

COMPARISON: MONTREAL REM AND SYDNEY METRO

	MONTREAL: RÉSEAU EXPRESS MÉTROPOLITAIN (REM)	SYDNEY: SYDNEY METRO
PROJECT OVERVIEW		
Owner	CDPQ Infra	NSW Government (Transport for NSW)
Operator	SNC-Lavalin-Alstom	Metro Trains Sydney: MTR, John Holland & UGL Rail
Line length/no. branches	67 km / 4 branches	66 km / no branches
Opening	2021: Rive-Sud-Central Station 2022: Central Station-Du Ruisseau 2023: Remainder of system	2019: Tallawong-Chatswood (open) 2024: Chatswood-Bankstown
Termini	Northwest: Deux-Montagnes, West: Sainte-Anne-de-Bellevue, Southwest: Airport, Southeast: Rive-Sud	Northwest: Tallawong, Southwest: Bankstown
Estimated total cost	CA\$6.5 billion	AU\$19.8-20.8 billion+
CONSTRUCTION		
Key construction elements	New and upgraded surface track, tunnels and stations, new viaducts/bridges	
Track gauge/ electrification	1,435 mm (standard gauge) / Overhead 1500 VDC	
Compatible existing lines	No	
Existing track conversion/%	30km / 45%	26km / 39%
Tunnel type & lengths/%	New 3.5 km, upgrade 5km, total 8.5km/13%	New 30km, upgrade 13km, total 43km/65%
No. stations/underground/elevated/average spacing	26 (12 new) / 5 / 5 / 2.4km (Rive-Sud to Deux Montagnes)	31 (15 new) / 14 / 2 / 2.2km
No. rail interchanges	4 (2 Metro, 1 Exo, 1 Metro & Exo)	8 (6 Sydney Trains, 2 light rail)
Platform length/doors	80m / Yes	Avg 170m / Yes
Expansion options	Extensions being considered: Laval branch, Chambly extension, Dorval extension/station, East Island Line (new)	Planned new line: Metro West: Westmead – Sydney CBD
ROLLING STOCK		
Company/model/country of manufacture	Alstom Metropolis / India	
Control/max. speed	Automatic (driverless) / 100km/h	
No. cars/trains	212 cars/106 trains (2-car configuration)	270 cars/45 trains (6-car configuration)
No. cars per train/length	2 (off-peak) or 4 cars (peak)/38 or 76 m	6 cars/120 m (est). Future 8 cars/160 m
Max. train capacity ¹	2-car: 390 (4-car: 780)	6-car: 1,100 (8-car: 1,540)
No. seats car/train (avg)	32 / 2-car: 64 (4-car: 128)	63 / 6-car: 378 (8-car: 504)
Seating style/no. doors	Longitudinal seating / 6 doors per car (3 per side)	
Other features	Spaces for wheelchairs, prams, bicycles and luggage, real time info displays, phone coverage, A/C, heated floors, LED lighting, wi-fi, CCTV, capacity indicators, snow and ice protection	Spaces for wheelchairs, prams, bicycles and luggage, real time info displays, phone coverage, A/C, LED lighting, CCTV
OPERATION		
Average speed	56km/h	50km/h
Initial frequency off-peak/peak (per hour) ²	4-24 trains/hr (15-2.5 mins)	6-15 trains/hr (10-4 mins)
Projected max frequency ^{2,3}	40 trains/hr (1.5 mins – 4-car))	30 trains/hr (2 mins – 8-car)
Est. max. capacity (peak) initial/projected ³	18,720/hr (4-car – 24 trains/hr) 31,200/hr (4-car – 40 trains/hr)	16,500 (6-car – 15 trains/hr) 46,200 (8-car – 30 trains/hr)
Est. seat capacity (peak) initial/projected ³	3,072 (4-car – 24 trains hr) 5,120 (4-car – 40 trains/hr)	5,670 (6-car – 15 trains/hr) 15,120 (8-car – 30 trains/hr)

Notes: 1. Each system may have used different approaches to calculating maximum carriage/train capacity.

2. Frequencies may vary in operation and from section to section of each system.

3. Projected maximum peak hour frequencies and capacities are theoretical and may never be achieved.