

Table 7.1 Comparison of the different impacts of light rail and Bus Rapid Transit in the CBD

	Light Rail	BRT
Description of Projects	Anzac Parade to Central Station to Circular Quay along George Street. Partial pedestrianisation of George Street (shared with light rail).	Bus tunnel Harbour Bridge to Wynyard and Town Hall, possible East-West connections via Cross City Tunnel. Redevelop Wynyard and Town Hall stations. Full pedestrianisation of parts of George Street.
Scoping Estimate	\$1-2 billion	\$2 billion
Bus Route Changes	Many routes terminated at edge or mid of CBD, or through-routing (through mid CBD).	Relatively few network changes required (some desirable to support high frequency "turn up and go" trunk services and to support more varied trip patterns).
Customer Impacts		
Passenger Capacity	Will provide 9,000 customer trips per hour on George Street – assuming 45m vehicles every 2 mins (which is less capacity than current buses). There will be fewer light rail vehicles than the buses they replace, but the light rail vehicles will be more fully occupied.	New sub surface capacity of 20,000 customers per hour utilising standard buses (75 passengers per bus)
Standing	Two thirds of customers will be standing in the CBD when full; smoother ride mitigates.	One third customers standing in standard buses
Passenger Interchange	Forced interchange to access light rail from some suburbs where current direct bus services will cease. Customers on bus services that continue into the CBD will need to interchange onto light rail in the CBD to access north of Town Hall.	Relatively little forced interchange due to minimal change to existing bus services
Travel time and reliability	The trip from Wynyard to Town Hall will take longer than a sub-surface BRT due to intersections and other surface disturbances, and the interchange requirement.	Sub surface buses will travel from Wynyard to Town Hall consistently in 2-3 minutes.
Wider CBD Impacts		
Pedestrian amenity	Shared pedestrian use of George Street. One light rail vehicle passes every minute in peak hours (combined up and down services assuming passing times of 30 seconds including a safety buffer)	George Street fully pedestrianised
Traffic congestion	Combination of additional light rail vehicles (with limited flexibility in traffic), likely continued bus services to mid CBD, and pedestrianisation will increase traffic congestion.	Additional sub-surface capacity allows for pedestrianisation without increasing CBD congestion
Wynyard and Town Hall stations	Does not include full redevelopment	Includes full redevelopment.

