

# Australian light rail lines completed or extended since January 2010, or with government commitments to build by 2020

Prepared by Alex Gooding, Director, Gooding Davies Consultancy

As at May 2015 (excludes the Melbourne tram system, planned lines without specific commitments to build before 2020 and tourist or heritage tramlines)

City (State/Territory)	Adelaide (SA)	Sydney (NSW)	Gold Coast (Qld)	Sydney (NSW)	Canberra (ACT)
Light Rail (LR) Line	Glenelg Tram	Dulwich Hill Line	Gold Coast Light Rail	Planned: CBD and Eastern Suburbs Light Rail (CESLR)	Planned: City to Gungahlin
<b>SUMMARY</b>					
System/Marketing name	Adelaide Metro: Route Tram	Sydney Light Rail: Line 1	G:Link	Sydney Light Rail: Line 2	Capital Metro: Stage 1
Status	In operation	In operation	In operation	Planned - contract signed	Planned - consortia shortlisted
Operator/Proposed operator	Adelaide Metro	Altrac Light Rail	Goldlinq	Altrac Light Rail	To be determined
Year first opened (as LR)/planned to open	1929 (prev. suburban railway)	1997 (prev. freight rail line)	2014	2019 (planned)	2019 (planned)
Year last extended	2010	2014	n/a	n/a	n/a
<b>TECHNICAL</b>					
Total route length (km)	15	12.8	13	12	12
Terminal stations/stops	Glenelg - Entertainment Centre	Dulwich Hill - Central Station	Gold Coast Uni Hospital - Broadbeach South	Kingsford and Randwick - Circular Quay	Gungahlin Place - City Centre (Alinga St)
Line description	Runs as a radial line to and then through the CBD.	Runs circumferentially then becomes a radial line to the edge of the CBD.	Runs through the core of the Gold Coast to form a transport "spine".	Will start as two branches combining to run radially to Central, then through the CBD.	Will run as a radial line to the CBD.
New construction or conversion existing track	Conversion (1929) - New (2007 & 2010)	Conversion (1997, 2000, 2014)	New	New	New
Length last section built (km)	1.6 (2007) 2.8 (2010)	5.6	13	n/a	n/a
Line branches	No	No	No	Yes: ends in two 3km arms	No
Number stations/stops	28	23	16	19	13
Average distance between stops (metres) <sup>1</sup>	556	582	867	667	1000
Fleet type(s)	Flexity Classic, Citadis 302	Variotram (being phased out), CAF Urbos 3	Bombardier Flexity 2	Alstom Citadis X05 (33.4m), coupled in pairs	Likely to be either Bombardier or CAF
No. light rail vehicles	21 (15 Flexity, 6 Citadis)	12 (from June 2015)	14	30	Not known
Max. vehicle capacity (average across fleet) <sup>2</sup>	179 (Flexity), 186 (Citadis)	200 (CAF vehicles only)	309	233 each vehicle, 466 when coupled	Not known
<b>COSTS</b>					
Total cost (lines/sections opened since 2010) <sup>3</sup>	\$94 million (2010 \$)	\$176 million (2014 \$)	\$1.6 billion (2014 \$)	\$2.1 billion (est)	\$823 million (est)
Cost per kilometre	\$33.6 million	\$31.4 million	\$123 million	\$175 million	\$68.6 million
Cost benefit estimate (line/sections opened since 2010) <sup>4</sup>	Not available	1.0	1.65	1.9	1.2
<b>PERFORMANCE</b>					
AM peak trip time (minutes, end to end) <sup>5</sup>	55	39	33	39 (each branch)	25
AM peak trip speed (kph)	16.4	19.7	23.6	13.8	28.8
Peak frequency <sup>6</sup>	5-10 minutes	10 minutes	7.5 minutes	4 minutes (city end)	6 minutes
Avg. daytime frequency	15 minutes	15 minutes	7.5 minutes	5 minutes (city end)	15 minutes
Annual patronage (last recorded or estimated)	2.3 million (2013/14 boardings not incl. transfers)	3.9 million (2013/14 - includes only 3 months of extension operation)	6.3 million (2015 estimate based on first 9 months operation)	31.4 million (projection)	5.5 million (projection)
Average daily patronage (rounded, based on annual) <sup>7</sup>	6,300	10,700	17,300	84,900 (based on projection)	15,000 (based on projection)
<b>INTERCHANGES</b>					
Train (no. interchanges)	Yes (1)	Yes (2)	No (1 if extended)	Yes (4)	No
Bus	Yes	Yes	Yes	Yes	Yes
Ferry	No	No	No	Yes	No
Other light rail (no.)	No	No (1 planned: L2)	No	Yes (1: L1)	No
<b>OTHER</b>					
Extension/expansion options	Plan to extend to Outer Harbour, Semaphore, West Lakes and Grange as part of the long-term development of a new tram/LR network.	No plans to extend this line but will interchange with the planned CESLR line.	Proposals to extend north to Parkwood and/or Helensvale or west to Nerang to meet the rail line. Also proposal to extend south to Burleigh Heads and Coolangatta.	Options to extend in the Anzac Pde corridor to Maroubra Junction, Malabar or La Perouse under investigation.	Proposal to extend from City Centre to Russell being considered. Also seen as providing the core for longer-term development of a LR network.

Sources: Relevant State/Territory Government annual reports, strategic plans and business plans, transport statistics and operational timetables, media articles and Wikipedia

<sup>1</sup> On some lines there can be considerable variation in actual distances between stations/stops

<sup>2</sup> Based on media statements and manufacturer specifications which may vary depending on seating configurations and density used to calculate numbers of standing passengers

<sup>3</sup> Inclusions in project costs can vary greatly from project to project

<sup>4</sup> Based on estimates provided in business cases media releases, with adjustment where possible to reflect actual costs. Estimates may vary however through the implementation of the project

<sup>5</sup> Based on media statements or timetables. Definitions of peak hour may vary

<sup>6</sup> Based on media statements or project plans

<sup>7</sup> Averaged over a seven day week and so does not account for different patronage levels on weekdays and weekends