## Australian and New Zealand CBD Rail Projects: Key Features

CITY	AUCKLAND	BRISBANE	MELBOURNE	SYDNEY
Project name	City Rail Link	Cross River Rail	Melbourne Metro Rail	Sydney Metro: City & Southwest – Chatswood to Sydenham section <sup>3</sup>
Brief description	Will remove the dead end constraint at Britomart, allowing trains to run both ways through the CBD & doubling capacity.	Will connect north & south rail networks, ease congestion & improve reliability & CBD access	Will unlock the centre of the network, improve capacity, reliability and frequency and support expansion	Will significantly increase capacity through Sydney's CBD & form core of the standalone 66km Sydney Metro
<b>Construction start</b>	2016	2017/18	2017	2017
Completion/opening	2023	2023	2026	2024
Estimated total cost	NZ\$2.4 billion	A\$5.4 billion	A\$10.9 billion	A\$11.5-12.5 billion+4
Key construction components	New tunnels and surface track, new & upgraded stations	New tunnels, surface track and stations	New tunnels and stations	New tunnels and new and upgraded stations
Total route length	3.5 km	10.2 km	9 km	16.5 km
Tunnel length	3.5 km x2	5.9 km x2	9 km x2	15.5 km x2
Compatible with	Yes	Not stated but likely	Partial (longer trains,	No (single deck,
existing system			different signalling)	driverless)
Integrated or	Integrated with all	Not stated	Separated involving	Separated with
separated line	existing lines		existing lines	conversion exist. lines
Additional stations <sup>1</sup>	2	5	5	7
Rail interchanges	2	2	2	4
CBD stations / interchanges	3 / 1 (Britomart)	2 / 2 (Roma Street)	2 / 2 (Melb. Central, Flinders Street)	4 / 2 (Central, Martin Place)
Station links/ interchanges with existing/planned lines	N: Britomart (all lines) S: Mt Eden (all lines) <sup>2</sup>	N: Albion (Sunshine Coast)* S: Dutton Park (Gold Coast)* * to be confirmed	NW: Footscray (Sunbury) SE: Hawksburn (Cranbourne/ Pakenham)	NW: Chatswood (NW Metro/Main North) SW: Sydenham (Bankstown)
End stations (new section)	N: Karangahape S: Aotea	N: Exhibition S: Boggo Road	NW: Arden SE: Domain	NW: Crows Nest SW: Waterloo
Projected train frequency (each way)	Not stated	19 trains/hr	Not stated	30 trains/hour
Est. <u>additional</u> peak capacity (each way) <sup>5</sup>	7,500/hr	Not stated	6,500/hr (initial, up to 16,500+/hr by 2031)	20,000+/hr
New or existing fleet	Not stated but likely to use existing fleet initially (NZ AM trains)	Not stated but likely to use existing fleet initially (probably NGR trains currently being delivered)	New train fleet being delivered (HMCT)	New metro fleet on order for stage 1 + likely additional trains (Alstom Metropolis trains)
No. new trains/cars	Not stated	Not stated	65 / 450 cars	22 trains / 132 cars (stage 1 only)
Train capacity / seats <sup>6</sup>	373 / 230 (3-car)	964 / 454	1,100-1,380 / 552	1,100 / 378
No. cars per train <sup>6</sup>	3 or 6	6 (platforms max 9)	7 (platforms max 10)	6

- 1 Including new underground stations or platforms attached to existing stations
- 2 Auckland City Rail Link will provide different loop paths for all services
- 3 This will form part of the CBD and Southwest metro project along with the converted Bankstown line. In turn this project will be integrated with the Northwest metro from Chatswood to Cudgegong Road due to open in 2019.
- 5 Estimate is for new lines only and does not include capacity freed up in the rest of the respective train networks. The method of calculating capacity varies between systems and these estimates also do not indicate projected usage levels.
- 4 Cost is for overall Sydney CBD and SW metro, including Sydenham to Bankstown section
- 6 Based on assumptions about future train design, number of seats and crush capacity estimates, all of which may change.