

Appendix 1: Historical Chronological Matrix

International/National Historical Era	Major Factors/Events of the Era	Key NSW Railway Events	Examples
1770-1815 Industrial Revolution	First industrial railways in UK Founding colony of NSW		
18-29 Jan 1788 First Fleet arrives Botany Bay 26 Jan 1788 Captain Arthur Philip took possession of NSW at Sydney Cove	1785 Bolton & Watt's Soho Foundry, Staffordshire, manufacturing rotative steam engines – revolutionises industry 21 Feb 1804 Richard Trevithick's locomotive hauled train over Penyfaren Ironworks plateway, Merthyr Tyndfil 27 Sep 1825 Opening of Stockton & Darlington Railway, world's first public railway		1785 Bolton & Watt steam engine at Powerhouse Museum, Sydney
1815-1850s settling the inland	Expansion of the pastoral industry west of the Great Dividing Range and into Victoria		
Breaking out: squatter settlement beyond the 1826 boundary of settlement. Establishment of the wool industry as the colony's economic base.	Dec. 1829 AA Coy coal mining monopoly, establishment of the 'A' Pit in 1830 15 Sept 1830: Opening of the Liverpool to Manchester Railway in England – the world's first inter-city passenger carrying railway. It heralded in the <i>Railway Age</i> . 1830s Recovery of the pastoral industry after the 1828-29 drought. 1836: John Dunmore Lang gains support of the British Government for assisted Scottish emigrants to 'cleanse Australian society'. 1835-1840 Expansion of pastoral industry into the Port Phillip District and <i>Felix Australis</i> 1841-42 Economic depression – sheep were virtually unsaleable	10 Dec 1831: Opening of the AA Coy's iron-railed railway at Newcastle – Australia's first industrial railway	c1826 fish-bellied rail from 1831 AA Coy railway (Newcastle Regional Museum)
Economic recovery: Overcoming economic depression	Nov 1840 IK Brunel ordered that London time be used at all stations and on timetable for the Great Western Railway, UK – establishment of 'railway time'. 1842 PN Russell & Company established its iron foundry and engineering business in	1844 Alexander Walker Scott proposes railway from Newcastle to Maitland 1845 Australian Railway Company promotes railway from Sydney to Goulburn 29 January 1846 first public meeting in	Sydney Railway Company papers. Earl Grey's letter of 10 July 1851 approving the 5ft 3in gauge for Australian railways. Ceremonial spade, barrow and memorabilia used in Turning of the First

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	<p>Sydney. 1848 Discovery of the 'Borehole coal seam' at Newcastle 1848: Ironstone Bridge Ironworks made Australia's first iron in a catalan forge at Mittagong.</p>	<p>Sydney for railway from Sydney to Goulburn. Thomas Woore submitted is survey of a route to Goulburn on 17 January 1849. May 1849: AA Coy commences construction of a 2-mile standard gauge railway to its 'D' pit. 10 October 1849: Sydney Railway Company incorporated. Francis Shields appointed engineer 1 Feb 1849. Recommends 5ft 3in gauge on 21 May 1850. This gauge was approved for the Australian colonies by Earl Grey on 10 July 1851 and was adopted by Victoria and South Australia 3 July 1850: Turning of the First Turf Celebration of 'the first Australian Railway' at Cleveland Paddocks. 3 Oct 1851: Burwood Tramroad Act passed, which allowed Dr James Mitchell to extend his horse-worked tramway over AA Coy land to wharves at Newcastle.</p>	<p>Turf Celebration.</p>
1851-1869 The Gold Rushes	10 May 1851: Hargraves promotes his 'discovery' of gold at Ophir in the Bathurst district and a 'gold rush' ensures.		
<p>Labour shortages and immigrants: Non-Aboriginal population of the colonies trebled from 430,000 in 1851 to 1,150,000 in 1861. Major gold discoveries in Victoria in 1851 and these fields generate huge wealth for what soon became a separate colony. Its capital, Melbourne, rapidly outstripped Sydney in population and wealth.</p>	<p>15 June 1851: Discovery of 106lbs nugget at Hargraves near Mudgee. Existing industry and commerce suffers men abandon their jobs for the gold fields. Pastoralists turn to Aborigines to meet their labour needs. 6 Jun 1856: Colonial self-government: Elections for the Legislative Assembly and first Ministry under Stuart Donaldson. Unstable political alliances and regular changes of ministries. Immigrants who failed to find their fortunes on the goldfields sought work elsewhere. 1870s Gold rushes at Gulgong and Hill End</p>	<p>July 1852: Appointment of James Wallace as engineer to the SRC. August 1852: Governor-General agrees to payment of assisted passage of 500 labourers (navvies) from England for railway construction. The first contract labourers arrived on 25 August 1853. May 1855: Immigrant navvies arrive for construction of the Hunter River Railway</p>	

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<p>Early development of transport networks and the establishment of a public corporation – the NSW Railway Commissioners – to operate the railway system.</p>	<p>(the Turon field).</p> <p>March-Sept 1853: The first two steam river boats, the <i>Many Ann</i> and <i>Lady Augusta</i>, travelled from Mannum to Swan Hill and returned with wool, initiating the paddle boat era.</p> <p>1854: Opening of Australia's first public railway, the Goolwa-Port Elliott horse-worked 5ft 3in gauge line in South Australia.</p> <p>1854: Opening of Australia's first steam-operated railway, the Flinders Street to Port Melbourne line built to 5ft 3in gauge.</p>	<p>8 Sep 1853: Wallace proposes changing the gauge of the Sydney Railway Company to 4ft 8½in.</p> <p>10 Oct 1853: Hunter River Railway Company incorporated.</p> <p>22 March 1854: Arrival of first rails in Sydney</p> <p>8 Nov 1854: Turning of the first sod for construction of the Hunter River Railway.</p> <p>2 December 1854: assent of the Construction of Government Railways Act.</p>	<p>Report of the Select Committee on Roads and Railways.</p> <p>Barlow rails used for the Sydney-Parramatta railway (Powerhouse).</p> <p>Minute Book of the NSW Railway Commissioners, 1855. (SRO NSW).</p> <p>Locomotive No. 1 and replica carriages (Powerhouse Museum).</p> <p>Site of original Parramatta Junction Station.</p> <p>Darling Harbour branch overbridge George Street.</p>
<p>Early development of transport networks and the establishment of a public corporation – the NSW Railway Commissioners – to operate the railway system (continued)</p>	<p>15 Nov 1854: Legislative Council Select Committee on Roads and Railways. Chairman Charles Cowper reported that private companies could not construct railways under local conditions and the government should take over these works.</p> <p>1856 Opening of the Adelaide to Port Adelaide steam railway (5ft 3in gauge)</p> <p>March 1863: Victorian Parliamentary Committee into the securing to Victoria the trade of the Murray River generates apprehension in NSW.</p>	<p>10 Jan 1855: First meeting of the NSW Railway Commissioners: Captain Edward Ward (Chief Comm.), Thomas Baker and Charles Kemp discussed extending the railway to Liverpool.</p> <p>16 May 1855: Transfer of the Hunter River Railway Company to the Railway Commissioners</p> <p>26 Sept 1855: Official opening of the Sydney-Parramatta Railway by the Governor-General, Sir William Denison. Branch to Darling Harbour (opened 1856?).</p> <p>16 Sept 1856: Opening of Granville to Liverpool extension.</p> <p>30 March 1857: Official opening of the Great Northern Railway from Honeysuckle Point to a temporary station for East Maitland by the Governor-General, Sir William Denison.</p> <p>Jan 1861: John Rae appointed Commissioner of Railways.</p>	<p>Fairfield Railway Station and Station Master's Residence.</p>
<p>Building the trunk railways: The Whitton era and Developing the inland</p>	<p>John Whitton, engineer for the Oxford, Worcester & Wolverhampton Railway recommended as Engineer-in-Chief by Sir Morton Peto.</p>	<p>15 Jan 1857: Appointment of Whitton as Engineer-in-Chief of the NSW Railways.</p> <p>28 July 1857: Opening of extension to West Maitland by the Governor-General,</p>	<p>Bust/monument to John Whitton at Central Station.</p> <p>Menangle railway bridge (1863).</p> <p>Penrith and Picton railway stations.</p>

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	<p>1861 John Robertson's Land Act in response to the cry of new settlers to 'unlock the lands'. Government income from land 'sales' helped finance railway construction.</p> <p>June 1862: Establishment of Cobb & Co headquarters at Bathurst</p>	<p>Sir William Denison.</p> <p>20 Nov 1857: Report of Select Committee on the Great Trunk Routes of Railway, North, South and West.</p> <p>10 July 1858: Haslams Creek Bridge railway accident</p>	<p>Moss Vale and Goulburn railway stations.</p> <p>Singleton and Muswellbrook railway stations.</p> <p>Lapstone Zig Zag and Knapsack Viaduct.</p>
<p>Building the trunk railways: The Whitton era and Developing the inland (Continued).</p>	<p>1863 Queensland Parliament passes Act to construct the Ipswich to Toowoomba railway to a gauge of 3ft 6in.</p> <p>1864: Opening of the Victorian Railways 5ft 3i gauge line to Echuca and the expansion of that centre as a major port for the river boat trade.</p> <p>1865 Queensland Railways open the Ipswich to Grandchester line.</p>	<p>3 Jan 1861: Newcastle Wallsend Coal Coy branch from Wallsend (Hanbury) Junc opened and coal traffic commences on GNR.</p> <p>1862 Whitton adopts English double-headed iron rails on chairs as NSW standard.</p> <p>7 July 1862: Western Line extension to Penrith opened.</p> <p>1 July 1863: Southern line extension to Picton opened; increase in goods traffic.</p> <p>2 May 1864 East Maitland to Morpeth branch line opened to serve the river trade port.</p> <p>19 May 1869: GNR extension to Muswellbrook opened and wool traffic diverted to the railway.</p> <p>27 May 1869: Opening of the Great Southern Railway to Goulburn.</p> <p>20 September 1869: Opening of Great Western Railway from Mt Victoria to Bowenfels (Lithgow Valley)</p>	<p>The Great Zig Zag at Lithgow.</p> <p>Mt Victoria and Bowenfels railway stations.</p> <p>Branxton station (1863), Singleton station (from 1863) and Greta station (1878)</p> <p>Locomotive E 18 (Robert Stephenson 1542/1864)</p> <p>Locomotive 20N (Kitson 1620/1870) and 6-wheel radial carriage WY666 (Newcastle Regional Museum)</p>
<p>Founding of a manufacturing industry in response to the demand for mining machinery and railway construction.</p>	<p>15 Sept 1851: Fitz Roy Iron-mining Company founded to take advantage of funds generated by the gold boom.</p> <p>1855 Government railway workshops established at Redfern</p> <p>1862-63: Fitz Roy Iron Works Company formed to make rails for railway construction.</p> <p>19 June 1866: Australia's first pig iron made in the blast furnace at the Fitzroy Ironworks</p> <p>1865: Denison Foundry established at Bathurst – manufacturing goods wagons for</p>	<p>Sept 1853: John Eales commences construction of the 6-mile Minmi to Hexham railway – opened early 1857.</p> <p>Nov 1853: Newcastle Coal & Copper Company commenced construction of the standard gauge Glebe railway and the Beach railway. Opened as horse-worked line in June 1854 and converted to locomotive operation December 1857.</p> <p>1869: Local manufacture of rolling stock – PN Russell & Co and Vale & Lacey.</p>	<p>D type 4-wheel goods open wagon</p>

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	the NSW Railways (D and E class) by 1876.		
Colonial rivalry 1870-1889: Protectionism Vs Free Trade and expansion of public services to meet political demands	Building the railway network: the years of rapid expansion	Adoption of 'Railway Time'	
Completing the trunk railways: the change of gauge problem The Great Southern Railway: competing with Melbourne for the Riverina trade	21 Nov 1883 Opening of VR North-East Line to Wodonga 4 Jul 1876 opening of 5ft 3in gauge private line from Echuca-Moama to Deniliquin. Development of wheat farming following the railway	1874 John Whitton designed Sydney station (2 nd) opened 9 Nov 1875 Opening of GSR to Gunning 1 Nov 1877 Opening of GSR to Cootamundra 6 July 1878 Opening of GSR to Junee 3 Feb 1881 Opening of GSR to Albury 14 Jun 1883 Opening of Murray River railway bridge and connection with the VR.	Gunning, Yass Junction and Cootamundra railway stations; Junee railway precinct. Albury railway station and transhipment shed, Murray River Bridge. Locomotive 1905, built Beyer Peacock 1647 of 1877.
Reshaping settlement: a new route across the plains The Great Western Railway frontier line to tap the river trade for Sydney. Creation of new settlements/towns at Narromine, Trangie, Nevertire, Nyngan and Byrock. World's longest (now 3 rd longest) stretch of straight railway track 116 miles, Nyngan to Bourke.	Selectors and the development of agriculture west of the Divide at Wellington, Dubbo and Narromine following the railway opening 14 Jun 1887 SAR 3ft 6in gauge line opened from Petersburg (Peterbrorough) to Cockburn (NSW border) opened.	1 July 1870 Opening of GWR to Rydal 4 April 1876 Opening of GWR to Bathurst 19 April 1877 Opening of GWR to Orange 1 Feb 1881 Opening of GWR to Dubbo 9 June 1883 Opening of GWR to Nyngan 3 Sep 1885 Opening of GWR to Bourke	Clarence to Sodwalls railway line, including viaducts in deviated sections. Wallerawang, Bathurst, Blayney, Orange Wellington, Dubbo railway stations. Station Master's residences at Bathurst, Orange and Dubbo. Whitton lattice iron bridges at Bathurst, Wellington and Dubbo. Railway water facilities at Narromine, Nyngan, Wilga Tank and Byrock.
The battle of the routes, up the Great Dividing Range to Armidale and Wallangarra The Great Northern Railway: linking Sydney with Brisbane. How the choice of route created operating problems and led to the demise of the Northern Tablelands section of the line.	9 Jan 1871 Opening of QR Southern Line to Millhill (Warwick) 3 May 1881 Opening of QR Southern Line to Stanthorpe 14 Feb 1883 Opening of QR Southern Line to Jennings (Wallangarra).	5 Apr 1872 Opening of GNR to Murrurundi 14 Oct 1878 Opening of GNR to Tamworth 3 Feb 1883 Opening of GNR to Armidale 1 Sep 1886 Opening of GNR to Tenterfield 16 Jan 1888 Opening of GNR to Jennings (Wallangarra) and transfer to QR	Murrurundi, Tamworth, Armidale, Glen Innes and Wallangarra railway stations. Werris Creek railway precinct. Ardglen Liverpool Range Tunnel (1877); Tamworth lattice iron bridge.
Colonial rivalry 1870-1889 (continued) A branch line to every village: political agitation for branch lines to rural towns	26 Apr 1877: 'Railway Night' of NSW Legislative Assembly led by Thomas G Dangar voted to break established policy and approved a branch line from Werris	11 Sep 1879 Werris Creek to Gunnedah branch line opened (to Narrabri 1 Oct 1882)	Gunnedah, Narrandera, Hay, Rylstone and Mudgee railway stations. Locomotive 1709 of 1887, built Vulcan

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<p>and hamlets. 24 Sep 1884 George Dibbs' Railway Policy for 1489 miles on new railway lines</p>	<p>Creek to Gunnedah before completion of the GNR to Tamworth.</p>	<p>28 Feb 1881 Junee to Narrandera branch opened (to Hay 4 Jul 1882) 15 May 1882 Wallerawang to Capertee branch line opened (to Mudgee 10 Sep 1884)</p>	<p>Foundry 1172 of 1887.</p>
<p>Building an industrial base in a free trade colony – development of engineering works for the manufacture of railway items. Development of refrigeration and the export trade in meat and dairy products.</p>	<p>1872 Establishment of Mort's Dock & Engineering Company at Balmain. Erection of English-built locomotives for NSW Railways from October 1874. Development of refrigeration for transport of meat and dairy products by Thomas S Mort and ED Nicolle, 1866 to 1878. 28 Nov 1874 First pig iron produced at Eskbank Ironworks – foundation of Lithgow as an industrial centre. Manufacture of iron rails for Sydney's first steam tramway 13 May 1879 Expansion of coal export from Port of Newcastle and opening of coal loading facilities at The Dyke, Carrington. Coal traffic on GNR reached 1 million tonnes in 1877-78 Sep 1879-April 1880, Sydney International Exhibition at the Garden Palace. 30 Nov 1879: Eskbank Iron Company 5-year contract to re-roll condemned iron rails for NSW Railways. 1 April 1880 'first rails of full-size ever produced in Australia' rolled.</p>	<p>24 Jun 1870 first locally built locomotive by Parkinson & Monaghan's for Williams and Blunt; NSW Railways loco No. 10 built at Redfern Workshops. Mort & Company built 4 I class locomotives (36-39) in 1870-71. 1873 Thomas Mort established abattoir and experimental refrigeration works at Lithgow for the slaughter and refrigerated for transport by rail and sea. First successful shipment of frozen meat to London November 1879. 1874: Expansion of Honeysuckle Railway Workshops to service GNR locomotives 1876-77 Hudson Brothers built 200 wagon for the NSW Railways at Redfern 1877 Additional locomotives (Nos 75-78) built at Redfern Railway Works 18 Jun 1878: Opening of Bullock Island branch and loading coal onto ships at The Dyke using hydraulic cranes 1881-82 Henry Vale/Atlas Engineering built locomotives for NSW Railways. 1887 George Cowdery's Eveleigh workshops begin operating</p>	<p>Eskbank railway precinct, including station. Rails with EBIW (Esk Bank Iron Works) rolling marks at Top Points Zig Zag Remaining examples of insulated railway wagons for meat and tank wagons for milk transport. Locomotive No. 78 built Railway Workshops, 1877. Hydraulic Powerhouse at Carrington. Second Newcastle Railway Station (1878); second West Maitland station (1880) Locomotive 1243 (Powerhouse Museum) built by Atlas Engineering (2 of 1882) Eveleigh Railway Workshops and Carriage Workshops.</p>
<p>Expanded demands for government services</p>	<p>The railways as a public enterprise: overcoming corruption and putting railway management in the hands of independent commissioners. The Goodchap and Eddy eras. 1887 Final report, Lynne Royal Commission in the Conservation of Water in NSW proposing large-scale irrigation schemes 1888 Centenary of the First Fleet</p>	<p>29 Jan 1878 John Sutherland (Minister for Works) dismissed John Rae as Railway Commissioner and demoted John Whitton to Engineer for New Lines. Charles Goodchap appointed Commissioner and George Cowdery, Engineer for Existing Lines. 30 Jan 1878 Emu Plains railway disaster Oct 1887, Government Railways Act</p>	

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	celebrations in Sydney, with opening of Centennial Park	placed management of railways and tramways in the hands of 3 Commissioners appointed for 7 years. Oct 1888: Edward Millar Guard Eddy, William Meeke Fehon and Charles NJ Oliver commenced as Commissioners.	
Linking the systems – the Strathfield to Hamilton Railway. Integration of policies and operating practices into a single NSW railway system.	Autonomy of the GNR and increasing political dominance of Sydney interests, with centralisation of trade on the Port of Sydney. Henry Parkes: [This bridge is], without any exaggeration of language, is superior to anything that has ever occurred in the history of these great colonies. In the first place it is a great achievement in itself, and in the second it signifies what must be a large factor in the future of the colonies – the binding together by iron of the four great capitals of Australia. ... [We] in New South Wales are the central power in this [national] railway system, and we are to-day, as it were, marrying the north to the south, and the marriage takes place at this board (Cheers.) ... in this great system of material arteries which we complete to-day, we see the crimson fluid of kinship coursing through all the iron veins.	March 1881, Homebush to Waratah Railway included in Loan Bills 17 Sep 1886 Opening Strathfield to Hornsby 7 Apr 1887 Opening Hornsby to Hawkesbury River 15 Aug 1887 Opening Islington Junction to Gosford 17 Jan 1888 Opening Gosford-Mullet Creek 1 May 1889 Opening Hawkesbury River Railway Bridge	John Whitton memorial, Central Station. The design of this line was the final chapter in Whitton's distinguished career. Hornsby railway station; Hawkesbury River railway station; Fassifern Railway station; Hamilton railway station. Hawkesbury River Railway bridge (remnants). Hawkesbury River to Woy Woy railway vistas, including Woy Woy tunnel.
Incorporating the South Coast: Construction of the Illawarra Railway	Building the railway network (continued) Conquering the Illawarra Escarpment	26 Dec 1885 Opening of line to Sutherland 21 Jun 1887 Opening Wollongong-Clifton 3 Oct 1888 Line completed to Wollongong 9 Nov 1887 Opening to North Kiama 3 Jun 1893 Opening to Bomaderry (Nowra)	Stanwell Park viaduct; Bulli and Wollongong railway stations.
Lean Years: Coping with Economic Depression, 1888-1894	Cost-cutting: the emergence of Pioneer Lines		
Creating employment: public works and the railways	1890 Maritime Strike 9 Oct 1890 NSW Government provided	31 May 1889 Opening Joppa Junc-Cooma	Cooma railway precinct; Yass railway precinct.

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	soldiers at Lithgow to protect strike-breakers May 1893 Banks liquidated and Commercial Banking Coy of Sydney suspended.	20 Apr 1892 Opening Yass Town branch 1 Sep 1893 Cootamundra-Temora branch 18 Dec 1893: Molong-Parkes line opened 24 Dec 1894 Isolated Lismore-Murwillumbah-Condong line opened	Parkes railway station.
Towards Federalism	1891 First Federal Convention in Sydney 1893 Unofficial Federal Convention, Corowa	1890 Introduction of American locomotives & carriages – O and J classes – signifies break from UK traditions. 3 Oct 1892: Opening Culcairn-Corowa line	Corowa railway station and precinct. Pullman-type vintage carriages.
Urban expansion – the dominance of Sydney. Population increased from 360,000 in 1891 to 500,000 in 1902 to become Australia's largest city. Economic depression and drought brought a corresponding decrease in the political influence of rural NSW.	Wealth from the goldfields brought the rapid growth of Melbourne, which had become Australia's largest city by 1861 and experienced a speculative boom in the 1870s-80s, only to dramatically collapse in the 1890s 1890 Election: Labor Electoral League wins 35 of 141 seats in Legislative Assembly Prolonged drought 1894-1903 delayed NSW rural recovery from depression April 1901, Sydney's population (488,969) caught that of Melbourne	15 Oct 1884 Illawarra Junc. to Hurstville line opened 17 Sep 1886 Strathfield-Hornsby line 1 Jan 1890 Hornsby-St Leonards line 1 Feb 1895 Sydenham-Belmore line opened 1 Aug 1901 Rosehill-Carlingford line opened American end-platform carriages built in large numbers (1800) for rapidly expanding suburban rail network	Sydenham & Tempe station groups. Strathfield, Concorde West, Epping, Rhodes. Artarmon, Gordon, Killara, Lindfield, Pymble, Roseville, Turramurra, Wahroonga stations. Belmore, Canterbury, Marrickville, Sydenham stations. End-platform carriages.
Supporting local industry	Wealth from the earth: the rise of Cobar and Broken Hill 1889 Protectionist Union won 36 seats in Parliamentary election Oct 1893: Legislative Assembly introduced levy on imported pig iron to encourage local industry 14 Jan 1894 New plate & sheet mill opened Eskbank Ironworks	2 Jan 1888: Opening of the 3ft 6in gauge Silverton Tramway from Cockburn to Broken Hill to provide rail connection with Port Pirie 1 Jul 1892 Opening of Nyngan-Cobar line Jan 1894 Great Cobar Syndicate reopens the copper mine at Cobar	Cobar railway station and precinct.
Federalism: Building a Nation, 1895-1913	Development of a National identity: romance of the interior through art and literature		
Stepping stones to nationhood.	Jul 1895 elections result in formation of a Free Trade Ministry under George Reid with support of Independent Labor MPs.	1901 Governor-General's carriage built at Eveleigh Workshops; Royal Train Albury to Wallangarra and return	Governor-General's and Railway Commissioner's carriages

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	<p>Nov 1896 People's Federal Convention at Bathurst with urging for a strong industrial base</p> <p>1897-98 Second Federal Convention</p> <p>1 Jan 1901 Proclamation of the Commonwealth of Australia</p> <p>7 May 1901 Opening of Commonwealth Parliament in Melbourne by Duke of Cornwall</p> <p>13 Apr 1910 Federal Labor Government under Andrew Fisher elected</p> <p>Dec 1911 Commonwealth Parliament authorises Trans-continental railway</p> <p>1912 Walter Burley Griffin's design for Canberra selected in international competition</p>	<p>26 Sep 1902 Cobar-Wilcannia Railway Bill passed – construction commenced 1903</p> <p>26 Sep 1905 50th Anniversary of NSW Railways</p> <p>Feb 1913 First steel rails for Trans-continental railway dispatched from Lithgow</p> <p>25 May 1914, Opening Queanbeyan-Canberra line – built with Lithgow rails</p>	
<p>Coping with Drought: the Federation Drought and the decline of rural and regional NSW</p>	<p>Huge stock losses in the Western Division and decline of towns, particularly Bourke</p> <p>Political agitation for cross-country lines to move stock during droughts</p>	<p>Mar-Nov 1902 Water trains from Warren to Cobar maintain the town's population and mines. Political pressure to build cross-country lines to move stock during drought.</p>	
	<p>From ship to rail: The North Coast Line</p>	<p>14 Aug 1911 Maitland-Dungog opened; 4 Feb 1913 Dungog-Taree opened; 27 Nov 1917 Taree-Kempsey section; Grafton-Casino 6 Nov 1905</p>	
<p>Agricultural expansion</p>	<p>Development of wheat varieties suited to local conditions by William Farrer from 1894</p> <p>Joseph Carruthers' Land Act 1895 led to break-up of large pastoral runs</p> <p>Expansion of wheat growing areas along railway lines</p> <p>1906 HV McKay Sunshine Harvester works at Melbourne manufactures wheat harvesters on large scale</p> <p>19 Dec 1906 Barren Jack Dam and Murrumbidgee Canals Construction Act</p> <p>13 Jul 1912 First irrigation water turned on Yanco Regulator</p> <p>1913-15 Walter Burley Griffin prepares town</p>	<p>1 Apr 1897 Narrabri-Moree line opened – first Pioneer Line</p> <p>Feb-Mar 1911 Farmer agitation at inadequate wheat transport by the railways</p> <p>1 Mar 1898 Parkes-Bogan Gate line opened</p> <p>16 Sep 1898 Jerilderie-Finley line opened</p> <p>10 Mar 1902 Moree-Inverell line opened</p> <p>18 Feb 1903 Dubbo-Coonamble opened</p> <p>2 Jun 1908 First train on narrow gauge railway from Goondah Station to Burrinjuck Dam site</p> <p>21 Sep 1908 Tamworth-Barraba line</p>	<p>27 Sep 1905 50th Anniversary feature 'Railways and Agriculture', <i>The Sydney Mail</i></p> <p>Finley railway precinct</p> <p>Ex-Goondah-Burrinjuck Railway locomotives <i>JACK</i> (RTM Thirlmere) and <i>ARCHIE</i> (Burrinjuck Waters State Park)</p>

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	plans for Leeton and Griffith	opened 7 Nov 1908 Narrabri-Walgett line opened 23 Dec 1912 The Rock-Oaklands line opened	
Managing economic institutions	Railway management	21 Jun 1897 Death of Edward Eddy; Charles Oliver to Chief Commissioner October 1901 Design for NSW Head Station at Devonshire Street approved. 30 April 1902 O'Sullivan lays foundation stone for Central Station 3 April 1906 Royal Commission on Railway Management: Board being dissolved new Commissioners appointed 4 Aug 1906: Official opening Central Station Stage 1 building. 4 April 1907 TR Johnson appointed Chief Railway Commissioner	Charles Oliver collection of documents and memorabilia (ARHS RRC) Foundation stones at Central Railway Station. Central Railway Station – basement and ground floor.
Building national industries	Development of Australian locomotive and carriage building capacity 30 Sep 1898: Hudson Bros liquidated and new company, Clyde Engineering Co formed. 24 April 1900: Production of first steel at Eskbank Iron & Steel Rolling Mills 1903 Tenders called for local manufacture of locomotives and Royal Commission established to review the question 25 Sep 1905, William Sandford Limited announced as the successful tenderer to supply locally-manufactured iron to government departments for 7-years 13 May 1907 Official ceremony to blow in Australia's first modern blast furnace for pig iron at Lithgow	1889 William Thow appointed as Locomotive Engineer. 1892 first of 191 renown P6 Class passenger locomotives entered service 1896 first of 280 T Class goods locomotive delivered; followed by 190 TF engines 1903 Introduction of S class suburban tank locomotives (145) 1905: Clyde Engineering awarded contract for 60P and T locomotives; with 10 P Class locos to be built at Eveleigh Workshops. Clyde delivered its first locomotive 1905-1912 Cobar station the highest revenue earner outside the main metropolitan areas.	Steel rails with 'HIS ' rolling marks William Thow's standard locomotives, 3203 (1891), 3214 (1892), 3001T (1903), 5096 (1907), 3085 (1912), 3137 (1916) 6/8-wheel radial carriages W 666/560; end-platform carriages FO 1563/65, 1671, 1688, 1690; Cobar railway station
Building national industries (continued)	2 Jan 1908 Takeover of Lithgow iron and steel works by G&C Hoskins Ltd. Sep 1908: New processing plant completed at Great Cobar mine	1910 Electro-pneumatic signalling introduced in Sydney Railway Yard Aug 1911 Special trains move strike-breakers and armed police to Lithgow	Eskbank railway precinct

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	<p>1 Jan 1909 Federal Government Bonus Bill came into force</p> <p>12 Jan 1911 First steel rails rolled at Lithgow iron & steel works</p> <p>29 August 1911 Industrial riot at Lithgow results in damage to iron & steel works</p> <p>15 Aug 1911: Royal Commission into the NSW iron & steel industry</p> <p>13 Nov 1912 Newcastle Iron & Steel Works Bill passed by NSW Parliament</p>	<p>1912-13 Record of 5.24 million tons of coal shipped through Port of Newcastle</p>	
Defending Australia: The Great War 1913-1919	Role of railways in supporting the war effort		
Preparing for war: building military and naval capacity	<p>Aug 1908 Visit of the US 'Great White Fleet' to Sydney</p> <p>Dec 1909-Feb 1910 Visit of Lord Kitchener to review Australia's defence capacity</p> <p>May 1911: Report of the Royal Commission on decentralisation in railway transit recommends five rail lines in districts more remote from attack to provide connections with northern NSW/Queensland with Victoria and South Australia</p> <p>1912 Opening of Commonwealth Small Arms Factory at Lithgow</p> <p>4 Oct 1913 Australian Naval fleet enters Sydney Harbour for first time</p>	<p>Rail transport of iron ore, coal and limestone to steel works at Lithgow and Newcastle</p> <p>Federation Line: Narromine-Peak Hill (opened 12 Dec 1910); Parkes-Peak Hill (30 Sep 1914); Stockinbingal-Forbes (8 Apr 1918); Forbes-Parkes (18 Dec 1893); Narromine-Dubbo (20 Oct 1892); Dubbo-Merrygoen (8 Apr 1918); Merrygoen-Binnaway (2 Apr 1917); Binnaway-Werris Creek (29 Oct 1923)</p> <p>28 Jul 1914 opening Finley-Tocumwal line – break-of-gauge transfer point with VR.</p> <p>3 Jul 1916: Borellan-Griffith line opened to serve MIA</p>	<p>Stockinbingal railway station; Forbes railway station; Narromine railway precinct; Binnaway railway precinct</p>
Preparing for war: building military and naval capacity (continued)	<p>3 Nov 1913 Second blast furnace blown in at Lithgow iron & steel works</p> <p>2 June 1915: Opening Newcastle steel works by Governor Sir Munro Ferguson</p>		
World War I: Fighting for 'King and Empire'	<p>4 August 1914 Declaration of war in Europe</p> <p>25 April 1916 First ANZAC Day march in Sydney</p> <p>4 Nov 1916 Labor Party split over conscription. Premier Holman and several Ministers joined Opposition leader Wade to form new Nationalist Government</p>	<p>Special trains to bring recruits to Sydney and people of German descent to Liverpool camp; Ambulance trains to transport injured troops from ship to hospital/home towns</p> <p>14 February 1914: Riot at Central Station by troops – 1 soldier killed and several</p>	<p>End-platform carriages used for ambulance trains</p> <p>Bullet holes from riot at Central Station</p> <p>Locomotive 3526 (formerly NN Class)</p>

International/National Historical Era	Major Factors/Events of the Era	Key NSW Railway Events	Examples
	11 November 1918 Armistice Day 19 June 1919 Peace Day celebrations in Sydney	injured August 1914 First NN Class locomotive delivered from Eveleigh workshops 26 March 1920 Amiens Gun place on display at Central station	
National austerity measures	Managing the railways during war 1915: Holman Government 'nationalised' railway refreshment rooms (RRR) by non-renewal of leases and extension of railway management. Leads to vertically integrated railway business manufacturing, procuring and distributing all manner of items for the railway system. 1919 Influenza epidemic Pressure to improve public transport in Sydney: City & Suburban Railways Bill passed on 8 Jul 1915.	7488 Railways & Tramway staff served in armed forces during war; 1210 killed; operation of wartime railways in France Dec 1916 Eastern Suburbs Railway postponed 2 Aug 1917 Great Railway Strike, victimisation of strikers Railways move huge masses of people/troops to city for marches/victory celebrations 19 June 1919 Railways carry 307,115 passengers to and from Peace Day event Railways operated 16,400 special trains for defence authorities during the War Jan 1917 work commenced on City Railway, suspended 12 Jun 1917	Railway Honour Boards (Central Station, Chullora Workshops, Newcastle Station) Newspaper reports/photographs of Great Railway Strike (SLNSW/ SRO NSW) Railway Operating Department locomotive 23 (Great Central Railway 1919 at Richmond Vale Railway)
Putting Thrift Aside: the Inter-War Years, 1920-1938	Rise of protectionism and isolationism		
'Australia Unlimited' sought development in terms of closer settlement of land and associated infrastructure: Investment without saving Demobilising soldiers and integrating them into civilian life: Soldier settlement schemes and post-war migration British Government funded 200,000 migrants to Australia during 1920s.	1921 Italian migrant families settle in Murrumbidgee Irrigation Area Improving the handling and transport of agricultural products: US firm Metcalf & Company appointed as consulting engineers to establish grain bulk handling facilities 1915; pilot silo at Peak Hill tested August 1918.	Jun 1920 Royal Train for Prince of Wales April 1921 World's largest wheat terminal at White Bay (Darling Harbour) commences receiving wheat transported in bulk. Agricultural railways: Henty-Rand (May 1920); Yanco-Griffith line (May 1922); Griffith-Hillston (18 Jun 1923); Barmedman-Rankin Springs (Jan 1923); Canowindra-Eugowra 1 Nov 1925 Great White Train promoting Australian products tours regional centres	Premier's carriage (1920)
Rise of private transport: the motor car, truck and bus – car ownership by 1929 surpassed only by Canada, the US and New Zealand. Roads rather than railways	Aug 1924 Establishment of the Main Roads Board and diversion of public works funding to roads 1929 Opening of the Pacific Highway	Mar 1925 Introduction of C36 class express locomotives 1926 Introduction of CPH rail motors to provide more efficient passenger/parcels	Locomotive 3642; Locomotive 5711 CPH Rail Motors

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<p>become the dominant feature of government funding</p> <p>Stagnation of railways: Management responded to competition from motor transport by seeking legislative protection.</p>	<p>between Sydney and Newcastle</p>	<p>services on branch lines</p> <p>13 Sep 1926 Muralla train accident (42 people killed; 42 injured)</p> <p>Sep 1929 Introduction of D57 Class heavy freight locomotives – twice the power of standard goods locos</p>	
<p>Urban development: the growth of Sydney – Population reached 1 million in 1922 – drift to the cities from rural hardship</p>	<p>13 Apr 1920 Labor government elected with John Storey as Premier; Labor under James Dooley defeated 20 Dec 1922</p> <p>17 June 1925 Labor government with Jack Lang as Premier: acceleration of City Railway and Harbour Bridge construction</p>	<p>17 Feb 1920 Work resumed on City Railway to JJC Bradfield's Plan, with new electric station at Central and a city loop line via Circular Quay.</p> <p>1 Mar 1926 First public electric train from Central to Oatley; 24 Oct 1926 Electric trains on Bankstown line</p> <p>9 Dec 1926 Opening of underground line to St James station</p>	<p>Central Electric Station: shift to North American practice.</p> <p>Museum and St James underground stations</p> <p>Heritage electric trains.</p>
<p>Strengthening Federalism</p>	<p>1927 Opening of Parliament House in Canberra</p> <p>Opening of inter-state rail links: Condobolin-Broken Hill line (connection with SAR via Silverton Tramway); Completion of the standard gauge line to South Brisbane</p>	<p>Mar-Apr 1927: Royal Train Duke & Duchess of York</p> <p>Condobolin-Ivanhoe (Aug 1925); to Menindee (Nov 1927); Menindee-Broken Hill (Jul 1919)</p> <p>25 June 1930 line opened Kyogle to South Brisbane; Grafton rail/road bridge opened 8 May 1932. Introduction of <i>Brisbane Limited Express</i> as premier train on new line</p>	<p>VIP carriages and memorabilia of Royal Train</p> <p>Grafton rail/road bridge</p>
<p>The Great Depression: coping with global economic collapse, 1929-1935</p> <p>Australia's unemployment 31 per cent by 1931. Widening of inequalities of wealth and income.</p>	<p>Supporting the destitute</p> <p>Aug 1928-Jun 1929: Waterside workers seek to prevent strike-breakers from taking their jobs</p> <p>Feb 1929: Miners locked out of collieries at Maitland and Newcastle</p> <p>Nov 1929: Wall Street crash an collapse of the international financial system</p> <p>16 Dec 1929: Police open fire on striking miners at Rothbury Colliery: 1 miner killed and unknown number wounded</p>	<p>1 Mar 1930: South Maitland Railways carriage fleet destroyed by fire: NSWGR takes over services</p> <p>1930 Nobby's Camp established by homeless adjacent to Newcastle Railway Yards</p> <p>Oct-Nov 1934: Royal Train for Duke of Gloucester to many NSW centres provides festive occasion for communities</p> <p>1935 Opening of Newcastle bulk grain terminal at Port Waratah</p>	
<p>Protecting jobs</p>	<p>25 Oct 1930 Labor Party under Lang elected to office by landslide with promise to get public works going</p>	<p>28 Feb 1932 Inauguration of electric train service to Town Hall and Wynyard</p> <p>19 March 1932 Opening of Sydney</p>	<p>Town Hall, Wynyard and North Sydney stations; Argyle Street electric sub-station</p>

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	13 May 1932 Jack Lang dismissed as Premier by Governor Phillip Game; UAP under Bertram Stevens elected	Harbour Bridge and linking of North Shore Line Central Station via new North Sydney station	
Managing public sector debt	Conservative governments seek to reduce public expenditure and minimise debt. Reducing competition between rail and road by legislative means 1930: Tramways placed under Department of Roads & Tramways, placing them under direct influence of roads lobby 1 Sep 1931 Transport Coordination Board established to bring all forms of land transport under coordinated control. Jun 1932 Transport Board dismantled and separate Commissioners appointed for each form of transport.	11 Sep 1929 Resignation of James Fraser as Chief Commissioner for failing to manage the Railways as a business Apr 1930 Commissioner Cleary introduces rationing of staff work to share available work and reduce redundancies. Aug 1930 Railways and Tramways partitioned into sperate organisations 1 Sep 1931 Thomas J Hartigan appointed Ass Commissioner for Railways. Reorganisation of Railways Department structure – Commissioner June 1932.	
The Art Deco movement: 1925-1940s 1925 Paris International Exposition of Decorative Arts & Modern Industries – initiated global expansion of Art Deco design	Nov 1924: Opening of Capitol Theatre & office building in Melbourne – design Water Burley Griffin 1937 Trial run of streamlined <i>Spirit of Progress</i> train between Melbourne and Albury marks a new era in Australian rail travel.	1936: development of Inter-War Functionalist (Art Deco) style of station architecture on NSW Railways under direction of Albert Frewtell. Opening of Railway House as the head office of the NSW Railways. 1937: Introduction of <i>Silver City Comet</i> train between Parkes and Broken Hill: first diesel air-conditioned train in Australia	Hamilton tramway substation (1929) Civic railway station (1936): Albert Frewtell design marked departure from Edwardian to Inter-War Functionalist (Art Deco) style of station architecture. Railway House (1936); Cronulla railway station (1939). <i>Silver City Comet</i> train sets (1937): in Art Deco styling; streamlining on locomotive 3801 (1945). Railway travel posters of 1920s-1930s.
Preparing for War: Strengthening defence capacity 1936 Hitler gained control over German foreign policy 2 July 1937: Second Sino-Japanese War commences	1937 Commonwealth Government imposes restriction on non-British imports > Japanese sanctions against Australian wool. Waterside workers refuse to load pig iron for Japan Oct 1940 Petrol rationing introduced – restricted road transport	1936 Upgrading of Newcastle suburban network with opening of Civic and Wickham stations and improved signalling 1939 British Air Mission recommends establishment of aircraft manufacturing capacity at a site next to Chullora Workshops and discussions on role of Workshops	Civic signal box (Jun 1937) and Newcastle signal box (1937) marked introduction of power-controlled signalling in Newcastle Yard.
Preparing for War (continued) 28 Sep 1938: British PM Chamberlain capitulated to Hitler's demand for	Isolationism in Australian politics 1942 Lithgow Small Arms Factory expanded and munitions plant established at	1939 Establishment of National Emergency Service by Railway Department; basement of Railway House	Chullora Railway Workshops.

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Sudetenland – ‘Peace in our time’	Rutherford (Maitland)	made available for NEC control centre Feb 1941: Railways order additional rolling stock to meet defence needs	
<p>Outbreak of War: Coping with dramatic increase in land transport for the war effort</p> <p>3 Sep 1939: Australia declares war on Germany</p> <p>7 Dec 1941 Australia declares war on Japan. Shift in political alliance of the Australian Government from Britain to the US.</p> <p>Feb 1942 Fall of Singapore and Japanese bombing of Darwin commenced</p> <p>7 Jun 1942 Japanese shelling of Newcastle. Statute of Westminster adopted, signifying Australia’s constitutional independence</p> <p>8 May 1945 End of war in Europe with German surrender</p> <p>14 August 1945 Japanese surrender</p>	<p>Over 8000 railwaymen enlisted or diverted to defence duties; 1000 women brought into the service</p> <p>1941: Industrial conflict in the coalfields results in coal shortages</p> <p>May 1941: Election of McKell Labor Government in NSW</p> <p>1942: Enemy threats to coastal shipping shifts additional freight to the railways – 3 BHP ships lost to enemy action</p>	<p>1939: Construction of a replacement Hawkesbury railway bridge commenced</p> <p>1939 <i>Silver City Comet</i> units assigned to the <i>Federal City Express</i> to Canberra to 1943</p> <p>Jan 1943 Express locomotive 3801 entered service – regarded as pinnacle NSW steam locomotive development</p> <p>Mar 1943 31 special trains transport members of the 9th Division to home centres</p> <p>4 Nov 1943: Cuts in train services to conserve coal</p> <p>2 Feb 1944: US Army DE locomotives commenced operating at Central Station on lease; US Army accident trains also used</p> <p>1 July 1946: 2nd Hawkesbury bridge opened</p>	<p>Hawkesbury River railway bridge. Locomotives 3801; 3810; 3830 (Powerhouse)</p> <p>Locomotive 7923; US Army Brownhoist accident cranes 1080, 1081.</p> <p>Goods transfer shed and overhead transfer crane Albury; ditto for Tocumwal.</p> <p>Wallangarra change of gauge transfer station on Queensland border.</p>
<p>Servicing the war effort</p> <p>1942 Australian Department of Post-War Reconstruction established to plan for a new order</p>	<p>3 Dec 1941: War Railway Committee formed to advise on all Australian railway matters; Tom Hartigan appointed Chairman</p> <p>18 July 1943: Transport (Administration) Act passed to restore ministerial control over the railways</p>	<p>Oct 1941 Tank assembly shop opened at Chullora workshops; Departmental power stations upgraded to expand supply</p> <p>1942-43 Moving Australian and US Army personnel to defend the north – use of the Federal Line and North Coast Railway</p> <p>1944 2000 men and women at Chullora workshops employed on aircraft production; construction of C38 locomotives at Eveleigh and Cardiff Workshops</p>	
Rehabilitating the nation: 1946-1949	Visions for a better world		
<p>Post-war reconstruction</p> <p>Rehabilitating infrastructure and services</p>	<p>1946-47 widespread strike by unions with Communist leadership – severe coal shortages on railways</p> <p>27 June 1949: General coal strike began:</p>	<p>1946 Construction commenced of 10 two-car and 10 three-car diesel-hydraulic trains with light aircraft-type metal alloy bodies, and of 25 D58 heavy freight</p>	<p>600/700 Class two-car diesel train.</p>

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	<p>PM Chifley sent the Army to work open-cut coal mines and railway unions agree to move coal stocks by train.</p> <p>Aug 1949 massive floods in the Hunter and North Coast</p>	<p>locomotives. Contracts let for 250 high-capacity wagons and 4000 steel underframes for 4-wheel wagons.</p> <p>29 Jun 1948: SW Mail accident, Rocky Ponds, 4 killed and 19 seriously injured</p> <p>1947: 25 Beyer Garratt steam locomotives, Australia's most powerful, ordered from the UK (increased to 50 – 42 delivered).</p> <p>Aug 1949: Railway services blocked by floods at Maitland and at North Coast centres</p>	
<p>Building for a post-war Australia</p> <p>13 Jul 1945: Following the death of John Curtin, Ben Chifley, a former NSW Railways locomotive driver, became Prime Minister.</p> <p>1945: Commencement of post-war migration to provide the displaced and homeless with opportunities in Australia – 200,000 refugees arrived by 1950 and 2 million more migrants arrived by 1970.</p> <p>1947 Establishment of Joint Coal Board to improve industry performance</p>	<p>1948 First Holden cars completed</p> <p>1948 Cumberland (Sydney) and Northumberland (Newcastle) County Councils established to plan economic, social and urban fabric of their regions</p> <p>1949 Commencement of the Snowy Mountains Scheme, one of the world's most complex schemes that collects water and melting snow from the Snowy Mountains for the generation of hydro-electricity and diverts it into the Murray and Murrumbidgee Rivers for irrigation</p>	<p>1947 Moving migrants from Sydney to migrant camps</p> <p>1947 NSW Railways pioneered use of steel LCL containers between Sydney and Adelaide</p> <p>2 Apr 1949: Premier McGirr announces rail electrification to Lithgow, Newcastle, Port Kembla and Goulburn</p> <p>1949 Transporting workers and equipment to Cooma for the Snowy Mountains Scheme</p>	<p>NSWGR steel LCL container.</p>
The Golden Age, 1950-1971	Enhancing the nation's wealth		
<p>The Menzies era 1950-1966</p> <p>10 Dec 1949 Liberal Party under Robert Menzies elected to office</p> <p>1950 Outbreak of Korean War: industrialised countries stockpile essential commodities</p> <p>6 Jul 1957: Australia-Japan Trade Agreement signed marks dramatic increase in trade between the two countries, particularly a dramatic increase in coal and iron ore exports</p> <p>1965 Australia responds to President Johnson's to send ground troops to</p>	<p>False Hopes: Following war in Korea, the price of wool increased seven fold giving renewed vigour to rural economies, but extravagant spending led to future stagnation</p> <p>1951 ANZUS Security Treaty negotiated</p> <p>Late 1950s: Rapid housing development in cities: Sydney's population passes 2 million.</p> <p>Feb 1954 Royal Visit by HRH Queen Elizabeth II and HRH Duke of Edinburgh</p> <p>1955 Wangi Wangi opens as the first large coal-fired power station in the Hunter Valley</p> <p>Feb 1955 Record flooding in NSW and</p>	<p>26 Nov 1951: Air-conditioned 4-car diesel train introduced on North Coast Daylight Express; first two 40 Class Alco DE locomotives enter service</p> <p>1950s: Introduction of bogie coal (BCH), wheat (BWH) and limestone hopper wagons (BLH) bring dramatic changes in bulk rail transport</p> <p>June 1952: Prototype electric locomotive built at Chullora made trial trip.</p> <p>Oct 1952: First AD60 Class Garratt locomotives enter service</p> <p>Feb 1954 Royal Train to NSW regional</p>	<p>900 Class air-conditioned dmu train set</p> <p>Electric locomotive 7100.</p> <p>BCH, BWH, BLH bogie hopper wagons for bulk coal, wheat and limestone; insulated vans TRC 31279/31308.</p> <p>Flood marks at Maitland Station and elevated signal box and flood gates provided in response to the floods.</p>

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Vietnam	<p>Queensland brings natural disaster</p> <p>1958: Opening of Newstan conveyer coal loader at Carrington</p> <p>Aug 1961: Bulk carries <i>Cassiopeia</i> loads 15,000 tonnes of export coal at Newcastle for Japan</p> <p>20 Apr 1963: Commonwealth Government announces standardisation of Port Pirie to Broken Hill rail line to proceed</p> <p>20 Jan 1966: Prime Minister Robert Menzies announces his retirement; succeeded by Harold Holt</p>	<p>centres and massive movement of people in special trains</p> <p>1954: Awaba-Wangi Wangi branch opens for coal haulage</p> <p>Feb 1955: Railways closed for a month in the Hunter and many areas across the State due to record floods. Maitland North signal box swept away with loss of 3 lives</p> <p>Sep 1955: NSW Railways Centenary Celebrations: 'The nation's largest business'</p> <p>2 Jan 1962 Inauguration of standard-gauge freight services between Sydney and Melbourne</p> <p>12 Apr 1962: Inaugural run of <i>Southern Aurora</i> train between Sydney and Melbourne</p>	
<p>Domination of transport and leisure by the private car</p> <p>1956 Melbourne Olympic Games and introduction of television</p> <p>Rapid increase in car ownership generates urban sprawl and changed travel patterns.</p> <p>1960 50% of trips in Sydney by private car (70% by 1971)</p>	<p>Managing the railways</p> <p>Nov 1954 Privy Council in London overturned High Court decision to uphold the Road Transport Coordination Act power to tax interstate road hauliers – massive shift of interstate freight from rail to road and increased railway deficits</p> <p>Railway Dieselisation achieves improvements in efficiency and productivity from mid-1950s</p>	<p>26 Apr 1950 NSW Transport & Highways Act proclaimed with Reg Winsor as Director</p> <p>1 Sep 1952 Reg Winsor appointed Commissioner for Railways</p> <p>31 Jul 1956 Neal McCusker appointed Commissioner of Railways. Ebasco Report (Nov 1957) recommends replacement of steam locos with diesels and mechanisation</p> <p>20 Jan 1956 Opening Circular Quay station and City Railway loop</p> <p>9 Jun 1957: Electric trains commence services to Lithgow</p> <p>23 Jan 1960 Opening Hornsby-Gosford electrification extension</p> <p>Aug 1961: Introduction of 620/720 Class diesel railcars on Newcastle suburban services</p>	<p>1950s railway advertisements promoting Windsor's 'vision' of rail travel and transport.</p> <p>Electric locomotives 4601</p> <p>Stainless-steel interurban emu car set</p> <p>620/720 Class railcar set</p>
<p>Growing dissention</p> <p>Rapid expansion of Australia's export of</p>	<p>1 Jan 1966: Changes to State Transport (Coordination) Act reduce charges for road</p>	<p>8 Mar 1967 Eastern Suburbs Railway Bill introduced in Parliament.</p>	<p>First double-deck suburban electric train</p> <p>Double-deck interurban electric train</p>

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<p>raw materials to Japan and other Asian countries</p> <p>May 1965 Election of Askin Government brings 24 years of ALP rule to an end; State affected by widespread drought</p> <p>1968: Year of the barricades: dissention to emancipate the Third World from Cold War imperialism</p>	<p>hauliers – railway deficit > \$12 million</p> <p>1967: MSB coal loader at Port Waratah commences operations</p> <p>1968: Introduction of ISO containers leads to integrated sea and land transport</p> <p>29 Nov 1968: Completion of standard gauge project and first uninterrupted freight train from Sydney to Perth (12 Jan 1969)</p> <p>23 Feb 1969: First <i>Indian Pacific</i> passenger train from Sydney to Perth</p> <p>3 April 1969: Arrival in Sydney of <i>Encounter Bay</i>, first overseas contained ship.</p> <p>Aug 1971: Four-state, 48-hour railway strike for wage increases</p>	<p>4 May 1968: Opening Liverpool-Campbelltown electrification</p> <p>27 Oct 1968 National rail strike involving 61,000 workers</p> <p>Nov 1968 World's first double-deck emu passenger train commences trials</p> <p>10 Oct 1969: Last regular steam-hauled passenger train from Central Station by locomotive 3801</p> <p>22 June 1970: First double-deck interurban emu train entered service to Gosford</p> <p>21 Jul 1971: Last regular steam-hauled passenger train ser vice in Australia, the Newcastle-Singleton and return trains</p> <p>1 Feb 1972: Minister for Transport announced cuts to 58 passenger services on 15 branch lines</p> <p>11 Apr 1972 Railway strike stopped trains in all states except WA. Railway deficit for 1971-72 reached \$32.6 million.</p>	
Reinventing Australia, 1972-1999			
<p>The Whitlam years</p> <p>1972: Election of the Whitlam Government and withdrawal of Australian troops from Vietnam</p> <p>1973 Federal Department of Urban & Regional Affairs established to assist state and local governments to improve urban amenities</p> <p>1973 Energy crisis brought rapid increase in oil and fuel prices</p> <p>1974 new Trade Practices Act based on prohibition rather than administrative investigation of conduct</p> <p>11 Nov 1975 Dismissal of the Whitlam Government by Governor-General John Kerr</p> <p>Dec 1975: Election of Coalition</p>	<p>Public Transport Commission (PTC) era</p> <p>20 Sep 1972: Premier Askin announced that Philip Shirley would be Chief Commissioner of the new PTC, which would take over the running of all trains, government buses and ferries in NSW.</p>	<p>22 Dec 1972: Last use of standard goods steam locomotives on Hunter coal trains</p> <p>23 Feb 1973: Last steam-hauled coal train on PTC network (loco 6042).</p> <p>1974: Upgrade of Broadmeadow station completed under the Urban Public Transport Improvement Program</p> <p>1975: Introduction of CHS Core-ten steel coal hopper wagons overcame corrosion problems on CH aluminium wagons with steel under-frames.</p>	

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Government with Malcolm Fraser as Prime Minister			
The Wran era 1 May 1976: Election of the Wran Labor Government in NSW	Rebuilding public transport Nov 1979: Opening of new electronic Sydney Signalling box 1980-82 Refurbishment of Central Station. 1906 train indicator board donated to Powerhouse Museum in June 1982	18 Jan 1977: Granville rail disaster with loss of 83 lives and 213 passengers injured 23 June 1969: Opening of Eastern Suburbs Railway to Bondi Junction – first use of automatic fare collection in Australia Mar 1980: State Rail Authority (SRA) and Urban Transport Authority (UTA) established to replace PTC 8 Apr 1982: Introduction of XPT high-speed passenger trains on NSW country services 3 Jun 1984: Gosford-Newcastle electrification opened buy Premier Wran	Granville Disaster Monument Central Station train indicator board (Powerhouse Museum) XPT passenger train?
Reinventing Australia, 1972-1999	The role of railways in a global economy		
The Wran era (continued)	Upgrading rail freight services 1977: Port Waratah Coal Services open coal loader with capacity of 16 Mt pa. 1984: Kooragang Island coal loader opened	29 Aug 1985: Last run of TPO mail sorting van in NSW 4 Feb 1986 Opening of Illawarra Line electrification Sutherland to Wollongong 1987 Introduction of Tangara trains on Sydney suburban services 15 Oct 1982: Opening of Sandy Hollow-Ulan line to serve coal mine; extension to Gulgong on 16 Jun 1985 provides link from Port of Newcastle to interstate line to Adelaide/Perth 1983-84: Industrial stoppages, many over demarcation disputes between unions 22 Sep 1987: Last regular steam train working on Richmond Vale Railway	Non-air 4-wheel coal hopper wagons (Richmond Vale Railway, Kurri Kurri)
Towards competition 1982 Election of Labor Federal Government with Bob Hawke as Prime Minister and Paul Keating as Treasurer Nov 1983: Floating of the \$AUS and deregulation of financial controls	NSW Inc. Mar 1988: Election of Griener Government on platform of public sector reform 25 Mar 1995: Election of Labor government with Bob Carr as Premier Apr 1996: Restructure of NSW rail system to	Dec 1988 British steam locomotive <i>Flying Scotsman</i> arrives in Sydney and hauls special trains as part of Bicentenary 11 Apr 1989: SRA restructured under four business arms: Freight Rail, CityRail, Country Passenger and Property Group	

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<p>Jan 1988 National celebrations of the Australian Bicentenary</p> <p>12 March 1991, 'Building a Competitive Australia' statement by Prime Minister Hawke; Special Premier's Conference on competition policy, Nov 1991</p> <p>Oct 1992: Hilmer review leads to National Competition Policy. Feb 1994 COAG agrees to strengthen micro-economic reform; <i>Competition Policy Reform Act 1995</i></p>	<p>achieve National Competition Policy objectives, with establishment of Rail Infrastructure Corporation (RAC) to maintain and sell access to the rail network.</p> <p>Sep 1997: State & Commonwealth Transport Ministers agree that management of the inter-state rail system as discrete state-based systems is no longer acceptable. The ARTC was established to take responsibility for maintaining national track.</p>	<p>Jul 1989: Rail service cuts: closure of 3 lines, elimination of passengers services and loss 8000 jobs</p> <p>12 Aug 1991: High-tech Operations Control Centre opened at Central Station</p> <p>1993 FreightCorp operation of 42-wagon unit coal trains in Hunter Valley. Introduction of new designs of bar-coupled CR12 steel coal hopper wagons</p>	
<p>Towards the new Millennium</p> <p>Mar 1992: National Rail (NR) Corporation commences operations providing freight services on the interstate freight network</p> <p>1992 One Nation program to foster greater inclusiveness</p> <p>Aug 1992: Sydney announced as the successful bidder for the 2000 Olympic Games</p>	<p>Standardisation of Melbourne-Adelaide railway under the One Nation program</p> <p>28 Oct 1997: Great Southern Railway took over AN passenger business, including <i>Indian Pacific</i> and <i>The Ghan</i> trains.</p> <p>Sep 1999: Closure of Newcastle steel works.</p>	<p>1997: Freight Rail became FreightCorp to demonstrate new business culture</p> <p>Apr 1999: NR commences operating unit coal trains in Hunter Valley in competition with FreightCorp</p> <p>1999: Silverton Rail commences freight operations hauling ore trains from Cobar to Newcastle in partnership with NR.</p> <p>2 Dec 1999: Glenbrook rail accident with loss of -- lives</p>	