
C History of railways in Australia

The current role and performance of different transport modes in Australia are products of past decisions and events. A number of factors including investment decisions, government regulation, changes in technology and work practices have all influenced the development of Australia's transport system, including railways. The Victorian Government stated:

... what we have today is a product of history and a product of what would fashionably be called "past dependence". That is, the sequence in which events happened leads to the outcome which one sees and one cannot, in past dependent processes, argue that what one sees is in any way remotely related to an optimal position in its transport configuration or anything else where you have got a past dependent process going. (trans., p. 940)

This appendix briefly describes the development of railways in Australia from the 1840s to the 1990s, providing a context for examining the current issues and challenges facing the industry.

C.1 1840 to 1915

Private enterprise was responsible for the introduction of railways in Australia. In 1846 the Great Southern and Western Railway Company was formed with the intention to construct railway lines from Sydney to Parramatta and Richmond/Windsor (Brooke 1988). Initial government involvement in Australian railways arose because of investors' demands that governments guarantee the dividends of private investors and the need to provide additional capital to complete lines (IC 1991b).

The majority of the initial private railway companies collapsed without ever building, still less operating, a railway. Governments out of necessity took over ownership of the early railway companies to protect themselves from financial exposure. Thus there is no significant early history of private participation in railways (IC 1991b).

The boom years for railways in Australia first occurred between 1860 and 1890. Each colony developed a railway network centred on the capital city or other ports, extending out into the rural towns (Stevenson 1987). The growth of the rail network

created political pressure for the construction of lines to every settlement. However, McKillop argued that the spread of railways actually benefited the capital cities more than rural areas:

The paradox of Australian railways is that while the political pressure to build railway lines into the interior came from rural communities, the net effect of the railway systems was to centralise economic and institutional power in the capital cities of the colonies. Not only did the railway system of NSW radiate out from the port of Sydney (and to a lesser extent Newcastle), but differential freight rates were used to give city-based merchants and manufacturers a price advantage over country-based competitors. (sub. DR90, p. 2)

The Victorian Government also noted the close association between the development of railways and the maritime industry:

... rail was used by the colonial governments to prop up an increasingly obsolete port configuration as land transport improves largely due to rail, and there was a very sick co-evolution with the maritime industry due to the intervention of government in trying to protect past rent-seeking or rent-earning opportunities when the time had passed. (trans., p. 940)

The rapid expansion of the rail network soon began to dominate the budgets and political agendas of the colonial governments:

The six colonial governments which owned railways were excited and worried by the spread of lines. In Victoria and New South Wales the steam monster threatened to swallow its masters. (Blainey 1983, p. 253)

One of the most discussed issues concerning railways during these early periods — an issue that continued well into the 1990s — was the gauge problem. New South Wales, Victoria and South Australia initially started constructing railways based on the broad gauge (5 ft 3 in or 1600 mm). However, New South Wales converted to standard gauge (4 ft 8½ in or 1435 mm) in the 1850s. In Queensland, Western Australia and Tasmania, railways were constructed to the less expensive narrow gauge (3 ft 6 in or 1067 mm).¹

The break of gauge initially caused little concern among the colonial governments. Railways were not used to link capital cities but rather to link each capital with its outer towns and regions. However, the problem of gauges developed as more railways were built to link the States. During the two World Wars, the gauge barrier to the quick passage of supplies and troops across States became an acute problem. Criticism from the business community and general public ‘raised sufficient heat to melt every railway in the land’ (Blainey 1983, p. 244).

¹ South Australia constructed both narrow and broad gauge railways.

During the early period, railways were treated like any other government department and fell under the direct authority of a minister. As argued by Stevenson:

Governments typically set rates and fares, decided when to build new lines, and were involved in other major and even quite minor decisions. Railway receipts were paid into consolidated revenue ... It made railway authorities financially dependent on governments even when they operated at a profit, which quite frequently they did. (Stevenson 1987, p. 7)

However, in the 1880s the colonies of New South Wales, Victoria, Queensland and South Australia handed over the detailed running of their railways to appointed commissioners. Governments experimented with single commissioners, a board of commissioners or a single commissioner with assistant commissioners. The appointment of commissioners effectively transformed the running of railways into semi-independent agencies.

Despite the doubtful economic or social value of some of the railways built and operated during the boom years, they generally proved to be marginally viable. This was possible because government railways were exposed to little competition from competing transport modes or from other railways. Road and air transport were still not serious threats to the dominance of the railways, though steamships offered some competition. Government control over the railways meant that there was no potential competition from privately-owned and operated railway companies (Stevenson 1987).

C.2 1915 to the 1990s

The past dominance of the railways in Australia began to end after World War One. Two reasons cited for this decline were the inability of the railways to cater to changing demand patterns and the growth of road transport.

In relation to demand McKillop argued that:

The decline of rail as a dominant transport form in NSW since the 1920s, and particularly since the 1950s, reflects the inappropriateness of its 19th century routes ... The traditional centralist organisation and route structure of the NSW railways meant that they missed out on most of the post-War growth. Its network was not appropriate for the changed demand pattern ... (sub. DR90, p. 4)

After World War One road transport also emerged as a viable alternative to rail transport. However, the Victorian Government argued road transport did not emerge as a serious competitor to the railways until the 1970s:

Road competition appeared late in Australia compared with North America and Europe ... the Sydney-Brisbane connection by road was only fully sealed by 1958 and the last river was bridged on the Pacific Highway in 1966 ... Until the 70s, at least, there was not anything – leaving aside the National Highway Program – nothing like a competitive road freight mode, just because the infrastructure wasn't there ... (trans., pp. 940, 944)

Despite some difference of opinion regarding when road transport became a serious competitor to the railways, when it did occur it posed serious problems for State Governments in terms of both the profitability of the railways and resulting effects on State finances (Stevenson 1987).

The first response of State Governments to the emergence of road transport was to regulate the traffic of passengers and goods in the 1930s. Traffic regulations restricting freight can be categorised as:

- geographically based restrictions on the distance commodities could be carried by road transport;
- restrictions on the commodities that could be carried by road transport; and
- special taxes in proportion to the volume of traffic and the distance travelled.

The period after the Second World War was a time of mixed fortunes for the railways. Railways were seriously run down during the War and substantial renewal was required to rectify the deferral of maintenance that had occurred. Even more importantly, by the 1950s railways suffered substantial losses of traffic to private truck operators despite the restrictions placed on freight transport listed above. In addition, the Privy Council's ruling on the Hughes and Vale case in 1954 found that the revenues from licensing long distance transport across State boundaries were inconsistent with s. 92 of the Constitution.

Two factors complemented each other to provide new life for railways in Australia. They were the widespread application of diesel technology to Australian railways in the 1960s and the growth of the minerals sector during the 1970s. Diesel locomotives and the unit train (an entire train dedicated to a specific commodity) excelled at the long distance haulage of the bulk commodities produced by the minerals sector. Indeed, governments used their monopoly provision of rail freight services to extract monopoly rents from mining companies — a practice only being addressed gradually in the 1990s.

The changing nature of Australia's freight railways is highlighted in table C.1. In 1960-61, railways carried most agricultural produce, two thirds of coal and mineral production and about half of the production of fertilisers, cement and timber. In the case of coal and minerals, railways maintained their market share in the context of a rapidly expanding industry, but for all other commodities presented in table C.1, railways have been unable to maintain even the tonnage freighted.

Table C.1 Rail freight and annual production for select commodities, tonnes, 1960-61 to 1994-95

<i>Financial year</i>	<i>Agriculture and livestock</i>		<i>Coal and minerals</i>		<i>Fertilisers, cement and timber</i>	
	<i>Rail freight</i>	<i>Proportion of production</i>	<i>Rail freight</i>	<i>Proportion of production</i>	<i>Rail freight</i>	<i>Proportion of production</i>
	'000 tonnes	per cent	'000 tonnes	per cent	'000 tonnes	per cent
1960-61	15 413	86.4	22 054	61.4	5 929	45.8
1965-66	14 986	82.0	27 032	54.6	7 384	46.8
1970-71	18 041	75.3	41 266	53.4	6 460	38.3
1975-76	18 520	64.4	57 788	57.4	4 715	27.9
1980-81	19 334	70.3	78 966	58.3	5 611	27.2
1985-86	24 831	67.3	118 676	63.9	4 793	22.5
1990-91	17 845	47.7	139 099	60.9	3 638	17.5
1994-95	11 288	37.9	171 456	64.2	3 324	13.9

Source: BTE 1998.

Resolving the gauge problem

After World War Two the first serious attempts were made at solving the gauge problem. In 1956, a Committee of the Federal Parliament delivered its report on the unification of trunk railways in Australia, known as the Wentworth Scheme. The Wentworth Scheme discarded the proposal for all Australia's railways to be converted to standard gauge. Instead, it was recommended that only the capital cities should be linked by standard gauge, with little interference to existing lines of other gauges (Kain 1995).

While there was only muted support for the committee's recommendations, gradual progress was made in standardising the rail links between Australia's capital cities. In 1962 the link between Sydney's Central Station and Melbourne's Spencer Street Station was completed (Brooke 1988) and by 1970 a train could run on standard gauge track from Sydney to Perth. The process of linking all of Australia's mainland capital cities (except Darwin) is summarised in table C.2. Appendix B contains maps of Australia's interstate and regional rail networks illustrating current gauge differences.

Table C.2 Major post-1950s gauge standardisation initiatives

<i>Year</i>	<i>Standardisation initiative</i>
1962	Opening of a new Melbourne/Wodonga standard gauge line parallel with the existing broad gauge route, linking Melbourne, Sydney and Brisbane by standard gauge.
1969-70	Opening of new standard gauge links between Kalgoorlie and Perth and between Port Pirie and Broken Hill, eliminating three breaks of gauge and facilitating through Sydney/Perth services.
1980	Opening of the Tarcoola/Alice Springs rail line, replacing the former route via Oodnadatta and Marree and eliminating one break of gauge.
1983	Conversion of the Adelaide/Crystal Brook line to standard gauge thus placing Adelaide on the East-West standard gauge network for the first time.
1995	Conversion of the Adelaide/Melbourne broad gauge route to standard gauge, completing standardisation of the interstate network.

Source: Kain 1995.

Financial crisis within railways

Despite the new advances in technology and growth of the minerals trade, the railways were forced to face up to mounting revenue shortfalls and strong pressures were placed on State budgets in the 1970s (IC 1991b). In particular, there was no contribution to profitability from passenger services. Both urban and non-urban passenger services operated at considerable losses.

Government responses to mounting rail deficits varied across both jurisdiction and market segment. However, in general, most attempts by governments to improve the fortunes of the railways can be categorised as some combination of:

- the closure of the most uneconomical branch lines and passenger services;
- the alteration of financial and governance arrangements;
- the injection of capital to improve the state of the track or quality of the rollingstock; and
- the revision of fare structures.

In the case of freight services, it was accepted that these services — or at least some of them — could operate on a commercial basis. To achieve this goal, governments generally rationalised services and some branch lines were closed. In some instances greater commercial freedom was given to railway commissioners.

State Governments also gradually deregulated restrictions on the intrastate movement of freight from the 1960s. Key factors prompting the deregulation of freight transport included:

- the inefficiency of carrying certain commodities by rail;
- the ineffectiveness of the regulations at protecting rail from road transport; and
- the costs imposed on businesses and the wider community.

The SA Government was the first State Government to deregulate freight transport in 1963 and 1964. However, other State Governments were considerably slower in following this lead. Only modest moves were made towards deregulation in the 1960s and 1970s. Regulations on commodity traffics as they stood in 1991 are summarised in table C.3.

Since 1991, governments have removed many of these regulations on commodity traffics. From 1993 the Victorian Government removed restrictions applying to the transport of bulk oil, minor bulk commodities, timber, cement and briquettes (PC 1998c). In Western Australia the transport of all bulk commodities was deregulated in July 1995. However, the handling facilities at some ports are served only by rail.

Table C.3 Regulated commodity traffics by State, 1991

<i>State</i>	<i>Traffics</i>
New South Wales	Under the NSW Environmental Protection Act, coal was usually required to be transported by rail, if available. The use of road transport for export grain was constrained by limited road receival facilities at export ports.
Victoria	Domestic grains, cement, briquettes, limestone and petroleum were regulated to be transported by rail, with carriage by road allowed under permit in certain circumstances.
Queensland	Coal, coke, domestic grains (except seed grains), limestone, liquefied petroleum gas, minerals and ores and raw sugar were regulated to be transported by rail. With the exception of grains, road permits were issued when 'road transport was more competitive for the carriage of these restricted goods'.
South Australia	No restrictions.
Western Australia	Truck licences were not granted for domestic grains, fertilisers, bulk petroleum, bulk ores and minerals, or some timber. Partial regulation of bulk petroleum and fertilisers.
Tasmania	Permit fees applied to the road haulage of bulk cement, bulk fertiliser, limestone, timber, logs, coal and sulphuric acid.

Source: IC 1991b.

The unprofitable urban rail passenger services posed even greater challenges for governments:

For railway authorities this type of service poses a variety of problems. It is highly visible to the general public, chronically in need of capital investment, vulnerable to industrial disputes, and may interfere with other railway operations. (Stevenson 1987, p. 105)

Governments maintained or increased their control over the operation of rail passenger services. Ministers tended to take direct managerial responsibility, and new construction had to be sanctioned by Parliament. When funds permitted, the quality of track and rollingstock was upgraded in an attempt to improve service quality and stem declining rail patronage.

Passenger fares were also tightly regulated. Changes to passenger fares were (and continue to be) driven by a range of financial, social and political factors. For example, in 1976 in New South Wales fares were reduced by 20 per cent to promote patronage despite considerable financial losses at existing fare levels. In other cases, fares were raised in response to increases in wages or other operating expenses.