

ACT Light Rail Project – Capital Metro

July 2014

A key election commitment of the ACT Labor Government in 2012 was the establishment of the ACT's first large-scale private sector partnership to plan, finance and develop the first stage of a Light Rail Network for Canberra – the Capital Metro.

The Light Rail Network will provide greater connectivity and capacity between future growth centres and the City, encourage greater use of more sustainable transport modes, and encourage further economic development within the Gungahlin to CBD corridor.

Over the past year, the ACT Government has appointed a Capital Metro Project Board, commenced a Light Rail Integration Study, appointed technical advisors to the Capital Metro Agency and released preliminary designs for the project for public consultation.

By early 2015 the Capital Metro Agency intends to procure a consortium to build and operate the light rail system, with construction to commence in 2016.

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Capital Metro

Stage one of Capital Metro will be a light rail service with vehicles capable of carrying up to 200 people at 8–10 minute frequencies along a 12km route from Hibberson Street in Gungahlin to the City Centre.

The proposal will involve major stations at Gungahlin Town Centre and Dickson Group Centre with high quality stops 750m–1.5km apart at various points along Flemington Road and Northbourne Avenue, terminating between Allara and Rudd Streets close to the City Bus Interchange. In earlier planning stages, Capital Metro stage one has been known as the City to Gungahlin Project.

Stage one of Capital Metro will be developed on the median alignment along Flemington Road and Northbourne Avenue. It is proposed to retain the existing verge and median widths along Northbourne Avenue and also provide dedicated 3 metre wide segregated cycle lanes to improve cycling safety along Northbourne Avenue. Flemington Road will include 1.5m dedicated cycleways in the verge. Improvements will also be made to pedestrian infrastructure along the corridor.

The development will help manage congestion on the crowded Flemington Road Northbourne Avenue corridor and the broader Canberra road network. Currently travel delay during the AM peak is approximately 16 minutes. The completion of Capital Metro stage one is projected to reduce travel delay by up to 6 minutes based on the business as usual scenario. Capital Metro's travel times are estimated to be at least 30 per cent faster than general vehicle traffic.

Capital Metro stage one is anticipated to be completed by 2018, with construction estimated to commence in 2016. This timeframe is comparable with the Gold Coast light rail project, which is now under construction and is estimated to have an 8 year project life from project inception to completion.

Options currently under consideration for the second and subsequent stages of Capital Metro include Kingston (East Lake) to the City via Barton, Woden to the City, Woden to Erindale and Tuggeranong, as well as to Belconnen, Weston Creek and Molonglo.

Funding

Stage one of the project is estimated to cost around \$524.1 million. The ACT Government recognises that the Light Rail Network in Canberra cannot materialise without realistic consideration as to how it would be funded and how it might contribute to the sustainable development of the city.

Previous studies on transport in the ACT indicate that smaller scale interventions, such as bus lanes, are likely to deliver minimal changes in sustainability. On the contrary, rapid transport such as a Light Rail Network may be economically beneficial, however the cost and the small size of the ACT Government's budget means that it cannot be funded by taxpayers alone.

As such, the ACT Government is pursuing a packaged approach whereby higher densities contribute to higher demand for public transport, with a majority of funding drawn from beneficiaries. Projections indicate that higher density land scenario would put the benefit cost ratio for the project at 2.34 (compared to 1.02 under a 'business as usual' scenario).

The higher density land use scenario assumes higher commercial and residential densities through faster realisation of the Project Corridor's development potential without changes to existing land use controls or policies in the *Territory Plan*. The higher density may arise through market response to the investment in transport, adjustments in land use settings or urban renewal programs.

Under the higher density scenario, population and employment would be 38 per cent and 21 per cent higher than under the business as usual within the Project Corridor by 2031. The scenario allows for recent amendments in planning controls for: Dickson, Gungahlin Town Centre, Inner North urban housing and City area (ANU Exchange and Griffin Legacy).

A breakdown of the discounted costs and benefits of the Light Rail Network for both scenarios is included on the final pages of this paper.

Capital Metro Agency

The 2013–14 ACT Budget allocated \$18.7 million in funding for preliminary design work and the establishment of the Capital Metro Agency, responsible for the design, procurement and delivery of the light rail service between Gungahlin and the City. This funding came as part of a total infrastructure spend of \$775.5 million in 2013–14 and \$272 million in new capital works.

The Agency is currently assessing the procurement and financial options for the light rail infrastructure. Once preliminary design is developed to an appropriate level, the ACT Government will look at procuring the Capital Metro Light Rail project.

On 3 October 2013, the ACT Government announced the Independent Chair of the Capital Metro Project Board is John Fitzgerald, a Specialist Advisor to KPMG and Chair of the Sydney Convention Centre and Entertainment redevelopment. Emma Thomas, former Deputy Chief Executive, Public Transport in South Australia was announced as Capital Metro Project Director.

Minister Corbell's media release on the appointments is available [here](#).

Light Rail Integration Study

A Light Rail Integration Study is currently underway to identify and assess options to integrate the Gungahlin to City Light Rail Transport into Canberra's broader transport network. This study will examine ACTION bus network, the bicycle path network and the pedestrian path network.

Potential Capital Metro stop locations are currently being considered in terms of integration with the overall transport system, accessibility, employment, and attractions and services in surrounding areas.

Community consultation was also undertaken in mid 2013 to provide the community with further information and opportunity to comment on the network options. More than 400 individual responses and extensive stakeholder feedback Capital Metro's Light Rail Integration Study were received.

The consultation will feed into the planning and design stages of the Capital Metro Project.

The full Light Rail Integration Study Consultation Report is available [here](#).

Appointment of technical advisors

On 24 February 2014 Minister Corbell announced the appointment of a consortium to deliver technical advice for the Capital Metro Agency.

The successful Arup-led consortium includes light rail expertise from HASSELL and Parsons Brinckerhoff alongside local specialist consultants Brown Consulting, LandDATA Surveys, Phillip Chun Access, SLR Consulting, GML Heritage and dsb Landscape Architects. Arup and Parsons Brinckerhoff also have local offices.

Minister Corbell's media release is available [here](#).

Design Consultation

On 30 June 2014 Minister for the Environment and Sustainable Development Simon Corbell released early designs for light rail project from the city to Gungahlin for comment as part of community engagement program. The feedback provided during the consultation will feed into next stages of design that will provide the basis for expressions of interest later this year.

The design proposal has been created based on in-depth planning and builds on previous community feedback. Key features of the design proposal include:

- tracks running down the centre medium;
- a single wire-powered system;
- light rail crossings controlled by traffic lights;
- safe, accessible and smart stops; and
- a light rail depot in Mitchell.

The consultation materials, including maps and illustrations of the project, are available [here](#).

The urban designs for the six precincts of the project are available [here](#).

The route and stop locations, route alignment information, depot details, stop and shelter design, traffic management proposal and track options are all available [here](#).

All information regarding the design proposal, information sessions and the opening hours of the pop-up shop in Civic is available on the Capital Metro website [here](#).

Monetised Cost and Benefits tables

Table 1: Breakdown of Discounted Costs and Benefits under a 'Business As Usual' Land Use Scenario

Cost/Benefit Element	Value in \$m (Discounted at 7%)	Contribution
Capital expenditure	469.8	89.6%
Operating and maintenance expenditure	54.3	10.4%
Total Costs	524.1	100.0%
Change in generalised journey time	150.0	28.0%
Incremental fare revenue	53.8	10.1%
Incremental parking revenue	198.2	37.1%
Unperceived vehicle operating cost savings	60.4	11.3%
Avoided accident costs	23.8	4.4%
Avoided air pollution	11.7	2.2%
Avoided greenhouse gas emissions	9.3	1.7%
Avoided noise pollution	3.8	0.7%
Avoided road damage	1.0	0.2%
Residual value	22.9	4.3%
Total Benefits	534.9	100.0%

Table 2: Breakdown of Discounted Costs and Benefits under a Higher Density Land Use Scenario

Cost/Benefit Element	Value in \$m (Discounted at 7%)	Contribution
Capital expenditure	469.8	89.6%
Operating and maintenance expenditure	54.3	10.4%
Total Costs	524.1	100.0%
Change in generalised journey time	633.7	51.7%
Incremental fare revenue	53.3	4.4%
Incremental parking revenue	192.5	15.7%
Unperceived vehicle operating cost savings	177.2	14.5%
Avoided accident costs	69.7	5.7%
Avoided air pollution	34.5	2.8%
Avoided greenhouse gas emissions	27.2	2.2%
Avoided noise pollution	11.3	0.9%
Avoided road damage	2.9	0.2%
Residual value	22.9	1.9%
Total Benefits	1,225.2	100.0%

All values are based on 2011 prices. For more information, see the ACT Government's City to Gungahlin Transit Corridor Infrastructure Australia Project Submission available [here](#).