

## Sydney Metro – a brief guide to a complex history

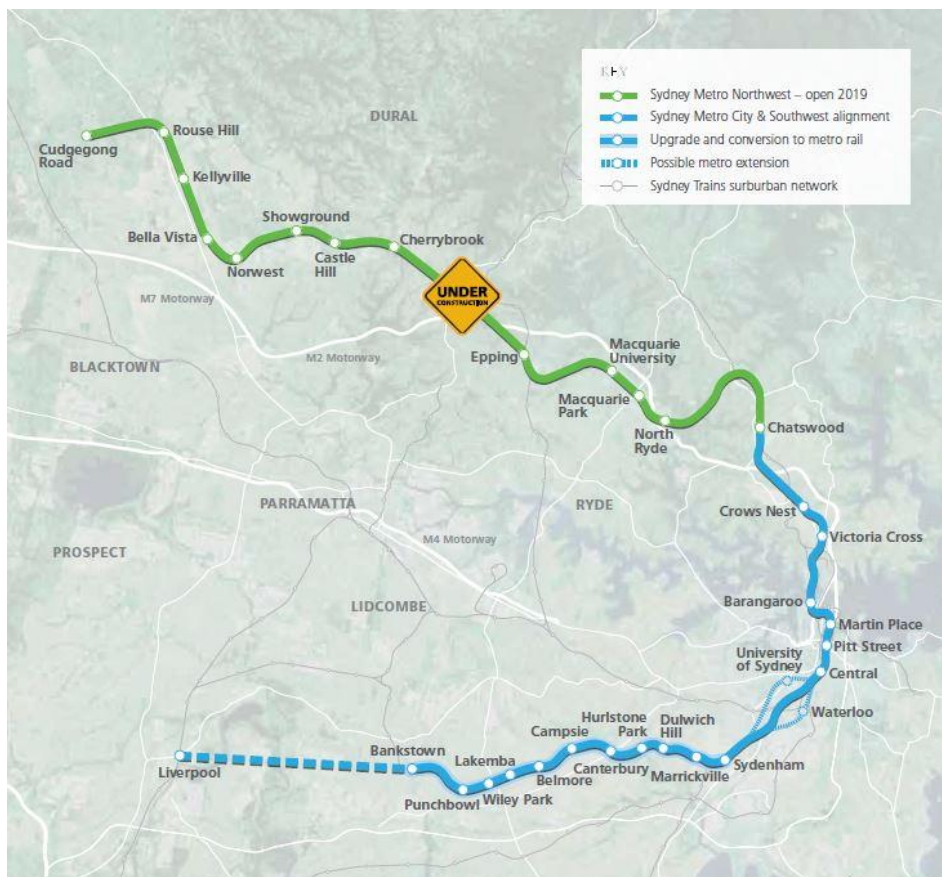
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In researching an article on the implications of the Sydney Metro for the existing suburban rail network, I realised how difficult it was to understand, let alone explain, the very complex way in which the metro concept developed. There were at least half-a-dozen iterations of the proposal, with different modes and several route variations, before the current project was announced in 2012 – and even after that it has continued to evolve.

I decided it would be useful to develop a summary timeline of the project's history. I have drawn from several sources, including several useful Wikipedia articles on [proposed](#) and [implemented](#) rail projects in Sydney, State government reports and media releases, the government's [Metro site](#), the [Transport Sydney](#) blog, [my earlier posts](#) on the metro and media reports.

Please note that this summary does not consider metro proposals prior to 1974, nor those made subsequently for metros and rail lines that were completely unrelated to either the earlier planned northwest and southwest heavy rail lines or the current metro projects. It also does not address related issues such as the genesis of the Sydney Metro West proposal prior to its announcement in 2016 or the debate over the state government's leasing of government electricity assets, in part to provide capital for these projects. I have also included planned events from 2018 to 2026.

While I will continue to express my views of the Metro project and have added some comments to the timeline, I have tried to keep this summary as neutral as possible. If I have left anything out or got something wrong please contact me.



*Sydney Metro alignment (source: Sydney Metro website)*

## Timeline

1974 TO 2011	
<b>1974</b>	<a href="#">Sydney Area Transportation Study</a> proposes a line from Parramatta to Windsor via the Hills district.
<b>1995</b>	Labor wins the NSW state election.
<b>1998</b>	<p><a href="#">Action for Transport 2010</a> proposes the North West Rail Link (NWRL), a conventional rail line which would branch from the Main North line north of Epping to run to Castle Hill.</p> <p><i>Comment: This was the first proposal for a link along a corridor similar to the one currently under construction.</i></p> <p>The <a href="#">Parramatta Rail Link</a> (PRL) is also announced as part of <i>Action for Transport 2010</i>.</p>
<b>2002</b>	<p>Construction commences on the PRL.</p> <p>The state government releases a report detailing the preferred route alignment for the NWRL, from Epping to Mungerie Park at Rouse Hill.</p>
<b>2003</b>	The government announces that the Epping-Parramatta section of the PRL would be postponed indefinitely. Work continues on what is now known as the Epping to Chatswood Rail Link (ECRL).
<b>2005</b>	<p>The NWRL is incorporated into the <a href="#">Metro Rail Expansion Program</a> (MREP), which also involves the construction of the <a href="#">South West Rail Link</a> (SWRL) from Glenfield to Leppington and tunnel under the CBD and Sydney Harbour between Redfern and Chatswood.</p> <p><i>Comment: The NWRL would have been connected via the ECRL and the Redfern-Chatswood tunnel to the SWRL provide a limited-stop service linking Sydney's NW and SW suburbs via the CBD. The MREP was also the first proposal involving the NWRL to address congestion issues in the existing network by providing an alternative corridor for trains from the Main North and Macarthur lines, freeing up train paths in the CBD for trains from other corridors, particularly from the Main West line.</i></p>
<b>2008</b>	<p>The government replaces the NWRL with a proposed stand-alone North West Metro line to run to the CBD via Ryde and Drummoyne.</p> <p>Later <a href="#">the plans are changed again</a> to a shortened CBD Metro from Central to Redfern, subsequently announcing the North West Metro is to be deferred indefinitely.</p>
<b>2009</b>	The <a href="#">Epping to Chatswood Rail Link opens</a> . The project's budget has blown out by nearly \$1 billion to \$2.3bn.
<b>2010</b>	After a change in Premier the state government dumps the North West Metro plans and returns to the previous NWRL proposal.
<b>2011</b>	The Coalition opposition also <a href="#">commits to building</a> the NWRL in the run-up to the state election, which it wins in a landslide over Labor.
2012 TO 2017	
<b>2012</b>	<p><a href="#">The new government announces</a> that the metro proposal is to be revived as Sydney Rapid Transit. The line forms part of <a href="#">Sydney's Rail Future</a> and the <a href="#">NSW Long Term Transport Master Plan</a> and is to be constructed as a single-deck privately-operated metro from Rouse Hill (later Cudgegong Road) to Epping and then to Chatswood along the ECRL which will also be converted to metro.</p> <p><i>Sydney's Rail Future</i> also proposes conversion of the whole Bankstown line to Cabramatta and Lidcombe, as well as a section of the Illawarra line from Sydenham to Hurstville, and a new Harbour tunnel from Sydenham to connect to the NWRL at Chatswood to form the Sydney Rapid Transit network.</p> <p><i>Comment: This decision is a key turning point for Sydney's rail system. The new tunnels will be too small for double deck trains and the new trains will be incompatible with the current network. It</i></p>

also introduces private sector operation and the conversion of existing infrastructure to both metro standards and private operation. Another fundamental change from the original MREP proposal is that instead of freeing up capacity on the existing network by connecting the Macarthur line to the new link, the conversion of the Bankstown line and the link via Sydenham to the CBD and the Harbour tunnel will in effect take over this role.

**2013** The metro plan [is strongly criticised](#) by a number of transport planners. TJHD Consortium (Thiess, John Holland and Dragados) [is awarded](#) the \$1.15 billion Tunnel and Station Civil Works contract for the north west metro. Italian company Salini Impregilo [is contracted](#) to build the Skytrain portion between Balmoral and Windsor Road, including a 270m cable-stayed bridge. Construction of the metro commences.

**2014** The Northwest Rapid Transit (NRT) Consortium (John Holland, MTR Corporation – operators of the Hong Kong metro, Leighton Contractors and UGL Rail Services) [is awarded](#) a \$3.7 billion operations contract to deliver eight new stations and parking, upgrade the ECRL, procure rolling stock and design, build, finance, and operate Sydney Metro Northwest for a 15 year period. This is the largest Public Private Partnership ever awarded in NSW. The [government announces](#) that the metro trains will be driverless and the stations equipped with platform doors. [Alstom are contracted](#) to provide 22 Metropolis trainsets and automatic control systems. The trains will have six cars but the metro platforms will be long enough for expansion to eight cars. There will be 15 trains per hour in the peak, with a potential maximum of 30 trains. *Comment: The government claims this means the metro will deliver greater capacity than the current double-deck rolling network, but this [claim is questioned](#) and it is clear that the new trains will have [a much lower proportion of seats](#).*

**2015** The [South West Rail Link opens](#). This is the only major element of the 2005 Metropolitan Rail Expansion Program to be completed as a conventional heavy rail link. A life-size model of a metro train carriage [is developed](#) for customer testing. This reveals that the trains will have 378 seats but these are all longitudinal. The [government commits](#) to a second stage of the metro, to run from Chatswood via stations at Crows Nest and Victoria Cross under the Harbour and the CBD to Sydenham, connecting with the Bankstown line which will be converted to metro standards as far as Bankstown. The two stages are renamed Sydney Metro Northwest and Sydney Metro City and Southwest respectively. The combined route will be 66km long and will have 31 stations. Locations for the CBD stations [are announced](#), at Barangaroo, Martin Place, Pit Street and Central. Later in the year Waterloo is nominated over Sydney University as another inner-city station. Sixty buildings overall are to be acquired and demolished for the metro. Nineteen of these are in the CBD, including several skyscrapers. [It is revealed](#) that the conversion of the Bankstown Line stations is complicated by the number of curved platforms involved that will need straightening to conform with metro requirements, including platform doors. *Comment: The Bankstown Line conversion will not include the sections from Bankstown to Cabramatta and Lidcombe, or the Sydenham to Hurstville section. These lines will continue to be serviced by the existing train fleet.* The NSW Greens Transport Spokesperson [claims the metro](#) is “privatisation of the rail network by stealth”.

**2016** Tunnelling for Sydney Metro Northwest [is completed](#) – but cracks and buckling [are detected](#) in the Skytrain viaduct.

In the 2016 budget [the government commits](#) \$5.8 billion to completion of the Metro Northwest and \$6.2 billion over four years to commence the second stage City and Southwest. The government seeks community feedback over a proposal to extend the metro line to Liverpool. The [Sydney Metro City and Southwest Business Case Summary](#) is released. This claims a benefit-cost ratio for the project of 1.47 to 1.6. It also reveals that when fully completed the Sydney Metro will require an additional 37 six-car trains for a total of 59 sets to operate at four-minute intervals. At its maximum capacity, with 30 eight-car trains an hour carrying up to 1,539 passengers each, the line could carry 46,170 passengers per hour per direction.

*Comment: This appears to be the first detailed statement of the total number of trains the complete network will require, their capacity and the overall maximum capacity of the Metro when fully operational, if trains were to be extended from six to eight-car sets.*

The [government announces Sydney Metro West](#), a second metro line that will connect Parramatta with the Sydney CBD. Little information is provided about the metro's route, except that there will be stations at The Bays Precinct and Sydney Olympic Park.

**2017** The EIS for the Chatswood to Sydenham section of the Metro City and Southwest [receives planning approval](#).

The ABC uses Freedom of Information provisions [to obtain proposed timetables](#) and route changes developed in 2014 in response both to the temporary closure of the Epping to Chatswood Rail Link in 2018 for metro conversion and ultimately when it reopens 2019 as a metro and suburban services are altered permanently. The timetables also seek [to improve capacity](#) in response [to sustained growth](#) in train use and include some cuts to Western Line services. The [Minister for Transport strongly denies](#) that these are current proposals.

#### 2018 TO 2026 (PLANNED)

**2018** The ECRL [will close for at least seven months](#) to allow conversion to metro operation. Tunnelling is due to commence for the Sydney Metro City and Southwest.

**2019** Stage one Sydney Metro Northwest is due to open.

**2019-2023** The Bankstown Line [will close for up to two months every year](#) as part of the City and Southwest metro conversion process, and for up to six months in 2023 prior to the metro opening.

**2024** Stage two Sydney Metro City and Southwest is due to open.

**2026** The approximate date the Sydney Metro West (to Parramatta) is due to open.

Compiled April 2017

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