

Committee Secretary
Joint Standing Committee on the National Capital and External Territories
PO Box 6021
Parliament House
Canberra ACT 2600

Inquiry into the Development of Stage Two of the Australian Capital Territory Light Rail Project

This submission primarily focuses on Terms of Reference 4:- the identification of matters that may be of concern prior to formal parliamentary or Australian Government consideration of the project.

Light Rail Stage 2 (LR2) does not adequately respect the National Capital Plan (NCP), the strategic plan for Canberra and the Territory and the environmental values and national concerns with the sustainability of Australia's urban areas.

When compared to alternatives, especially a busway, LR2 is less supportive of the NCP's principles and policies¹. It does not give proper consideration to the environmental impacts; the integration with land use decisions; the planning of infrastructure in an integrated and timely manner; the determination of major employment location proposals with regard to their transportation and environmental impacts; to the reduction of car dependency; the hierarchy of centres and the encouragement of public sector office employment to locate at City and the town centres.

¹ Theme 2.2 Productivity: Principles Objective 1 Infrastructure and employment –

1. Infrastructure must support the effective functioning of Canberra with proper consideration of the environmental and visual impact and be integrated with land use decisions; and 2. Infrastructure must be planned and provided in an integrated and timely manner to facilitate the development of Canberra and the Territory;

Theme 2.2 Productivity Objective 2 - Infrastructure and employment 2. Major employment location proposals must be determined with regard to their transportation and environmental impacts.

Theme 2.5 Accessibility: Principles for transport and movement: An accessible movement system will be achieved by 2.2: supporting efficient and sustainable pedestrian, bicycle and public transport systems that reduce car dependency

3.3 1 Urban Areas: One of the key principles of Canberra's urban structure has been that a hierarchy of centres has been developed

3. 5.3 Policies for employment location

3:5.3.2: Any new major employment generating land uses should consider the transportation and environmental impacts of the location.

3.5.3.3: Public sector office employment should be encouraged to locate in the City Centre and the Town Centres.

LR2 and Sustainability

Infrastructure Australia's evaluation of the Civic to Gungahlin Light rail (LR1) concluded that the case for light rail over bus rapid transit "has not been strongly made, especially when the [ACT government] submission itself points to the stronger economic (that is, cost benefit performance) of a bus rapid transit option".

The ACT Government has argued the project provided a Benefit to Cost Ratio (BCA) of 1.2 meaning a \$1.20 benefit for every \$1 spent. This mediocre figure was seen as an overestimate by professionals with expertise in BCA analysis including Leo Dobes (adjunct Professor Crawford School of Public Policy at the ANU), Bob Nairn (Principal; Bob Nairn Consulting) and David Hughes (former Senior Treasury Official). The ACT Auditor General in her 2016 *Initiation of the Light Rail project* found that 60 per cent of the benefits were wider economic and land use benefits whose inclusion was debatable. The transport benefits were just 49 cents for every dollar spent.

These wider economic and land use benefits were argued to stem from the city transformative benefits of light rail. These are greatly overstated. The transformation of Northbourne Avenue began well before the light rail project. Between 1991 and 2011 the number of dwellings in North Canberra increased by 50 per cent, many of which were in the Corridor.

Furthermore, extensive high rise development is occurring in the absence of light rail at Acton, Kingston and the Belconnen, Woden and Tuggeranong town centres. High rise development in Civic is also not dependent on light rail. This suggests light rail is not crucial to the transformation of the city as its proponents suggest. It is not "leading infrastructure" necessary to attract the knowledge workers.

The relative attractiveness of North Canberra is a result of its accessibility to employment opportunities.

The claimed land value increases in the light rail corridors would be offset by lower value of development at other locations. The light rail of itself does not increase demand. The acceleration of development along the light rail corridor transfers demand from other locations, especially the town centres.

Given the problems of low reverse loadings there is no certainty that the viability of light rail will be greatly improved by the increased densification on the route.

The cost of LR1 is likely to be in the order of \$1 billion with the cost of LR 2 likely to be more given the need for a lake crossing. The Canberra community was misled by the ACT Government about the costs and benefits of the Civic to Gungahlin light rail and is committed to its extension to Woden despite the absence of any assessment of its costs and benefits. As was the case for LR1 the government is not responding to community concerns with consultation limited to route selection rather than the need for the project. Its failure to respond to informed criticism has compromised any mandate it could claim from the 2016 election.

The commitment of funds to LR2 will reduce the environmental, social and financial sustainability of the Territory by diverting funds from projects that would provide better outcomes – increased bus services throughout Canberra and incentives to encourage employment at the town centres would both result in lower car dependency and greenhouse emissions; social sustainability would be increased by additional funding for social housing, education, health and disability services; or reduced taxes and charges.

The government urgently needs to review its priorities if Canberra is to develop as a more sustainable, liveable and inclusive city. The extension of light rail would not be a higher priority than other pressing demands if decisions were evidenced based.

Light Rail Inadequacy: An aim of the transport system should to reduce overall travel and increase accessibility to reduce emissions. The appropriate transport solution needs to consider alternatives including busways; trends influencing future travel demand including changing lifestyles, working hours, employment and residential location, electric buses and automated vehicles. Light rail is a means to an end not an end in itself.

LR1 will have full carriages for about 90 minutes in the morning peak travelling from Gungahlin to Civic and 90 minutes in the afternoon from Civic to Gungahlin. At all other times there will be substantial unused capacity given the low reverse loadings.

LR1 will not solve the congestion from Gungahlin as the population of the District is expected to grow from 71,000 at the 2016 Census to over 90,000 with the number of resident workers increasing by over 10,000. As the capacity of the light rail from Gungahlin is 2,070 passengers per hour in the peak and 3,500 boardings are estimated in the morning peak, the number of workers commuting from the district will increase above current levels. Additional employment in the District and/or increases in people working from home are needed to reduce congestion.

Changes in electric battery technology make light rail a high risk strategy. Electric vehicle technology has advanced sufficiently for, a large electric bus, with a capacity of 300 passengers and capable of travelling at 70kms per hour, to begin operations this year in Zhuzhou in Hunan Province. This “trackless tram” potentially meets the objectives of light rail at a fraction of the cost. As battery technology improves its viability will increase.

Light rail’s expense and inflexibility renders it inferior as a means to improve connectivity when compared to busways, increasing the frequency of buses throughout the city and encouraging employment at the Gungahlin, Tuggeranong, Woden and Belconnen town centres.

Employment Location and 30 Minute Cities: The NCP policy is to encourage Commonwealth office employment to locate in City and the town centres. LR2 runs counter to this aim by weakening Canberra's polycentric structure, a structure that other cities are trying to emulate. Instead of focusing on a land use

distribution to improve the viability of light rail, the government should be investigating what distribution of activity maximizes benefits to the community.

The mixed use corridor development city form promoted by light rail runs counter to focusing development at town, group and local centres, contrary to the NCP principle of a hierarchy of centres.

A public transport network to serve the numerous employment locations in the ACT needs to be flexible, affordable and high frequency. LR1 and LR2 cannot adequately serve the numerous employment destinations of Canberra workers. For example, someone living in Casey and working in Weston Creek would need to catch a bus or drive to a tram stop and then possibly a further two buses. Travel time would be extreme.

The increasing congestion in the City is a product of the laissez faire approach to the location of development by successive Territory and Federal Governments. The transport task from Gungahlin, Belconnen, Woden-Weston Creek and Tuggeranong would have been significantly less if more employment had been dispersed to these locations.

Decision making by individual departments has led to decisions that fail to adequately consider the social, economic and environmental implications of location. These costs include additional car travel and the consequent increases in congestion, greenhouse emissions and infrastructure costs and the detrimental impacts of businesses at existing locations. The prime example is the Airport which has become a larger office node than any of the town centres.

Increased employment at the town centres is necessary to reduce overall travel, infrastructure and environmental costs and support business.

If employment is to increase at the town centres, the Commonwealth needs to consider land-use transport issues when decisions are being made on department location. The ACT government needs to have serviced sites available and provide incentives such as land grants and rates holidays. Given many of the costs of office location are borne by the ACT community, a joint ACT/Commonwealth Committee should be established to consider office location.

The Commonwealth's increasing interest in urban affairs and concepts such as the 30 minute city provides the opportunity for the ACT and Federal governments to promote the benefits of town centres as employment locations. By intervening in the process the Turnbull government would show its commitment to sustainable smart city development

Need to review Land Use/Transport Strategy: There is an urgent need to review the ACT's transport/land use-strategy to ensure the future development of the city is more socially, environmentally, financially and economically sustainable.

The review would enable the assessment of the environmental, social, infrastructure and travel benefits and costs of alternative distributions of employment and population and involve the community in discussions about how the city should develop.

An aim of the review should be to increase metropolitan accessibility. It could consider

- (a) Whether future transport needs are best met by light rail or could they be better met through improving the comfort and frequency of the Canberra wide bus network to provide people a real choice to the car;
- (b) Whether the rapid improvement in electric bus technology, including high capacity battery powered buses would deliver the benefits of light rail without the high price tag;
- (c) Whether light rail generates new development or simply transfer development from other locations;
- (d) What is the distribution of activity that maximizes benefits to the community?
- (e) What is the appropriate balance of development between Civic and the town centres; and
- (f) Whether incentives should be provided to Commonwealth offices to locate in preferred locations such as the town centres.

An updated strategy would provide an improved framework for government to determine its priorities. It would provide the Canberra community greater confidence on the future directions of the city and ensure that Canberra 'is a city like no other' rather than a city like every other.

There is time to undertake the review as no real urgency to extend light rail to Woden as the bus based network based around the Blue, Green and Red Rapid services are providing a high quality and frequent service.

It is recommended that LR2 not be considered for approval until

- (a) A business case is prepared that includes an assessment of alternatives including a busway;
- (b) A comprehensive land use/transport strategy is undertaken for the Territory; and
- (c) The ACT and Federal the governments establishes a committee determine the location of Commonwealth offices.

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