructure, has a slower average point-to-point scheduled speed because it has more stops and shares the line for the first 60 of the 158-kilometre route distance with (all stops) suburban trains.

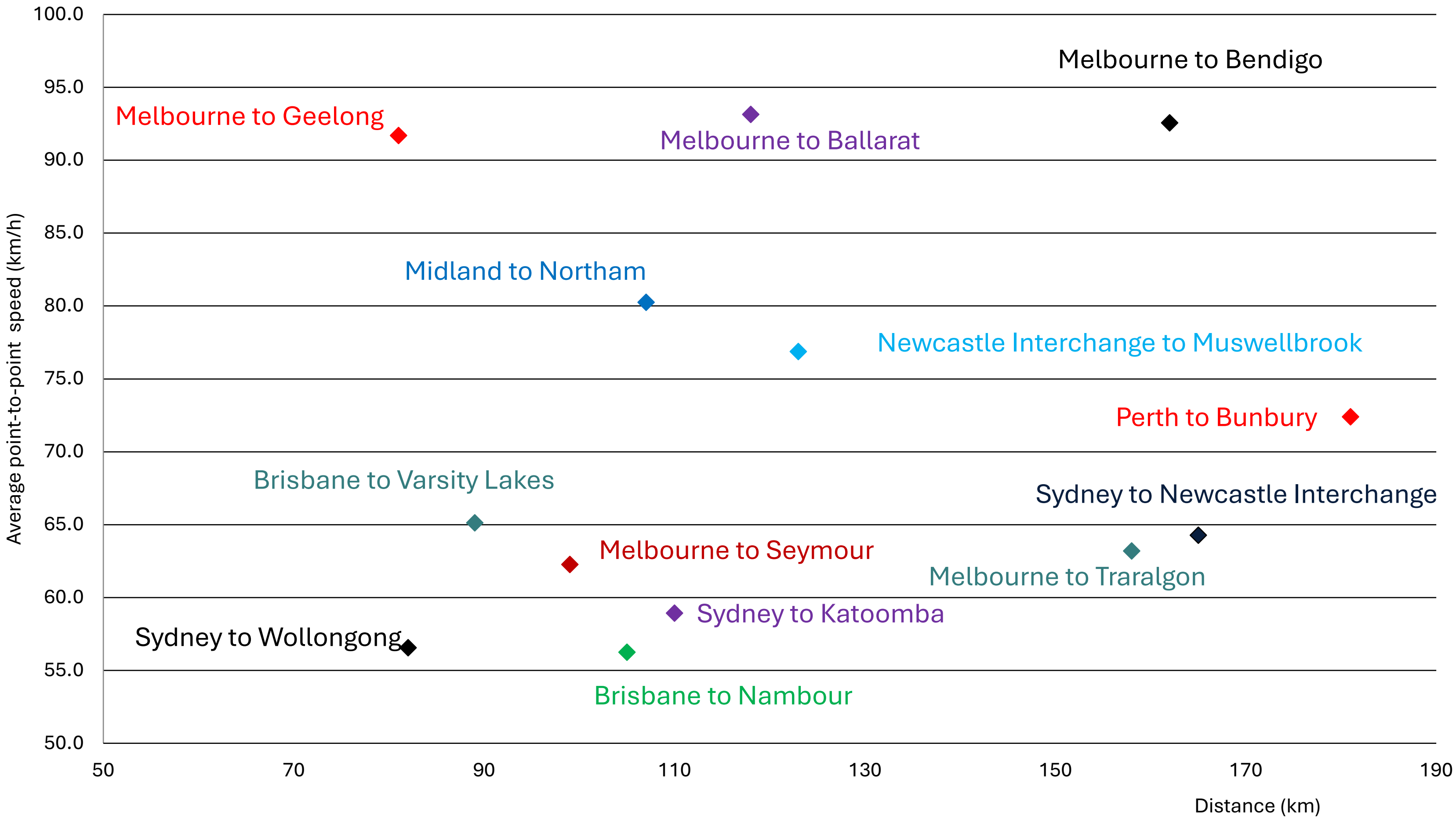
The following services listed above have average point-to-point speeds of 90 kilometres per hour or greater:

- Melbourne to Bendigo, 92.5 kilometres per hour;
- Melbourne to Ballarat, 93 kilometres per hour;
- Melbourne to Geelong, 92 kilometres per hour; and
- Perth to Kalgoorlie, 95 kilometres per hour.

Long-distance passenger trains in Australia typically have uncompetitive transit times compared to air and some road coach travel.

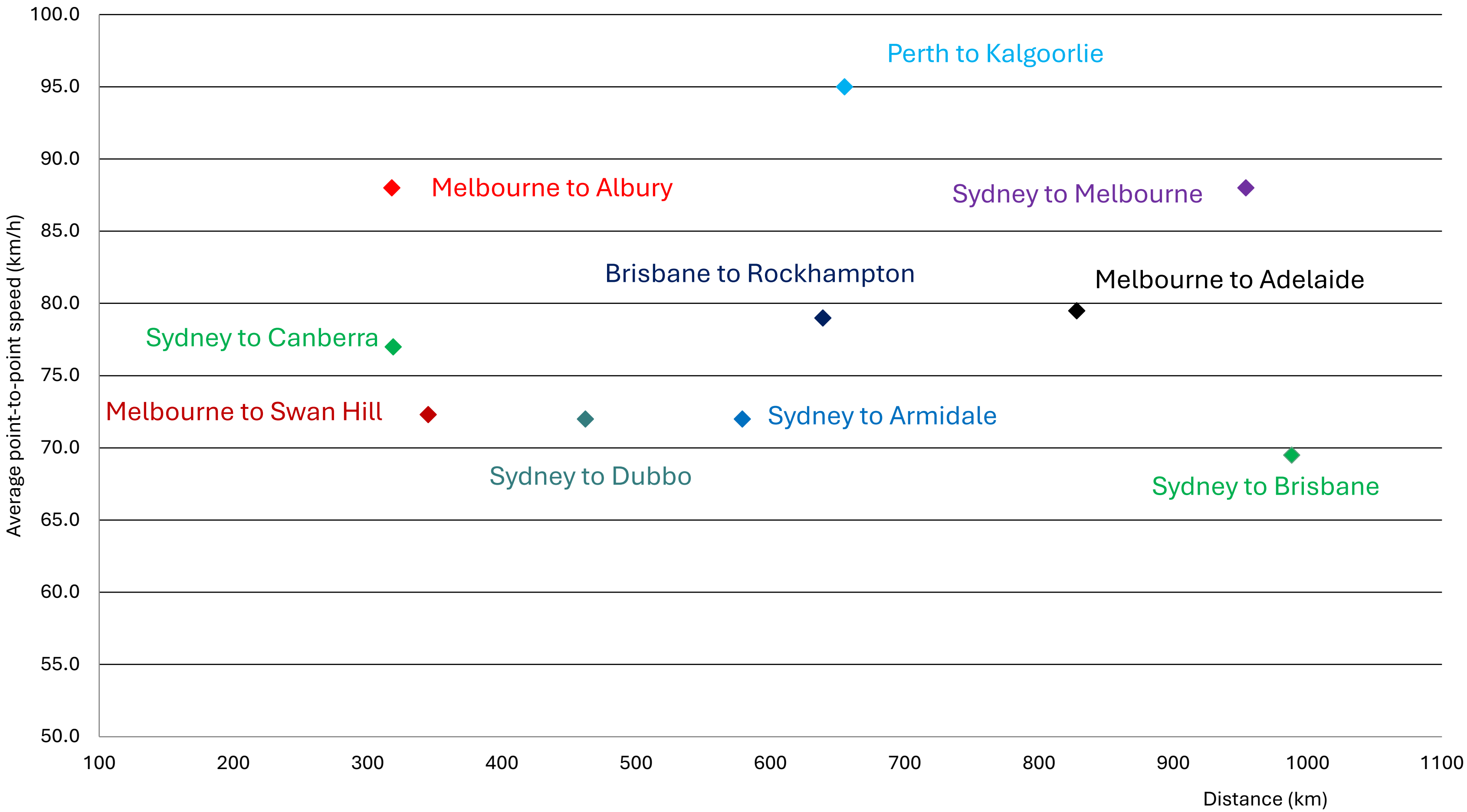
Figure 53, below, shows average timetabled point-to-point speeds and distances for a sample of non-urban services that are less than 200 kilometres in length. The calculations are for selected services shown in Table 28. The Sydney to Wollongong service has seven stops en route and almost half the route distance is shared with suburban services in Sydney. It is also subject to tight curves for much of the journey. This all reduces its average point-to-point scheduled speed to less than 60 kilometres per hour. By contrast, the Melbourne to Geelong, Ballarat, and Bendigo services have corresponding speeds of more than 90 kilometres per hour. The Brisbane to Nambour service has similar low speeds to the Sydney to Wollongong service. This is partly due to the close average spacing between stops (five kilometres compared to 10 kilometres for the Sydney to Wollongong service).

Figure 53 **Distance and illustrative speeds for selected non-urban services – less than 200 kilometres, 2026**



Source: BITRE analysis.

Figure 54 Distance and illustrative speeds for selected non-urban services – more than 200 kilometres, 2026



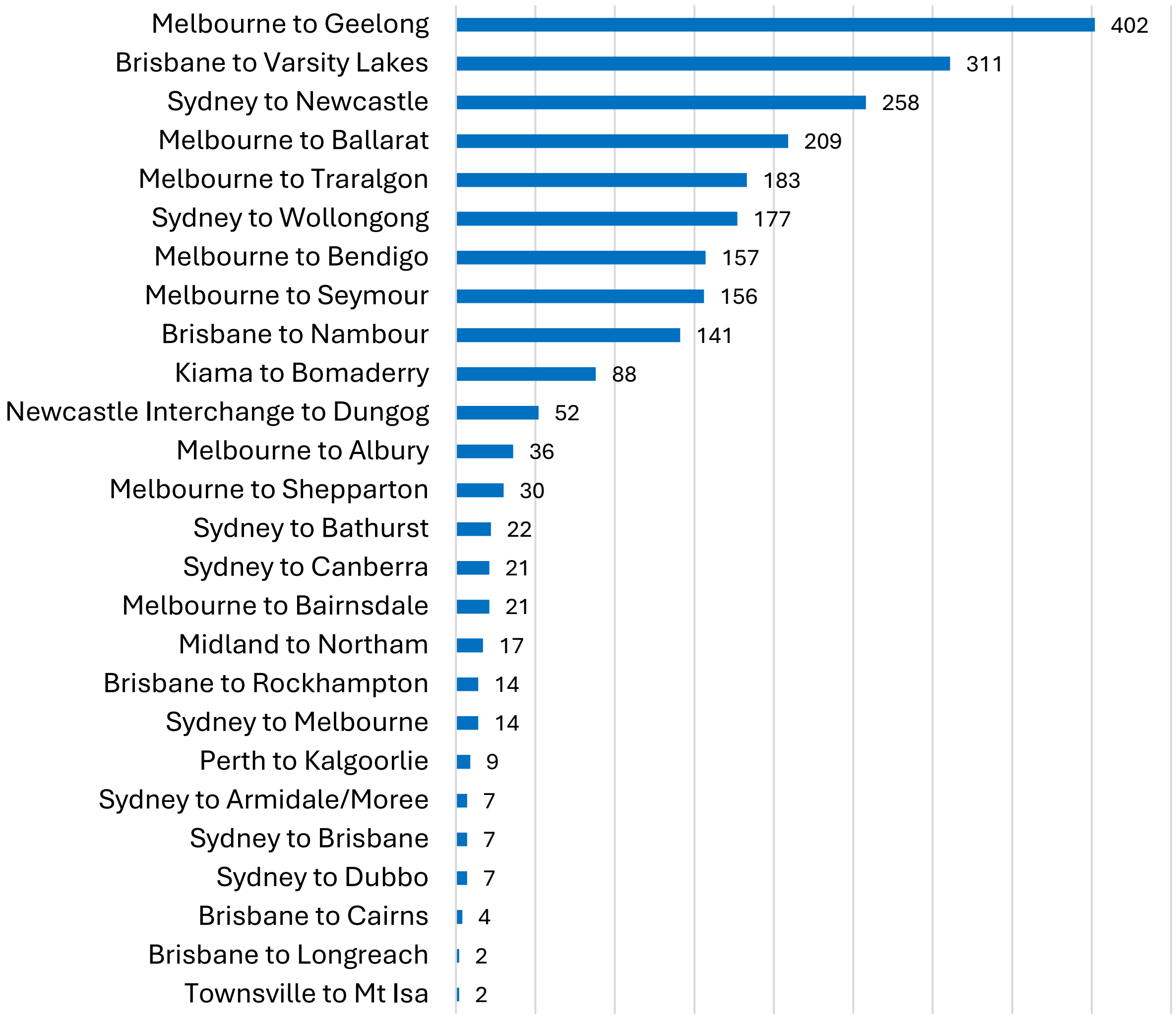
Source: BITRE analysis.

Figure 54, above, shows average scheduled point-to-point train speeds and distances travelled for non-urban services that are more than 200 kilometres in length. The calculations are also for selected services shown in Table 28. Of particular note is the Perth to Kalgoorlie *Prospector* service. It travels 655 kilometres in a scheduled time of six hours and 55 minutes, at an average point-to-point speed of approximately 95 kilometres per hour. It is able to achieve this through both the rollingstock used — capable of cruising at 160 kilometres per hour — and the relatively flat terrain and gentle curves that typify the route. Conversely, the Sydney to Brisbane XPT service travels 988 kilometres in 14 hours and 12 minutes, at an average point-to-point speed of approximately 70 kilometres per hour. While the XPT rollingstock used for the service can also cruise at 160 kilometres per hour, the Sydney–Brisbane line has many tight curves, particularly north of Maitland, which reduces speed. The Sydney–Melbourne line is relatively flat with only gentle curves for approximately half its distance (Junee to Melbourne), which enables the XPT rollingstock used to cruise at up to 160 kilometres per hour between Junee and Albury and 130 kilometres per hour between Albury and Melbourne. It completes the journey in a scheduled time of 10 hours and 50 minutes, at an average point-to-point speed of 88 kilometres per hour. The Melbourne to Albury service shown, using VLocity sets able to cruise at 130 kilometres per hour, completes the trip in three hours and 36 minutes, at an average point-to-point speed of approximately 88 kilometres per hour.

Frequency

Frequency is important for non-urban services because it determines how closely a train departure and arrival is to a passenger’s preferred time. Service frequencies can also determine the amount of time a passenger waits for a train and is therefore closely aligned with perceptions of total travel time and its generalised cost. Figure 55, below, shows the number of scheduled services per week on selected intercity/commuter and regional/interstate passenger rail services. Intercity/commuter services have the highest frequency.

Figure 55 Non-urban services per week, 2026



Notes: Based on calculation of outbound ‘down’ services. Does not include return services.

The Sydney–Newcastle figures include long distance services that stop at nearby Broadmeadow.

Services include trains that arrive at but do not terminate at destination, for example, Brisbane to Cairns services that stop at Rockhampton.

Perth–Bunbury services are not shown in this edition due to the suspension of Perth–Bunbury services for infrastructure and rollingstock upgrades.

Sources: Queensland Rail Travel (n.d.); Transport for NSW (n.d.); Translink (n.d.); Transwa (n.d.); V/Line (n.d.); Queensland Rail Travel (n.d.).

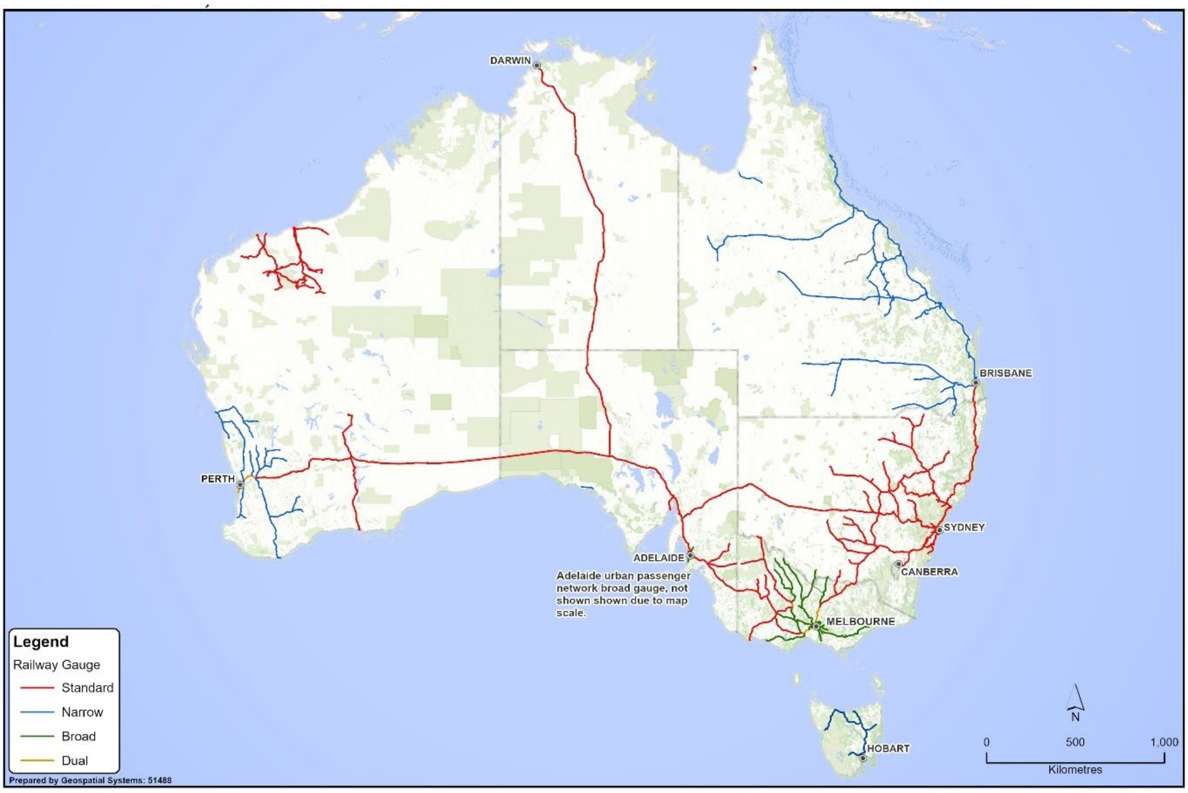
Changes since 2025 are as follows:

- Melbourne to Traralgon: 41 additional services;
- Melbourne to Ballarat: 18 additional services;
- Melbourne to Bendigo: nine additional services; and
- Melbourne to Geelong: two additional services.

Chapter 5 – Infrastructure

Australia's colonies (then states in the post-federation era) built the continent's first railways as separate networks, often with different gauges. The networks mostly radiated from the state (previously colonial) capitals, with cross-border links coming only after intrastate (intra-colonial) lines met at the borders. The exception is Queensland, whose early railways consisted of a network of disparate railways that connected inland areas with coastal ports. These railways were eventually linked, forming the current Queensland network. While aspects of the break of gauge legacy remain, interstate trains now operate across a continuous 1,435 mm 'standard' gauge.

Figure 56 Railway network, by track gauge, 2026



Notes: Broad gauge is 1,600 mm; standard gauge is 1,435 mm; and narrow gauge is 1,067 mm.

Current network

Table 29 shows BITRE's estimate of operational route kilometres of heavy railways in Australia. BITRE estimates there were approximately 31,311 route-kilometres of operational heavy railways in Australia in 2026. No railways in Australia that are in scope are known to have closed since the previous estimate in December 2024. The figures are subject to rounding.

Approximately eight per cent of the network is broad gauge, 35% is narrow gauge, 56% is standard gauge, and less than one per cent is dual gauge.

Approximately 11.4% of the network is electrified. Queensland has the largest electrified network, principally due to the electrified line between Rockhampton and Brisbane and a number of electrified coal lines in the CQCN. Elsewhere, overhead power systems have been installed on lines with relatively intensive urban and some intercity passenger services.

Most of the network is single-tracked (approximately 87%). Most of the urban networks, the Sydney–Melbourne line (of which around three-quarters is double-track), and parts of the Pilbara network is multiple track.

Table 29: Estimate of route kilometres of open (operational) heavy railways, 2026, by jurisdiction, gauge, and electrification

	State or territory (jurisdiction)								
	ACT	NT	NSW	Qld	SA	Tas	Vic	WA	Total
	Route kilometres by gauge								
Broad			73.0		127.1		2,292.8		**2,493.0**
Narrow				7,528.2	152.0	614.4		2,652.4	**10,947.0**
Standard	7.5	1,690.0	6,715.8	117.1	2,624.7		1,806.3	4,648.4	**17,609.7**
Dual				36.7			51.3	173.5	**261.4**
Total	**7.5**	**1,690.0**	**6,788.8**	**7,681.9**	**2,903.8**	**614.4**	**4,150.5**	**7,474.3**	**31,311.0**
	Route kilometres by electrification								
1,500V DC			697.4				388.0		**1,085.4**
25 kV AC				2,173.6	82.5			242.9	**2,499.0**
Total	**nil**	**nil**	**697.4**	**2,173.6**	**82.5**	**nil**	**388.0**	**242.9**	**3,584.4**

Notes: V denotes volts and kV denotes kilovolts. DC denotes ‘direct current’ and AC denotes ‘alternating current’.

Totals may not balance due to rounding. Excludes light rail, sugarcane tramways and heritage only railways.

The New South Wales total includes the Skitube railway.

Sources: Revised BITRE estimates.

Dedicated commodity networks

The primary railway traffic flows are iron ore, coal, grains, intermodal, and urban passenger. Parts of the Australian railway network are dedicated to serving individual commodity flows.

Iron ore networks

Most iron ore transport by rail in Australia occurs in the Pilbara region of Western Australia. As bespoke developments, these lines were generally built to very high standards to accommodate the large envisaged traffic. There has been extensive subsequent capacity expansion (signalling, track and train capacity) on many of the lines.

All the Pilbara railways are vertically-integrated. They are privately owned and operated. There are four operators:

Rio Tinto

The Robe River to Cape Lambert and the former Hamersley Iron's network to Port Dampier. Since 2012, trains on the Hamersley railway have been approximately 2.4 kilometres long and with a capacity of 26,000 tonnes (BITRE 2013, p. 31). Rio Tinto inaugurated its first driverless train revenue service on 10 July 2018. The train carried 28,000 tonnes of iron ore over 280 kilometres from Tom Price to Cape Lambert. In 2022, Rio Tinto started revenue operations on its newly constructed 166-kilometre branch line to the Gudai–Darri mine, in an expanded use of its driverless train operations (Rio Tinto, 2022).

BHP

BHP's network consists of an estimated 532 route-kilometres of operational lines. The 217-kilometre Goldsworthy (to Yarrie) line ceased operations 2014 but remains mothballed. The Goldsworthy line (to Yarrie) and the Newman line run to Port Hedland. Trains are more than 2.5 kilometres (264 ore cars) in length (BHP, 2026). Each train on the Newman line can carry approximately 37,000 tonnes (BITRE 2013, p. 27). In 2025, BHP received two purpose-built battery-electric locomotives. Each locomotive features a 7 megawatt-hour (MWh) battery system and regenerative braking technology (BHP, 2025).

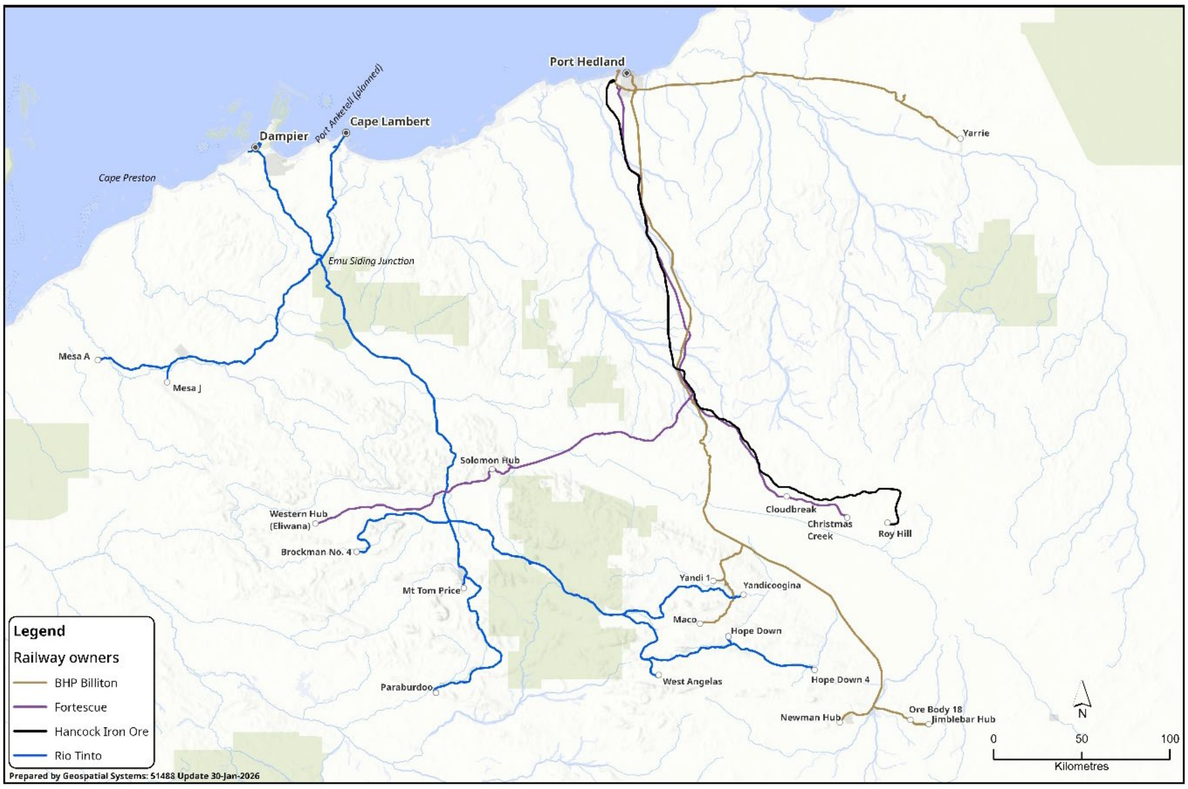
Fortescue Metals Group

Fortescue Metals Group's rail network is an estimated 586 route-kilometres, with lines from Western Hub/Solomon Hub and Christmas Creek to Port Hedland. Nominal train lengths are 244 wagons but it can be as many as 250, at approximately 2.8 kilometres maximum length. December 2020, Fortescue Metals Group opened its 143-kilometre Western Hub (Eliwana) line, as part of the development of the new Western Hub.

Hancock Iron Ore

Formerly Roy Hill, Roy Hill merged with Atlas Iron in July 2025 to become Hancock Iron Ore (Hancock Iron Ore, 2025). Its rail network consists of a 344-kilometre railway from Roy Hill to Port Hedland, capable of 42.8 tonne axle loads. These trains typically haul 232 ore cars, with a payload of more than 32,000 tonnes of ore (BITRE, 2016b, pp.102–103).

Figure 57 Pilbara iron ore railways, by infrastructure owner



Coal networks

Coal lines occur mostly in eastern Australia, generally being grafted onto the existing mixed-traffic networks. Track standards are high, but they are of a lower standard than the dedicated iron ore lines. There are some electrified lines in Queensland.

Aurizon manages the CQCN, under an open access regime. The network is narrow gauge with train axle loads of 26.5 tonnes. Bravus Mining and Resources owns the Carmichael Rail Network, which connects to the CQCN. ARTC manages the New South Wales (standard gauge) Hunter Valley system in New South Wales. The systems are:

Newlands (CQCN)

Newlands is at the northern end of the Bowen Basin. In 2012, the Newlands system was linked to Aurizon's Goonyella System, which has given additional flexibility to access the port of Abbot Point. The project included construction of the 69-kilometre 'Northern Missing Link', which connects the two rail systems, along with substantial upgrades to existing Newlands rail infrastructure. (For more details see Aurizon, 2026)

Goonyella (CQCN)

Goonyella is an electrified system that services the Bowen Basin coal region. It connects to the export terminals at Hay Point/Dalrymple Bay near Mackay, and Abbot Point near Bowen. (For more details see Aurizon, 2026.)

Blackwater (CQCN)

This system services the Bowen Basin coal region and it is the largest system in Central Queensland in terms of route kilometres. It delivers coal to the two export terminals at the Port of Gladstone: RG Tanna Coal Terminal and the Wiggins Island Coal Export Terminal (WICET). The system consists of mostly electrified duplicated lines that extend west from Rockhampton. (For more details see Aurizon, 2026.)

Moura (CQCN)

This system runs from Moura to Gladstone where it connects to the two export terminals: the RG Tanna Coal Terminal and the WICET. In late 2015, Aurizon finished the Wiggins Island Rail Project (WIRP), which involved the development of new rail lines and upgrades of existing lines to WICET. The project created a link between the coal terminal and mines in the Southern Bowen and Surat Basins. The project comprised interdependent infrastructure projects across the Blackwater Rail System, the Moura Rail System and the North Coast Line. (For more details see Aurizon, 2026.)

Galilee/Carmichael Rail Network (Queensland)

This network (line) opened in 2022. Bowen Rail Company hauls thermal coal from the Carmichael mine in the Galilee Basin along a newly constructed 200-kilometre railway that connects to the CQCN Newlands system near Collinsville. Maximum train axle loads are 26.5 tonnes, at maximum speeds of 100 kilometres per hour. Approximately six trains run on the network each day (Bowen Rail, 2026).

South-West Rail Corridor (Queensland)

Aurizon hauls coal from the West Moreton Coal System along the South-West Rail Corridor through to the Port of Brisbane. Axle loads vary across the corridor. (For more details see Aurizon, 2026.)

Hunter Valley (New South Wales)

Coal is transported to three coal-loading terminals in Newcastle and to domestic users. While most coal travels from Hunter Valley and points further north, there is also coal traffic from smaller mines to the south of Newcastle, and from mines in the Lithgow region of New South Wales (ARTC, 2026a, p.11). According to ARTC's latest public reporting, contracted export coal volumes were 170.6 mega tonnes per annum in the first quarter of 2025, declining to 112 mega tonnes per annum in 2034, as some train operators choose not to roll over some volume (ARTC, 2026a, p.5). This included up to 8.8 mega tonnes per annum of domestic coal. Train axle loads are 30 tonnes for most of the network. The lines south to Vales Point on the Central Coast are rated for 25 tonne axle loads. Trains consisting of '120 tonne' (30 tonne axle load) wagons are typically restricted to 60 kilometres per hour when loaded and 100 kilometres per hour when empty. Locomotives of up to 30 tonne axle load are authorised to run at 80 kilometres per hour (ARTC, 2026a, pp.12–13). Average train sizes as contracted with ARTC in 2024 was 8,541 tonnes (ARTCa, 2026, p.11). Permitted train lengths are approximately 1,300–1,500 metres (ARTC, 2026a, p.12).

Figure 58 Central Queensland Coal Network

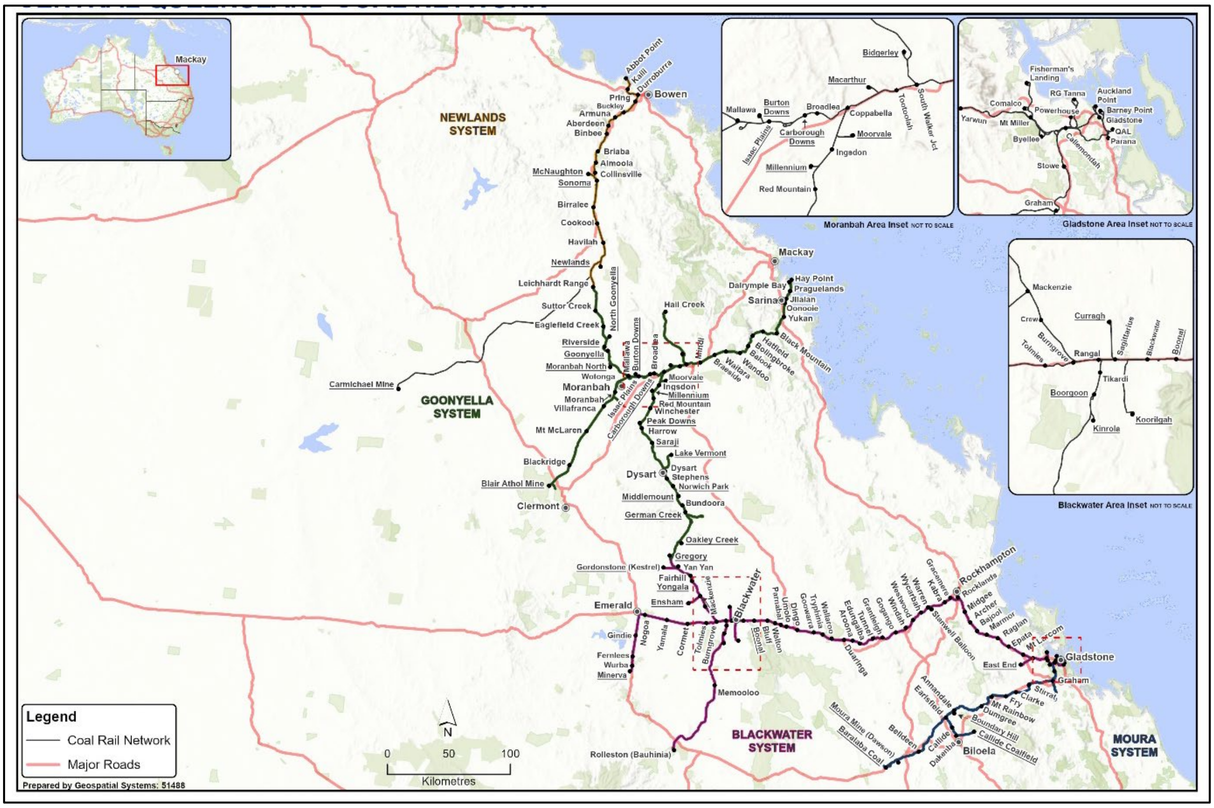


Figure 59 ARTC Hunter Valley Coal Network

Note: Map courtesy of ARTC.

Other places of coal haulage by rail includes:

- Southern coalfields (New South Wales):
  - Dendrobium;
  - Metropolitan;
  - Tahmoor;
- The Western coal region, near Lithgow, New South Wales; and
- Fingal, in Tasmania.

Grain railways

Unlike dedicated iron ore and coal railways, grain railways usually feed into main or secondary mixed-use lines — see Figure 20. Grain lines are generally of a lower technical and operational standard. Some are in a poor condition with only seasonal traffic. Unlike iron ore and coal railways also, the transportation of grain by rail often competes with road transport as it is market contestable.

The technical and operational diversity of the grain (and other freight) lines, mostly reflecting the varying importance (levels) of different branch traffic flows, has led to the classification of lines according to their technical standards (and, thus weight-bearing capability or train speed), their economic importance, or their viability. The respective categories across the states[28] are outlined below.

Box 3 Further reading on grain cropping and transport in Australia

- http://www.graincorp.com.au/
- https://www.cbh.com.au/
- https://www.awb.com.au/
- https://www.ldc.com/au/en/business-lines/grains-oilseeds/

State-based engineering standards

Queensland

The 'network capabilities' of railways in Queensland are classified according to the maximum permitted axle loads on a given section of track. Network information packs for access seekers describe track standards, permitted axle loads, and train speeds. Often the axle load limits are 15 tonnes at maximum speeds of 70 kilometres per hour. For more information on Queensland Rail's regional network, including network standards, see (Queensland Rail, 2026a).

New South Wales

While the New South Wales government's country railways are categorised by class — from Class 1 to Class 5, this is an engineering standard only; not an operational standard. Operationally, there is considerable variation within each standard.

The efficiency of grain transport by rail in the New South Wales Country Regional Network (CRN) is improving after network improvements, including through the Fixing Country Rail Program. Fixing Country Rail has funded infrastructure enhancement projects to reduce connectivity constraints and improve efficiency. Fixing Country Rail has also funded project business cases and feasibility studies to determine the future viability and strategic alignment of projects (Transport for NSW, 2025a).

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[28] Most of South Australia's grain railways are not currently operational and the remaining lines have not been classified.

Details of current projects and projects completed since 2019 are shown below.

Table 30: Fixing Country Rail projects

Project Name	Project Type	Status (2024)
Bellata Rail Siding	Construction	Completed 2023
Berry to Bomaderry	Construction	Completed 2022
Coolamon Siding Extension	Construction	Completed 2023
Coonamble South Siding	Construction	Completed 2020
Ettamogah Rail Hub Siding Expansion	Construction	Completed 2019
Hermidale Multi-User Siding	Construction	Completed 2019
Junee to Griffith Line Upgrade	Construction	Completed 2022
Mount Murray Loop	Construction	Completed 2020
Narromine to Ulan Upgrade	Construction	Completed 2022
Port Waratah Yard Configuration	Construction	Completed 2020
Red bend Rail Siding	Construction	Completed 2023
Riverina Intermodal Freight & Logistics Hub	Construction	Completed 2021
Tarago Crossing Loop Extension	Construction	Completed 2019
Temora West Rail Siding	Construction	Completed 2020
Condobolin Rail Siding	Construction	Completed 2025
Wumbulgal Siding	Construction	Completed 2025
Main West Bi-Directional Signalling (Wallerawang section)	Design	Completion due 2027–28
Gilgandra to Coonamble – 25 tonne axle loads	Design and Construction	Delivery

Source: Information provided by Transport for NSW.

In 2025, the New South Wales Government's RNEW Program replaced Fixing Country Rail. According to the New South Wales Government, RNEW is in the first phase of establishing a 10-year investment strategy.

RENEW will:

- identify future projects using a best for network approach;
- enable the New South Wales Government to identify and prioritise investment;
- create the opportunity to better understand, manage, forecast, and deliver improvements on the regional rail network; and
- provide flexibility and agility to address the freight task and changing network conditions, as well as addressing emerging issues on regional rail networks for all users.

Its project team is coordinating with other key initiatives to seek feedback and insights to guide the development of the investment strategy.

RNEW will initially involve data collection, analysis and modelling, then targeted stakeholder engagement to establish a short to medium term investment plan for the regional rail network over the following 10 years (Transport for NSW, 2025b).

Victoria

The V/Line managed network of Victoria and from Echuca to Deniliquin in New South Wales has six track standard classifications. The highest standard is Class 1, and the lowest is Class 5 (advice from Department of Transport and Planning, Victoria). Details are as follows:

- Class 1: Regional Fast Rail network. Up to 160 kilometres per hour for passenger trains and 80 kilometres per hour for freight trains;
- Class 2M: Up to 130 kilometres per hour for passenger trains and 80 kilometres per hour for freight trains;
- Class 2: Up to 115 kilometres per hour for all passenger trains and 80 kilometres per hour for freight trains;
- Class 3: Up to 100 kilometres per hour for passenger trains and 80 kilometres per hour for freight trains;
- Class 4: Up to 80 kilometres per hour for passenger trains and 65 kilometres per hour for freight trains; and
- Class 5: Lines that are short or have very little traffic, with minimal track maintenance. Maximum speeds are 50 kilometres per hour.

Rail weight is nominally 60 kilograms per metre for track classes 1–3 and 50–60 kilograms per metre for track classes 4–5. Maximum tonne axle loads for freight trains is 21–23 tonnes.

The state’s amended Murray Basin Rail Project is ongoing[29]. According to the Victorian Government, the current project includes:

- track upgrades on the Ouyen to Murrayville Line to remove speed restrictions (complete);
- track upgrades from Ararat to Maryborough to increase wagon load capacity and track speed (complete);
- new or upgraded sidings at Donald and Merbein to boost storage capacity (complete);
- new and extended passing loops at Elmhurst, Emu and Tourello to improve network capacity;
- upgraded signalling at Ararat, Maryborough and Dunolly junctions and the Ouyen yard;
- re-sleepering from Sea Lake to Dunolly to reduce speed restrictions (complete); and
- planning and assessment work for further upgrades (Victoria’s Big Build, 2026).

The Project’s estimated cost is $885.7 million, of which the Australian Government is contributing $528.1. The Australian Government's contribution includes $5 million for additional planning in developing options for full gauge standardisation of the network, which is contingent on an equal contribution from the Victorian Government. The expected completion

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[29] For details of the project’s original scope, see BITRE (2017), p.63.

date has not yet been determined (Department of Infrastructure, Transport, Regional Development, Communications and the Arts, 2024).

Western Australia

Grain railways in Western Australia are classified by their viability and cost-competitiveness. Tier 1 lines are currently considered to be cost-competitive compared to road transport and to remain competitive given probable future cost increases. Tier 2 railways are currently cost-competitive with road, given prevailing rail access prices and train operating costs. Tier 3 lines are regarded as unviable as rail volumes are low and trains are costlier than road transport. They are also typified by low (16-tonne) axle loads, with low standard track structure (Freight and Logistics Council of Western Australia, 2010, p.2). All Tier 3 lines are currently non-operational. Tier 1 lines have concrete and steel sleepers, and heavy rail and metal ballast. They can accommodate axle loadings of up to 24 tonnes. Tier 2 and Tier 3 lines have a combination of timber sleepers, light weight rail, and gravel ballast. Axle loads are limited to 16 tonnes (Government of Western Australia, 2020, p.20).

The West Australian Government's Revitalising Agricultural Region Freight (RARF) Strategy "… identifies core issues relating to the movement of agricultural freight over the next 10–15 years and presents a targeted list of infrastructure and non-infrastructure priorities to support improved efficiency of the State's agriculture supply chains…" (Government of Western Australia, 2020, p.4). Investment in the rail network will focus on improving the efficiency of existing lines, by facilitating efficient access to the network, and supporting feeder road infrastructure (Government of Western Australia, 2020, p.20).

In implementing the Strategy, the West Australian Government announced a funding boost through the $200 million Agricultural Supply Chain Improvements (ASCI) program in May 2022. ASCI is jointly funded by the Australian ($160 million) and West Australian ($40 million) governments for the following four tranche of projects:

- $22 million for four rail siding extensions for CBH grain bins at Moora, Brookton, Cranbrook, and Broomehill, complementing CBH investment in rail loading facilities;
- $46 million for seven additional grain rail siding upgrades at Avon, Kellerberrin, Dowerin, Konnongorring, Ballidu, Mingenew, and Perenjori North, which will enable CBH to load longer trains faster;
- $45 million for the Midland main line, increasing axle loads from 16 to 19 tonnes between Carnamah and Mingenew, allowing heavier trains and a 20% increase in train loads; and
- Approximately $87 million for investigations into and potential upgrades and/or recommissioning of rail infrastructure in grain growing regions.

Arc Infrastructure is funding the construction costs of the Midland Line upgrade, up to $22 million. The design, procurement and delivery of materials is complete, and construction was due to commence in mid-2026, with an anticipated completion of early 2027.

The upgrades at Broomehill, Cranbrook, Moora, Brookton and Konnongorring have been completed. The design of the Perenjori North rail siding has been completed and earthworks have started. The design for Dowerin is almost fully complete, and work at Ballidu rail siding was due to commence in mid-2026. It is anticipated that Perenjori, Dowerin and Ballidu will be completed in 2026–27. The remaining rail sidings — Kellerberrin, Mingenew and Avon (Northam) are progressing towards completion in 2027–28.

Figure 60 Moora siding

Note: Photo courtesy of CBH Group.

Tasmania

The Tasmanian and Australian governments have invested in the state's rail network through the Tasmanian Freight Rail Revitalisation Program (TFRRP) over the past decade. Now in its fourth (and final) tranche, the program focuses on renewing life-expired rail and sleepers, structure upgrades, level crossing improvements, and formation works. Tranche Four is a $120 million, four-year commitment. It began in July 2024 and is due for completion in June 2028. Key identified benefits include enhanced safety, reliability, and efficiency; improved access to ports and terminals across the state; and greater capacity for heavy-weight container transport (TasRail, 2025, p.13).

Interstate network indicators

Access revenue yield indicator (ARTC)

The access revenue yield data that ARTC provides is the revenue per '000 gross tonne kilometres that a reference intermodal train generates for ARTC in specific line segments.

Access revenue is the infrastructure manager's income made from train operators using the railway. ARTC's access charge has two parts: a flagfall charge, which is a reservation charge for booking a train path on a given line segment, invariant of tonnage; and a variable charge, which varies directly with the train operator's gross tonne kilometres. Thus, as a train's tonnage increases, the average access charge per tonne decreases.

This access charging regime encourages train operators to operate longer trains. Longer trains enable infrastructure managers to increase tonnage throughput, as there are limited train paths. However, longer trains require track infrastructure that can accommodate the longer trains. Consequently, interstate network infrastructure managers have upgraded their networks to accommodate longer trains.

Table 31, below, is ARTC's revised index of the maximum access yield for the interstate network it manages. The indicator measures the changes (relative to the base year of 2009–10, not shown in the table) in the maximum access revenue yield per gross tonne kilometre. As the access revenue yield is calculated on a nominal reference train, this measure essentially identifies if there have been any real changes in access charges. Changes in this composite indicator may reflect changes in:

- Real access charges (higher charges will increase the indicator);
- Train operators' use of existing capacity (heavier/longer trains will lower the indicator); or
- Enhancements in rail infrastructure and train operators' uptake of those enhancements (more uptake of improvements, through heavier trains, will lower the indicator).

According to advice from ARTC, the consumer price index from 2020-21 has not been passed on to the above-rail operators, to minimise their losses incurred during COVID period. That shortfall has carried forward until 2024-25.

Table 31: Index of real maximum access revenue yield, interstate network (2011–12 = 100)

	2013–14	2014–15	2015–16	2016–17	2017–18	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24	2024–25
North–South corridor												
Acacia Ridge–Border Loop	100	100	100	100	100	100	100	97.63	97.61	97.59	97.57	97.55
Border Loop–Newcastle	100	100	100	100	100	100	100	97.63	97.61	97.59	97.57	97.55
Macarthur–Albury	100	100	100	100	100	100	100	97.79	97.67	97.67	97.63	97.61
Albury–Tottenham	100	100	100	100	100	100	100	97.79	97.67	97.67	97.63	97.61
East–West corridor												
Melbourne–Adelaide	100	100	100	100	100	100	100	97.99	97.63	97.62	97.58	97.55
Adelaide–Kalgoorlie	100	100	100	100	100	100	100	97.87	97.67	97.67	97.64	97.62
Cootamundra West–Parkes	100	100	100	100	100	100	100	97.84	97.58	97.64	97.61	97.59
Parkes–Broken Hill	100	100	100	100	100	100	100	98.00	97.66	97.65	97.61	97.60
Broken Hill–Crystal Brook	100	100	100	100	100	100	100	97.81	97.66	97.65	97.62	97.60

Note: Numbers are subject to rounding.

Source: Data provided by ARTC.

Permitted train lengths on the interstate network

Permitted train lengths influence track capacity. On Australia's predominantly single track, crossing loops and passing lanes contribute to capacity. Since the mid-1990s in particular, infrastructure managers have built longer crossing loops and passing lanes (approximately 6–8 kilometres in length) across the interstate network. Track alignment and gradients also determine permitted train lengths.

Permitted unrestricted train lengths on the interstate network are as follows:

- 1,500 metres Brisbane–Sydney;
- 1,500 metres Melbourne–Adelaide (1 800 metres restricted); and
- 1,800 metres Sydney–Melbourne, Cootamundra West–Crystal Brook, Adelaide–Perth, and Tarcoola–Darwin.

The unrestricted train length is the maximum length train operators can run any scheduled service without reference to the infrastructure manager. The length is shorter than the standard loop length on the line segment. The restricted train length is the maximum train length permitted on the line segment. Under restricted access terms, trains that exceed the prevailing loop length can be operated by ensuring trains that have to be passed can be accommodated within the prevailing loop length.

Passing lanes[30] have been built on the single track sections between Junee and Melbourne on the Sydney–Melbourne corridor. This, combined with double track between Sydney and Junee, and Albury and Seymour, have enabled the use of unrestricted 1,800 metre trains between Sydney and Melbourne.

Double stacking capability on the interstate network

Double stacking containers on wagons increases capacity. In Australia, double stacking involves stacking one hi-cube (9 feet 6 inch, or 2.896 metres high) container on top of another in a low-floor (well) wagon. The stacking height must be no higher than 6.5 metres, and mass limits apply. Double stacking is permitted west of Goobang (Parkes) and west of Adelaide to Perth and Darwin. Figure 61, below, illustrates.

Clearances on the North–South corridor are restricted to single stacking of hi-cube containers. The increasingly prevalent higher maxicube (10 feet 6 inch, or 3.20 metre) containers travel in low-floor well wagons.

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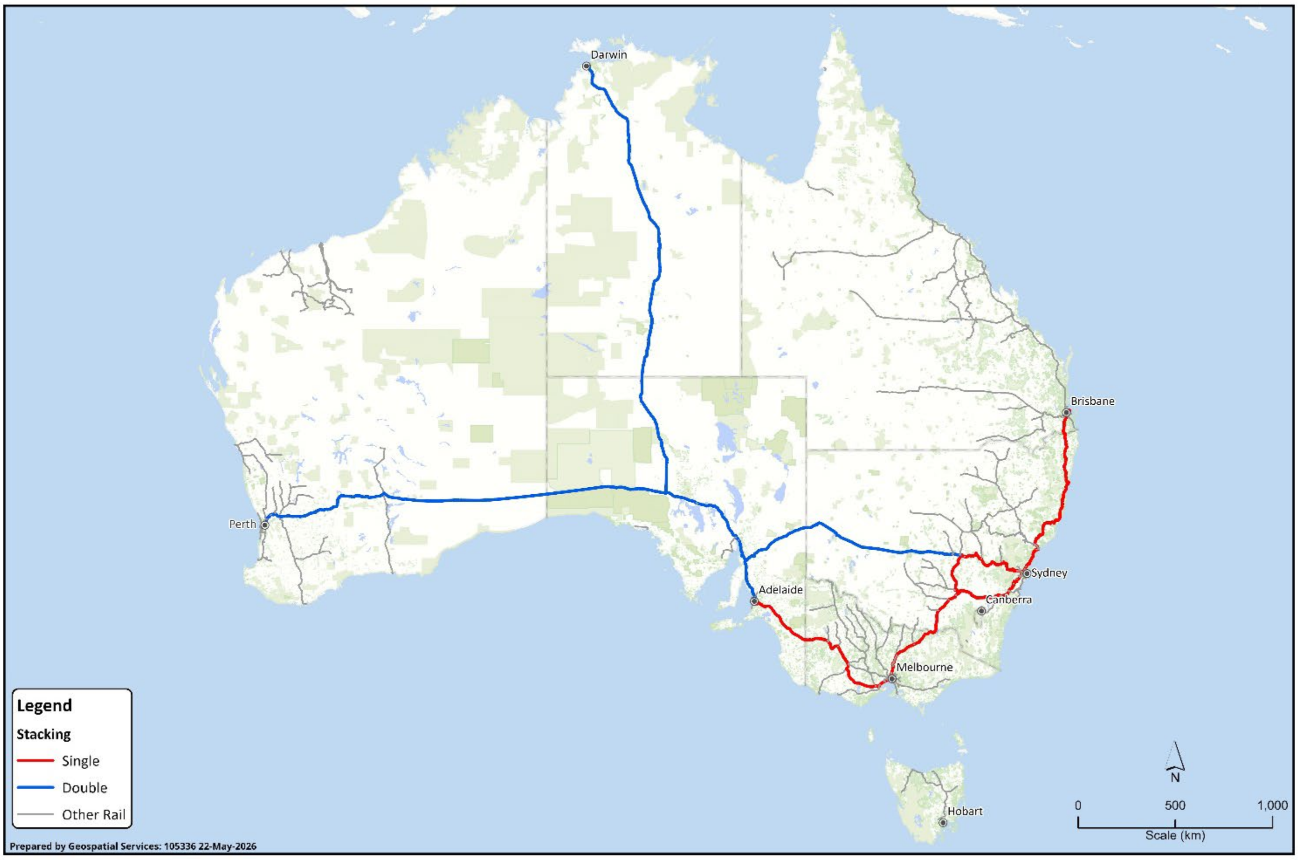
[30] A passing lane differs from a passing loop by virtue of the fact they are 6-8 kilometres in length, as opposed to approximately 1,500 metres and 1,800 metres, which is the typical crossing loop length on the interstate network, depending on the corridor. Passing lanes enable trains to cross each other without stopping, subject to timings.

Figure 61 Double stacking capability on the interstate network



Track quality of the interstate network

The maintenance and standards of railway infrastructure influence train operating performance. The infrastructure quality, maintenance regime and underlying economic life of the infrastructure influence the permitted track speed and smoothness of wagon ride.

For safety, maintenance, planning and regulatory reasons, infrastructure managers regularly measure the condition of their track. They measure the extent to which the track deviates from the 'designated' (or 'true') alignment, expressed as a track quality index (TQI). The TQI is a statistical measure calculated from the standard deviations of a number of different track geometry parameters. Track quality is reported as a composite measure of the different geometric parameters. The TQI for a given line segment is taken as the average of the individual TQI sample readings over a given period. A lower TQI number denotes improved track quality. The rate of track quality decline, where it occurs, is influenced by such factors as the quality of renewal material and work, the level and type of track usage, weather and local geographical factors, and the skill and timeliness of ongoing maintenance work.

Infrastructure managers routinely operate trains with a track geometry measuring carriage. The carriage is equipped to measure and record a range of geometric parameters. There is a variety of track geometry measuring cars in Australia and hence a variety means of measuring and analysing the parameters that comprise the TQI. This composite measure can differ between systems depending on the parameters used[31].

Figure 62 to Figure 65 show TQIs by line segment for the ARTC North–South and East–West corridors, and Aurizon's Northgate (Tarcoola)–Darwin corridor. The figures show trends in track condition for the line segments.

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[31] Trainline 6, has a case study on ARTC's 'AK Car' track measuring operations (See BITRE, 2018c).

The TQI charts show ongoing track quality variations that (in most cases) routine track maintenance addresses. Track quality continually fluctuates, rather than indicating specific problems requiring specific investment (other than in exceptional cases).

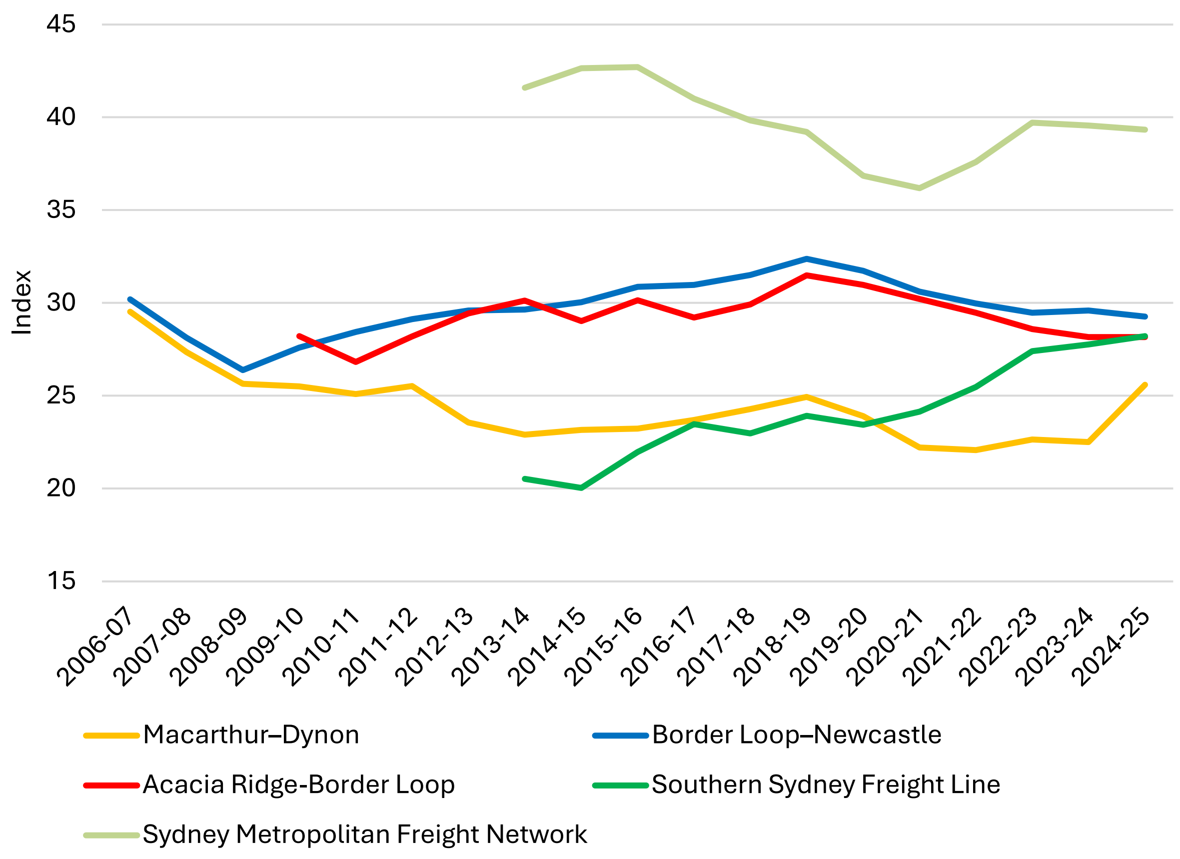
The TQIs shown for both infrastructure managers consist of:

- Gauge;
- Twist (short), measured over two metres;
- Vertical irregularities ('top'), deviation over a 20-metre inertial reading (average of left and right rail); and
- Horizontal line irregularities ('versine'), 5/10 metre chord emulation (average of left and right rail).

These are based on average Standard Deviations over 100 metre sections. The specific composition of the index varies between infrastructure managers, reflecting both differences in priority and different operational environments across the network. As such, the indexes are not comparable between the two infrastructure managers. However, TQI changes for each individual sector are comparable.

ARTC

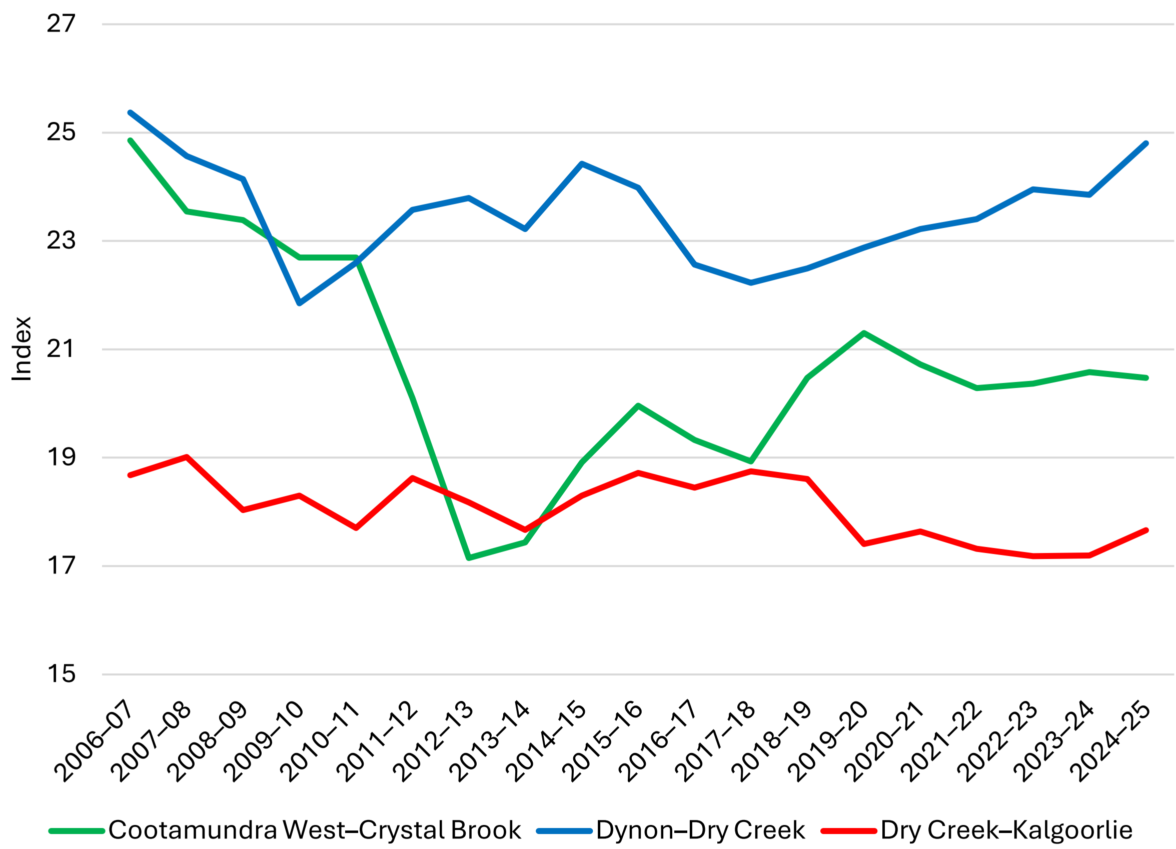
Figure 62 ARTC track quality index, North–South corridor



Note: Lower indices indicate higher track quality.

Source: Data Provided by ARTC.

Figure 63 ARTC track quality index, East–West corridor



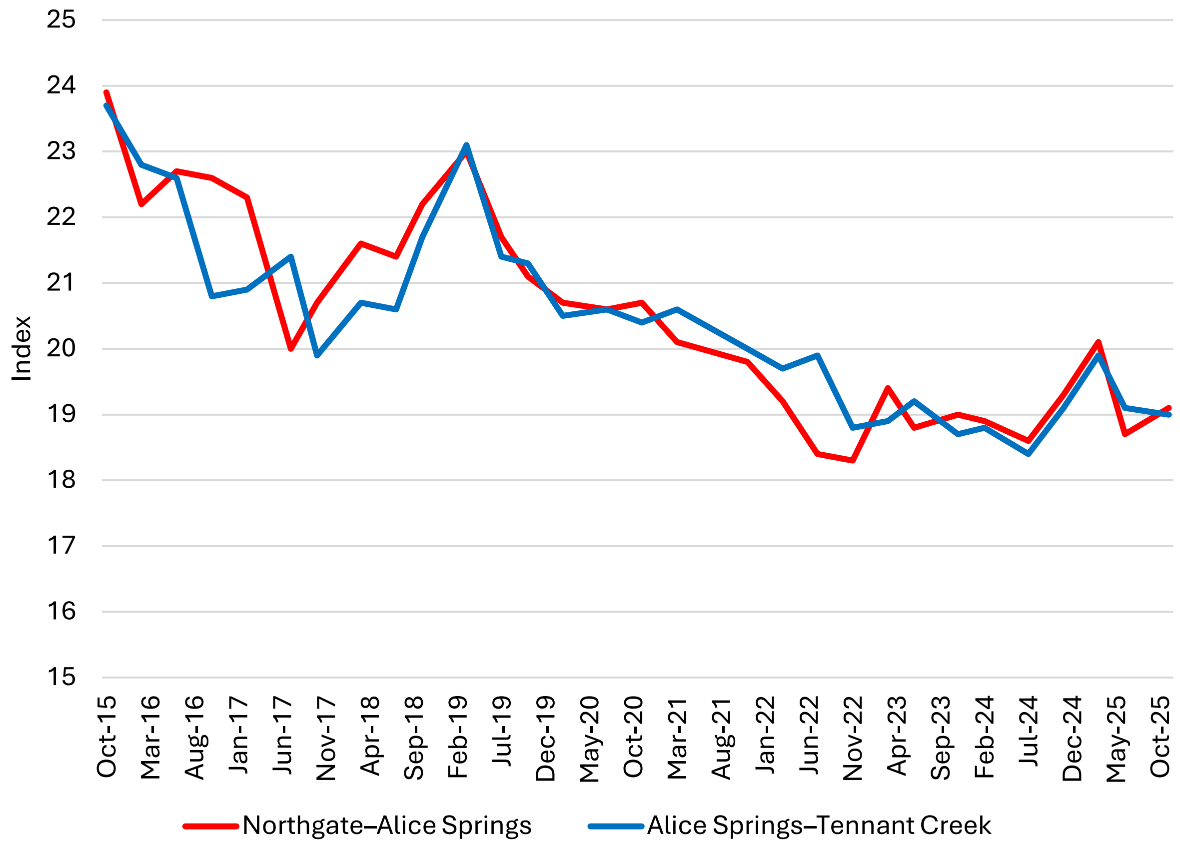
Note: Lower indices indicate higher track quality.

Source: Data Provided by ARTC.

In 2024–25, there was minimal annual variation — less than five per cent — to track quality on all sectors of the ARTC network, except Macarthur–Dynon, where track quality declined by almost 14%.

Aurizon (Northgate–Darwin)

Figure 64 Aurizon track quality index, Northgate-Tennant Creek

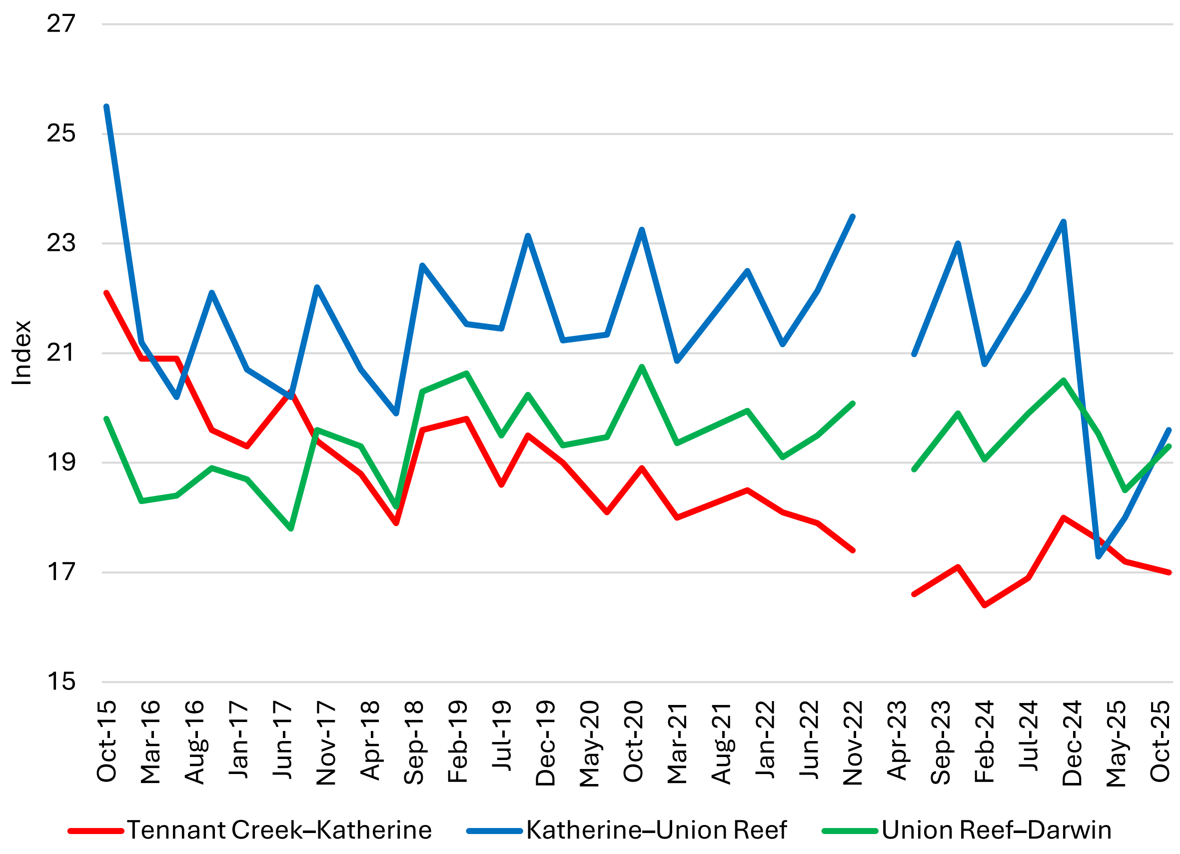


Notes: Northgate is the start of the Aurizon rail infrastructure. It is located shortly north of Tarcoola, where it diverges from the ARTC network.

Lower indices indicate higher track quality.

Source: Data Provided by Aurizon.

Figure 65 Aurizon track quality index, Tennant Creek–Darwin



Note: Data for March 2023 not available due to track outage.

Lower indices indicate higher track quality.

Source: Data Provided by Aurizon.

Aurizon's Northgate (Tarcoola)–Darwin line TQI data is divided into five segments. When comparing the average of the three indices in 2025 to the three indices in 2024, track quality on both the Northgate–Alice Springs and Alice Springs–Tennant sections declined by approximately 2–3%.

When comparing the average of the three 2025 indices on the Tennant Creek–Katherine, Katherine–Union Reef, and Union Reef–Darwin sections to the three indices in 2024, track quality declined by less than one per cent on the Tennant Creek–Katherine, but improved on the Union Reef–Darwin section, by approximately 4.5%, and 17.5% on the Katherine–Union Reef section.

TasRail

TasRail reports TQI results in its annual report. Table 32, below, shows relative track quality of the TasRail network in June 2024 and June 2025.

Table 32: TasRail track quality index

	Rating (per cent)							
Sector	June 2024 (Good)	June 2025 (Good)	June 2024 (Fair)	June 2025 (Fair)	June 2024 (Poor)	June 2025 (Poor)	June 2024 (Very Poor)	June 2025 (Very Poor)
West	78.52	73.71	18.92	23.34	2.34	3.55	0.23	0.40
South	70.64	76.65	23.70	18.82	4.81	3.90	0.85	0.62
Melba	93.43	93.35	6.29	6.37	0.28	0.28	0.0	0.00
Bell Bay	50.92	54.68	35.79	34.31	11.99	9.54	1.29	1.47
Fingal	76.39	71.30	19.50	23.71	3.58	4.28	0.54	0.71
Derwent Valley Line	75.37	75.94	13.43	15.04	11.19	9.02	0.0	0.00
Network	76.0	76.20	19.50	19.40	3.90	3.80	0.50	0.50

Source: TasRail (2025), p.30.

Box 4 ARTC Network Investment Program and TRACK Program

The Australian government has announced a $1.75 billion investment to improve the productivity, resilience and reliability of Australia's freight rail network, alongside a $55 million incentive scheme to have more freight moving by rail and sea. This is in addition to the Government's existing $1.04 billion commitment to upgrade the Australian Rail Track Corporation's (ARTC) network.

The Program will involve upgrades to the east coast network, including track renewals, crossing loop extensions, improved signalling (to remove key speed restrictions), and improved transit times. This is to support longer trains and enhance service reliability and safety. Work will also include resilience upgrades in high-risk flood-prone sections particularly along the East-West Corridor.

Alongside these upgrades, the Government is establishing a new $55 million program to incentivise more freight to move via trains and cargo ships. The Commonwealth, state and territory infrastructure and transport Ministers agreed in November 2025 to identify opportunities to move more freight by rail.

The Transport Resilience And Capacity Kickstart (TRACK) pilot program is intended to support more fuel-efficient freight movements across Australia.

This work will also include the establishment of a coordinator within the ARTC to identify and implement improvements to rail operations in conjunction with other rail infrastructure managers (Minister for Infrastructure, Transport, Regional Development and Local Government, 2026).

(For more information on the Network Investment Program see ARTC, n.d.-a)

Urban heavy rail passenger networks

Australia's urban heavy rail networks are extensive, even if the network coverage is not dense (see Table 33). The networks are mostly radial, reflecting the historical development of Australian cities, with lines branching from dense Central Business Districts (CBDs) into the surrounding, low density suburbs. In January 2026, Australia had an estimated 1,589 route kilometres of operational urban heavy railways.

Table 33: Network characteristics of urban passenger heavy railways, 2026

City	Sydney		Melbourne	Brisbane	Adelaide	Perth
Operator	**Sydney Trains**	**Sydney Metro**	**Metro Trains Melbourne**	**Queensland Rail**	**Adelaide Metro**	**Transperth**
Ownership	Public	Public	Private (government franchise)	Public	Public	Public
Dedicated urban passenger lines (km)	212.5	51.5	204.5	128	127	220
Shared metropolitan freight/passenger lines (km)	116	-	214.5	268	-	24
Total route length (km)	328.6	52	420	420.7	127.1	241.8
Electrified route length (km)	328.6	52	388	420.7	82.5	241.8
Metropolitan stations (number)	160	21	226	153	89	86
Average distance between stations (km)	2.0	2.5	1.8	2.6	1.4	2.8
Lines under construction (km)	-	47	53	10.2	-	0
Gauge	Standard	Standard	Broad	Narrow	Broad	Narrow

Notes: Distances are an estimate of route kilometres.

Urban networks are defined by urban passenger operator boundaries. The Brisbane calculations are based on the limits of Queensland Rail's City Train network, including the privately-owned Airport line.

The Sydney Trains calculations include the Airport Link and Olympic Park lines. They exclude the 'Intercity' lines from Berowra to Newcastle Interchange, Emu Plains to Lithgow, Waterfall to Bomaderry, and Macarthur to Goulburn.

Does not include freight only track sections.

Sources: Revised BITRE estimates.

Some specific characteristics of the various networks are as follows:

- Sydney has both a conventional and driverless metro network. Metro services began in May 2019 following construction of the Tallawong–Chatswood line (Sydney Metro North West). In August 2024, the newly constructed extension to Sydney Central and Sydenham (Sydney Metro City and South West) opened. Sydney Metro City and South West will be extended to Bankstown following conversion of the existing conventional line from Sydenham to Bankstown, currently underway. Construction of Sydney Metro West (Sydney Central–Parramatta) and Sydney Metro Western Sydney Airport (St Marys–Western Sydney Airport–Bradfield City Centre) is also underway.
- Perth's system is also distinctive relative to the other Australian networks due to the nature of its new railways. Its network is almost double the length of Adelaide's, but it has three fewer stations. This station spacing facilitates significantly higher average train speeds on Perth's Mandurah line and, to a lesser extent, the Yanchep line. With fewer stations, good station access is inherent to station design through rail-bus interchanges, extensive park-and-ride facilities and encouragement of (nearby) Transit Oriented Development (TOD). In 2025, the newly constructed Thornlie–Cockburn line and the Armadale–Byford extension began revenue operations.
- Brisbane, Melbourne, Adelaide and Perth's urban heavy railways use a different gauge to the interstate/standard gauge network. This separates urban passenger traffic from almost all freight traffic operating on the standard gauge. Examples of shared track where it occurs includes the north coast intermodal freight, and coal from the Toowoomba region into the Port of Brisbane (narrow

gauge). In Melbourne, regional broad gauge freight trains share tracks with suburban trains in the Melbourne metropolitan area. Sydney's urban network is standard gauge throughout. It therefore shares capacity with freight traffic travelling through suburban Sydney. The Southern Sydney Freight Line provides a dedicated southern access to Sydney freight yards. This segregates freight traffic from passenger traffic along the corridor. The freight line from Chullora/Enfield to Port Botany is also mostly segregated from passenger traffic.

- Electrified services began in Sydney and Melbourne[32] from the early inter-war period using Direct Current (DC) traction power. Cities that electrified their networks greater use more advanced Alternating Current (AC) traction. Perth and Brisbane electrified their networks relatively recently — Brisbane from the late 1970s and Perth from the early 1990s. In Adelaide, the Rail Revitalisation Programme electrified part of the network. Electric train operations began on the Seaford and Tonsley lines in 2014, and in 2022 on the Gawler line.

Light rail passenger networks

Australia has approximately 338.4 route-kilometres of operational light railways. The technological and operational differences between tramways, light rail and heavy rail are increasingly blurred[33]. Trainline refers to Australia's light railways as having shared characteristics with tramways, particularly in Melbourne. Former heavy rail corridors also form parts of the networks in Melbourne, Sydney and Adelaide. By route distance, Melbourne has the world's largest light rail network. There are smaller operations in the other cities that have light rail.

Table 34: Network characteristics of light railways, 2026

City	Gold Coast	Sydney	Melbourne	Adelaide	Canberra	Newcastle
Total route length (km)	20.3	36.8	250	16.6	12	2.7
Segregated right of way	segregated	largely segregated	24% segregated	largely segregated	segregated	segregated
Routes (no.)	1	4	24	3	1	1
Number of stops (no.)	19	59	1 717	29	14	6
Route length under construction (km)	6.7	-	-	-	1.6	-

Source: Revised BITRE estimates.

Melbourne's network is mostly integrated with road traffic, sharing the close-stop and on-road features of bus travel, which increases travel times. Other parts of the network resemble limited-stop, segregated railways. The lines from Southbank to Port Melbourne and St Kilda, for instance, are converted former heavy rail lines.

Adelaide's line runs between the Adelaide Entertainment Centre and Glenelg, via the CBD, with two short extensions from North Terrace in the CBD to Festival Plaza and to the Botanic Gardens. The

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32 Only Melbourne's Frankston–Stony Point line remains un-electrified.

33 Tramways generally have short spacing between stations and operate on roads, often sharing a right-of-way with road traffic. Light rail is considered to largely have its own right-of-way with more widely spaced stations. Melbourne's extensive system, in particular, illustrates the flexibility of light rail and its consequent definitional blurring. Melbourne's light rail vehicles operate on former heavy rail lines to St Kilda and Port Melbourne, but most of the network shares right-of-way with road traffic.

majority of the route length is in a segregated light rail corridor between the edge of the CBD and Glenelg, using a former heavy-rail corridor.

Sydney has four light rail routes. The L1 line starts at Sydney Central Station and runs to Dulwich Hill via Pyrmont, and Lilyfield. It runs along a former freight heavy rail corridor, with a small segment of on-road (largely segregated) operation between Haymarket and Central Railway Station. The L2 and L3 lines run from Circular Quay to Centennial Park, via Sydney Central Station on shared track. At Centennial Park the lines diverge. The L2 line continues to Randwick, while the L3 line continues to Kingsford. The L2 and L3 lines are largely on road segregated. Stage 1 of the Parramatta Light Rail, connecting Westmead to Carlingford via the Parramatta CBD and Camellia, opened to revenue services in December 2024.

The Gold Coast light railway runs between Helensvale and Broadbeach South. The line runs along roads but the space is mostly segregated. Construction of Stage 3, a 6.7-kilometre extension from Broadbeach South to Burleigh Heads, is underway, with revenue services expected to start in mid-2026 (Gold Coast Light Rail Stage 3, 2025).

Canberra's light railway runs from Canberra City to Gungahlin. Relatively long distances between stops and traffic signals priority enables Canberra's light rail to have the highest point to point average speed – 30 kilometres per hour. Construction of Canberra's light rail Stage 2A 1.7-kilometre extension, from the Canberra CBD to Commonwealth Park, is underway.

Newcastle's light rail has no overhead wires. Instead, the light rail vehicles recharge at every stop, by raising the pantograph to an overhead power supply located at the stop.

Non-urban passenger networks

Non-urban passenger services are mostly integrated with other rail operations. Non-urban services typically share track with urban passenger trains and freight trains, although the June 2015 opening of the Regional Rail Link reduced this in Melbourne.

Table 35: Network coverage of non-urban passenger rail services, by operator, 2026 (route kilometres)

	Queensland Rail	Sydney Trains/NSW TrainLink	V/Line	Transwa	Journey Beyond
Electrified component	622	467	0	0	0
Total	**4,296**	**4,256**	**1,725**	**836**	**9,173**

Notes: Shared corridors by multiple services by the same operator are only counted once. For example, NSW TrainLink's Sydney–Brisbane estimate includes all other TrainLink services that operate anywhere on that corridor. Conversely, the Sydney–Armidale estimate only includes the section from Maitland to Armidale.

Shared corridors by separate operators are counted separately. For example, NSW TrainLink's estimate includes the Albury–Melbourne corridor, which is counted separately to V/Line's estimate that also includes Albury–Melbourne.

In the V/Line estimate, the standard gauge and broad gauge lines that share the corridor between Jacana and Mangalore are counted separately.

The Journey Beyond estimate includes the seasonal Great Southern service that operates Adelaide–Melbourne–Sydney–Brisbane. Only the Melbourne–Sydney–Brisbane component is included in the estimate because the service shares the Adelaide–Melbourne component with Journey Beyond's regular Adelaide–Melbourne service.

The estimate includes the designated urban networks through which non-urban passenger rail services transit.

Diesel services run on electrified track in places. Where non-urban electrified and diesel services share electrified track (such as Rockhampton–Brisbane), the route is deemed electrified. Where non-urban diesel services share track with electrified urban trains (such as V/Line services on Melbourne's metropolitan network), the route is deemed not electrified.

The Transwa total includes the Perth–Bunbury line, which is temporarily closed due to infrastructure upgrade works.

Source: Revised BITRE estimates.

New railways

Since 2016, approximately 729 route-kilometres of heavy railways and approximately 47 route-kilometres of light rail railways have been opened (as at 2026). This included:

- 309 route-kilometres of iron ore railways in the Pilbara region of Western Australia;
- 248 route-kilometres of railways for coal haulage in Queensland and New South Wales (This includes the 200-kilometre Carmichael Rail Network (Galilee Basin) line, which opened in 2022, and the Olive Downs Complex spur and loop, which opened in 2023.);
- 159 route-kilometres of urban heavy railways (In 2025, this included the Thornlie–Cockburn Link in Perth and the Metro Tunnel in Melbourne.);
- 13.5 route-kilometres of other freight railways in New South Wales; and
- New or extended light railways opened in the Gold Coast, Sydney, Adelaide, Canberra, and Newcastle.

Table 36: Railways opened since 2016

Traffic	Location	Year	State	Length	Project	Infrastructure owner/manager
Iron Ore	Western Hub (Eliwana)	2020	WA	143	Western Hub (Eliwana)	Fortescue Metals Group
Iron Ore	Gudai-Darri	2022	WA	166	Gudai-Darri	Rio Tinto
Coal	Boggabri	2016	NSW	17	Boggabri Rail Spur	Idemitsu
Coal	Byerwen	2017	Queensland	5	New branch line in GAPE system	Private and Aurizon
Coal	Baralaba	2018	Queensland	6	New branch in Moura system	Private and Aurizon
Coal	Galilee Basin	2022	Queensland	200	Carmichael Rail Network	Bravus Mining and Resources
Coal	Bowen Basin	2023	Queensland	20	Olive Downs Complex	Pembroke Resources
Intermodal	North West Connection	2019	NSW	5	Inland Rail	ARTC
Intermodal	Tamworth	2024	NSW	5	Tamworth Intermodal freight facility	UGL Regional Linx
Grain	Moree–Broadbent Grain facility	2017	NSW	3.5	Broadbent Grain facility – Moree connection	ARTC
Urban passenger	Petrie–Kippa-Ring	2016	Queensland	13	Moreton Bay Railway	Queensland Rail
Urban passenger	South Morang–Mernda	2018	Victoria	8	Mernda Rail Extension	Metro Trains Melbourne
Urban passenger	Sydney	2019	NSW	36	Sydney Metro Northwest	Transport for NSW
Urban passenger	Adelaide	2020	SA	.65	Flinders Link	Department for Planning, Transport and Infrastructure
Urban passenger	Perth	2022	WA	8	Forrestfield-Airport Link	Metronet

Traffic	Location	Year	State	Length	Project	Infrastructure owner/manager
Urban passenger	Perth	2024	WA	14.5	Yanchep Extension	Metronet
Urban passenger	Adelaide	2024	SA	1	Port Dock Station Extension	Department for Planning, Transport and Infrastructure
Urban passenger	Sydney	2024	NSW	30	Sydney Metro City and Southwest	Transport for NSW
Urban passenger	Perth	2024	WA	21	Morley–Ellenbrook	Metronet
Urban Passenger	Perth	2025	WA	17.5	Thornlie–Cockburn Link	Metronet
Urban Passenger	Melbourne	2025	Victoria	9	Metro Tunnel	Metro Trains Melbourne
Light rail	Gold Coast University Hospital–Helensvale	2017	Queensland	7.3	Gold Coast Light Rail Stage 2	Queensland and Australian governments; Gold Coast City Council, GoldLinQ
Light rail	Kind William Street–East Terrace	2018	South Australia	1	City Tram Extension Project	Department of Planning, Transport and Infrastructure
Light rail	King William Street–Festival Plaza Precinct	2018	South Australia	.350	City Tram Extension Project	Department of Planning, Transport and Infrastructure
Light rail	Gungahlin–Canberra City	2019	ACT	12	Canberra Metro	ACT government and Canberra Metro consortium
Light rail	Newcastle Interchange–Pacific Park	2019	NSW	2.7	Newcastle Light Rail	Transport for NSW
Light rail	Circular Quay–Randwick and Juniors Kingsford	2019–2020	NSW	12	CBD and South East Light Rail	Transport for NSW
Light rail	Parramatta–Carlingford	2024	NSW	12	Parramatta Stage 1	Transport for NSW

Note: Distances are route kilometres.

As Table 37, below, shows, an estimated 105 route-kilometres of heavy and light railways were under construction in 2026. Of this, 96.6 kilometres was heavy railways and 8.4 was light railways.

Table 37: Heavy and light railways under construction, 2026

Traffic	Location	State/territory	Length (route kilometres)	Project
Light Rail	Gold Coast	Qld	6.7	Gold Coast Light Rail Stage 3
Light Rail	Canberra	ACT	1.7	Canberra Light Rail Stage 2A
Heavy Rail	Sydney	NSW	13.4	Sydney Metro City & Southwest[34]
Heavy Rail	Brisbane	Qld	10.2	Cross River Rail
Heavy Rail	Melbourne	Vic	26	Suburban Rail Loop East
Heavy Rail	Sydney	NSW	24	Sydney Metro West
Heavy Rail	Sydney	NSW	23	Sydney Metro Western Sydney Airport

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[34] Conversion of Sydney Trains line to Metro line.

Chapter 6 – Rollingstock

This chapter discusses heavy and light rail rollingstock, both freight and passenger. Due to a lack of available data, Trainline is unable to report details of freight wagons.

Locomotives

Due to an ongoing lack of official data provision and a scarcity of publicly available information, BITRE is unable to report a current estimate of the total number of operational locomotives in Australia. According to its previous estimate in September 2021, there were approximately 2,100 operational locomotives in Australia[35].

According to its website, TasRail has the following 27 operational locomotives:

- 17 TR Class;
- Eight 2000 (DQ) Class; and
- Two 2050 Class (TasRail, n.d.).

Urban passenger rollingstock

The levels of rollingstock needed are governed by:

- Traffic levels;
- Network size and length of individual lines;
- The range of services on each part of the network (such as offering stopping, semi-fast, and express services on a given line); and
- The average speed of services (with faster operations requiring fewer train sets).

Heavy rail rollingstock

Most urban heavy rail rollingstock operate as permanently coupled multiple-unit sets, and this coupling varies between the cities. Adelaide's rollingstock, with large numbers of one and two-car units, enables Adelaide Metro to cater for modest traffic levels with a broad range of configurations. While Melbourne's sets traditionally operate as three or six-car sets, the new HCMT rollingstock operate as seven-car sets.

Sydney is the only city to use double-deck carriages, which it began introducing in 1964, to increase passenger capacity on the existing network. Its double-deck trains may have longer dwell times, however, due to passengers from the upper and lower decks converging at the carriage doors and fewer doors per carriage than single deck trains. The new Metro sets are single-level, to enhance the flow of passengers exiting and entering the trains and thus reducing dwell times.

Adelaide has converted its fleet of diesel-powered sets into diesel hybrid operations, primarily for reliability purposes. According to advice from Adelaide Metro, the train sets' regenerative braking also enables them to reduce fuel consumption by up to 35% and provide a more comfortable ride.

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[35] For details of the September 2021 estimate, see BITRE (2022), pp. 61-63.

Table 38: Operational urban heavy rail rollingstock, 2026

	Brisbane	Sydney	Melbourne	Adelaide	Perth
Vehicles	810	1,970	1,684	152	378
Carriage format	Single-deck	Double-deck and single-deck	Single-deck	Single-deck	Single-deck
Multiple-unit format	75 six-car 120 three-car	45 six-car (Sydney Metro) 186.5 four-car (Sydney Trains) 119.25 eight-car (Sydney Trains)	199 six-car 70 seven-car	34 three-car 25 two-car	48 two-car 78 three-car 8 six-car
Total cars					**4,994**

Notes: Figures current as at January 2026 for each operator, except Melbourne, which were current were as at April 2026.

The Sydney total includes both Sydney Trains and Sydney Metro cars.

Sources: Data provided by Queensland Rail, Transport for NSW, Public Transport Victoria, Adelaide Metro, and Public Transport Authority WA.

BITRE estimates that in May 2026 Australia had 4,994 urban heavy rail cars (electric, diesel, and diesel hybrid, formed into multiple unit sets). Compared to the previous estimate in July 2024, this is 32 fewer cars, due to the retirement of old cars that new cars mostly replaced. There were the following changes:

- Melbourne had 39 fewer Comeng cars, but 42 new X'Trapolis 2.0 cars that had been delivered in 2026 but not yet entered service;
- Brisbane's remaining 57 EMU class vehicles had been retired;
- Adelaide had two fewer 3000/3100 class DMU cars; and
- In Perth, 24 newly built C-series electric EMU vehicles had entered service.

The reduction of two cars in Adelaide was the final stage in Adelaide Metro reducing the DMU fleet from 70 cars to the current 50. This was due to new EMU sets taking over duties on the Gawler line following its electrification.

Light rail rollingstock

BITRE estimates there were 655 operational light rail vehicles in Australia in January 2026. This is 23 more than the previous estimate. Sydney had acquired 13 vehicles for use on the newly opened Parramatta Light Rail Stage 1 (Parramatta Light Rail Stage 1 (n.d.). The Gold Coast and Canberra had acquired five new vehicles each (Government of Queensland, 2023) (ACT Government, 2026).

Approximately 77% of the fleet operates in Melbourne. As its operations have expanded, Melbourne has invested in longer, higher capacity vehicles. Melbourne's E class vehicle, introduced from 2013, is more than twice the length of Melbourne's older Z and A classes. Melbourne is also building a new G class light rail vehicle design, to replace the Z and A class vehicles, at the Alstom Plant in the Melbourne suburb of Dandenong. The vehicles will be low floor and able to accommodate up to 150 passengers. 100 vehicles are scheduled to be built. According to advice from Department of Transport and Planning (Victoria), the first G class vehicles had been delivered in April 2026 but had not yet entered service.

Most light rail vehicles in Australia use vehicle articulation rather than the coupling of vehicles, although all of Sydney's Citadis X05 vehicles operate as coupled two-car sets. New light rail vehicles are a mix of imported and locally built vehicles. Alstom also manufactured the E class vehicles at its Dandenong plant. Imported vehicles are made in Spain, Germany, France, and Austria.

Table 39: Operational light rail rollingstock, 2026

City	Vehicle type	Length (metres)	No. vehicles
Gold Coast	Flexity 2	43	**23**
Sydney	Urbos 3	33	12
	Citadis X05	33	60
	Urbos 100	45	13
Sydney total			**85**
Melbourne	A1 class	15	27
	A2 class	15	42
	B2 class	23.6	130
	C1 class	23	36
	C2 class	32.5	5
	D1 class	20	38
	D2 Class (Combino)	29.9	21
	E Class	33.5	100
	Z3 class	16.6	87
	W class	14.2	12
Melbourne total			**498**
Adelaide	100 Flexity Classic	30	15
	200 Citadis	32	9
Adelaide total			**24**
Canberra	Urbos 3	32.9	**19**
Newcastle	Urbos 100	32.9	**6**
Total			**655**

Sources: Advice from G:Link, Adelaide Metro, Transport for NSW, Department of Transport and Planning (Victoria).

Non-urban passenger rollingstock

Like urban rail rollingstock, and reflecting historical acquisitions, the composition of the non-urban passenger stock is a function of:

- Traffic levels;
- Service frequency;
- The size of the network and the length of individual lines;
- The range of services on each part of the network (such as offering all stopping, semi-fast, and express services on a given line);
- The average speed of services;
- Electrification, where in place; and
- Modernisation and replacement, particularly away from locomotive hauled services.

There is a wide range of non-urban rail passenger services in Australia. Thus, rollingstock, designed for individual markets and service types, vary. Table 40, below, shows the estimated number of operational individual vehicles/cars, by type and operator in 2026.

Table 40: Operational non-urban rollingstock, by type and operator, 2026

Operator	Queensland Rail	Sydney Trains	NSW TrainLink	V/Line	Transwa	Total
EMU cars	12	581	-	-	-	**593**
DMU cars	5	42	23	441	9	**520**
Locomotives	30	-	19	11	-	**60**
Carriages	73	-	58	4	-	**135**
Total cars/vehicles	**120**	**623**	**100**	**456**	**9**	**1,308**

Notes: The Sydney Trains and NSW TrainLink data is what was current in September 2025. The remaining V set cars still in use in September 2025 have since been retired.

Sydney Trains and NSW TrainLink data is shown separately following the transfer of 'intercity' operations from NSW TrainLink to Sydney Trains in July 2024. Most of this rollingstock is also used for semi-express services when inside the Sydney suburban network.

The Queensland Rail total excludes the EMU cars that serve destinations outside Brisbane as services to these destinations form part of an integrated urban/interurban network. The 12 cars listed above form the electric tilt train EMU sets. The five DMU cars are of the Gulflander fleet. The carriages total includes five power cars.

Transwa's fleet numbers excludes the new Australind rollingstock as it had not yet entered service and the line was temporarily closed for infrastructure upgrades.

The above lists individual vehicles rather than sets.

No data is available for Journey Beyond's trains.

Sources: Data provided by Transport for NSW, Queensland Rail, and Public Transport Victoria, and Public Transport Authority WA.

Sydney Trains uses its EMU fleet for Sydney–Newcastle, Sydney–Lithgow and Sydney–Kiama (via Wollongong) services. It uses its DMU fleet for Sydney/Campbelltown–Moss Vale/Goulburn, Kiama–Bomaderry and Hunter Valley services. Queensland Rail's 12 non-urban EMU cars form the Brisbane–Rockhampton electric Tilt Train sets. Victoria and Western Australia have no EMU non-urban trains. Transwa uses DMUs for all its rail services.

The use of traditional locomotive hauled passenger trains in Australia continues to decline. In Victoria, the expanding fleet of VLocity DMU sets has now replaced all previous locomotive hauled trains except on the Swan Hill line. This includes standard gauge sets on the Albury line. Some Queensland Rail long-distance services and the Kuranda Scenic Railway are still locomotive hauled.

A unique passenger rollingstock is Queensland Rail's electric and diesel tilt train (fixed-formation) sets. The electric tilt trains are used on Brisbane–Rockhampton services, while the diesel tilt trains are used for Brisbane–Cairns services. While the diesel tilt train is technically locomotive hauled, it differs from traditional locomotive hauled trains by virtue that the power cars (locomotives) are in a fixed format setting as part of a single train set, with one power car at each end of the trains. This arguably gives them the appearance of a DMU train. (BITRE 2014b, p. 60 and pp. 161–162, discusses the nature of the tilt-train services and the principles of tilt trains.)

NSW TrainLink's XPT sets are of the same fixed format structure as Queensland's diesel tilt trains. The New South Wales Government is replacing the XPT and (and DMU) XPlorer and Endeavour fleets. The first trains are expected to enter service in the mid to late 2020s.

Most non-urban DMU passenger trains in Australia are capable of and are timetabled in places to travel at speeds of 130–160 km/h. The XPT and tilt trains (both electric and diesel) also operate at these speeds in places. Such operations are only possible where the infrastructure used facilitates such speeds.

Figure 66 Queensland Rail locomotive-hauled train

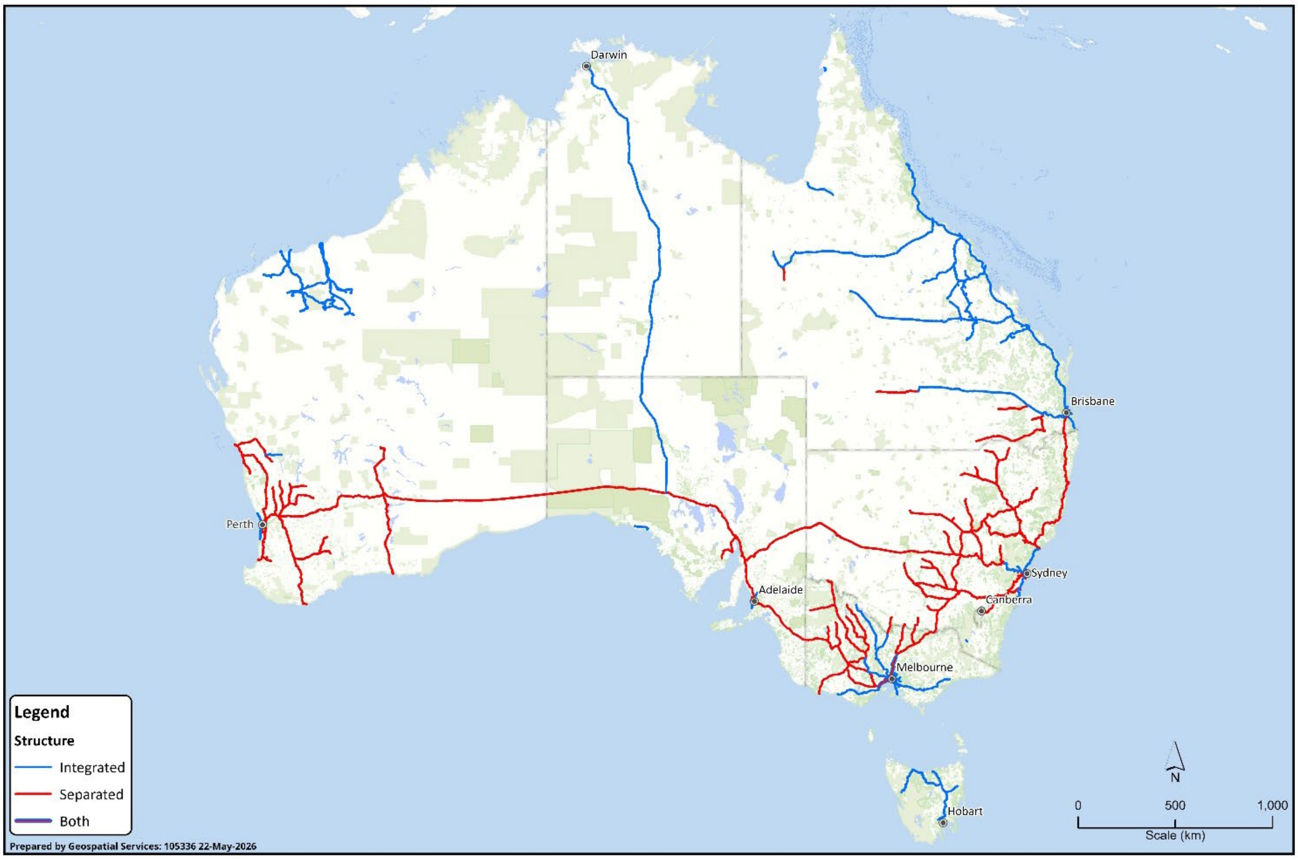
Notes: The image above shows a Queensland Rail Brisbane–Longreach ‘Spirit of the Outback’ service. This is one of the few remaining locomotive-hauled passenger train services in Australia.

Source: Supplied: Queensland Rail.

Chapter 7 – Industry structure

The Australian rail industry consists of vertically-separated and vertically-integrated railways. In vertically-separated railways, the railway infrastructure manager does not operate revenue earning services. Instead, it sells track access to train operators under an open access regime. In vertically-integrated railways the infrastructure manager both manages the infrastructure and runs revenue earning services on it. Vertically-integrated railway managers may also provide third-party access to (other) train operators, such in the Sydney Trains network.

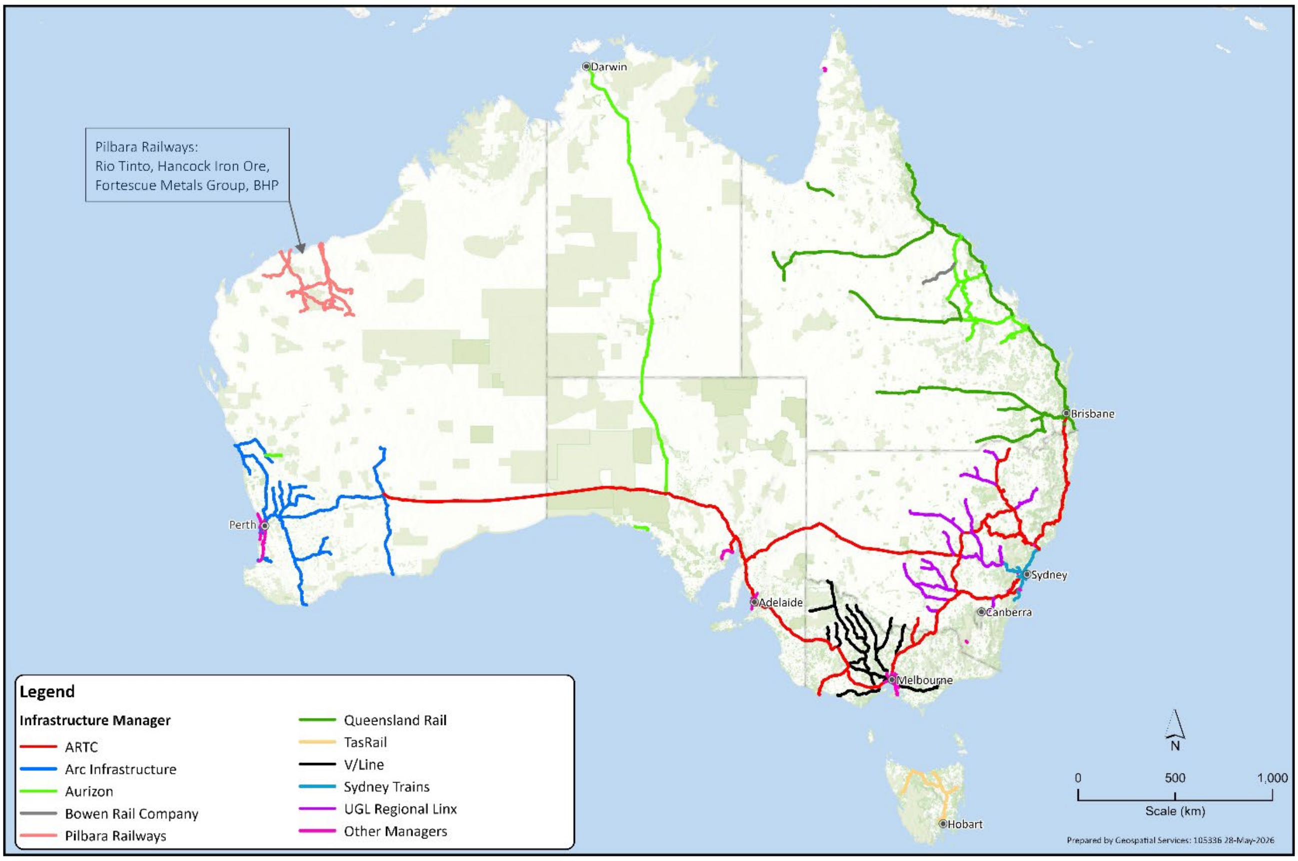
Figure 67 Australian rail industry structure, 2026



Infrastructure management

Australia's infrastructure managers are diverse in structure and operation. Figure 68 shows Australia's railway system by network manager.

Figure 68 Australian railways, by network manager, 2026



Note: Between Jacana (Melbourne) and Mangalore (Seymour), and between Newport (Melbourne) and North Geelong, the ARTC-managed standard gauge lines share the corridor with the V/Line and Metro Trains Melbourne-managed broad gauge lines. Due to the map's scale, only the ARTC lines are shown.

The pattern of the network management is, by traffic type:

- Interstate: ARTC manages most of the interstate network. Arc Infrastructure manages the interstate line between Kalgoorlie and Perth. Aurizon owns (long lease) the Tarcoola–Darwin line as a vertically-integrated railway. UGL Regional Linx (UGLRL) manages the line between Marrangaroo (Lithgow) and Parkes. Sydney Trains and Queensland Rail manage the infrastructure interstate trains use in their respective networks.
- Iron ore (Pilbara): These lines are vertically-integrated operations, with lines owned by BHP, Rio Tinto, Fortescue Metals Group and Hancock Iron Ore.
- Coal: Coal railways in the Central Queensland Coal Network are vertically-integrated. Aurizon manages most of the infrastructure and operates trains in the network. Aurizon also provides third-party access to the network. In 2022, the Carmichael venture commenced operations in Queensland, using its own 200 kilometre vertically-integrated railway that adjoins Aurizon's network. Coal railways in New South Wales are vertically-separated. ARTC manages the Hunter Valley coal network with UGL Regional Linx managing some other New South Wales coal lines.
- Mixed freight: Tasmania's railways are vertically-integrated. TasRail manages the system and operates the trains, hauling a variety of freight types.
- Grain: Grain railways are vertically-separated in Queensland (Queensland Rail), New South Wales (ARTC, UGL Regional Linx, Sydney Trains), Victoria (V/Line and ARTC) and Western Australia (Arc Infrastructure). Aurizon operates as a vertically-integrated operator in parts of South Australia.
- Passenger: Urban systems are vertically-integrated. Non-urban passenger operations are a mix of vertical-integration and separation.

In 2026, there were an estimated 18 heavy railways infrastructure managers in Australia[36].

Table 41: Principal infrastructure managers of Australian heavy railways, 2026

Infrastructure manager	Vertical structure	Primary usage
Interstate		
Australian Rail Track Corporation (ARTC)	Separated	Intermodal, grain, ores, steel, passenger
Arc Infrastructure	Separated	Intermodal, grain, ores, steel, passenger
Aurizon	Integrated	Intermodal, ores, passenger
UGL Regional Linx	Separated	Intermodal, steel, grain, coal, passenger
Intrastate		
Aurizon (Queensland)	Integrated	Coal
Bravus Mining and Resources/Bowen Rail Company	Integrated	Coal
Queensland Rail	Integrated (passenger) and Separated (freight)	Passenger, grain, coal, cattle, ores, intermodal
UGL Regional Linx	Separated	Intermodal, grain, ores, other agricultural freight, passenger
ARTC (New South Wales regional and Hunter Valley)	Separated	Intermodal, coal, grain, other agricultural freight, passenger
V/Line	Integrated (passenger) and Separated (freight)	Passenger, grains, other agricultural freight, quarry products, intermodal
ARTC (Victoria, Maroona–Portland)	Separated	Grain
TasRail	Integrated	Intermodal, coal, ores, timber
Aurizon (South Australia)	Integrated	Grain, gypsum, ores, minerals
Arc Infrastructure (Western Australia)	Separated	Grain, ores, intermodal, minerals
BHP	Integrated	Iron ore
Rio Tinto	Integrated	Iron ore
Fortescue Metals Group	Integrated	Iron ore
Hancock Iron Ore	Integrated	Iron ore
MTM (Metro Trains Melbourne)	Separated	Passenger, freight
Sydney Trains	Separated	Passenger, freight
PTA WA	Separated	Passenger, freight
Urban		
Queensland Rail (Brisbane, Gold Coast, Sunshine Coast)	Integrated	Passenger
Airtrain CityLink Limited	Integrated	Passenger

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[36] The figure excludes private sidings and tourist/heritage railways.

Infrastructure manager	Vertical structure	Primary usage
Sydney Trains	Integrated	Passenger
Sydney Metro	Integrated	Passenger
MTM (Metro Trains Melbourne)	Integrated	Passenger
Adelaide Metro	Integrated	Passenger
PTA WA	Integrated	Passenger

Above-rail operators

Heavy rail urban passenger operators are vertically-integrated. Most are publicly-owned entities, with the exception of Metro Trains Melbourne, which is a privately-owned joint venture that operates trains and manages the network on behalf of the Victorian Government under a franchise agreement. Non-urban passenger services are government operated except Journey Beyond, which operates the premium tourist Ghan, Indian Pacific, and Great Southern trains, along with the Adelaide–Melbourne Overland train.

National rail freight operators include Pacific National, SCT Logistics, Qube Logistics, Aurizon, and Southern Shorthaul Railroad. Regional rail freight operators include Pacific National, SCT Logistics, Qube Logistics, Aurizon, Southern Shorthaul Railroad, TasRail, and Watco.

Logistics companies, notably SCT Logistics and Qube Logistics, operate intermodal services for their own logistics chains. They also operate a small number of bulk services. SCT Logistics has a diverse portfolio of rail and road activities. Qube Logistics also has a diverse intermodal and bulk portfolio, with a primary focus on local and regional port-based operations. Fletcher International and Australian Food and Fibre provide agricultural product rail services from regional New South Wales to Port Botany and Enfield in Sydney. (Other logistics companies, such as Toll, Sadliers Logistics and Ettamogah Rail Hub, use rail freight operators to undertake their rail haulage.) Swift Transport and Intermodal Group provide port shuttle rail services in Sydney and Perth respectively.

Mining companies, Rio Tinto, BHP, Fortescue Metals Group and Hancock Iron Ore operate trains on their own railways.

Table 42: Principal above-rail service providers[37], 2026

Train operator	Infrastructure network used	Primary tasks
Aurizon	Aurizon, Queensland Rail, ARTC, Arc Infrastructure, PTA WA, Sydney Trains	Coal, ores, minerals, cattle, grain, mixed bulk, other agricultural freight, intermodal
Pacific National	Aurizon, Queensland Rail, ARTC, V/Line, UGL Regional Linx, Sydney Trains, Arc Infrastructure, Metro Trains Melbourne	Coal, ores, intermodal, steel, grain, mixed bulk, passenger (hook and pull services for Journey Beyond)
SCT Logistics/Specialised Bulk Rail	ARTC, Arc Infrastructure, Sydney Trains	Intermodal, steel, grain, iron ore
Qube Logistics	ARTC, V/Line, Sydney Trains, UGL Regional Linx, Metro Trains Melbourne	Intermodal, steel, grain, other agricultural freight
Watco	Aurizon, Queensland Rail, Arc Infrastructure, PTA WA	Grain, livestock

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37 Includes non-Office of the National Rail Safety Regulator (ONRSR) accredited above-rail transport providers who use own branding and rollingstock (owned or leased) but outsource their actual train operations to ONRSR accredited above-rail service providers.

Train operator	Infrastructure network used	Primary tasks
Southern Shorthaul Railroad	ARTC, Sydney Trains, UGL Regional Linx, V/Line, Metro Trains Melbourne	Coal, grain, intermodal, infrastructure works, third party train crewing
TasRail	TasRail	Intermodal, coal, ores, timber
Fletcher International Group	ARTC, UGL Regional Linx, Sydney Trains	Agricultural freight
Linfox	Queensland Rail	Queensland intrastate intermodal
Rio Tinto	Rio Tinto	Iron ore, bauxite
BHP	BHP	Iron ore
Fortescue Metals Group	Fortescue Metals Group	Iron ore
Hancock Iron Ore	Hancock Iron Ore	Iron ore
Bowen Rail Company	Bravus Mining and Resources/Bowen Rail Company, Aurizon, Queensland Rail	Coal
Magnetic Rail Group	Aurizon, ARTC, Queensland Rail	Coal
Crawfords Freightlines	ARTC, UGL Regional Linx, Sydney Trains	General freight, agricultural freight, forestry products
Swift Transport	ARTC, Sydney Trains	Port shuttle intermodal
Intermodal Group	Arc Infrastructure, PTA WA	Port shuttle intermodal
Australian Food and Fibre	UGL Regional Linx, Sydney Trains, ARTC	Agricultural freight, intermodal
Queensland Rail	Queensland Rail, AirTrain CityLink Limited	Heavy rail passenger (urban, intercity, and long distance)
Sydney Rail Services	Sydney Trains, ARTC, UGL Regional Linx	Intermodal, bulk, infrastructure works, third party train crewing
CBH Group	Arc Infrastructure, PTA WA	Grain
Manildra Group	UGL Regional Linx, Sydney Trains	Grain
NSW TrainLink	Sydney Trains, ARTC, UGL Regional Linx, V/Line, Queensland Rail	Non-urban heavy rail passenger
V/Line	V/Line, ARTC, Metro Trains Melbourne	Non-urban heavy rail passenger
Transwa	Transperth, Arc Infrastructure	Non-urban heavy rail passenger
Journey Beyond	Sydney Trains, UGL Regional Linx, ARTC, Arc Infrastructure, Aurizon, V/Line, Queensland Rail	Heavy rail passenger (interstate premium tourist oriented)
Sydney Trains	Sydney Trains	Urban and non-urban heavy rail passenger
Metro Trains Melbourne	Metro Trains Melbourne	Urban heavy rail passenger
Adelaide Metro	Adelaide Metro	Urban heavy rail and light rail passenger
Transperth	PTA WA	Urban heavy rail passenger
GoldLinQ	GoldLinQ	Light rail passenger
Transdev	Transport for NSW	Light rail passenger
Yarra Trams	Yarra Trams	Light rail passenger

Train operator	Infrastructure network used	Primary tasks
Canberra Metro	Canberra Metro	Light rail passenger
Newcastle Transport	Newcastle Transport	Light rail passenger
Sydney Metro	Sydney Metro	Fully automated rapid transit passenger

Chapter 8 – Safety and environment

Safety

The Office of the National Rail Safety Regulator (ONRSR) has regulatory safety oversight for rail transport operations in Australia[38]. It reports rail safety data on its website.

Fatalities and serious injuries

Table 43, below shows details of rail related fatalities for 2024–25. In 2024–25, there were 89 rail related fatalities in Australia[39]. This compares to 85 for the previous financial year (Office of the National Rail Safety Regulator, n.d.).

Table 43: Rail related fatalities 2024–25

	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total
Suspected or attempted suicides[40]	0	19	0	5	5	0	37	6	**72**
Other	0	9	0	2	1	0	4	1	**17**
Total	**0**	**28**	**0**	**7**	**6**	**0**	**41**	**7**	**89**

Source: Office of the National Rail Safety Regulator, (n.d.).

Table 44: Serious injuries 2024–25

	ACT	NSW	NT	Qld	SA	Tas	Vic	WA	Total
Suspected or attempted suicides	0	5	0	3	0	0	6	1	**15**
Other	1	19	0	6	3	0	27	5	**61**
Total	**1**	**24**	**0**	**9**	**3**	**0**	**33**	**6**	**76**

Source: Office of the National Rail Safety Regulator, (n.d.).

In 2024–25, there were 76 serious injuries[41], as itemised in Table 44. This compares to 95 in the previous financial year (Office of the National Rail Safety Regulator, n.d.).

Notifiable occurrences

Rail safety laws oblige rail transport operators to report notifiable occurrences to ONRSR. A notifiable occurrence is an accident or incident associated with railway operations that has, or could have, caused significant property damage, serious injury, or death. Category A occurrences must be reported immediately, principally due to being serious in nature or involve events that may trigger immediate regulatory response. Category B occurrences must be reported within 72 hours of the occurrence. In 2024–25, there were 937 Category A occurrences, and 5,601 Category B occurrences. This compares to 1,003 Category A occurrences, and 5,671 Category B occurrences in 2023–24 (Office of the National Rail Safety Regulator, n.d.-a).

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38 Each Australian state and territory has legislated nationally consistent rail safety law, which ONRSR administers.
39 All ONRSR sourced data shown in Table 43 and Table 44 is a live published estimate that is subject to change. The figures quoted here what ONRSR published in June 2026.
40 The term 'suspected or attempted suicides' is used in both the fatalities and serious injuries categories, to cover all suicide attempts, with either fatality or serious injury as the outcome.
41 For a definition of what ONRSR deems a serious injury and for other terms ONRSR uses, see Office of the National Rail Safety Regulator, 2024.

Environmental performance

The measurement of the rail industry's emissions is complicated by the need to allocate upstream emissions from power generation sources to downstream energy uses, such as powering electric trains. Emissions data is therefore an approximation and subject to revision.

Changing requirements, such as higher performance and, for passenger rail, air-conditioning and on-board electronics, may increase emissions intensity.

Table 45, below, shows BITRE's revised estimate of full fuel cycle carbon dioxide equivalent emissions estimate by transport mode[42].

Figure 69, below, expresses the emissions by each transport mode shown in Table 45 as a percentage of total emissions. On average, rail transport has been the source of approximately five per cent of total emissions over the 10-year period until 2024–25, while road vehicles have been the source of approximately 82–87% of emissions.

Table 45: Transport full fuel cycle greenhouse gas (carbon dioxide equivalent) emissions, including recreational vehicles, by transport mode

Megatonnes of CO2 equivalent					
Financial year	**Road vehicles**	**Rail**	**Domestic maritime**	**Domestic aviation**	**Total**
2014–15	96.65	6.19	2.35	11.76	**116.95**
2015–16	99.76	6.39	2.37	11.99	**120.51**
2016–17	100.00	6.54	2.46	11.86	**120.87**
2017–18	103.70	6.55	2.58	11.19	**124.03**
2018–19	103.44	6.56	2.77	10.52	**123.29**
2019–20	101.06	6.48	2.55	8.26	**118.34**
2020–21	100.32	6.58	2.23	5.46	**114.59**
2021–22	99.75	6.48	2.30	7.19	**115.71**
2022–23	105.44	6.47	2.49	11.22	**125.63**
2023–24	107.18	6.48	2.59	11.99	**128.24**
2024–25	107.56	6.53	2.60	12.36	**129.05**
Change (2023–24 to 2024–25)	+0.35%	+0.78%	+0.27%	+3.12%	**+0.63%**

Notes: Several methodological changes were made in the 2024–25 estimates. These include inclusion of new data sources, adjustments to account for reduced data availability or quality in some instances, changes to improve consistency with other Australian Government sources, and unit standardisation to millions of tonnes.

The road vehicles estimate includes off road vehicles, such as trail bikes. The rail estimate includes electricity generations for electric powered trains. Domestic maritime includes small pleasure craft.

Source: BITRE (2025) Table 9.8.

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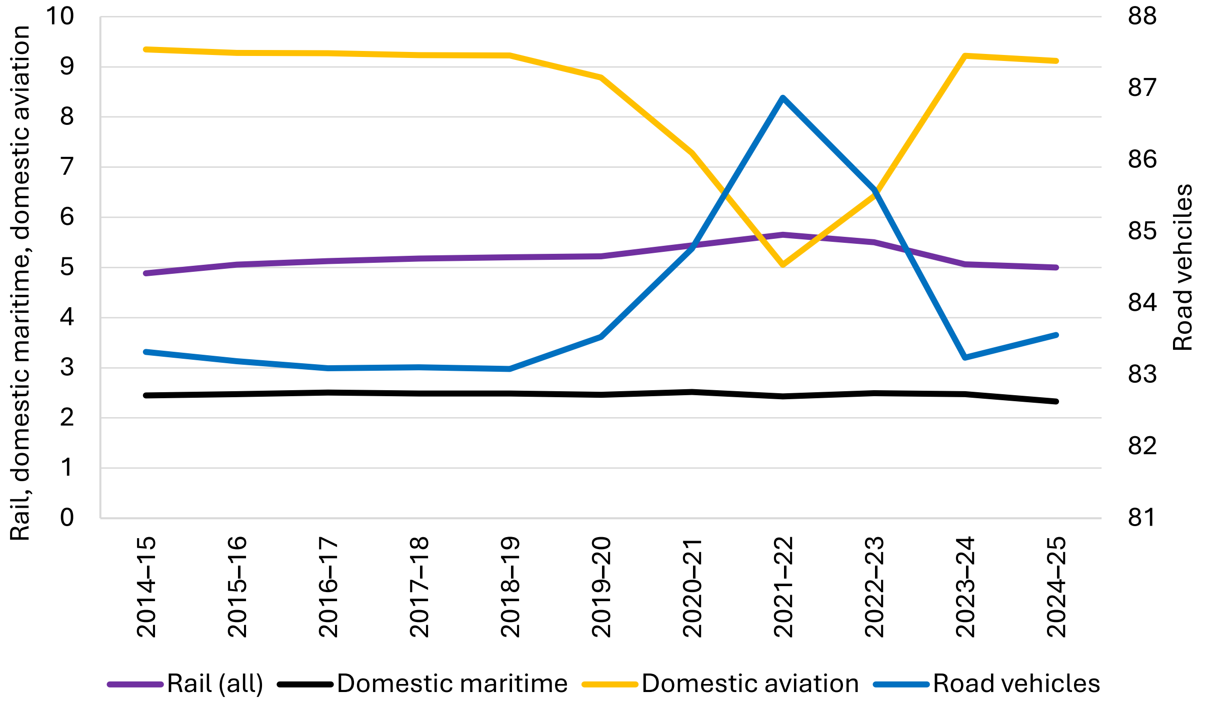
[42] BITRE (2025), shows full estimates dating back to 1974-75.

Figure 69 Percentage of greenhouse gas emissions by transport mode – full fuel cycle



Source: Derived from BITRE (2025) Table 9.8.

Appendix A – Urban heavy rail networks – 2026

Figure 70 Adelaide urban heavy rail network

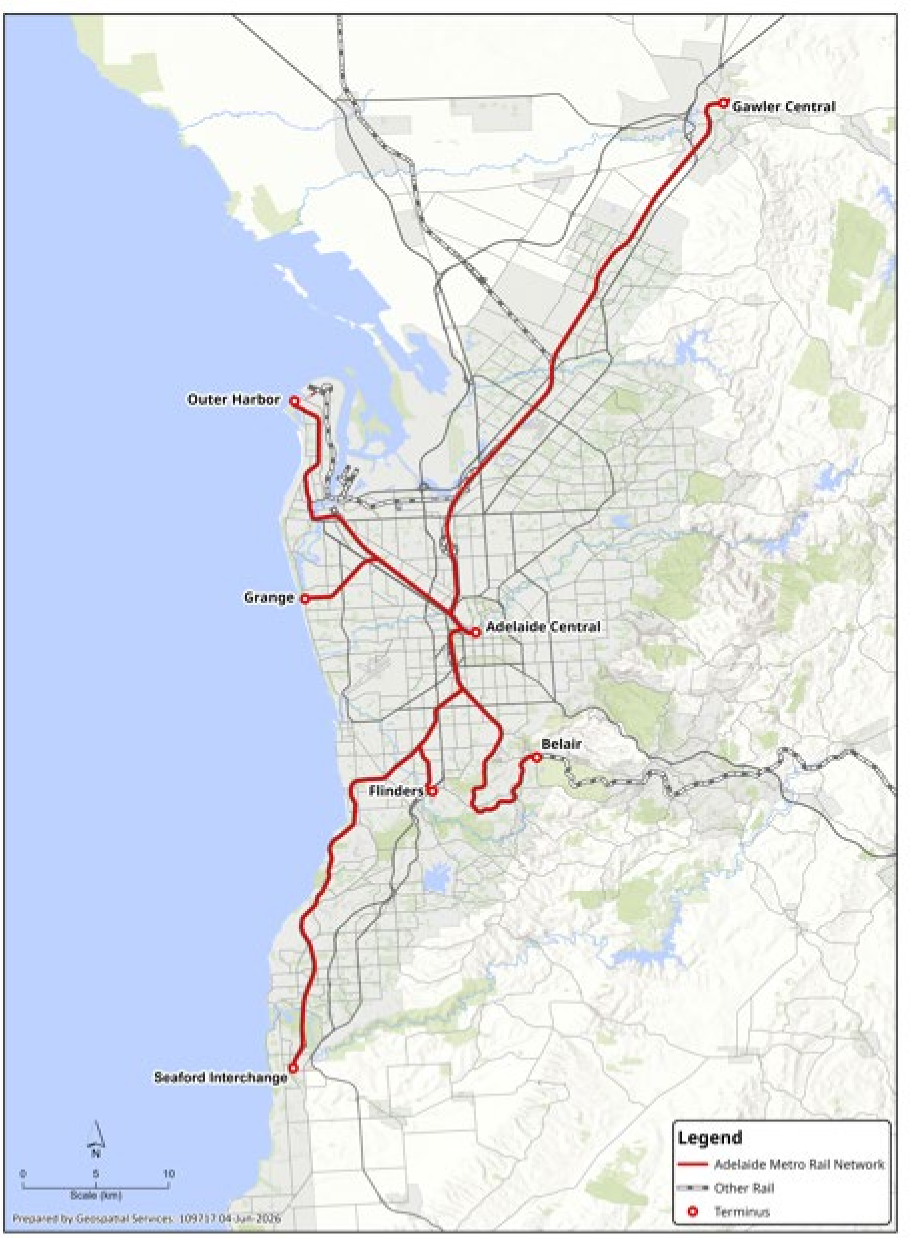


Figure 71 Brisbane urban heavy rail network

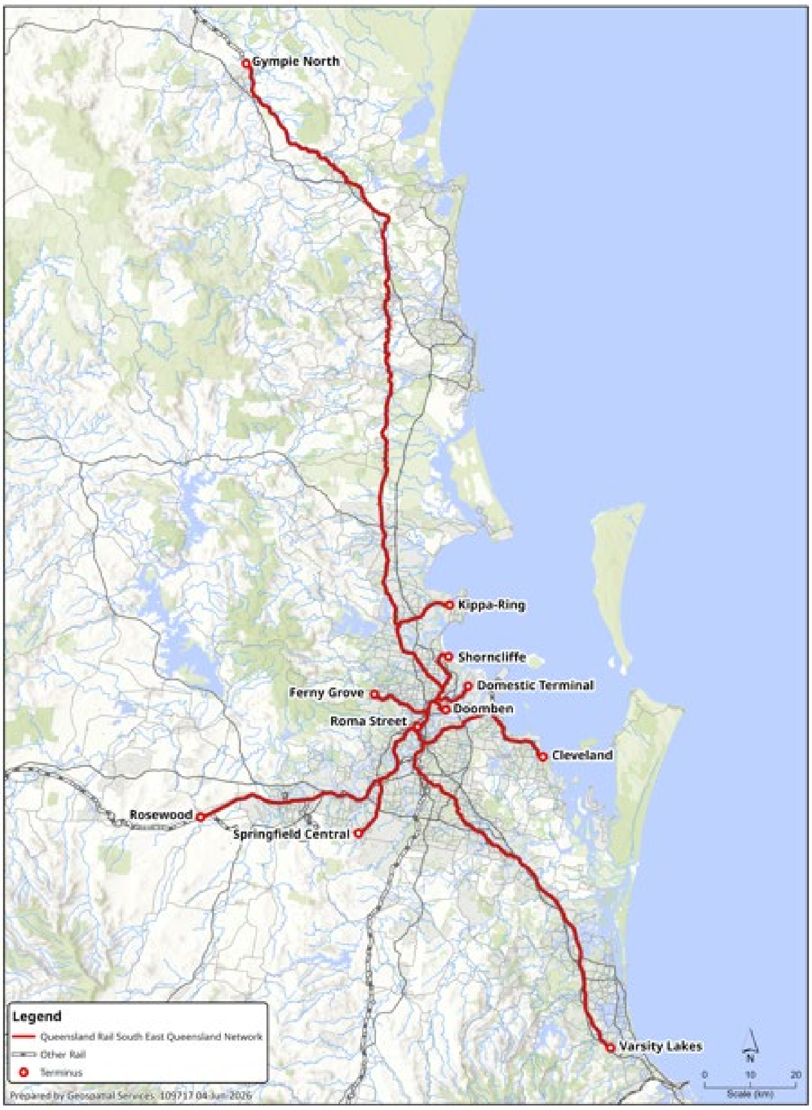


Figure 72 Melbourne urban heavy rail network

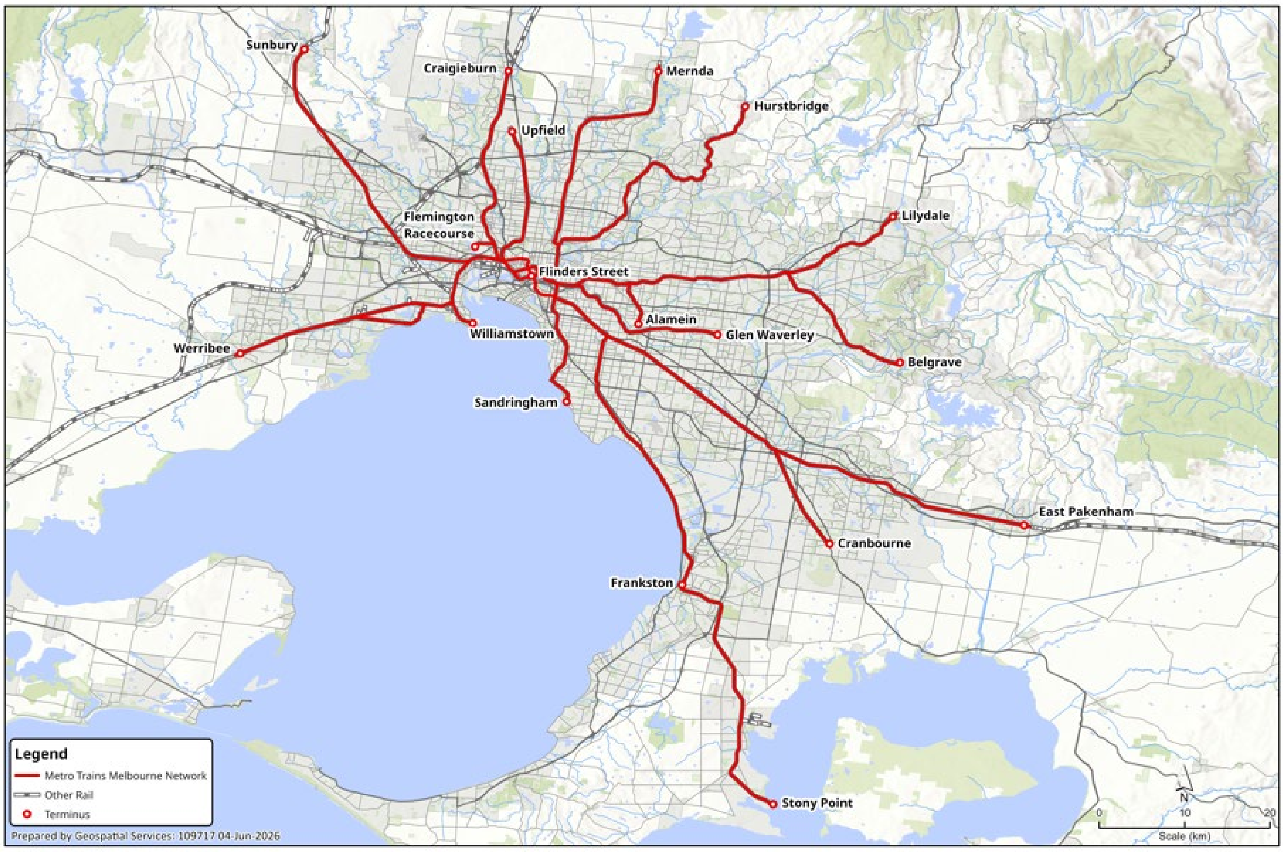


Figure 73 Perth urban heavy rail network

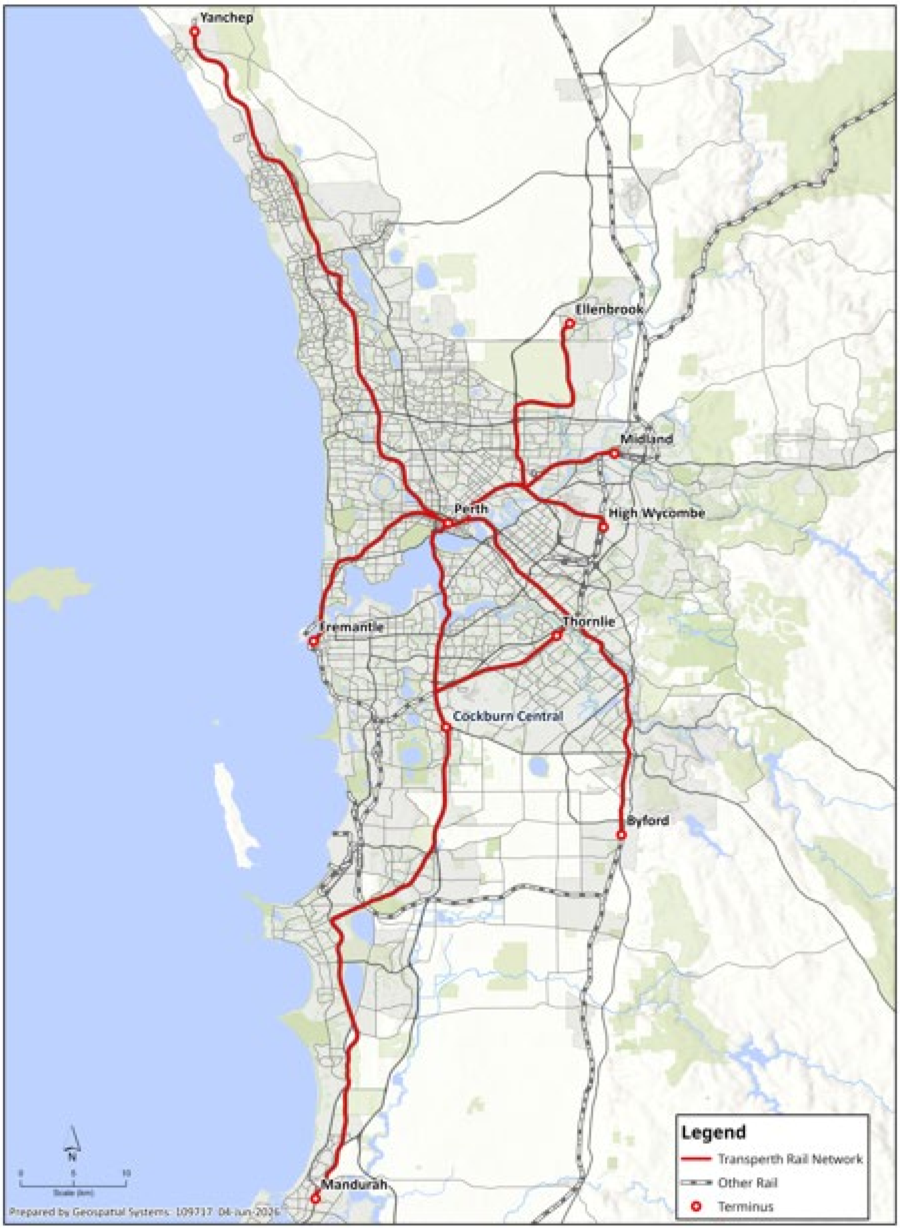
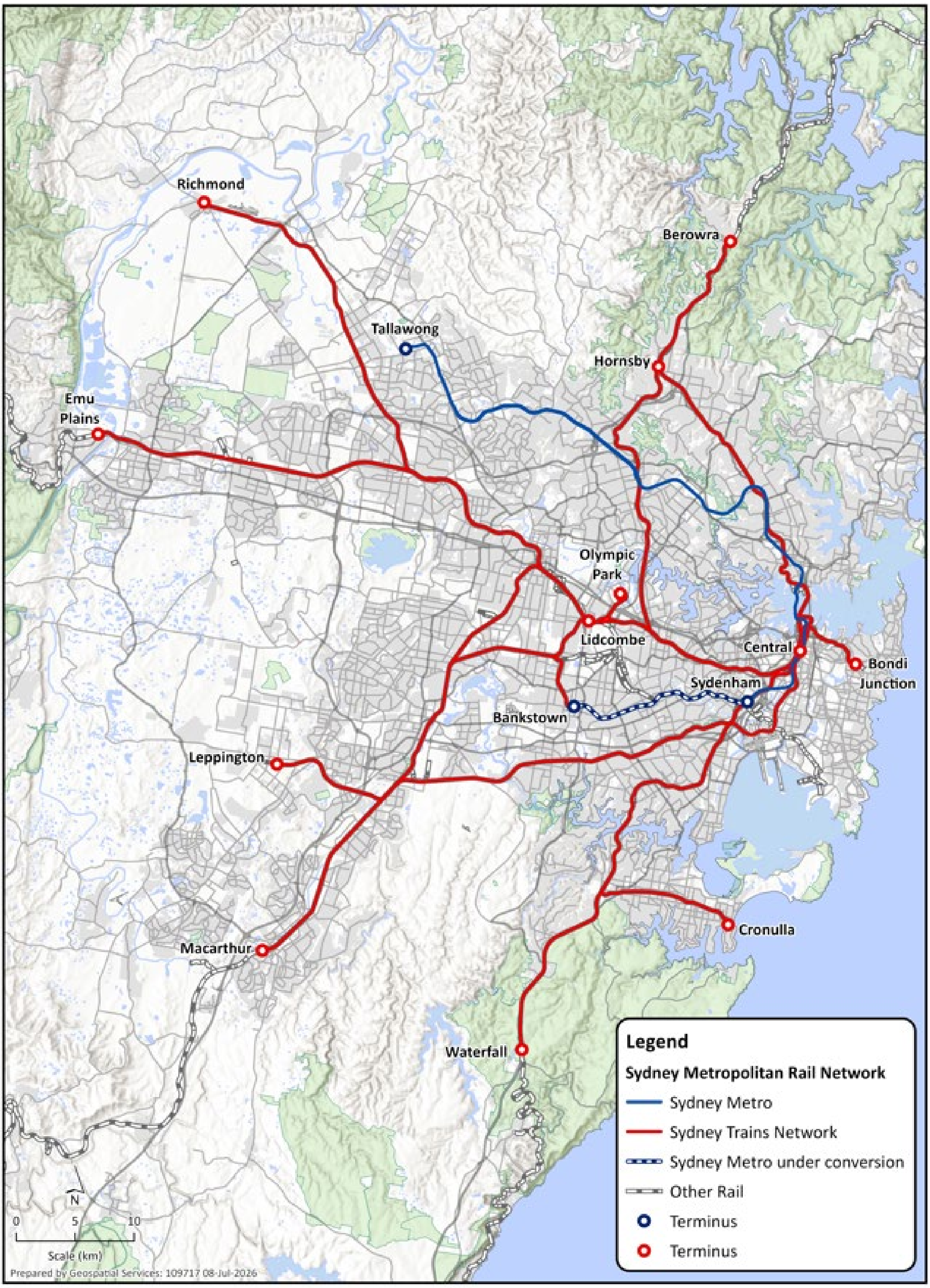


Figure 74 Sydney urban heavy rail network



Appendix B – Light rail networks – 2026

Figure 75 **Adelaide light rail network**

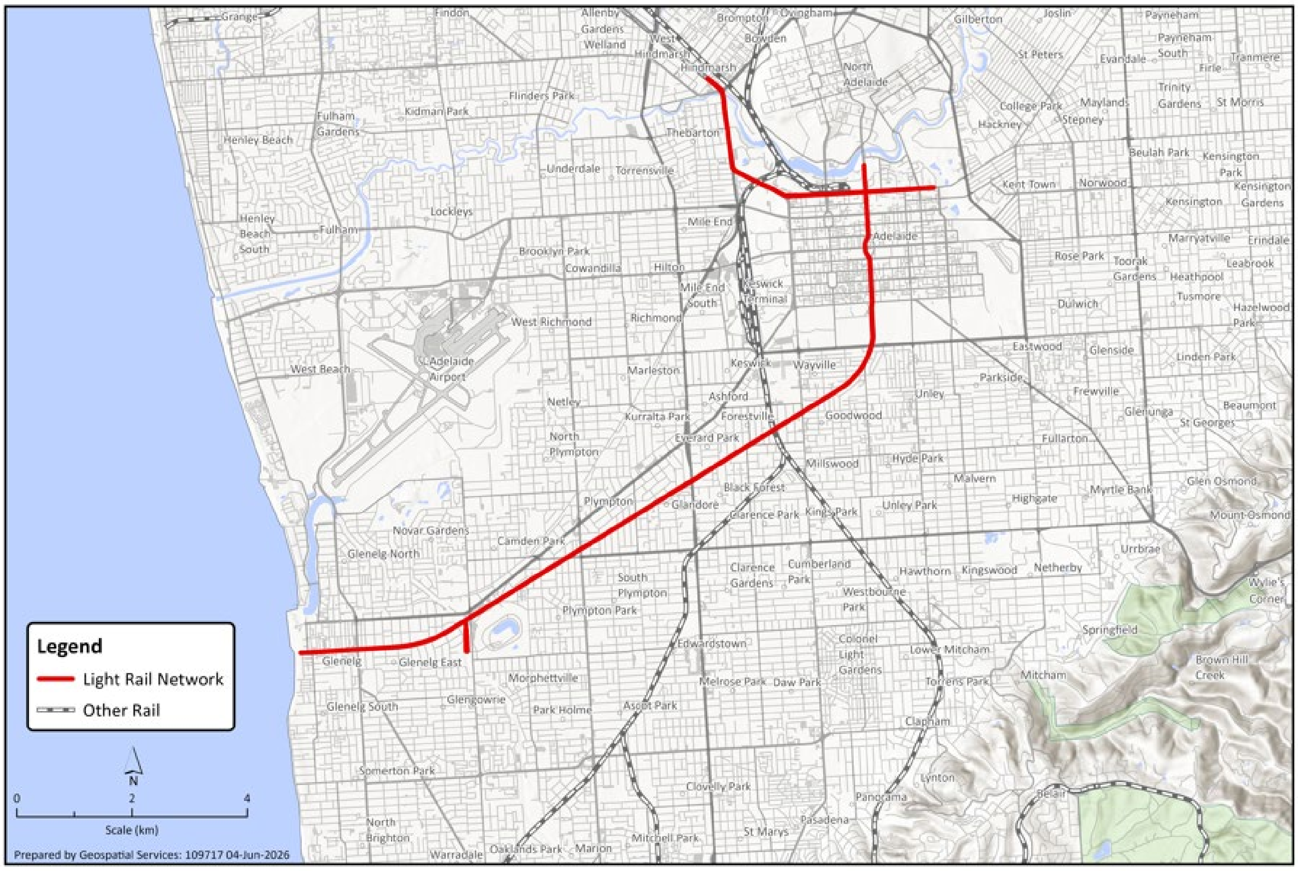


Figure 76 Canberra light rail network

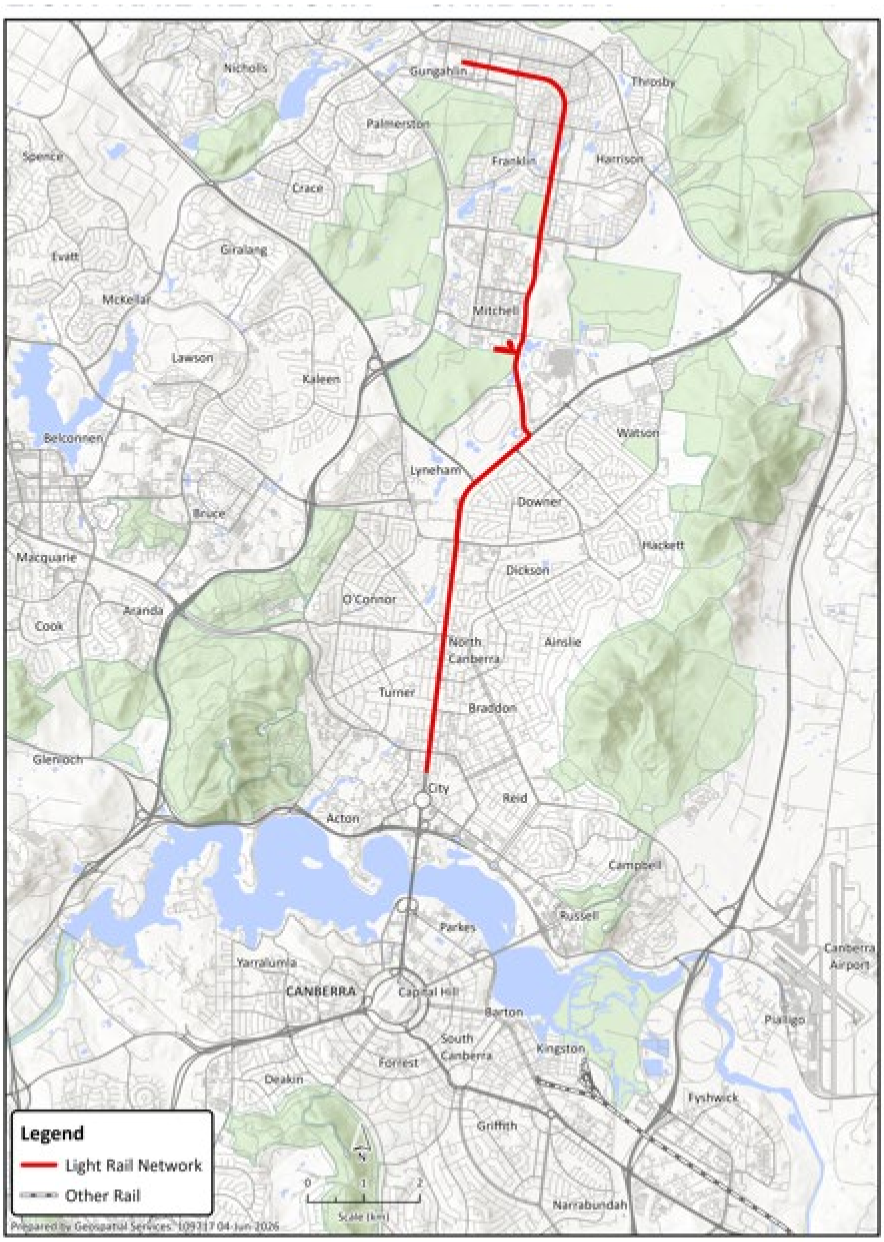


Figure 77 Gold Coast light rail network

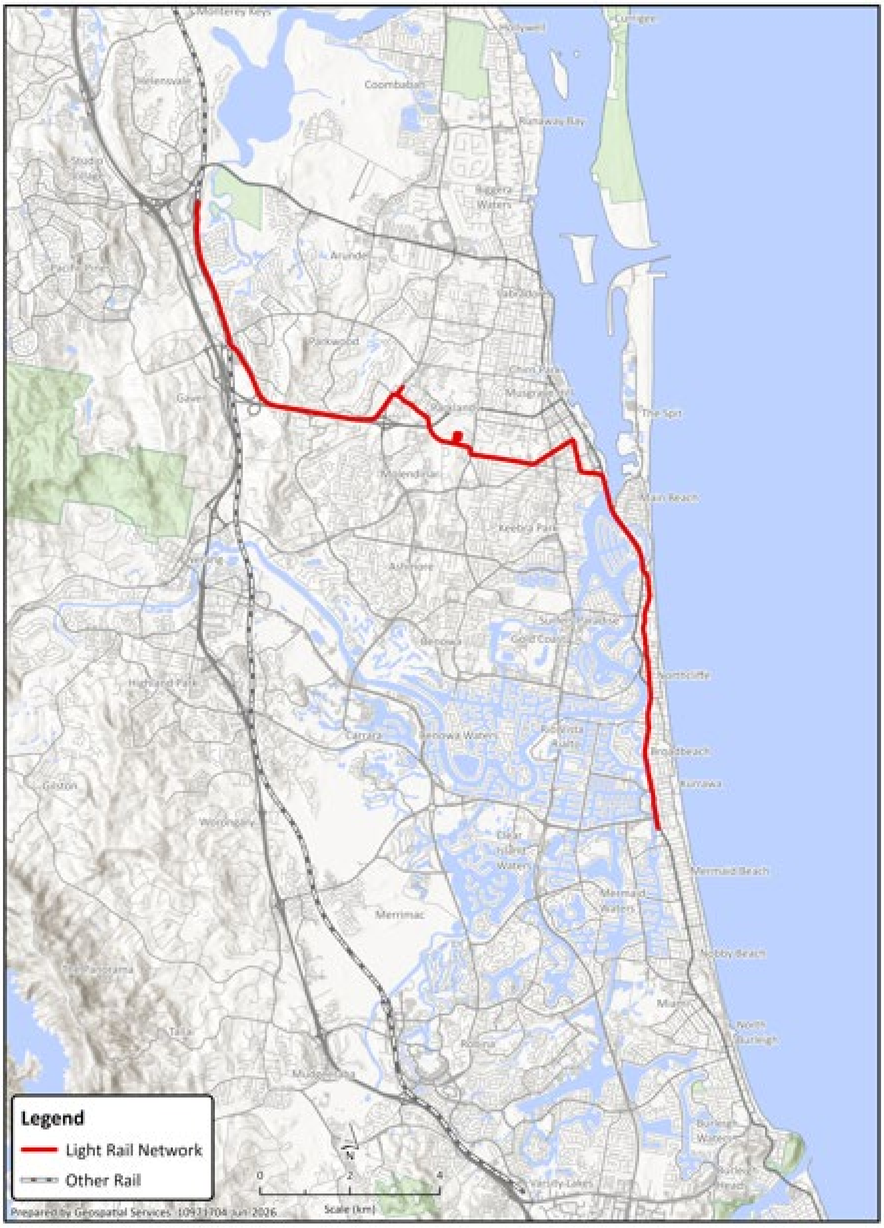


Figure 78 Melbourne light rail network

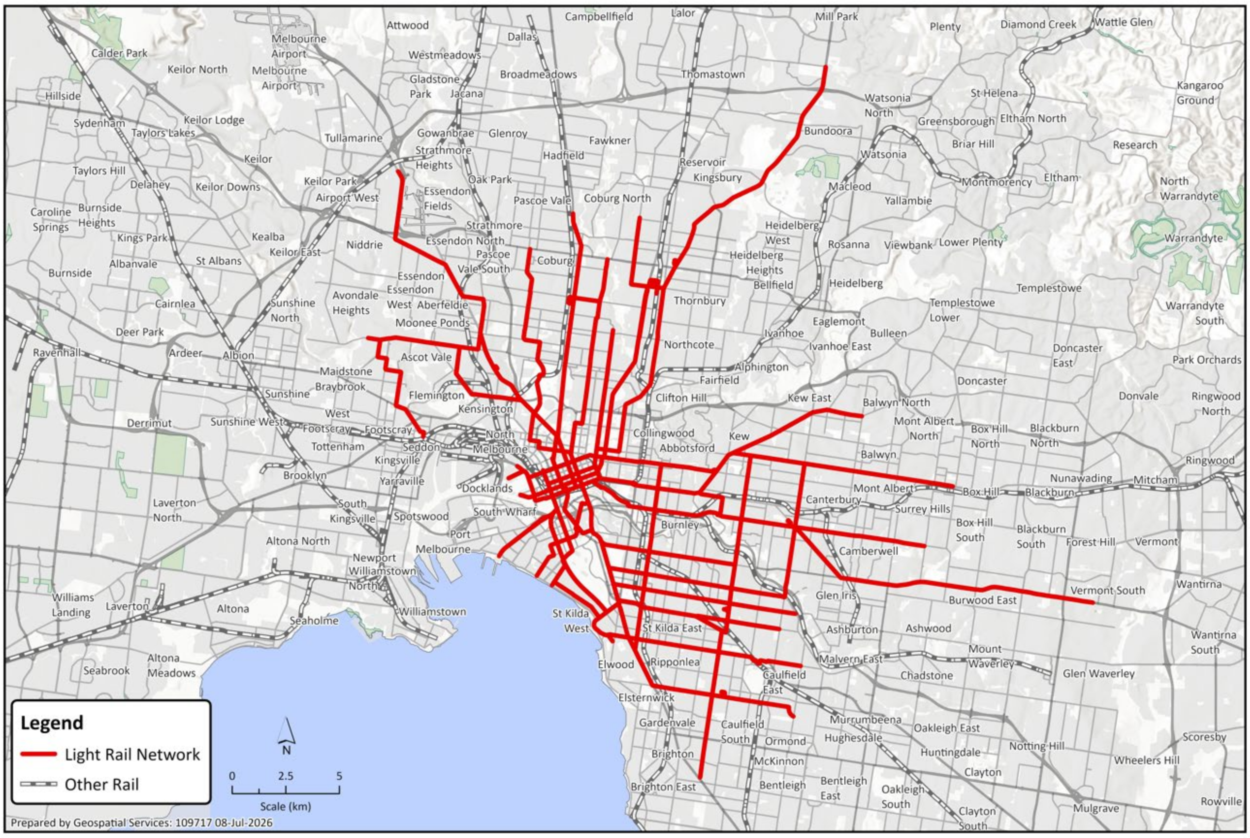
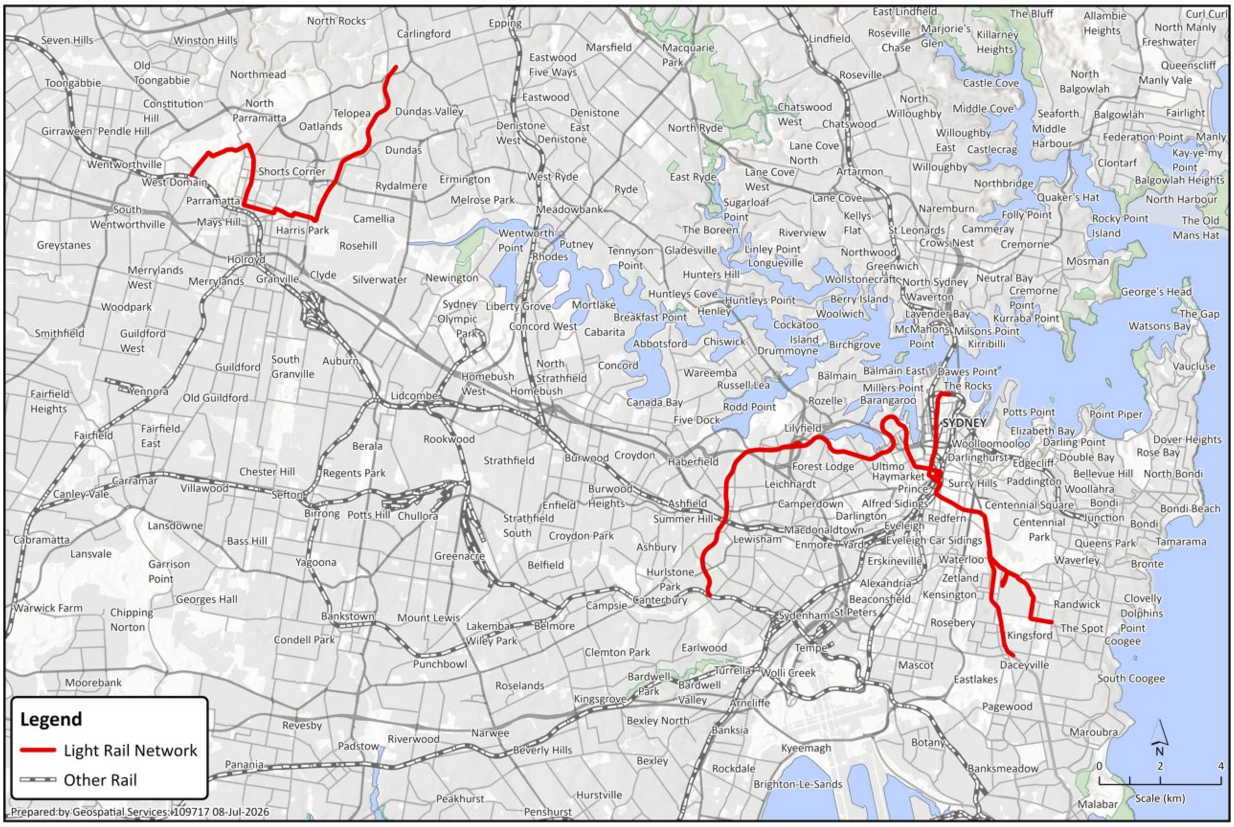


Figure 79 Newcastle light rail network

Figure 80 Sydney light rail network



Appendix C – Glossary

Term	Abbreviation	Definition
Above-rail		The operations, rolling stock, and train services that run on a railway network.
Above-rail operator		A train service operator that provides above-rail services.
Axle load		The total weight transmitted to the railway tracks by all the wheels connected to a single axle. It is calculated by taking the total weight of a locomotive or rail car (including cargo) and dividing it by its number of axles.
Below-rail		The construction and management of railway infrastructure, including rail infrastructure assets and network services.
Below-rail operator		See infrastructure manager.
Broad gauge	BG	A rail gauge of 1600 millimetres, used in Victoria and South Australia.
Bulk freight		Large quantities of homogenous product that is mostly conveyed in purpose-built wagons, such as grain hoppers, although some goods that are usually bulk can be containerised.
Central Corridor		That part of the interstate rail network from Tarcoola (South Australia) to Darwin.
Central Queensland Coal Network	CQCN	A multi-user track network comprising four of the major coal systems and one connecting system, serving Queensland's Bowen Basin coal region: Newlands, Goonyella, Blackwater and Moura with Goonyella Abbot Point, the connecting system link.
Country Rail Network	CRN	The non-ARTC managed regional rail network of New South Wales, excluding the Sydney Trains managed lines from Sydney to Newcastle, Lithgow, and Bomaderry.
Crossing loop		A short section of parallel track on a single-line railway. It lets trains travelling in opposite directions cross each other safely or allows a faster train to overtake a slower one travelling in the same direction.
Container (shipping)		A large, standardised steel box used to transport goods safely and efficiently via ships, trains, and trucks without unloading the cargo.
Containerised (freight)		Freight that is transported in a (shipping) container).

Term	Abbreviation	Definition
Diesel multiple unit	DMU	A multiple unit (carriage) train powered by on-board diesel engines. A DMU requires no separate locomotive, as the engines are incorporated into one or more of the carriages.
Double-stacking		(In Australia) stacking one hi-cube (9 feet 6 inch, or 2.896 metres high) container on top of another in a well wagon on a freight train.
Dwell		The period a train is stationary during its journey from origin to destination. This includes for such reasons as scheduled stops at stations (passenger), crew changes, re-fuelling, and crossing other trains.
Dual gauge	DG	A railway track that has three or four rails, allowing vehicles of two track gauges to run on it.
East–West Corridor		That part of the interstate rail network from Melbourne to Perth, via Adelaide; Sydney to Crystal Brook (South Australia) via Lithgow, Parkes, and Broken Hill; and Cootamundra West to Parkes.
Electric multiple unit	EMU	A multiple unit (carriage) train consisting of self-propelled carriages using electricity as the motive power. An EMU requires no separate locomotive, as electric traction motors are incorporated within one or more of the carriages.
Force majeure		Incidents, such as natural disasters, that impact services beyond a service provider's control.
Franchise		A business agreement where a government gives a private company or consortium the legal right to run passenger train services on specific routes for a set time. The private operator manages daily travel, staff, and trains while following strict government rules on fares, timetables, and service quality.
Frequency		The number of services that pass a specific stop or operate on a route during a set period, typically measured as arrivals or departures per hour.
Full fuel cycle		All greenhouse gas emissions and energy used from initial resource extraction, processing, and distribution (well-to-tank) to final vehicle combustion or operation on the road (tank-to-wheel).

Term	Abbreviation	Definition
Gauge		The inner distance between the two running rails of a railway track.
Generalised cost (of travel)		A single measure used in transport economics and planning to describe the total 'price' of a journey. It combines direct financial expenses with non-monetary factors like travel time, comfort, convenience, and safety, usually converted into a shared unit such as money or time.
Gross tonnages		A measure of the freight task by weight, including the rollingstock on which the freight travels.
Gross tonne kilometres	GTK	A measure of the rail freight task, expressed as gross tonnages hauled multiplied by the distance it travels.
Headway		The time or distance gap between two trains travelling on the same track.
Heavy rail		There is no universal definition of heavy rail. It can be thought of as a rail network designed primarily for high-capacity passenger or mixed passenger/freight railway operations, generally using larger and heavier trains (than light rail) operating on railway infrastructure with relatively high axle loads and typically separated from road traffic. In this report heavy rail includes the Sydney Metro network.
Hunter Valley coal network		A dedicated double track 'coal line' between Port Waratah and Maitland, a shared double track line (with some significant stretches of third track) from Maitland to Muswellbrook in the upper Hunter Valley, and a shared single track with passing loops from that point north towards Gunnedah and west towards Ulan.
Infrastructure manager	IM	The entity that manages all aspects of a railway's below-rail operations.
Integrated (light rail)		A section of a light rail network that shares the given section with road traffic.
Intermodal		Generically speaking, 'intermodal' means freight that travels by multiple modes between origin and destination, such as by road and rail. As a categorisation Trainline uses of freight type travelling on the Australian interstate network, 'intermodal' means all freight travelling on ARTC intermodal designated (capital city to capital city) trains, regardless of the freight composition of the train and the freight's origin and destination. For example,

Term	Abbreviation	Definition
		freight on intermodal designated trains that is loaded or unloaded en route (such as in regional locations) is included. Industrial steel products, such as slab steel or steel coil carried on intermodal designated trains is also included. Trainline deems freight that is intermodal by the generic definition, but which does not travel on ARTC intermodal designated trains as 'non-intermodal'. This includes hinterland to coastal port trains carrying containerised freight.
Landbridge		The movement of freight over land in place of part of a sea journey.
Light rail (system)		An urban or suburban rail transport system characterised by relatively small-capacity passenger vehicles, frequent services and generally short trains, operating on dedicated rights-of-way, streets or a combination thereof. In Australia this includes the Melbourne, Sydney, Adelaide, Gold Coast, Canberra and Newcastle networks.
Light rail vehicle	LRV	A rail vehicle designed for passenger transport on a light rail system, typically operating singly or in short trains, with relatively low axle loads and generally capable of sharing urban streets or operating on a dedicated right-of-way.
Locomotive		A powered railway vehicle (other than a diesel-multiple-unit or electric-multiple-unit) used to pull or push a train along tracks.
Louvre van		A type of covered railway freight wagon featuring slotted, vent-like openings (louvres) on its sides or ends. (Also spelled 'louver van')
Master Train Plan	MTP	A complete listing of all contracted path schedules and associated information for the entire ARTC network.
Mode share		The percentage of travellers or freight using a particular type of transportation.
Motive power		See Locomotive.
Narrow gauge	NG	A rail gauge of 1067 millimetres, used in Queensland, Tasmania, South Australia, and Western Australia.
Net tonnages		A measure of the freight task by the freight's weight, excluding the rollingstock on which the freight travels.

Term	Abbreviation	Definition
Net tonne kilometres	NTK	A measure of the rail freight task, expressed as net tonnages hauled multiplied by the distance it travels.
Non-bulk freight		Any general freight that is either containerised or otherwise carried, such as in louvre vans.
Non-urban (railways)		(Heavy) rail passenger networks outside the urban networks. Includes commuting distance (‘intercity’, and ‘interurban’), regional, and interstate services.
North–South Corridor		That part of the interstate rail network from Brisbane to Melbourne, via Sydney.
Notifiable occurrence (rail safety laws)		An accident or incident associated with railway operations that has, or could have, caused significant property damage, serious injury, or death. Category A occurrences must be reported immediately, principally due to being serious in nature or involve events that may trigger immediate regulatory response. Category B occurrences must be reported within 72 hours of the occurrence.
Patronage		The number of passenger trips made over a defined period.
Passing lane/loop		An extended crossing loop of approximately 6-8 kilometres in length (as opposed to approximately 1,500 metres and 1,800 metres, which is the typical crossing loop length on the Australian interstate network). Passing lanes enable trains to cross each other without stopping, subject to timings.
Punctuality		A measure of how often a service arrives, departs, or completes a journey according to its published timetable.
Regional rail freight transport		Non-bulk freight travelling by rail from hinterland to coastal port, usually for export, and return traffic.
Reliability		The number of scheduled services that run, namely the total number of scheduled services minus cancellations.
Revenue earning rail service		A passenger or freight rail service provided for payment as part of a railway undertaking's transport operations. Tourist, heritage and recreational railway services are excluded.
Rollingstock		All the wheeled vehicles that move on a railway track, including both powered engines

Term	Abbreviation	Definition
		(locomotives) and unpowered carriages, such as passenger coaches and freight wagons.
Route-kilometres		The distance of a railway, as measured by the rail corridor, regardless of how many operational tracks are in the corridor.
Segregated (light rail)		A section of a light rail network that is separated from road traffic and exists in its own corridor.
Short-haul		The distance less than the linehaul distance that non-bulk freight transport by rail is normally considered viable.
Standard gauge	SG	A rail gauge of 1,435 millimetres, used in New South Wales, Victoria, Queensland, South Australia, Western Australia, Northern Territory, and the Australian Capital Territory.
Throughput		The volume of freight that moves through a system, terminal, or network within a specific time period.
Track-kilometres		The distance of a railway, as measured by the rail corridor length multiplied by the number of operational tracks on the corridor.
Track quality index	TQI	The extent to which a railway track deviates from its designated (or 'true') alignment. It is expressed as a statistical measure calculated from the standard deviations of several different track geometry parameters.
Twenty-foot equivalent unit	TEU	A standard unit of freight capacity based on an intermodal container that is 20 feet (6.1 meters) long. It measures train freight capacity, allowing rail operators to count mixed container sizes uniformly.
Urban (heavy railways)		In this report, passenger rail networks within the bounds of each designated urban (heavy) rail service provider's network (Queensland Rail Citytrain, Sydney Trains Suburban, Metro Trains Melbourne, Adelaide Metro, Transperth).
Urban maritime container movements		Urban shuttle trains that provide a rail link from seaports to nearby intermodal (distribution) centres.
Vertically-integrated		A rail network in which the above-rail and below-rail operations are integrated, whereby a train operator also manages the rail network infrastructure on which its trains operate.
Vertically-separated		A rail network in which the above-rail and below-rail functions of a rail network are

Term	Abbreviation	Definition
		separated. Train operators pay an access fee to an infrastructure manager for access to the network.
Well wagon		A specialised freight rail vehicle with a depressed low-floor centre section (the well) sitting close to the tracks between its wheel assemblies. This lowered design reduces the centre of gravity and overall vertical clearance of tall cargo. (Also known as a well car or double-stack car.)

References

ACT Government (2026), <https://www.act.gov.au/our-canberra/latest-news/2026/january/canberras-light-rail-vehicles-go-wire-free>

Adelaide Metro (n.d.), <https://www.adelaidemetro.com.au/about-us/on-time-running>

Adelaide Metro (n.d.-a), <https://www.adelaidemetro.com.au/plan-a-trip/timetables?num_ranks=20&f.routemodes%7croutemode=0>

Arc Infrastructure (2025), <https://www.arcinfra.com/Newsroom/Gold-Valley-rail-task-grows-on-the-Arc-network>

ARTC (n.d.), <https://www.artc.com.au/> (search 'Hunter Valley Network Key Performance Indicator Report')

ARTC (n.d.-a) <https://proj.artc.com.au/network-investment-program/>

ARTC (2026a), *2025 Hunter Valley Corridor Capacity Strategy* <https://www.artc.com.au/uploads/2025-HVCCS-FINAL-Jan-2026.pdf>

Aurizon (2025), *FY2025 Results*, <https://media.aurizon.com.au/-/media/files/investors/reports-and-webcasts/2025/full-year-results/fy2025-results-presentation.pdf?rev=c1197938837347 89a014661807feaa90>

Aurizon (2025a), <https://aurizon.com.au/news/2025/aurizon-commences-haulage-for-yilgarn-iron-through-esperance>

Aurizon (2025b), <https://www.aurizon.com.au/news/2025/aurizon-drives-down-emissions-with-rail-based-logistics-solution-for-bhp-copper-south-australia>

Aurizon (2026), *Central Queensland Coal Network Information Packs* <https://www.aurizon.com.au/what-we-deliver/coal>

Australasian Railway Association/Freight on Rail Group (2023), *The future of freight* (summary report), <https://ara.net.au/wp-content/uploads/ACRI-Summary-Report_WEB.pdf>

Australian Bureau of Statistics (2022), <https://www.abs.gov.au/census/find-census-data/search-by-area> (search 'Community Profile' under 'Greater Capital City Statistical Area')

BHP (2025), <https://www.bhp.com/news/articles/2025/11/bhp-welcomes-australias-first-purpose-built-battery-electric-locomotives-to-the-pilbara>

BHP (2026), <https://www.bhp.com/what-we-do/global-locations/australia/western-australia>

BITRE – see Bureau of Infrastructure, Transport and Regional Economics; and Bureau of Infrastructure and Transport Research Economics

Bowen Rail (2026), <https://www.bowenrail.com.au/what-we-do/carmichael-rail-network/>

Bureau of Infrastructure, Transport and Regional Economics (2013), *Australia's bulk ports, Research Report 135*, <https://www.bitre.gov.au/publications/2013/report_135>

Bureau of Infrastructure, Transport and Regional Economics (2014), *Freightline 1 — Australian Freight Transport Overview*, <https://www.bitre.gov.au/publications/2014/freightline_01>

Bureau of Infrastructure, Transport and Regional Economics (2014a), *Freightline 2 — Australian Iron Ore Freight Transport*, <https://www.bitre.gov.au/publications/2014/freightline_02>

Bureau of Infrastructure, Transport and Regional Economics (2014b), *Improving regional passenger rail services, Research report 137*, <https://apo.org.au/sites/default/files/resource-files/2014-05/apo-nid40545.pdf>

Bureau of Infrastructure, Transport and Regional Economics (2015), *Trainline 3*, <https://www.bitre.gov.au/publications/2015/train_003>

Bureau of Infrastructure, Transport and Regional Economics (2016), *Freightline 4*, *– Australian Coal Freight Transport* <https://www.bitre.gov.au/publications/2016/Freightline_04>

Bureau of Infrastructure, Transport and Regional Economics (2016a), *Why short-haul intermodal rail services succeed* <https://www.bitre.gov.au/publications/2016/rr_139>

Bureau of Infrastructure, Transport and Regional Economics (2016b), *Trainline 4*, <https://www.bitre.gov.au/sites/default/files/train_004.pdf>

Bureau of Infrastructure, Transport and Regional Economics (2017), *Trainline 5* <https://www.bitre.gov.au/sites/default/files/train_005.pdf>

Bureau of Infrastructure, Transport and Regional Economics (2018), *Freightline 5 – Australian cotton freight transport*, <https://www.bitre.gov.au/publications/2018/Freightline_05>

Bureau of Infrastructure, Transport and Regional Economics (2018a), *Freightline 6 – Australian rice freight transport,* <https://www.bitre.gov.au/publications/2018/Freightline_06>

Bureau of Infrastructure, Transport and Regional Economics (2018b), *Freightline 7 – Australian aluminium industry freight transport*, <https://www.bitre.gov.au/publications/2018/Freightline_07>

Bureau of Infrastructure, Transport and Regional Economics (2018c), *Trainline 6*, <https://www.bitre.gov.au/sites/default/files/train_006.pdf>

Bureau of Infrastructure and Transport Research Economics (2022), *Trainline 9*, <https://www.bitre.gov.au/sites/default/files/documents/trainline-9.pdf>

Bureau of Infrastructure and Transport Research Economics (2024), *Waterline 70*, <https://www.bitre.gov.au/publications/2024/waterline-70>

Bureau of Infrastructure and Transport Research Economics (2025), *Australian Infrastructure and Transport Statistics - Yearbook 2025*, <https://www.bitre.gov.au/publications/2025/australian-infrastructure-and-transport-statistics-yearbook-2025>

Canberra Metro (n.d.), <https://cmet.com.au/frequency-guide/>

Canberra Metro Operations (n.d.), <https://cmet.com.au/about/operational-performance/>

Department for Infrastructure and Transport (2025), *Department for Infrastructure and Transport 2024–2025 Annual report*, <https://dit.sa.gov.au/__data/assets/pdf_file/0010/1552888/DIT-Annual-Report-2024-2025.pdf>

Department of Infrastructure, Transport, Regional Development, Communications and the Arts (2024) <https://investment.infrastructure.gov.au/projects/062827-15vic-pkg>

Department of Transport and Main Roads (2025), *Department of Transport and Main Roads Annual Report 2024-2025*, <https://www.publications.qld.gov.au/dataset/annual-report-2024-2025-transport-and-main-roads/resource/5469daec-1854-4d69-9fe9-12a4911511d9>

Department of Transport and Planning (2025), *Department of Transport and Planning Annual Report 2024-25*, <https://www.vic.gov.au/dtp-annual-report>

DP World (2024), <https://www.dpworld.com/australia/news/releases/dp-world-expands-operations-and-launches-new-rail-service-at-stocklands-yennora-intermodal-terminal/>

Freight and Logistics Council of Western Australia (2010), <https://www.accc.gov.au/system/files/public-registers/documents/D11%2B4123.pdf>

Gladstone Ports Corporation (n.d.), <https://app.powerbi.com/view?r=eyJrIjoiZDE1YmNmYTktYWNjNi00OTZhLTg5YWUtMzczYWE4OGQwYjk3IiwidCI6ImQ4MjE0OGJhLTc1OWMtNDMzYy04Y2VhLTBkOTI1ODlhOGNjOCJ9>

G:link (n.d.), <https://ridetheg.com.au/journey-planner/>

Gold Coast Light Rail Stage 3 (2022), <https://www.gclr3.com.au/goldlinq/gclr3>

Government of Queensland (2023), <https://web.archive.org/web/20260330115700/https://statements.qld.gov.au/statements/98284>

Government of Western Australia (2020), Revitalising Agricultural Region Freight Strategy, <https://www.transport.wa.gov.au/getmedia/39DE3A1F-5245-4987-9D2B-4D3B33F466E9/fre_p_fs_revagriregionfreightstrategy_final.pdf>

Government of Western Australia (2025), <https://www.wa.gov.au/government/media-statements/Cook%20Labor%20Government/State-subsidy-supports-record-share-of-container-freight-on-rail-20250814>

Grain Central (2017), *Eliminating choke points to build NSW grain rail capacity*, <https://www.graincentral.com/cropping/grains/eliminating-choke-points-to-build-nsw-grain-rail-capacity/>

Hancock Iron Ore (2025), <https://www.hancockironore.com.au/our-team/#our-story>

Journey Beyond Rail Expeditions (n.d.), <https://www.journeybeyondrail.com.au/guest-information/timetables/>

Karara Mining Limited (2025), <https://www.kararamining.com.au/port-and-rail-operation/>

Mees, P and Groenhart, L (2012), *Transport policy at the crossroads: travel to work in Australian capital cities 1976–2011*, Melbourne: RMIT

Metro Trains Melbourne (n.d.), <https://www.metrotrains.com.au/metro-performance/>

Mid West Ports (2025), *Annual Report 2024/25*, <https://www.midwestports.com.au/our-port/publications/annual-reports.aspx>

Minister for Infrastructure, Transport, Regional Development and Local Government (2026), < https://minister.infrastructure.gov.au/c-king/media-release/record-investment-freight-rail-network-and-consolidating-inland-rail>

North Queensland Bulk Ports Corporation (n.d.), <https://nqbp.com.au/trade/throughputs>

NSW TrainLink (2025), *Annual Report 2024-25 Volume 1*, <https://www.transport.nsw.gov.au/system/files/media/documents/2025/nsw-trainlink-annual-report-2024%E2%80%9325-volume-1.pdf>

Office of the National Rail Safety Regulator (ONRSR) (2024), *ONRSR Business Glossary*¸ <https://nraspricms01.blob.core.windows.net/assets/documents/Industry_Updates/ONRSR-Business-Glossary.pdf>

Office of the National Rail Safety Regulator (ONRSR) (n.d.), <https://www.onrsr.com.au/publications/national-rail-safety-data/harm-to-people>

Office of the National Rail Safety Regulator (ONRSR) (n.d.-a) <https://www.onrsr.com.au/publications/national-rail-safety-data/key-occurrences-2>

Parramatta Light Rail Stage 1 (n.d.), <https://www.nsw.gov.au/driving-boating-and-transport/projects/parramatta-light-rail/stage-1#toc-frequently-asked-questions>

Pilbara Ports Authority (n.d.), <https://www.pilbaraports.com.au/about-ppa/news,-media-and-statistics/port-statistics>

Port of Brisbane (n.d.), <https://www.portbris.com.au/operations-and-trade/trade-development>

Port of Melbourne (2025), <https://www.portofmelbourne.com/call-for-registrations-of-interest-potential-support-for-import-volumes-to-melbourne-intermodal-terminal-mit-somerton/>

Port of Newcastle (n.d.), <https://pon.com.au/trade-and-business/trade-overview-reports/>

Public Transport Authority of Western Australia (2025), *Public Transport Authority Annual Report 2024-2025* <https://www.pta.wa.gov.au/about-us/priorities-and-performance/annual-reports/annual-report-2024-2025>

Public Transport Victoria (n.d.), Timetables, <https://www.ptv.vic.gov.au/timetables>

Queensland Rail (2025), *Annual and Financial Report 2024-2025*, <https://www.queenslandrail.com.au/about%20us/Documents/Queensland%20Rail%20Annual%20and%20Financial%20Report%202024-2025.pdf>

Queensland Rail Travel (n.d.), <https://www.queenslandrailtravel.com.au/Planyourtrip/timetable>

Queensland Rail (2026a), <https://www.queenslandrail.com.au/forbusiness/the-regional-network>

Rail Express (2025), <https://www.railexpress.com.au/rail-first-signs-major-deal-with-australian-food-fibre/>

Rail Express (2025a), <https://www.railexpress.com.au/australias-largest-new-intermodal-terminal-kicks-off-operations/>

Rio Tinto (2022), <https://www.riotinto.com/en/news/releases/2022/rio-tinto-first-ore-delivered-at-gudai-darri-iron-ore-mine-in-the-pilbara>

Southern Ports (2025), *Southern Ports 2025 Annual Report*, <https://www.southernports.com.au/annual-reports>

Sydney Metro (2025), *Sydney Metro Annual Report Volume 1 2024-25*, <https://www.transport.nsw.gov.au/system/files/media/documents/2025/sydney-metro-annual-report-2024%E2%80%9325-volume-1.pdf>

Sydney Trains (2025), *Sydney Trains Annual Report Volume 1 2024-25*, <https://www.transport.nsw.gov.au/system/files/media/documents/2025/sydney-trains-annual-report-2024%E2%80%9325-volume-1.pdf>

TasRail (2025), *Annual Report 2024-25*, <https://www.tasrail.com.au/volumes/documents/Annual-Reports/Tasrail-Annual-Report-2024-25.pdf>

TasRail (n.d.), <https://www.tasrail.com.au/fleet/>

Translink (n.d.-a), <https://translink.com.au/about-translink/reports-and-publications/performance>

Translink (n.d.-b), <https://jp.translink.com.au/plan-your-journey/timetables/train>

Transperth (n.d.), <http://www.transperth.wa.gov.au/Timetables>

Transport for NSW (n.d.), <https://transportnsw.info/routes/train>

Transport for NSW (2025), *Transport for NSW Annual Report Volume 1 2024–25*, <https://www.transport.nsw.gov.au/system/files/media/documents/2025/transport-for-nsw-annual-report-2024%E2%80%9325-volume-1.pdf>

Transport for NSW (2025a), *Fixing Country* Rail, <https://www.transport.nsw.gov.au/projects/current-projects/fixing-country-rail>

Transport for NSW (2025b), *Regional Network East/West Uplift Program – RNEW Program*, <https://www.transport.nsw.gov.au/projects/current-projects/regional-network-eastwest-uplift-program-%E2%80%93-rnew-program>

Transport Open Data (n.d.-a), <https://opendata.transport.nsw.gov.au/data/dataset/opal-trips-light-rail>

Transport Open Data (n.d.-b), <https://opendata.transport.nsw.gov.au/dataset/nsw-trainlink-regional-train-and-coaches-statistics>

Transwa (n.d.), <https://transwa.wa.gov.au/tickets-times/train-timetables>

Victoria's Big Build (2026), <https://bigbuild.vic.gov.au/projects/murray-basin-rail-project>

V/Line (n.d.), <https://www.vline.com.au/Timetables/Additional-pages/train-coach-timetable-list>

V/Line (2025), 2024-25 *Annual Report*, <https://corporate.vline.com.au/getattachment/d1e6b761-4cf4-4845-b920-a05325230b8a/Annual-Report-2024-25>