
The Parliament of the Commonwealth of Australia

Commonwealth approvals for ACT light rail

**Commonwealth and Parliamentary approvals for the proposed
Stage 2 of the Australian Capital Territory light rail project**

Joint Standing Committee on the National Capital and External Territories

October 2018
Canberra

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Foreword

Canberra is the Commonwealth seat of government and the national capital of Australia. It is home to Australia's principal governmental, judicial, cultural, scientific, educational, and military institutions and holds special meaning not only for its residents, but for all Australians. The Commonwealth and this committee have a responsibility to safeguard this character and heritage.

It is the Australian Capital Territory (ACT) Government's responsibility to improve Canberra's public transport network for residents and visitors. However, progress must never be prioritised over the protection of the nation's most significant areas, institutions, and buildings. The development of light rail amenity must not come at the cost of the long-term character and heritage of the National Capital Area and the Parliamentary Zone.

The Light Rail Stage 2 project passes through and adjacent to a number of key cultural and heritage sites and, like all projects and proposals in these areas, must be consistent with the legal requirements imposed by the National Capital Plan. However, throughout the inquiry, we have become increasingly concerned that elements of the route alignment proposed by the ACT Government are not consistent with the Plan.

The ACT Government has presented arguments regarding the potential benefits offered by the proposed route alignment through the Parliamentary Zone. Nonetheless, we do not believe that those elements of the alignment that are found to be inconsistent with the National Capital Plan will be approved by the Commonwealth.

Therefore, we urge the National Capital Authority and the ACT Government to continue to work together to ensure that the proposed alignment for the project is consistent with the National Capital Plan. This may require the proposed route alignment to be revised to better reflect the routes outlined in the National Capital Plan. Alternatively, we understand that the ACT Government may need to work with the Commonwealth to amend the National Capital Plan.

We commend the ACT Government for its proactive approach in seeking guidance and advice, from both pre-application discussions with the National

Capital Authority and throughout this inquiry process. It is important to ensure that a proposed route alignment is feasible before committing the considerable funding required to develop detailed designs and Environmental Impact Statements.

We thank the ACT Government, the National Capital Authority, and all those who participated in the inquiry, for their assistance.

Mr Ben Morton MP
Chair



List of recommendations

2 Commonwealth jurisdiction and approval processes

Recommendation 1

The committee recommends that the Minister responsible for territories refer any Works Approval application or any amendment to the National Capital Plan relating to the light rail project to the Joint Standing Committee on the National Capital and External Territories for inquiry, prior to its tabling in the Parliament.

3 Light rail stage 2

Recommendation 2

In the event that the ACT Government chooses to pursue a route alignment that is only partially consistent with the National Capital Plan, the committee recommends that there be a two-stage process for seeking Commonwealth approval:

- Stage 1: the ACT Government works with the National Capital Authority to ensure Commonwealth approval of the route alignment, by way of amendment to the National Capital Plan; and
- Stage 2: completion of Works Approval application and other Commonwealth approval processes.

Recommendation 3

The committee recommends that the National Capital Authority require any light rail bridge design on either the Commonwealth or Kings Avenue bridges to:

- be of equal quality to that of the existing bridges;
- have the same column spacing as the existing bridges;
- not reduce existing lake to underside of bridge clearances;
- be slimmer than the existing bridges so as not to visually impact on the existing two bridges; and
- have no impact on the structural soundness of the existing bridges.

4 Heritage

Recommendation 4

The committee recommends that the Parliament require any light rail on, or crossing:

- Commonwealth Avenue;
- Kings Avenue;
- State Circle;
- Brisbane Avenue;
- Sydney Avenue;
- Canberra Avenue (to Manuka Circle);
- Hobart Avenue;
- Melbourne Avenue;
- Adelaide Avenue (to Kent Street);


and in the Parliamentary Zone, be wire-free.

Recommendation 5

The committee recommends that Parliament require the placement and appearance of light rail stops, landscaping, and signage to be unobtrusive and complementary to the heritage value of nearby buildings, views of Parliament, and the character of the Central National Area and Parliamentary Zone.

Recommendation 6

The committee recommends that Parliament require that the removal of any trees with heritage value, such as the Weston plantings, be met with an appropriate replanting and landscaping strategy that maintains heritage values in the Central National Area and the Parliamentary Zone.



Membership of the Committee

Chair Mr Ben Morton MP

Deputy Chair Ms Gai Brodtmann MP

Members Mr Kevin Hogan MP

Mr Julian Leeser MP

Hon Sussan Ley MP (to 28/8/18)

Hon Warren Snowdon MP

Hon Dr John McVeigh MP (from 10/9/2018)

Senator Jonathon Duniam

Senator Sue Lines

Senator Malarndirri McCarthy

Senator James Paterson

Senator Lee Rhiannon (to 15/8/18)

Senator David Smith (from 28/6/2018)

Senator Mehreen Faruqi
(from 13/9/2018)

Committee Secretariat

Secretary	Ms Shennia Spillane Ms Peggy Danaee
Inquiry Secretary	Ms Casey Mazarella
Administrative Officer	Ms Kathleen Blunden



Terms of reference

The Joint Standing Committee on the National Capital and External Territories will inquire into and report on the development of stage two of the Australian Capital Territory light rail project, with regard to:

1. the relevant parliamentary approval processes for works within the Parliamentary zone;
2. the roles of the National Capital Authority and the Australian Government, and the associated approval processes;
3. possible impacts on the Parliamentary zone and Parliamentary precincts, including any impacts on the heritage values and national importance of the Parliamentary zone and our national capital;
4. the identification of matters that may be of concern prior to formal parliamentary or Australian Government consideration of the project; and
5. any other relevant matter the Committee wishes to examine.



List of abbreviations

ACT	Australian Capital Territory
AIA	Australian Institute of Architects
ARA	Australian Railway Association
Cth	Commonwealth
EIS	Environmental Impact Statement
Environment	Department of the Environment and Energy
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
LRS1	Light Rail Stage 1
LRS2	Light Rail Stage 2
Minister for the Environment	Australian Government Minister for the Environment
MoAD	Museum of Australian Democracy (at Old Parliament House)
NCA	National Capital Authority
Parliament	Commonwealth Parliament
Parliament Act	<i>Parliament Act 1974</i>
PIA	Planning Institute of Australia
PPP	Public Private Partnership

The Plan

National Capital Plan

Introduction

Light rail in the Australian Capital Territory

- 1.1 The Australian Capital Territory (ACT) Government has committed to the construction of a city-wide light rail system 'as part of an integrated public transport network connecting key population, employment, social and cultural hubs across the Territory'.¹
- 1.2 The ACT Government envisages eventual connections stretching north to south from Gungahlin to Tuggeranong, and east to west from western Belconnen to the Airport and Fyshwick (see Figure 1.1).
- 1.3 In March 2012, the ACT Government identified the need to 'actively plan for mass public transport like light rail or bus rapid transport'. It stated that public transport infrastructure planning and design is a key element in encouraging the shift away from Canberra's current dependency on motor vehicles to more sustainable transport options.²
- 1.4 In July 2013, the ACT Government established the Capital Metro Agency (now Transport Canberra) to deliver light rail for Canberra and, in October 2014, the ACT Government approved the business case for Stage 1 of the light rail (LRS1), City to Gungahlin.³ In December 2015, the ACT Government updated the Light Rail Master Plan.⁴

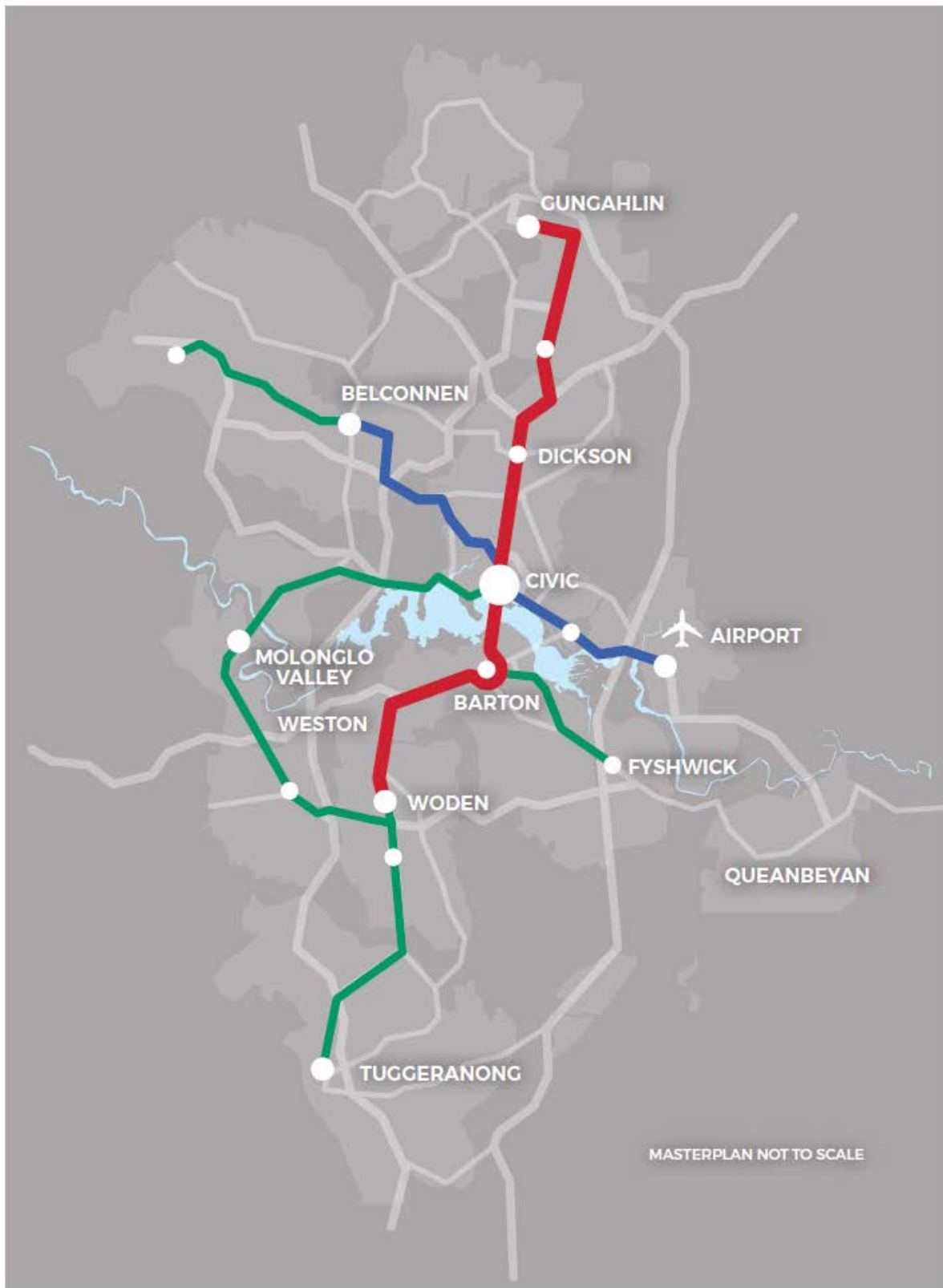
1 ACT Government, *Submission 25*, p. 13.



2 ACT Government, *Transport for Canberra: Transport for a sustainable city: 2012-2031*, 2012, p. 35.

3 ACT Government, Transport Canberra, *City to Gungahlin: Stage 1: Project History*, <https://www.transport.act.gov.au/light-rail-network/city-to-gungahlin-stage-one/project-history>, accessed 16 July 2018.

4 ACT Government, *Submission 25*, p. 70.

Figure 1.1 Indicative Canberra light rail network



 **ACT** Government |  **TTC** Transport Canberra

Proposed Light Rail Route
— Gungahlin to Woden — Belconnen to Airport — Future stages

Source ACT Government, Submission 25, p. 14.

- 1.5 In May 2016, the ACT Government entered into a public private partnership (PPP) with Canberra Metro Consortium to build, maintain and operate LRS1. In January 2017, construction commenced for LRS1, with completion and operation expected in early 2019.⁵
- 1.6 In May and June 2017, the ACT Government commenced community consultation regarding proposed route options, selection of alignment, and stop locations for Stage 2 of the light rail (LRS2), City to Woden.⁶ In April 2018, ACT Minister for Transport and City Services, Meegan Fitzharris MLA, announced the ACT Government's preferred route for LRS2.⁷ The finalisation and approval of the business case for LRS2 is scheduled for 2018/2019.⁸

Conduct of the inquiry

- 1.7 On 10 May 2018, the committee agreed to inquire into and report on Commonwealth and Parliamentary approvals for the proposed Stage 2 of the Australian Capital Territory light rail project, in accordance with combined terms referred by the Speaker of the House of Representatives, the President of the Senate, and the former Minister for Regional Development, Territories and Local Government, comprising:
- the relevant parliamentary approval processes for works within the Parliamentary Zone;
 - the roles of the National Capital Authority and the Australian Government, and the associated approval processes;
 - possible impacts on the Parliamentary Zone and Parliamentary Precincts, including any impacts on the heritage values and national importance of the Parliamentary Zone and our national capital;
 - the identification of matters that may be of concern prior to formal parliamentary or Australian Government consideration of the project; and
 - any other relevant matter the committee wishes to examine.

5 ACT Government, Transport Canberra, *City to Gungahlin – Stage 1: Project History*, <https://www.transport.act.gov.au/light-rail-network/city-to-gungahlin-stage-one/project-history>, accessed 16 July 2018.

6 ACT Government, Transport Canberra, *City to Woden – Stage 2* <https://www.transport.act.gov.au/light-rail-network/city-to-woden-stage-two>, accessed 16 July 2018.

7 Meegan Fitzharris MLA, Minister for Transport and City Services, Australian Capital Territory, 'Next steps for light rail stage two from Civic to Woden' *Media Release*, 19 April 2018.

8 ACT Government, *Submission 25*, p. 70.

- 1.8 The committee received 43 submissions, 11 supplementary submissions, and two exhibits. A list of submissions is at Appendix A and a list of exhibits is at Appendix B. The committee held three public hearings in Canberra, hearing from 25 witnesses. A list of witnesses is at Appendix C.
- 1.9 The committee offers its sincere thanks to all those who contributed to the inquiry.

Structure of the report

- 1.10 The report is structured as follows:
- Chapter 1 briefly outlines the background of light rail in Canberra and the conduct of the inquiry;
 - Chapter 2 examines the areas and legislated protections under the Commonwealth's jurisdiction that the LRS2 project engages as well as the Commonwealth approvals process for the project;
 - Chapter 3 explores the ACT Government's proposed route alignment against the National Capital Plan, examines concerns regarding the proposed route alignment, and considers the alternative routes put forward throughout the inquiry; and
 - Chapter 4 considers the consultation undertaken by the ACT Government and National Capital Authority and examines the potential heritage impacts of the LRS2 project.

Scope of the inquiry

- 1.11 Whilst the terms of reference of the inquiry require the committee to closely consider issues related to the Commonwealth and Parliamentary approval processes and potential impacts in the Parliamentary Zone and Parliamentary Precincts, there is a range of overlapping considerations relevant to LRS2.
- 1.12 Where these issues have been raised by inquiry participants, the committee has given them due consideration in the context of safeguarding the unique heritage of the nation's capital. However, the committee acknowledges that broader consideration of the merits of light rail in Canberra is a matter for the ACT Government and the people of the Australian Capital Territory.

Commonwealth jurisdiction and approval processes

- 2.1 Canberra is the Commonwealth seat of government and the national capital of Australia. It is home to Australia's principal governmental, judicial, cultural, scientific, educational, and military institutions and hosts diplomatic missions and residences from a wide range of foreign governments. It holds special meaning not only for its many residents, but for all Australians, and is protected by a range of safeguards intended to preserve the National Capital's character and heritage.
- 2.2 This chapter will examine the areas and legislated protections under the Commonwealth's jurisdiction that the Light Rail Stage 2 (LRS2) project engages as well as the Commonwealth approvals process for the project.

National Capital Plan

- 2.3 The *Australian Capital Territory (Planning and Land Management) Act 1988* (Cth) (Planning and Management Act) provides for a National Capital Plan (the Plan) to ensure that Canberra and the ACT are 'planned and developed in accordance with their national significance'.¹ The Plan is the 'strategy and blueprint giving effect to the Commonwealth's interests and intentions for planning, designing and developing Canberra and the Territory'.²

1 *Australian Capital Territory (Planning and Land Management) Act 1988* (Cth), s. 9.

2 National Capital Plan, 1990, <https://www.legislation.gov.au/Details/F2018C00580>, p. 1.

- 2.4 The Plan is a Commonwealth disallowable legislative instrument.³ This means that it was tabled in both Houses of the Commonwealth Parliament for approval. Similarly, any amendment to the Plan must be tabled in both Houses of the Commonwealth Parliament, and may be disallowed in whole or part by either House.⁴
- 2.5 The Plan establishes the following key matters of national significance in the planning and development of Canberra and the ACT:
- the pre-eminence of the role of Canberra and the Territory as the centre of National Capital functions, and as the symbol of Australian national life and values;
 - conservation and enhancement of the landscape features which give the National Capital its character and setting, and which contribute to the integration of natural and urban environments;
 - respect for the key elements of the Griffins' formally adopted plan for Canberra;
 - creation, conservation, and enhancement of fitting sites, approaches, and backdrops for national institutions and ceremonies as well as National Capital uses; and
 - the development of a city which both respects environmental values and reflects national concerns with the sustainability of Australia's urban areas.⁵
- 2.6 At its broadest level, the Plan prescribes broad land use controls across the whole ACT. However, the Plan may specify areas that have the 'special characteristics of the National Capital', known as Designated Areas. It may set out detailed conditions and priorities of planning, design, and development for Designated Areas.⁶
- 2.7 Designated Areas are divided into precincts. Planning and development in Designated Areas is subject to general codes, which provide detailed controls for particular aspects of development, or types of development; and precinct codes, which provide objectives, and planning and design controls for each specific precinct.

3 National Capital Plan 1990, 'Introduction',
<https://www.legislation.gov.au/Details/F2018C00580>.

4 *Legislation Act 2003*, ss. 38 and 42.

5 National Capital Plan 1990, 'Introduction',
<https://www.legislation.gov.au/Details/F2018C00580>.

6 *Australian Capital Territory (Planning and Land Management) Act 1988* (Cth), s. 10(1).

Central National Area

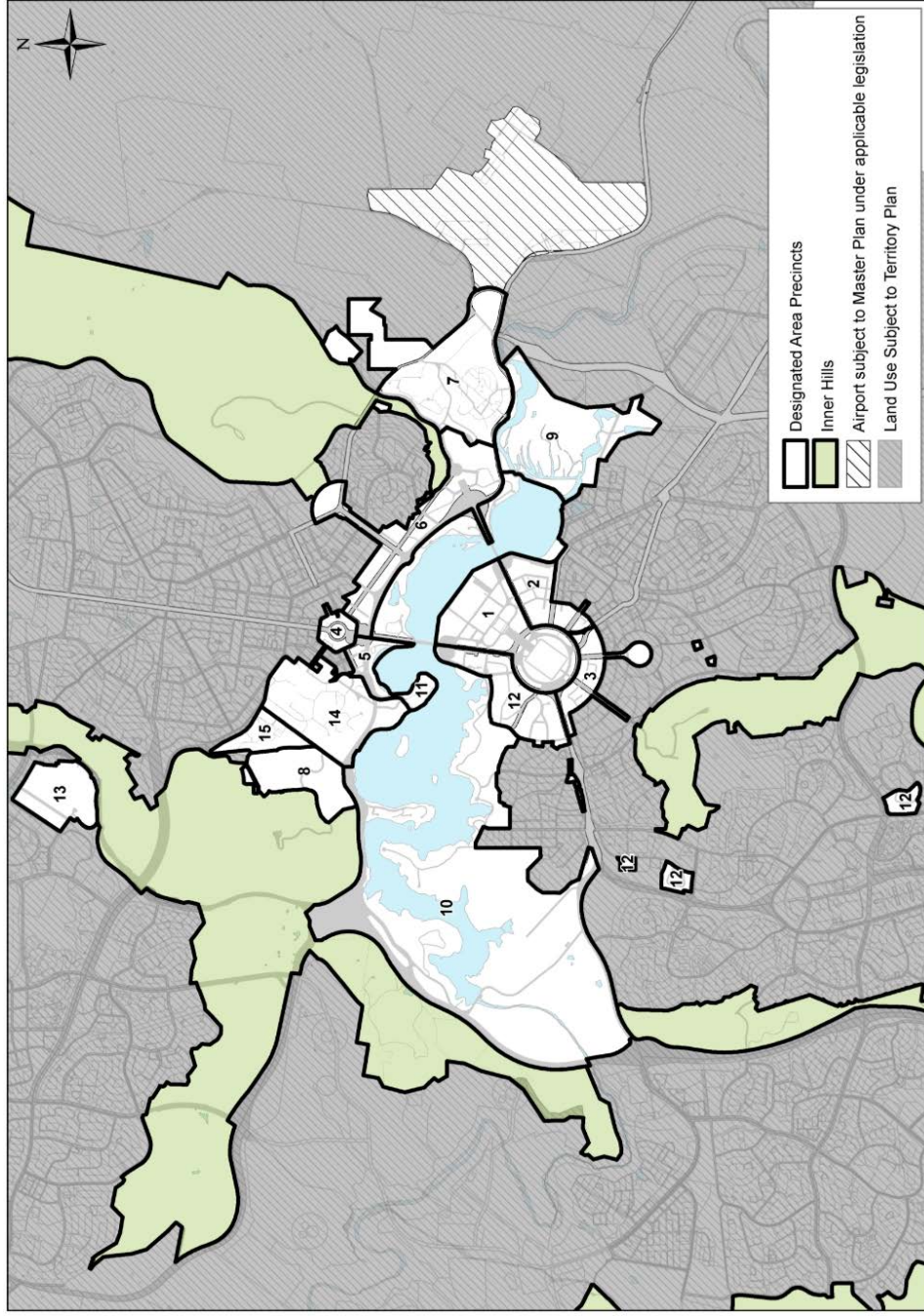
- 2.8 The Central National Area is a Designated Area that comprises the following precincts (see Figure 2.1):
1. Parliamentary Zone
 2. Barton
 3. Deakin/Forrest Residential Area
 4. City Hill
 5. West Basin
 6. Constitution Avenue and Anzac Parade
 7. Australian Defence Force Academy, Royal Military College Duntroon, and Campbell Park Precinct
 8. Australian National Botanical Gardens
 9. Jerrabomberra Wetlands
 10. Lake Burley Griffin and Foreshores
 11. Acton Peninsula
 12. Diplomatic Precinct
 13. Australian Institute of Sport
 14. Australian National University
 15. CSIRO Black Mountain
 16. Canberra Airport (which is within the Central National Area but is not within a Designated Area).

Rapid public transit in the Plan

- 2.9 The Plan provides for an inter-town public transport system and sets out the general location for transit corridors suitable for express public transport systems, such as light rail (see Figure 2.2). Its policies for the inter-town transit system state that public transport planning and provision will:
- reserve a route for the development of a public transport service to link major employment nodes, which will (as far as practicable) be segregated from other transport systems and will operate with priority right-of-way; and
 - reserve a corridor between the city centre, the town centres and major employment nodes, suitable for priority or segregated right-of-way transport services for an inter-town and express public transit system.⁷

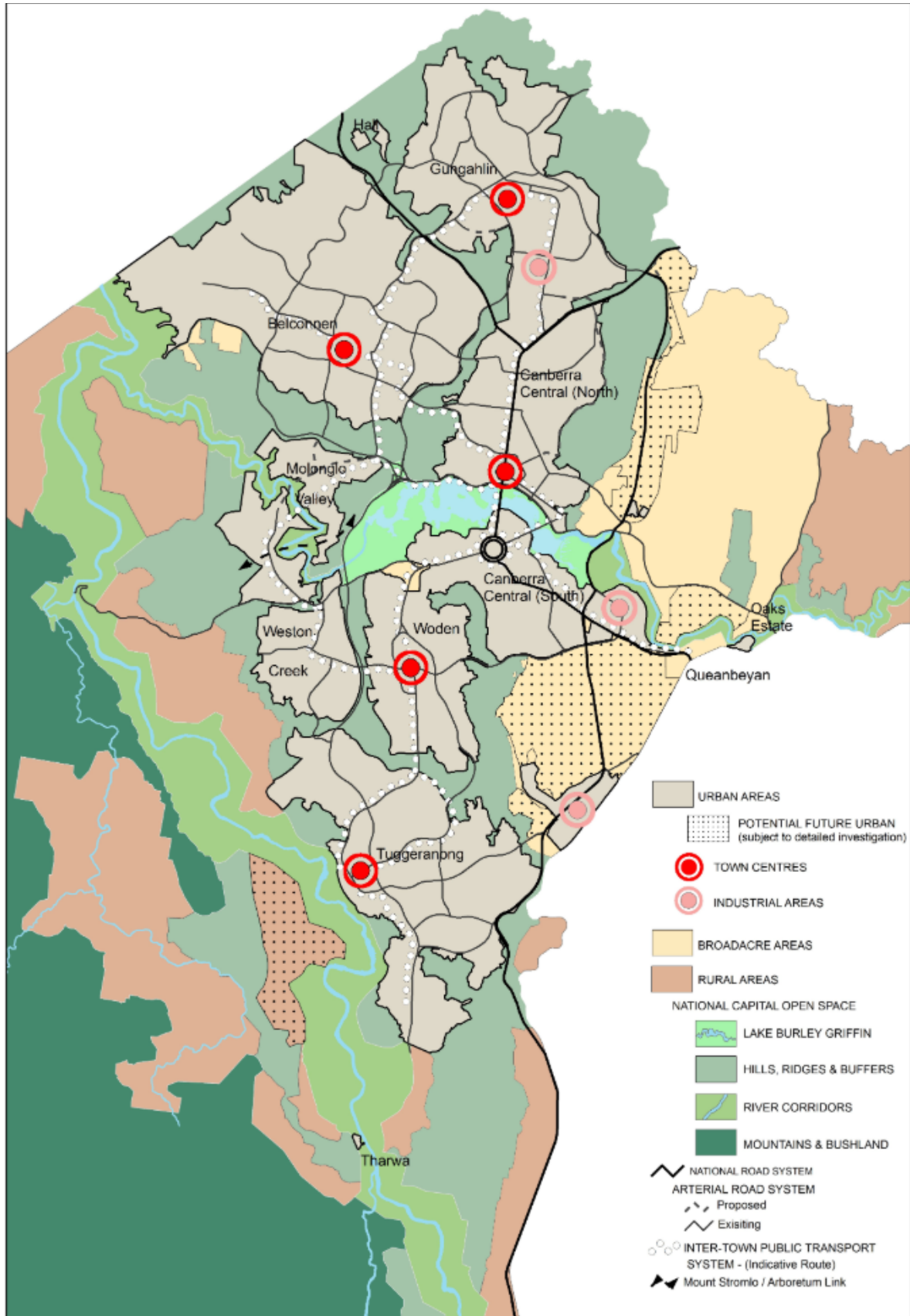
7 National Capital Plan 1990, <https://www.legislation.gov.au/Details/F2018C00580>, s. 3.1.4.

Figure 2.1 Precincts of the Central National Area



Source National Capital Plan 1990, s. 4.

Figure 2.2 National Capital Plan, General Policy Plan—Metropolitan Canberra

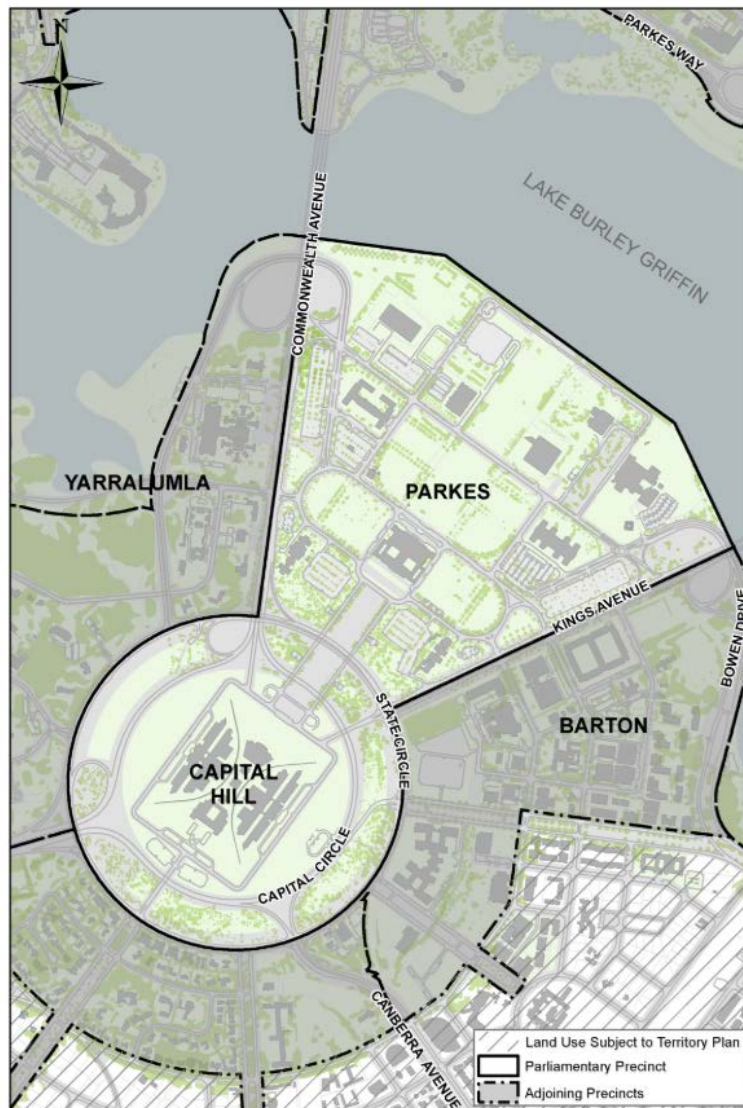


Source National Capital Plan 1990, s. 3.1.4

Parliamentary Zone

- 2.10 The Parliamentary Zone is established by the *Parliament Act 1974* (Cth) (Parliament Act) and is a Designated Area Precinct of the Central National Area under the National Capital Plan. It comprises the area bounded by the southern edge of Lake Burley Griffin, Kings Avenue, State Circle and Commonwealth Avenue (Figure 2.3).
- 2.11 The Parliament Act provides that the construction of buildings or any other works within the Parliamentary Zone must be approved by resolution of both Houses of Parliament. In addition, as a Designated Area, the Parliamentary Zone is subject to the general codes and precinct codes prescribed by the National Capital Plan.

Figure 2.3 Parliamentary Zone

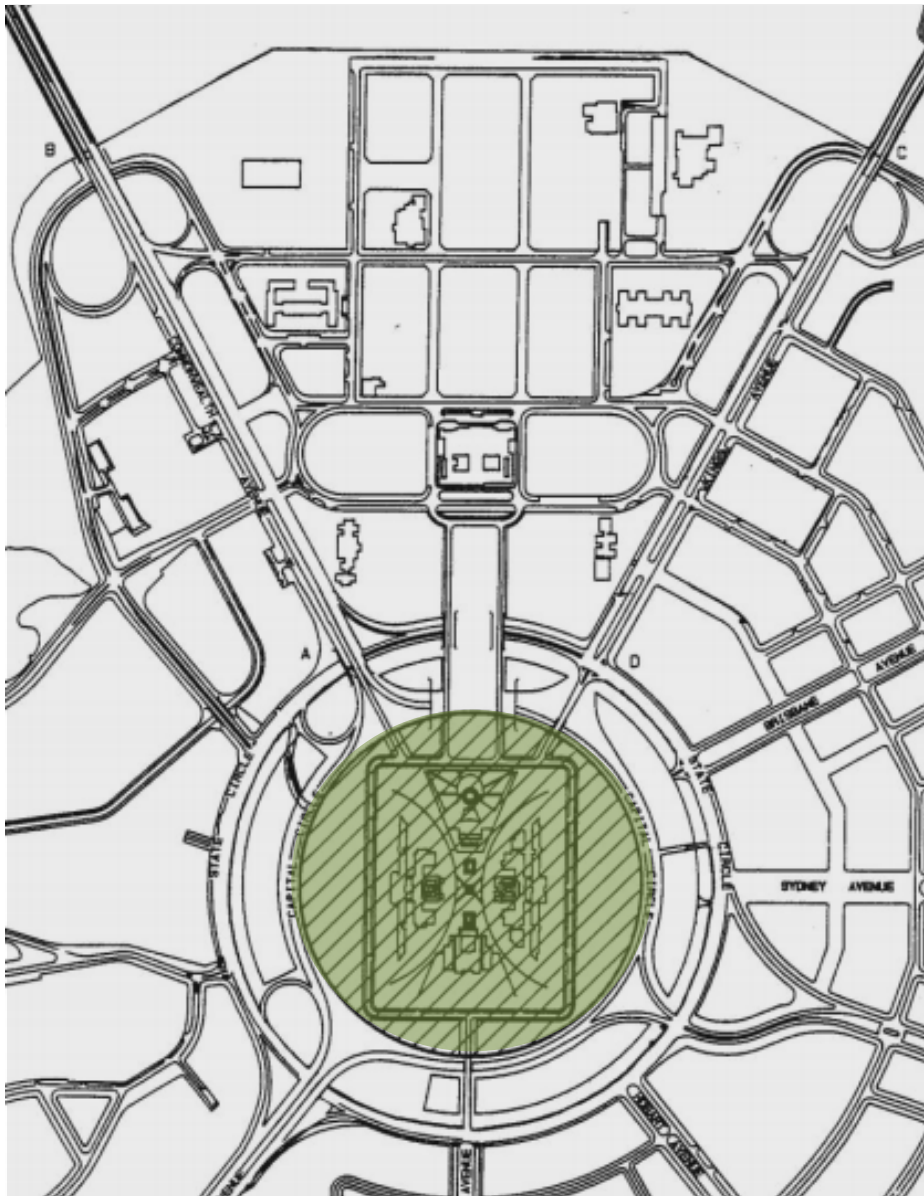


Source *National Capital Plan 1990*, s. 4.3.1

Parliamentary Precincts

- 2.12 The Parliamentary Precincts are established by the *Parliamentary Precincts Act 1988* (Cth) and comprise the land surrounding Parliament House and bounded by Capital Circle (see Figure 2.4).
- 2.13 The Parliamentary Precincts are under the control and management of the Presiding Officers, the Speaker of the House of Representatives and the President of the Senate. The Presiding Officers may, subject to any order of either House, take any action they consider necessary for the control and management of the precincts.

Figure 2.4 Parliamentary Precincts



Source *Parliamentary Precincts Act 1988, Schedule 1 [colour added]*

Parliament House Vista

2.14 The Parliament House Vista is a listed place on the Commonwealth Heritage List, under the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act) (see Figure 2.5). It comprises:

...the whole of the area bounded by the northern alignment of State Circle, the western alignment of Kings Avenue, the southern alignment of Parkes Way and the eastern alignment of Commonwealth Avenue, excluding the Archbishops Residence and grounds being Block 1 Section 2 Parkes; the whole of Anzac Parade and Anzac Park and the whole of Section 39, Campbell.⁸

Figure 2.5 Parliament House Vista



Source National Capital Authority, *Parliament House Vista Area Heritage Management Plan, Volume 1, 2010, p. 11.*

⁸ Department of Environment and Energy, Australian Heritage Database, *Parliament House Vista*, accessed 17 July 2018.

- 2.15 The routes for the inter-town public transport system outlined in the National Capital Plan do not enter the Parliament House Vista. As such, these routes are unlikely to engage any heritage considerations regarding the Vista.
- 2.16 However, as elements of the ACT Government's proposed route alignment cross directly through the Parliament House Vista, it is expected that it would engage heritage protections and require assessment under the EPBC Act (outlined below). The ACT Government's decision to pursue a route that is, in part, inconsistent with the Plan and that crosses through the Vista has therefore added complexity to the approval process.
- 2.17 Heritage is discussed in greater detail in Chapter 4 of this report.

Commonwealth approval processes

- 2.18 The ACT light rail is a Territory project. The ACT Government is responsible for the development, design, planning and (if approved) implementation of the project. As such, decisions about the details of the LRS2 project proposal, such as the route, use of technologies, business case, and costings are the prerogative of the ACT Government.
- 2.19 Once a final design proposal has been produced by the ACT Government, those aspects of the proposal that pass through or engage with the above areas will be subject to (sometimes simultaneous) consideration, and approvals from the following Commonwealth agencies:
- Department of the Environment and Energy (Environment);
 - National Capital Authority (NCA); and
 - Commonwealth Parliament (Parliament).
- 2.20 Other agencies, such as the ACT Environment Planning and Sustainable Development Directorate, are also involved in the broader consideration of the project. However, Territory considerations and approval processes are outside the scope of this inquiry.

Department of the Environment and Energy

- 2.21 The EPBC Act provides that actions that have or are likely to have a significant impact on a matter of national environmental significance require approval from the Australian Government Minister for the Environment (Minister for the Environment). The Assistant Secretary, Assessments and Waste Branch, Department of the Environment and Energy, Kim Farrant, explained that the 'environment' is defined broadly under the EPBC Act and includes:

...ecosystems, and their constituent parts including people and communities; natural and physical resources; the qualities and characteristics of locations, places and areas; heritage values of places; and the social, economic and cultural aspects [of locations, places and areas].⁹

- 2.22 First, the ACT Government will make a referral to the Minister for the Environment, which is subsequently released to the public for ten business days to allow for comment on whether the project is likely to have a significant impact on matters of national environmental significance. Within 20 business days of receipt of a referral, the Minister for the Environment must decide whether the proposed action requires formal assessment and approval under the EPBC Act.¹⁰
- 2.23 If the Minister for the Environment decides that the proposed action is likely to be significant and therefore formal assessment and approval is required, the action is called a 'controlled action'.¹¹ The ACT Government has advised that its initial discussions with Environment indicate that LRS2 is likely to be a controlled action, which it expects will be assessed by Environmental Impact Statement (EIS).¹²
- 2.24 If this is the case, the ACT Government will prepare a draft EIS, following Commonwealth EIS Guidelines issued by Environment for the project. The draft EIS is then lodged with Environment, where it will be released to the public for comment. The ACT Government will then prepare a revised/final EIS addressing and taking into account public comments.¹³
- 2.25 The final EIS is assessed by Environment, which prepares a recommendation report for the Minister for the Environment. The Minister will then make a decision to either approve the proposed action; to approve the proposed action with conditions; or not to approve the proposed action. For assessment by EIS, a decision must be made within 40 business days of receiving the finalised EIS.¹⁴

9 Ms Kim Farrant, Assistant Secretary, Assessments and Waste Branch, Department of the Environment and Energy, *Proof Committee Hansard*, 28 June 2018, p. 8.

10 Department of the Environment and Energy, 'Environment assessment and approval process', <http://www.environment.gov.au/protection/environment-assessments/assessment-and-approval-process>, accessed 25 July 2018.

11 Department of the Environment and Energy, 'Environment assessment and approval process', <http://www.environment.gov.au/protection/environment-assessments/assessment-and-approval-process>, accessed 25 July 2018.

12 ACT Government, *Submission 25*, p. 61.

13 ACT Government, *Submission 25*, pp. 59-61.

14 Department of the Environment and Energy, 'Environment assessment process- referral, assessment/decision whether to approve flowchart', <http://www.environment.gov.au/epbc/publications/environment-assessment-process-flowchart>, accessed 25 July 2018.

- 2.26 The ACT Government advised the committee that it intends to prepare a single EIS to address the requirements of the relevant Commonwealth and Territory laws. Environment agreed that it will endeavour to streamline the process where appropriate. Environment advised that:
- ... we would look to streamline the process as much as possible and...would possibly agree to an EIS process that addressed all our matters as well as matters for the ACT government or any other approving authority that might want to utilise that information...We would try and align it as much as we thought was appropriate.¹⁵
- 2.27 The ACT Government explained that the EIS 'will investigate in detail the implications of the project' including urban renewal and development implications; adjustments to traffic arrangements; and heritage and visual considerations. It assured the committee that engagement and consultation will be fundamental to the EIS process, which will incorporate 'thorough engagement with regulatory stakeholders, stakeholders along the route, and any other stakeholders with administrative responsibilities relating to the project'.¹⁶
- 2.28 The ACT Government explained that 'this engagement will assist the Territory in adjusting the design of the project and developing strategies to manage the project's implementation' and advised that 'the EIS will be supported by a suite of specialist studies considering a range of matters, including, for example, heritage implications, visual sensitivity, traffic considerations, noise and vibration, and biodiversity'.¹⁷

National Capital Authority

- 2.29 The National Capital Authority (NCA) prepares and administers the National Capital Plan (the Plan) and as such is the lead agency in the Commonwealth approvals processes for LRS2. Following successful approvals from other agencies and the Parliament during the approval process, the NCA is responsible for administering the final decision for the Works Approval (see Figure 2.6).

Licence Agreement to use National Land

- 2.30 In passing through the Central National Area, the LRS2 will traverse national land owned by the Commonwealth. As such, the ACT

15 Mr Michael Smith, Director, Southern NSW and ACT Assessment Section, Assessments and Waste Branch, Department of the Environment and Energy, *Proof Committee Hansard*, Canberra, 28 June 2018, p. 10.

16 ACT Government, *Submission 25*, p. 59.

17 ACT Government, *Submission 25*, p. 59.

Government will need to negotiate land access licences with the Commonwealth through the NCA, specifying principles such as cost, areas of work, etc. The Licence Agreement forms part of the final decision regarding the Works Approval (see Figure 2.6).

2.31 The ACT Government has advised that it will seek to negotiate land access licences that provide:

- access to the light rail system for the Territory (and its contractor and operator and maintainer) for the purpose of constructing, operating, and maintaining the light rail;
- a prerogative for the Commonwealth to suspend light rail services for specific events, such as events of national significance or matters of state;
- a term that reflects and is consistent with the long-term nature of the investment in permanent infrastructure; and
- other matters required to make the agreement acceptable to the infrastructure investment market, such as cure periods for default.¹⁸

2.32 The ACT Government explained that it anticipates the Commonwealth Government 'would not seek to obtain licence fees (other than *de minimis* amounts)' in recognition of the ACT Government's significant financial investment in the LRS2, which will 'directly benefit the Australian Government'.¹⁹

Responsibility for costs arising from construction and operation

2.33 The NCA will have ultimate responsibility for the safety, care, and maintenance of assets on National Land. LRS2 will result in significant changes to the road network and place additional infrastructure and assets on National Land.²⁰ The NCA explained that it cannot be financially disadvantaged as a result of the decision to construct a light rail system.²¹

2.34 The NCA advised the committee that the ACT Government must provide an undertaking that it will assume responsibility for all costs arising from the construction and operation of light rail on land managed by the NCA.²² It explained that:

The quantum of these maintenance costs will be dependent on the final route location, design and construction standards, the extent of works and on-going risk assessments and treatment plans.

18 ACT Government, *Submission 25*, pp. 68-69.

19 ACT Government, *Submission 25*, p. 69.

20 National Capital Authority, *Submission 22*, p. 4.

21 National Capital Authority, *Supplementary Submission 22.2*, p. [5].

22 National Capital Authority, *Supplementary Submission 22.2*, p. [5].

Funding arrangements that guarantee the additional land management costs arising from the light rail system must be in place prior to an agreement to grant Works Approval. This will ensure these assets are maintained to a standard that is expected of the National Capital and its relevant regulators.²³

- 2.35 The NCA explained that ‘detailed arrangements that guarantee the additional land management costs arising from the light rail system do not impact on the NCA must be agreed prior to a Works Approval application being submitted’.²⁴

Works Approval assessment

- 2.36 The Planning and Land Management Act provides that proposals for works in Designated Areas must be submitted to the NCA (together with any plans and specifications that the NCA may require). Proposals for works must be found to be in accordance with the National Capital Plan and are subject to approval by the NCA.²⁵ Approximately 65 per cent of the proposed route will be subject to Works Approval by the NCA.²⁶

Pre-application meetings

- 2.37 The NCA noted that, while it has not yet received a Works Approval application from the ACT Government for LRS2, it has been consulted and periodically briefed regarding ongoing development of the project and will continue to provide feedback as the project progresses.²⁷

- 2.38 The ACT Government advised that, as of September 2018, there had been 72 separate items of engagement on a pre-application basis between the ACT Government and the NCA regarding LRS2, noting that:

Transport Canberra and City Services has spent considerable effort engaging with NCA since December 2016. Many of the features of the route proposed and preferred by the ACT Government have been because of suggestions and directions by NCA officials.²⁸

- 2.39 The NCA explained that its meetings with the ACT Government are intended to ‘provide guidance as to the NCA’s expectations when assessing a final Works Approval’, and provide ‘advice about the

23 National Capital Authority, *Submission 22*, p. 4.

24 National Capital Authority, *Supplementary Submission 22.2*, p. [5].

25 *Australian Capital Territory (Planning and Land Management) Act 1988* (Cth), s. 12.

26 National Capital Authority, *Submission 22*, p. 3.

27 National Capital Authority, *Submission 22*, p. 3, 9.

28 ACT Government, *Supplementary Submission 25.2*, pp. 3-4.

requirements of the Plan that must be addressed in the development of the light rail route'.²⁹

Assessment

- 2.40 The NCA advised that, if Works Approval is sought, it will carefully consider whether the proposal is consistent with policies in the National Capital Plan, such as ensuring that:
- substantial works of architecture, engineering and landscape within the Territory are designed to contribute positively to the overall composition, symbolism and dignity of the National Capital;
 - development in the National Capital seeks to achieve harmony between architecture and landscape to give continuing effect to the 'City Beautiful' and 'Garden City' characters of the city;
 - the proposal demonstrates respect for the key elements of the Griffins' formally adopted plan for Canberra, reinforcing and complementing the geometric lines of the Main Avenues; and
 - accessible movement systems for a diversity of pedestrian, cycle, and public transport modes are provided, with good connections between different modes of transport.³⁰
- 2.41 If the Works Approval application is considered suitable for approval and EPBC Act matters have been resolved, the NCA will recommend to the Minister responsible for territories that parliamentary approval be sought.

Commonwealth Parliament

- 2.42 The Parliament Act provides that any proposal for building or other works on land within the Parliamentary Zone must be approved by the Parliament. This requires either a joint proposal by the Speaker and the President or a proposal by the relevant Minister to be approved by resolution of each House.³¹
- 2.43 The Department of Infrastructure, Regional Development and Cities advised the committee that the NCA will conduct an initial assessment of the Works Approval application, 'ensuring consistency with the statement of planning principles set out in section 2 of the National Capital Plan' (see Figure 2.6). Once it is satisfied, the NCA will recommend that the Minister responsible for territories table the Works Approval application in the House of Representatives and the Senate for approval by resolution.³²

29 National Capital Authority, *Submission 22*, pp. 3, 9.

30 National Capital Authority, *Submission 22*, pp. 3, 7.

31 *Parliament Act 1974* (Cth), s. 5.

32 Department of Infrastructure, Regional Development and Cities, *Submission 16*, p. 4.

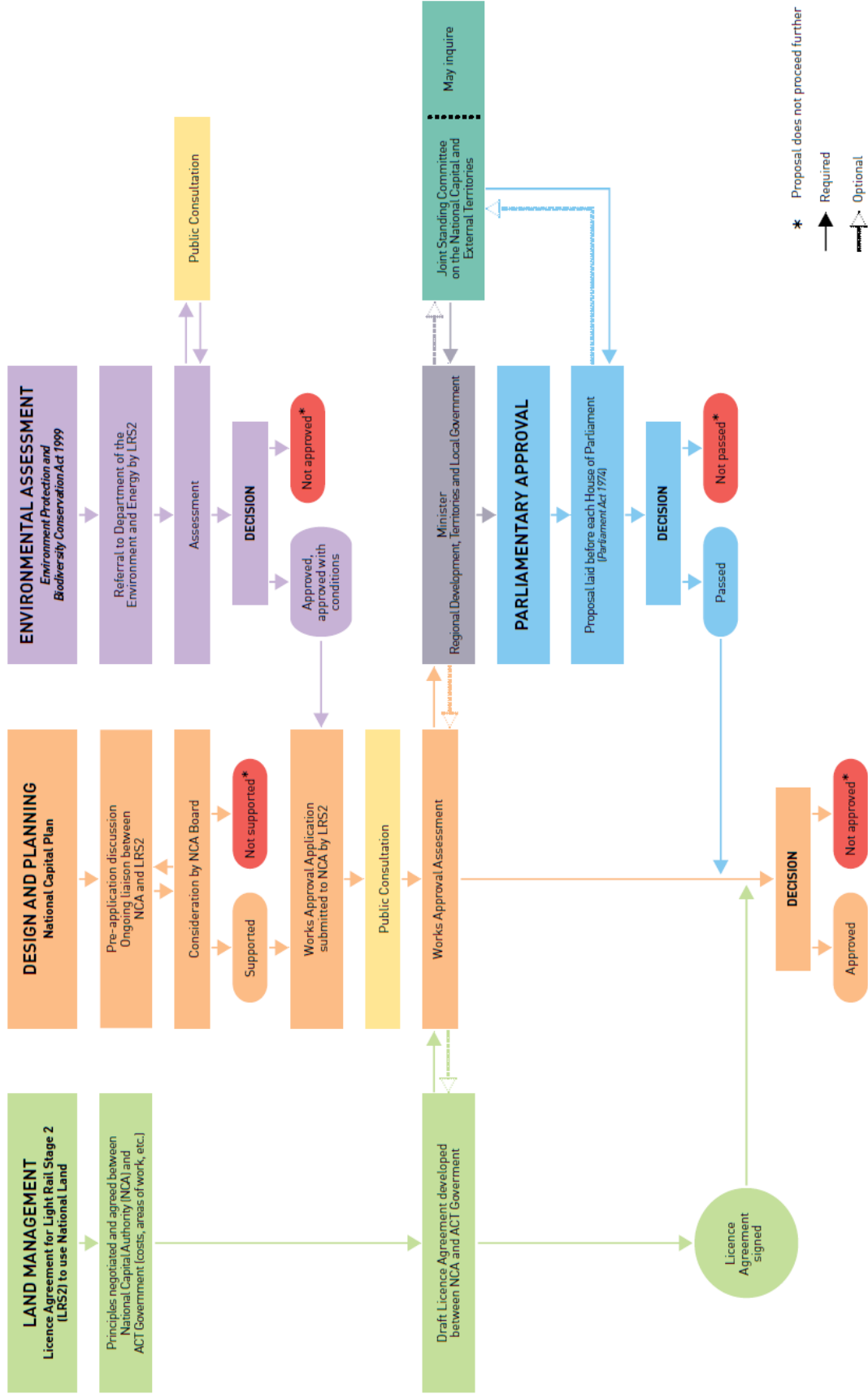
- 2.44 The Parliament may refer the Works Approval application to the Joint Standing Committee on the National Capital and External Territories for inquiry and report.³³
- 2.45 Once the proposal is passed by both Houses, the Works Approval application then returns to the NCA for its final decision of the Works Approval application.

Works Approval

- 2.46 Once the Licence Agreement to use National Land has been signed; EPBC Act matters have been resolved; and the Works Approval application has been approved by both Houses of Parliament, the NCA makes the final decision regarding the Works Approval, concluding the Commonwealth approvals process for LRS2.

33 Joint Standing Committee on the National Capital and External Territories, *Resolution of appointment*, passed by the House of Representatives on 1 September 2016 and Senate on 12 September 2016.

Figure 2.6 Commonwealth approval processes



Committee comment

- 2.47 The Commonwealth has a responsibility to safeguard and preserve the National Capital's character and heritage for all Australians. The Commonwealth's interests and intentions are articulated in the National Capital Plan, which enshrines in law the strategy for planning, designing and developing Canberra and the Territory.
- 2.48 LRS2 passes through and adjacent to a number of key cultural and heritage sites. As such, like all projects and proposals in these areas, it must be consistent with the National Capital Plan. Its design must demonstrate sufficient understanding of the symbolic, functional, ceremonial, and heritage values that are core to the Central National Area and Parliamentary Zone and are outlined in the National Capital Plan.
- 2.49 The committee acknowledges the ACT Government's aim to improve Canberra's public transport network for residents and visitors. Furthermore, it notes that the light rail project is bringing to fruition the Griffins' vision for Canberra, in which trolley cars travelled down the city's main avenues. However, the development of light rail amenity must not come at the cost of the long-term character and heritage of the National Capital Area and the Parliamentary Zone.
- 2.50 The committee is satisfied that the Commonwealth approvals process is robust and will provide appropriate consideration for the LRS2 project, maintaining a balance between progress and protection of heritage. The project is of ongoing interest to the committee and it looks forward to following its development and progress.

Recommendation 1

- 2.51 **The committee recommends that the Minister responsible for territories refer any Works Approval application or any amendment to the National Capital Plan relating to the light rail project to the Joint Standing Committee on the National Capital and External Territories for inquiry, prior to its tabling in the Parliament.**

Light rail stage 2

- 3.1 The Australian Capital Territory (ACT) Government submitted that it is committed to constructing light rail between Gungahlin and Woden via the City, Parkes and Barton, describing it as the ‘backbone of its vision for a city-wide integrated public transport network’.¹
- 3.2 This chapter will consider the ACT Government’s proposed route alignment against the National Capital Plan (the Plan), examine concerns regarding the proposed route alignment, and explore the alternative routes put forward throughout the inquiry.

Route

- 3.3 The ACT Government explained that Canberra light rail will be:
- **frequent:** with services operating at least every six minutes in peak periods, every 10 minutes between 7am and 6pm on weekdays, and at least every 15 minutes outside of these periods;
 - **rapid:** connecting Woden to the City in under 30 minutes, and Gungahlin to the City in 24 minutes;
 - **attractive:** with comfortable, state-of-the-art light rail vehicles and free Wi-Fi for passengers on-board and at stops;

1 ACT Government, *Submission 25*, pp. 5-6.

- **accessible:** with level boarding at all doors, priority seats for mobility-impaired passengers, designated areas for wheelchairs and pushchairs, and room for bikes on-board; and
 - **sustainable:** run entirely on renewable energy.²
- 3.4 In May and June 2017, the ACT Government sought feedback from the community on two different route alignment options and stop locations. These route options comprised:
- City to Woden Town Centre via Capital Circle; and
 - City to Woden Town Centre via Parkes and Barton.³
- 3.5 The ACT Government advised that 75 per cent of the 4,437 responses it received supported a route alignment that travels through Barton and a preference for more stops in Barton to enable easy access to employment and recreational facilities.⁴ The Director-General of Transport Canberra, Ms Emma Thomas, told the committee that:
- ...through the community consultation process that we undertook we found that the overwhelming majority of respondents did not actually favour the more direct route...the overwhelming public sentiment was for the longer route because it actually takes people to places where they might want to go.⁵
- 3.6 Furthermore, she explained that the more direct route raised greater engineering challenges and heritage sensitivities:
- ...the more direct route is not actually the easier or cheaper route, because it goes so close to Parliament House and because there are more bridges involved and there are greater difficulties in providing pedestrian access to the light rail system. We also think that there are perhaps greater heritage sensitivities to having lift wells or whatever may be needed to get people from that system into Parliament House.⁶
- 3.7 In April 2018, the ACT Government announced its preferred route for Stage 2 of the light rail (LRS2) project (see Figure 3.1).⁷ The proposed route alignment will:

2 ACT Government, *Submission 25*, pp. 5-6.

3 ACT Government, *Submission 25*, pp. 17-18.

4 ACT Government, *Submission 25*, p. 18.

5 Ms Emma Thomas, Director-General, Transport Canberra and City Services, ACT Government, *Proof Committee Hansard*, Canberra, 21 June 2018, p. 11.

6 Ms Emma Thomas, Director-General, Transport Canberra and City Services, ACT Government, *Proof Committee Hansard*, Canberra, 21 June 2018, p. 11.

7 The Hon Meegan Fitzharris MLA, Minister for Transport, ACT Government, 'Next steps for light rail stage two from Civic to Woden', *Media Release*, 19 April 2018.

- leave the City via London Circuit West;
- cross Lake Burley Griffin via Commonwealth Avenue on a new bridge, continuing south on Commonwealth Avenue's median;
- traverse the Parliamentary Zone via King George Terrace, Kings Avenue, John McEwen Crescent and Windsor Walk;
- join Capital Circle at Canberra Avenue; and
- continue to Woden Town Centre via Adelaide Avenue, terminating at Callam Street.⁸

3.8 Many submissions to the committee supported the light rail project;⁹ some of these expressly supported the proposed route alignment.¹⁰ For example, the Canberra Business Chamber asserted that including Barton in the alignment 'embeds the value of the light rail transport system as more than simply a commuter route'. It explained that:

It reinforces the benefits to the City of tourism, as the cultural institution precinct and hotels in Barton are made accessible through the proposed route, giving visitors to the city enhanced ease and capacity to move across the city. This route also provides greater access for workers to office buildings in Barton – a highly populated workforce area.¹¹

3.9 However, many submitters raised concerns regarding the proposed route alignment, in particular that:

- the proposed route alignment may not be consistent with the National Capital Plan;
- the proposed route alignment does not function as a rapid transport spine;
- road capacity on Commonwealth Avenue Bridge may be negatively impacted; and
- traffic congestion may be negatively impacted.

8 ACT Government, *Submission 25*, p. 8.

9 For example: Planning Institute of Australia, *Submission 24*; Australian Railway Association, *Submission 31*; Canberra Business Chamber, *Submission 32*; Property Council of Australia, *Submission 37*; Mr David Flannery, *Submission 39*; Ms Emma Davidson, *Submission 38*; Public Transport Association of Canberra, *Submission 14*; Mr Lukas Sigut, *Submission 10*; Mr Jim Mitchell, *Submission 20*; Mr Bill Gemmell, *Submission 15*; Mr Damien McGrath, *Submission 11*.

10 For example: Canberra Business Chamber, *Submission 32*; Mr David Flannery, *Submission 39*; Ms Emma Davidson, *Submission 38*.

11 Canberra Business Chamber, *Submission 32*, pp. 3-4.

Figure 3.1 Proposed City to Woden light rail alignment

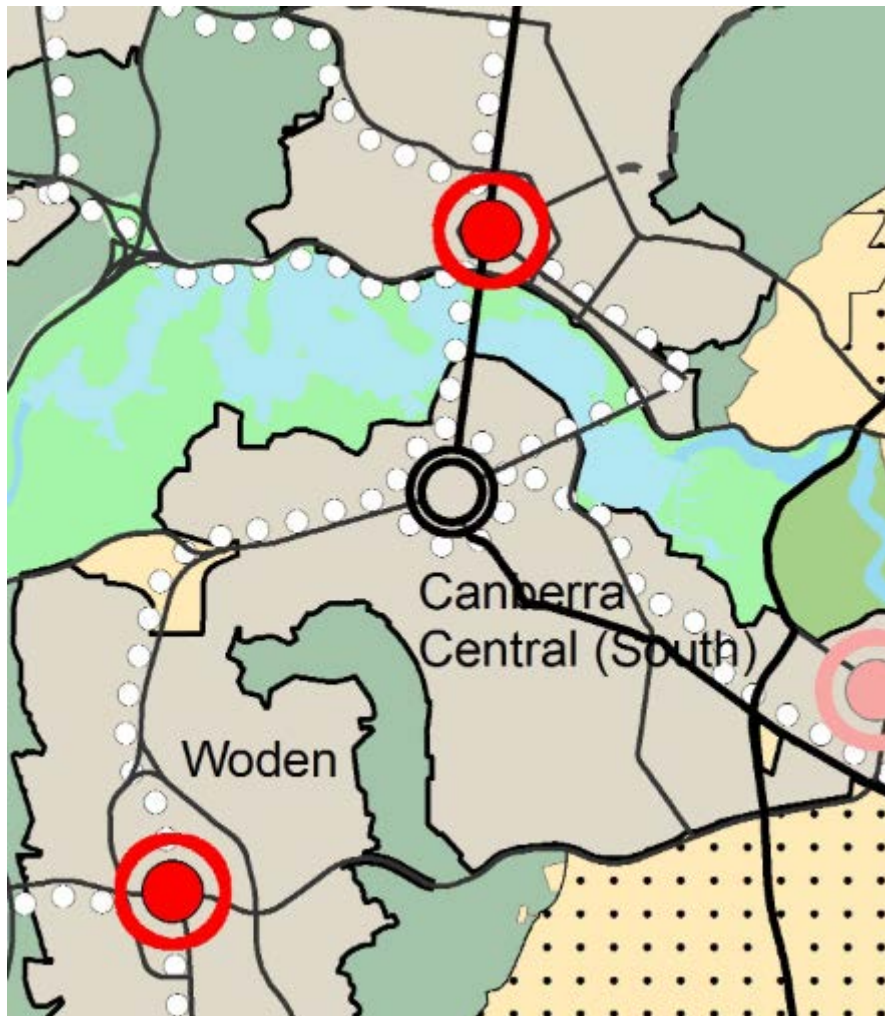


Source ACT Government, Submission 25, p. 17.

Consistency with the National Capital Plan

3.10 The Plan provides for an inter-town public transport system and sets out the general location for a transit corridor, reserving routes between the city centre, town centres, and major employment nodes.¹² At present, the Plan provides for inter-town public transport routes that traverse Commonwealth, Kings and Constitution Avenues, State Circle, and Adelaide Avenue (see Figure 3.2).

Figure 3.2 National Capital Plan, excerpt showing indicative route for inter-town public transport system relevant to light rail stage 2



Source National Capital Plan, s. 3.1.4

3.11 The National Capital Authority (NCA) stated that it does not support the proposed route alignment's path through the Parliamentary Zone. It advised that the Parliamentary Zone is not identified in the Plan as a route

12 National Capital Authority, *Consolidated National Capital Plan*, s. 3.1.4.

for an inter-town public transport system and, as such, the proposed route alignment is not consistent with the Plan.¹³ It explained that:

...the Plan permits further consideration and exploration of a route for an inter-town public transport system along Commonwealth Avenue, Kings Avenue and State Circle. This approach is consistent with the principles provided for in the Griffins' original plan for Canberra. The Plan, however, does not provide for an inter-town public transport system through the Parliamentary Zone.¹⁴

- 3.12 The NCA advised that the Plan can be considered 'in principle' approval for light rail routes, as it has been subject to full community consultation and approved by the Commonwealth Parliament. It explained that:

Should the ACT Government elect to follow a route outlined in the Plan, and subject to environmental and heritage approvals and urban design, moral rights, traffic and land tenure matters being resolved, there would appear to be no impediment to the NCA receiving a works approval application for its consideration.¹⁵

- 3.13 The NCA cautioned that any further consideration of routes not currently identified in the Plan would 'require information that is much more detailed than that which appears to be currently contemplated by the ACT Government before a decision could be made'. It advised that it would require all environmental and heritage impact approvals, as well as design and safety matters necessary for rail operation to be addressed and documented for assessment prior to its consideration of a route.¹⁶

- 3.14 The NCA recommended that the ACT Government conduct an initial rapid heritage impact assessment to assist the ACT Government in determining whether a route not outlined in the Plan is suitable for further consideration.¹⁷

Rapid-transport spine

- 3.15 The ACT Government explained that 'light rail from Gungahlin to Woden will create a north-south public transport spine for Canberra'.¹⁸ While

13 National Capital Authority, *Supplementary Submission 22.2*, p. [19].

14 National Capital Authority, *Supplementary Submission 22.2*, p. [4].

15 National Capital Authority, *Supplementary Submission 22.2*, p. [4].

16 National Capital Authority, *Supplementary Submission 22.2*, p. [4].

17 National Capital Authority, *Supplementary Submission 22.2*, p. [4].

18 ACT Government, *Submission 25*, p. 5.

many submitters supported this objective, some questioned whether the proposed route alignment best served this goal.¹⁹

- 3.16 The Planning Institute of Australia (PIA) emphasised the importance of clear and direct planning goals for LRS2. The Principal Policy Officer for New South Wales at PIA, John Brockhoff, told the committee that ‘in the interests of good planning practice, there needs to be clarification of the project objectives’. Mr Brockhoff explained that:

...the project is trying to kick a lot of goals. The corridor south from Capital Hill to Woden is going to serve a role that competes with busways and competes with private car travel ...[However] As you go around Capital Hill and deviate into Barton, it’s going to be slowing down and servicing pick-ups and drop-offs all through the employment precincts in Barton [where] it’ll also serve a place-making role as it slows down...Then, once it’s going over the lake and charging north, it’ll be back into a more rapid-transit role.²⁰

- 3.17 PIA cautioned that the proposed alignment ‘removes the route’s effectiveness as a rapid inter-town public transport system’, explaining that:

A diversion from the most direct and legible route at Barton will penalise many kilometres of route beyond Woden Town Centre...a diversion from the primary spine would likely reduce both the incentive and the real-world ability to interchange as future stages of light rail come on-line...this highlights a lack of alignment between strategic planning and infrastructure planning.²¹

- 3.18 The Property Council of Australia submitted that the proposed alignment ‘should not depart from the longer-term ACT Light Rail Network Plan [see Figure 1.1 in Chapter 1] without strong justification and a review of the network’, stating that:

Diverting away from the IPT [inter-town public transport] corridor and the Light Rail Master Plan to service employment at Barton, removes the route’s effectiveness as a rapid inter-town public transport system. For residents of Woden this will be a slower

19 For example: Planning Institute of Australia, *Submission 24*; Property Council of Australia, *Submission 37*; Farrer Residents Association, *Submission 30*; Dr John Smith, *Submission 8*; Weston Creek Community Council, *Submission 13*; Mr Mark Dando, *Submission 19*; Woden Valley Community Council, *Submission 34*.

20 Mr John Brockhoff, Principal Policy Officer, New South Wales, Planning Institute of Australia, *Proof Committee Hansard*, 28 June 2018, p. 6.

21 Planning Institute of Australia, *Submission 24*, p. 9.

service than the current express bus service currently operating or driving a car. As a result, it is likely that express buses will continue to operate along Adelaide Avenue which will undermine the viability of the light rail.²²

Travel times and impact on existing rapid transport

3.19 A number of submitters raised concerns that the rapid transport provided by the light rail will not exceed or even meet current rapid bus transport options, with many expressing concerns that existing rapid bus transport services will be stopped following the opening of the light rail.²³ Dr John Smith, a Canberra resident, explained to the committee that:

...the light rail stage 2 is replacing the only rapid transit element in the entire ACT public transport network – the bus-way route from Woden town centre to Civic. The route of Stage 2 is a milk run deviating through Barton. As a result, commuters between Woden and Civic will have their travel time double from 12 minutes to more than 25 minutes when Stage 2 replaces the existing rapid service.²⁴

3.20 However, the Australian Railway Association (ARA) cautioned that ‘light rail and buses should not be viewed as an “either/or” proposition’, noting that:

Arguments pitting buses against light rail are blinkered and detract from the role both technologies can play in reducing car dependence in cities such as Canberra. Integration between transport modes is vital to the success of a public transport system...efforts should be focused on how to make buses and light rail seamless extensions of each mode.²⁵

3.21 The ACT Government asserted that the proposed light rail alignment ‘provides very different amenity’ to the current rapid bus services. It explained that the light rail project does not directly compare to either the blue rapid or green rapid bus services between Woden and the City:

[The light rail] provides very different amenity to the current blue rapid bus service that provides only a direct bus service with no stops between Woden and the City...in the same way, it’s not

22 Property Council of Australia, *Submission 37*, pp. 10-11.

23 For example: Farrer Residents Association, *Submission 30*; Mr Leon Arundell, *Submission 4*; Dr John Smith, *Submission 8*; Smart Canberra Transport, *Submission 5*; Mr Mike Quirk, *Submission 7*; Woden Valley Community Council, *Submission 34*; Western Creek Community Council, *Submission 13*; Mr Kent Fitch, *Submission 27*; Ms Dione Smith, *Submission 29*.

24 Dr John Smith, *Submission 8*, p. 2.

25 Australian Railway Association, *Submission 31*, p. 13.

accurate to compare the project to the 'green' bus rapid route between Woden and the City which operate every 15 minutes and takes between 34 and 49 minutes to travel from Woden to the City depending on the time of day.²⁶

- 3.22 The ACT Government confirmed that buses will 'continue to play an important role as part of an integrated public transport network in the future'. It advised the committee that bus network changes, including rapid services, will be developed 'closer to the planned opening date of the extension to Woden' to accurately reflect the public transport needs at the time.²⁷

Commonwealth Avenue Bridge

- 3.23 A number of submissions raised concerns regarding the proposed crossing of Lake Burley Griffin along Commonwealth Avenue, with most submitters opposed to existing traffic lanes on Commonwealth Avenue Bridge being used for the light rail.²⁸ The Inner South Canberra Community Council advised the committee that a survey conducted by the Deakin Residents Association found that:

A majority of respondents did not support removal of car lanes to accommodate light rail. Over half supported a new bridge over Lake Burley Griffin.²⁹

- 3.24 Some submitters were also concerned with the impact of light rail on the heritage and aesthetic appeal of the Bridge.³⁰ The Lake Burley Griffin Guardians told the committee that it has serious concerns regarding the impact of the light rail crossing the lake, asserting that light rail will 'damag[e] the elegance and form of whatever bridge is used'.³¹
- 3.25 However, the Public Transport Association of Canberra believed that the benefits provided by light rail outweighed any potential impacts to traffic, and that light rail is unlikely to impact heritage or aesthetics:

26 ACT Government, *Supplementary Submission 25.1*, pp. 26-27.

27 ACT Government, *Supplementary Submission 25.1*, pp. 26-27.

28 For example: Smart Canberra Transport, *Submission 5*; Deakin Residents Association, *Submission 18*; Inner South Canberra Community Council, *Submission 26*; Weston Creek Community Council, *Submission 13*; Farrer Residents Association, *Submission 30*.

29 Inner South Canberra Community Council, *Submission 26*, p. 2; Deakin Residents Association, *Submission 18*, pp. 6-7.

30 For example: Lake Burley Griffin Guardians; Deakin Residents Association, *Submission 18*; Mr Duncan Marshall, *Submission 12*; Mr Jack Kershaw, *Supplementary Submission 3.1*; Mr Kent Fitch, *Submission 27*; Dr John Smith, *Submission 8*.

31 Lake Burley Griffin Guardians, *Supplementary Submission 6.1*, p. 3; Lake Burley Griffin Guardians, *Submission 6*, pp. 3-4.

...the accommodation of light rail is a higher priority than the loss of a traffic lane. We do not believe the heritage values of the bridge or the remainder of Commonwealth Avenue would be negatively impacted. The road surface and bridge have been subjected to numerous upgrades and changes since construction and any changes to accommodate light rail, would provide a significant benefit to all users.³²

- 3.26 The ACT Government assured the committee that existing road capacity on Commonwealth Avenue will be retained. It explained that an on-road alignment, using existing traffic lanes, was initially contemplated in the early stages of planning. However, it has since amended its design and the proposed alignment now features off-road light rail travelling on the median of Commonwealth Avenue and the construction of a new dedicated bridge to be built between the two existing Commonwealth Avenue bridges.³³
- 3.27 The National Capital Authority advised that it requires the ACT Government to provide the findings of an independent heritage assessment, by an appropriately qualified heritage practitioner, that demonstrates that the heritage impact can be acceptably mitigated for light rail on Commonwealth Avenue and Commonwealth Avenue Bridge.³⁴ It explained that the ACT Government will need to provide a bridge design that:
- is of equal quality to that of the existing bridges;
 - has the same column spacing as the existing bridges;
 - does not reduce existing lake to underside of bridge clearances;
 - is slimmer than the existing bridges so as not to visually impact on the existing two bridges; and
 - has no impact on the structural soundness of the existing bridges.³⁵

Impact on traffic congestion

- 3.28 Some submissions, particularly resident associations, raised concerns that the light rail would exacerbate traffic congestion.³⁶ The NCA noted that,

32 Public Transport Association of Canberra, *Submission 14*, p. 5.

33 ACT Government, *Submission 25*, p. 23.

34 National Capital Authority, *Supplementary Submission 22.2*, p. [16].

35 National Capital Authority, *Supplementary Submission 22.2*, p. [17].

36 For example: Kingston and Barton Residents Group, *Submission 23*; Lake Burley Griffin Guardians, *Submission 6*; Griffith-Narrabundah Community Association, *Submission 9*; Inner South Canberra Community Council, *Submission 26*; Weston Creek Community Council, *Submission 13*.

when considering earlier designs, it formally advised the ACT Government that it does not support:

- a significant increase in traffic signals;
- the (previously) proposed reduction of lanes on Commonwealth Avenue and associated traffic management implications; or
- changes to the road layout within the Parliamentary Zone.³⁷

3.29 The ACT Government assured the committee that it has undertaken substantial traffic modelling and that the 'the introduction of light rail will not worsen traffic delays across the road network as a whole' (see Table 3.1 below).³⁸

Table 3.1 Light rail traffic modelling summary (2026, with and without light rail)

Network statistics for all vehicles	2026: No light rail		2026: With light rail (median alignment Commonwealth Avenue)	
	AM peak	PM peak	AM peak	PM peak
Total vehicle travel time through network (h)	15,741	13,814	15,724	14,013
Total delay across network (h)	1,334	1,147	1,317	1,148
Average trip speed (km/h)	37	38	37	38

Source ACT Government, *Submission 25*, p. 24.

Alternative routes

3.30 A number of alternative route alignments were proposed by submitters, with many focusing on optimising the route alignment for rapid transport.³⁹ PIA presented three alternative route options that 'deliver an attractive service to the Barton employment precinct while maintaining the integrity of the ACT Light Rail Network Plan'.⁴⁰

3.31 PIA's first alternative comprises a direct route located on the eastern side of Capital Circle with a stop serving both Parliament House and the Barton Office precinct (see Figure 3.3). It notes that this route is 1.32 km shorter than the proposed route alignment.

37 National Capital Authority, *Submission 22*, p. 16.

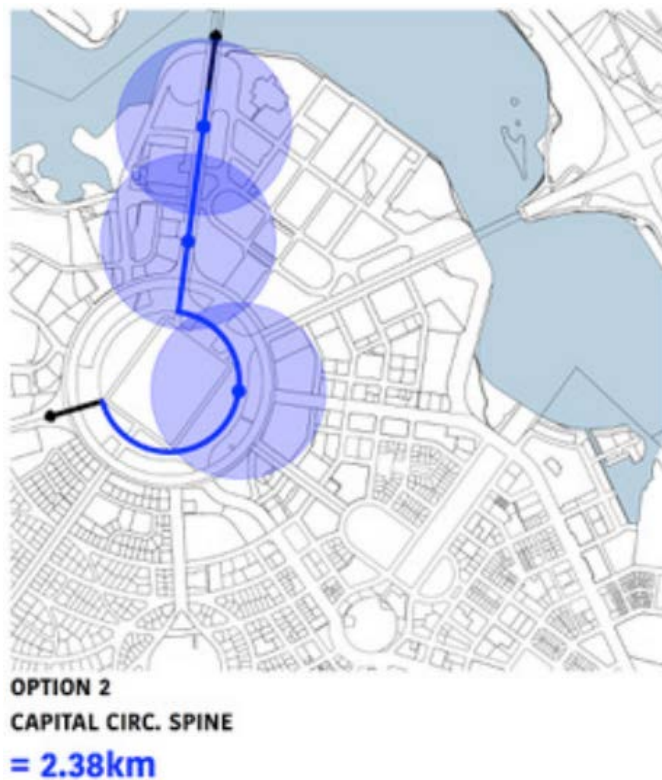
38 ACT Government, *Submission 25*, p. 24.

39 For example: Planning Institute of Australia, *Submission 24*; Mr Mark Dando, *Submission 19*; Ms Dione Smith, *Submission 29*; Australian Railway Association, *Submission 31*; Mr Jack Kershaw, *Submission 3*.

40 Planning Institute of Australia, *Submission 24*, p. 10.

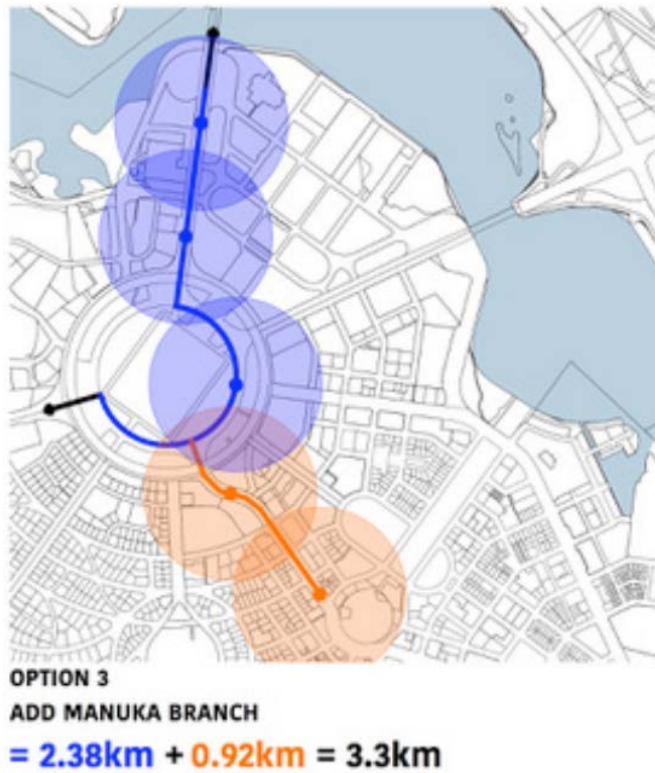
- 3.32 PIA's second alternative comprises a direct route on Capital Circle (the first alternative) with a line running from Capital Circle along Canberra Avenue with stops serving the Barton Office precinct and Manuka Oval (see Figure 3.4). It notes that this route is 0.34km shorter than the proposed route alignment.
- 3.33 PIA's third alternative comprises a direct route on Capital Circle (the first alternative) with a line to Kingston Foreshore and Kingston Railway Station along Wentworth Avenue via Brisbane Avenue and Macquarie Street in Barton connecting to King George Terrace (see Figure 3.5). It notes that this route is 0.9km longer than the proposed route alignment.

Figure 3.3 Direct route via Capital Circle Spine



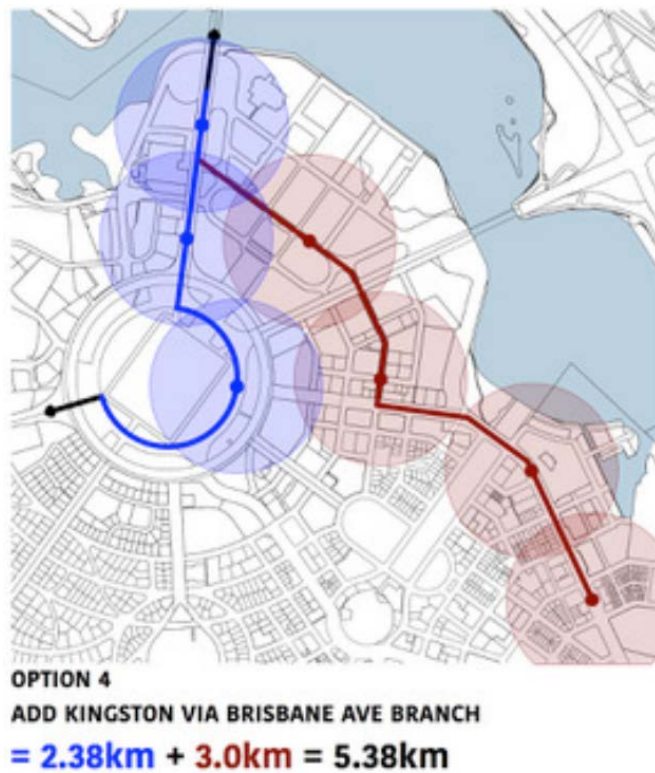
Source *Planning Institute of Australia, Submission 24, p. 16.*

Figure 3.4 Capital Circle Spine + new Canberra Avenue line to Manuka Oval



Source *Planning Institute of Australia, Submission 24, p. 17.*

Figure 3.5 Capital Circle spine + branch line to Kingston



Source *Planning Institute of Australia, Submission 24, p. 17.*

- 3.34 The NCA noted that extending the route along Commonwealth Avenue to State Circle, rather than crossing the Parliamentary Zone, ‘approximates Griffin’s design and may result in improved trip times’. However, it noted that ‘there are challenges in navigating beneath the Australian Parliament House ramp’.⁴¹
- 3.35 Parliament House Moral Rights Holder, Mr Harold Guida, advised the committee that he had no objection to a route that travelled along State Circle and incorporated a station at the ‘cut-in’ under the ramp, providing vertical access to Federation Mall.⁴²

Constitution Avenue, Russell, Kings Avenue

- 3.36 A number of submissions commented on the importance of the light rail network servicing the employment centre of Russell and the potential for light rail to cross the lake on Kings Avenue Bridge.⁴³ The NCA outlined two alternative routes that utilised Kings Avenue as a rapid transit corridor, noting that, while preliminary and in need of further development, ‘an acceptable design solution may be able to be found along Kings Avenue’ (see Figure 3.6).⁴⁴
- 3.37 The NCA submitted that ‘there are benefits in redirecting the route to Kings Avenue as per Griffin’s Plan, which avoids the Parliamentary Zone’.⁴⁵ It advised the committee that the proposed route alignment sets aside and permanently alters the road geometry established by Griffin for the Parliamentary Zone and that ‘adopting Griffin’s approach of using Kings Avenue would ensure that the three employment centres at the junctions of the National Triangle (Civic, Russell and Parliament House) would be serviced by the light rail network’.⁴⁶
- 3.38 Both PIA and the Property Council of Australia highlighted the role of Constitution and Kings Avenues in the ACT Light Rail Network Plan for the National Triangle (see Figure 1.1 in Chapter 1).⁴⁷ PIA explained that the Light Rail Network Plan proposes light rail routes that utilise the broad reserves of Commonwealth, Kings and Constitution Avenues:

41 National Capital Authority, *Supplementary Submission 22.1*, p. 2.

42 Mr Harold Guida, Parliament House Moral Rights Holder, *Proof Committee Hansard*, Canberra, 16 August 2018, p. 3.

43 For example: National Capital Authority, *Submission 22* and *Supplementary Submission 22.1*; Australian Railway Association, *Submission 31*; Property Council of Australia, *Submission 37*; Lake Burley Griffin Guardians, *Supplementary Submission 6.1*.

44 National Capital Authority, *Submission 22*, pp. 18-19.

45 National Capital Authority, *Supplementary Submission 22.1*, p. 2.

46 National Capital Authority, *Supplementary Submission 22.1*, p. 2.

47 Property Council of Australia, *Submission 37*, pp. 10-11; Planning Institute of Australia, *Submission 24*, pp. 6-7.

[The avenues] provide direct and efficient routes to the City Centre and Russell from the Parliamentary Zone. These avenues connect to the broader network which logically extend outwards to Canberra's town centres and other major destinations such as Canberra International Airport, Fyshwick and potentially Queanbeyan. The route follows Capital Circuit, which then connects to Adelaide Avenue.⁴⁸

- 3.39 ARA outlined the benefits of a route that linked Russell to Civic along Constitution Avenue. It noted that such a route would add employment (Russell), educational (Canberra Institute of Technology) and emerging high-density residential (Reid) patronage to the light rail network, resulting in 'greater all-day bi-directional patronage'.⁴⁹ The ARA further noted that a route to Russell could be extended to Canberra Airport, which would 'stimulate additional private sector investment and provide a critical link in Canberra's transport system'.⁵⁰
- 3.40 The ACT Government emphasised the importance of considering LRS2 in the broader context of the light rail network over time. It argued that if the proposed route alignment for LRS2 is required to traverse Constitution Avenue, Russell, and cross the lake at Kings Avenue Bridge, it would be significantly detrimental to the viability of the light rail network as a whole.⁵¹

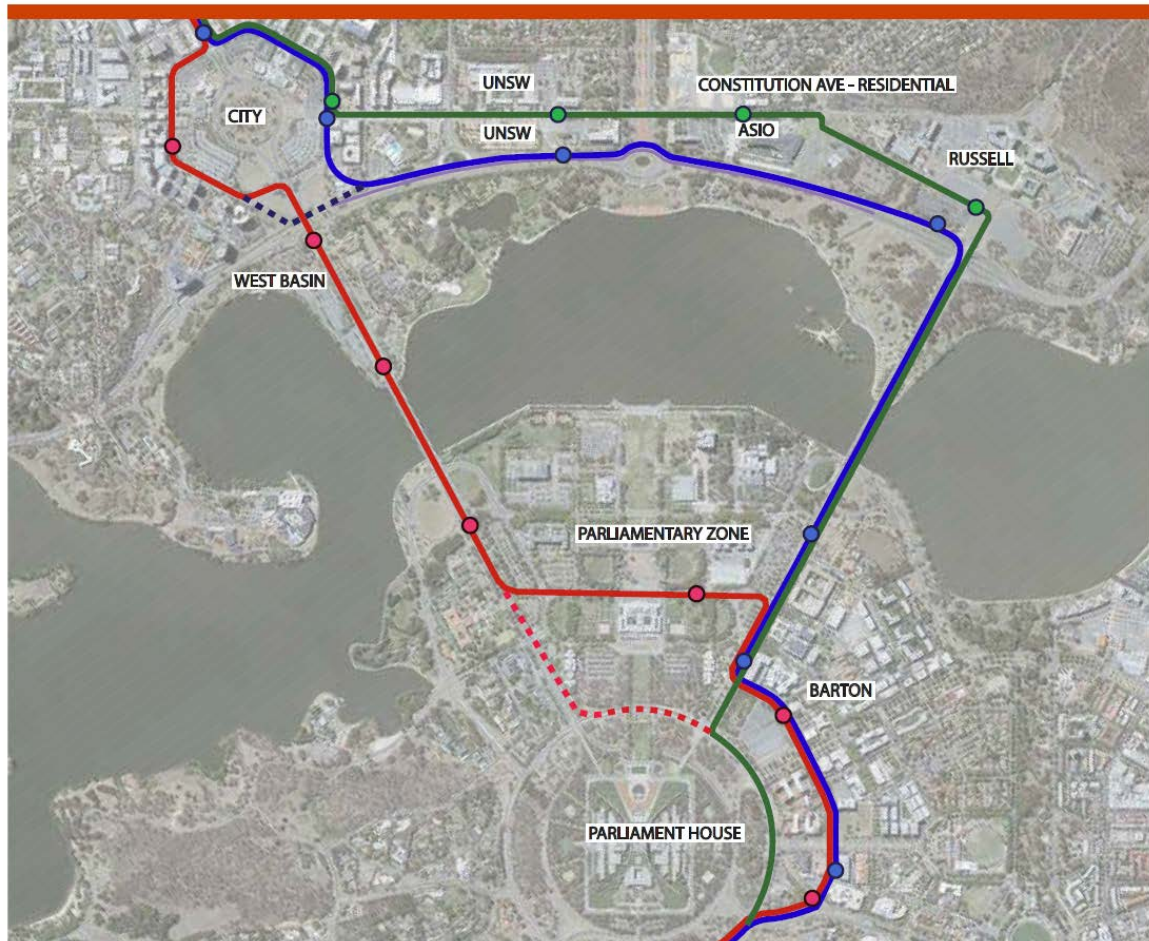
48 Planning Institute of Australia, *Submission 24*, pp. 6-7.

49 Australian Railway Association, *Submission 31*, pp. 11-12.

50 Australian Railway Association, *Submission 31*, pp. 11-12.

51 ACT Government, *Supplementary Submission 25.1*, pp. 4-9.

Figure 3.6 Possible alternative light rail routes

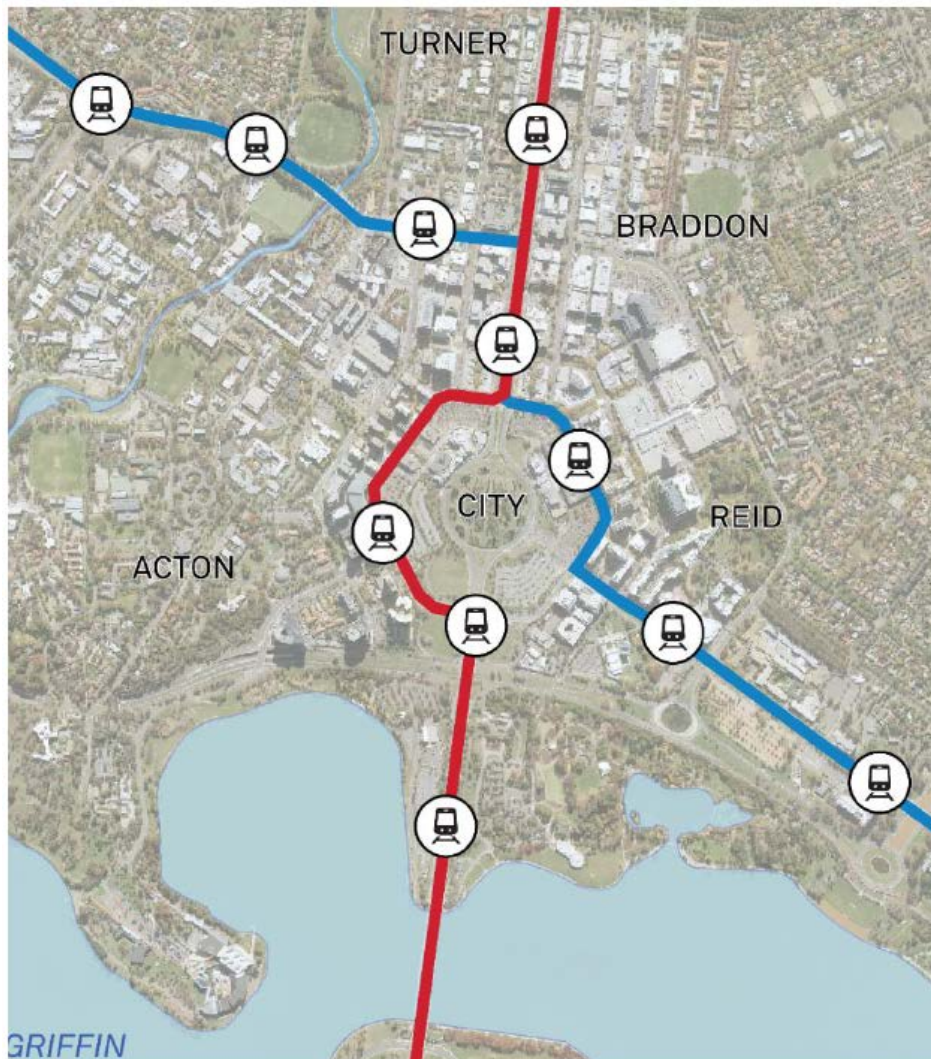


Source *National Capital Authority, Submission 22, p. 19.*

- 3.41 The ACT Government explained that it plans for the light rail network ultimately to comprise two major axes that cross the city centre at London Circuit, around City Hill, which will enable light rail to serve all central areas, including the Parliamentary Zone. The north-south spine (Gungahlin to Woden) will use the alignment along the western side of London Circuit and the east-west spine (Belconnen to Russell and the Canberra International Airport) will use the alignment along the eastern side of London Circuit (see Figure 3.7).⁵²

52 ACT Government, *Supplementary Submission 25.1*, p. 4.

Figure 3.7 Light rail network design, showing primary north-south (red) and east-west (blue) spines that intersect around City Hill.



Source ACT Government, *Supplementary Submission 25.1*, p. 5.

- 3.42 The ACT Government advised the committee that if both the north-south and east-west spines were to use Constitution Avenue it would limit coverage and significantly disrupt both capacity in the light rail network and traffic in the city (See Figure 3.8). This would result in:
- western areas in the City, including the Australian National University, never being serviced by light rail and the high demand for stops on the western side of the City (estimated to be approximately 1,200 people alighting at the City West stop and 500 alighting at West Basin during the morning peak by 2036) not being met;

- a reduction in the overall capacity of the transport network, as both major lines will overlap on Constitution Avenue, (which is insufficiently wide to completely segregate light rail and road vehicles), and both major lines would be disrupted by a private vehicle breakdown on Constitution Avenue;
- the potential for the intersection of Constitution Avenue and Coranderrk street to fail if services were doubled, exposing the city road network to unacceptable delays; and
- the limitation of future expansion and flexibility for the network.⁵³

3.43 It explained that it estimates that a Kings Avenue alignment for LRS2 will have poorer outcomes than the proposed route alignment, including:

- lower patronage numbers (39,000 projected daily patronage in 2041 for proposed alignment compared to 31,200 for Kings Avenue alignment);
- longer journey times (25-30 minutes for proposed alignment compared to 35-39 minutes for Kings Avenue alignment);
- greater cost (\$1.3-1.6 billion for proposed alignment compared to \$1.53-1.9 billion for Kings Avenue alignment); and
- more original Charles Weston plantings being impacted (28 trees for proposed alignment and 40 trees for Kings Avenue alignment).⁵⁴

3.44 The ACT Government advised the committee that it is 'unlikely to invest in the project' if there was a requirement to cross the Lake at Kings Avenue, 'given the lasting, sub-optimal outcomes that this would produce for Canberra'. It explained that:

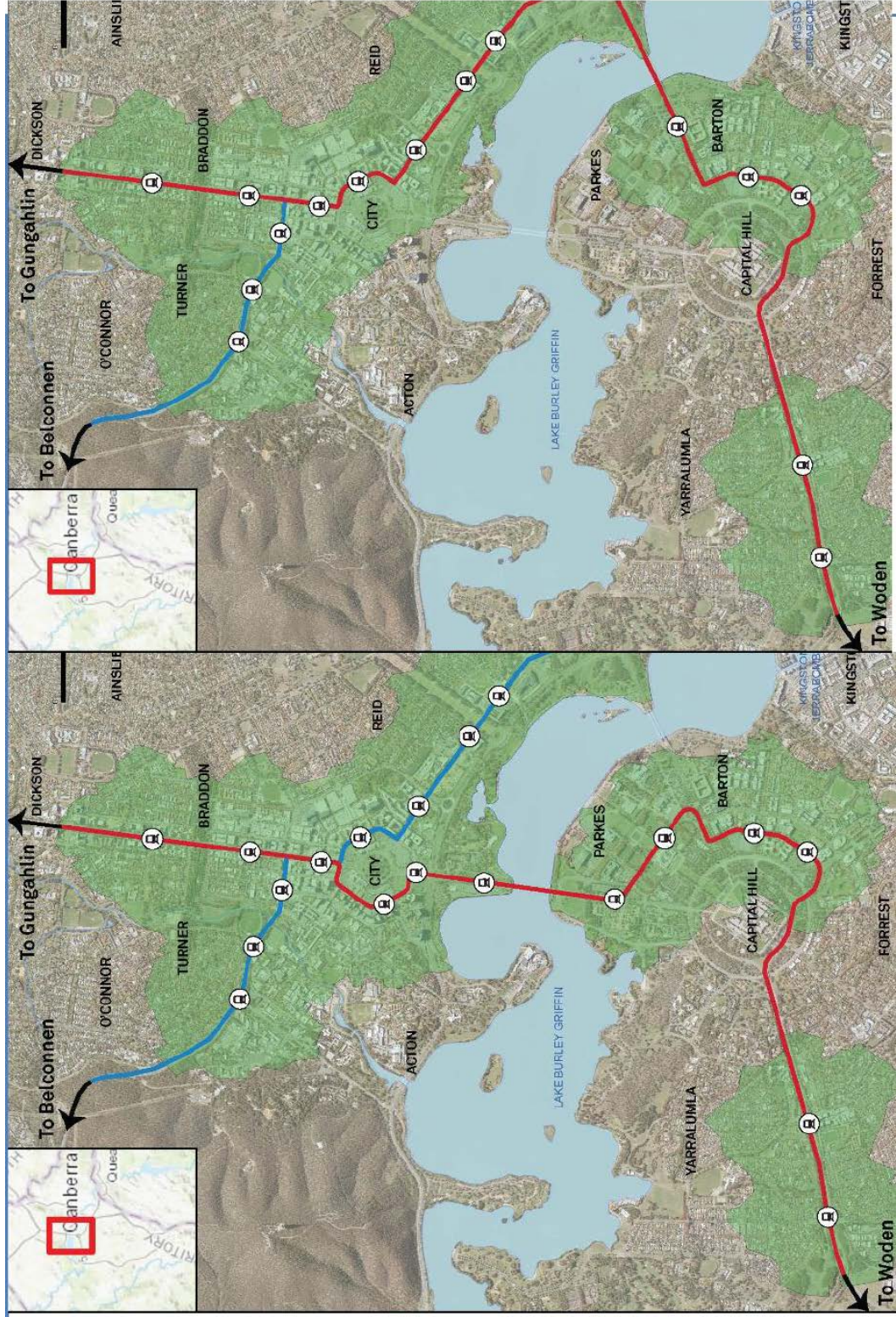
The ACT Government is firmly of the view that Canberra is best served by the north-south light rail alignment crossing the Lake at Commonwealth Avenue – it will provide better light rail coverage through the City and Parliamentary area, achieve more appropriate travel times and cost outcomes, result in higher patronage, require the removal of fewer significant trees, and result in more appropriate network operations.⁵⁵

53 ACT Government, *Supplementary Submission 25.1*, pp. 4-9.

54 ACT Government, *Supplementary Submission 25.1*, pp. 4-9.

55 ACT Government, *Supplementary Submission 25.1*, p. 9.

Figure 3.8 Comparison of Stage 2 Commonwealth Avenue Lake Crossing and Kings Avenue Lake Crossing



Source ACT Government, Supplementary Submission 25.1, p. 9.

Committee comment

- 3.45 The National Capital Plan sets out in law the strategy and blueprint that articulates the Commonwealth's interests and intentions for planning, designing and developing Canberra and the Territory. As such, the route alignment for the LRS2 project must be consistent with the Plan in order to receive Parliamentary, and, ultimately, Works Approval by the National Capital Authority.
- 3.46 The committee wants to facilitate and ensure the simplest possible Commonwealth approval process for the light rail project. It is not the committee's intention to slow or hinder the approvals process, but rather to provide certainty for the ACT Government and the people of Canberra, and to ensure that time and money is not wasted pursuing a route that is not endorsed by the Commonwealth and therefore not feasible.
- 3.47 The NCA's advice makes clear that, if the ACT Government were to pursue a route that is consistent with the National Capital Plan, it could do so with the confidence that the route has already been considered by the Commonwealth, and given its in-principle approval, in the Plan. This would allow the ACT Government to quickly and easily move forward with the Commonwealth approvals process.
- 3.48 However, if the ACT Government decides to proceed with a route alignment that is only partially consistent with the National Capital Plan, this will unavoidably add further complexity, time, and cost to the approval processes and the overall light rail project.
- 3.49 If the ACT Government remains committed to its choice of route alignment, the committee believes that there should be a two-stage Commonwealth approval process. The first stage would comprise working with the NCA and other relevant Commonwealth agencies to definitively determine whether the proposed route is feasible. The NCA has advised that this would require the ACT Government to provide the results of an initial rapid heritage assessment. The committee is of the view that the first stage would also be best completed by seeking an amendment to the National Capital Plan.
- 3.50 It is only after these matters have been addressed and the proposed route has the approval of the Commonwealth, that the second stage should commence. The second stage would comprise the Works Approval and other Commonwealth approvals processes outlined in Chapter 2 of this report.

- 3.51 The committee is concerned that if the ACT Government chose to invest in the development of detailed designs, heritage assessments, and an Environmental Impact Statement without prior Commonwealth approval of its proposed route alignment, there is a significant risk that this investment could be wasted. A two-stage process would ensure that this did not occur.
- 3.52 The committee commends the ACT Government for its proactive approach in seeking guidance and advice, from both pre-application discussions with the NCA and throughout this inquiry process. It is important to ensure that this cooperation continues in the most effective way – not to slow down the project, but to ensure that it can proceed lawfully and effectively.

Recommendation 2

- 3.53 **In the event that the ACT Government chooses to pursue a route alignment that is only partially consistent with the National Capital Plan, the committee recommends that there be a two-stage process for seeking Commonwealth approval:**
- **Stage 1: the ACT Government works with the National Capital Authority to ensure Commonwealth approval of the route alignment, by way of amendment to the National Capital Plan; and**
 - **Stage 2: completion of Works Approval application and other Commonwealth approval processes.**

- 3.54 The committee is conscious of the importance of heritage considerations in designing a light rail crossing for Lake Burley Griffin. The committee agrees that the National Capital Authority must be provided with the findings of an independent heritage assessment, by an appropriately qualified heritage practitioner, that demonstrates that the heritage impact can be acceptably mitigated for light rail to use either the Commonwealth Avenue or Kings Avenue bridges.

Recommendation 3

- 3.55 **The committee recommends that the National Capital Authority require any light rail bridge design on either the Commonwealth or Kings Avenue bridges to:**
- **be of equal quality to that of the existing bridges;**
 - **have the same column spacing as the existing bridges;**
 - **not reduce existing lake to underside of bridge clearances;**
 - **be slimmer than the existing bridges so as not to visually impact on the existing two bridges; and**
 - **have no impact on the structural soundness of the existing bridges.**

Heritage

- 4.1 Canberra is more than just a city; it is the ceremonial heart of Australia and is home to some of the nation's most significant institutions and buildings. The Central National Area, and particularly the Parliamentary Zone, is filled with examples of our heritage and national identity. It is essential that the Commonwealth ensures it is preserved for all Australians.
- 4.2 This chapter will consider the potential heritage impacts of the Light Rail Stage 2 project (LRS2) and examine the consultation regarding the project undertaken by the Australian Capital Territory (ACT) Government and National Capital Authority (NCA) to date.

Consultation to date

ACT Government

- 4.3 In May and June 2017, the ACT Government sought feedback from the community to inform the development of the LRS2 project, seeking the community's views on:
- route alignment;
 - stop locations; and
 - other elements of community, cultural or environmental significance.¹
- 4.4 The ACT Government assured the committee that it is committed to an ongoing consultation process with the community, local businesses, educational institutions, and other key precincts and stakeholders including:

1 ACT Government, *Submission 25*, p. 18.

- national cultural institutions and Commonwealth departments within the Barton precinct;
- Woden Town Centre users, such as businesses, customers and public transport patrons;
- residents and representative groups in Barton, Forrest, Deakin, Yarralumla, Curtin, Hughes, Lyons and Woden, such as the Inner South Canberra and Woden Valley Community Councils and aged care facilities such as St Andrews Village;
- Aboriginal groups and individuals, including representatives from the Aboriginal Embassy, Registered Aboriginal Organisations, and the broader Aboriginal community;
- suburban shopping areas, such as Deakin and Curtin Shops;
- educational institutions, such as the Australian National University, Canberra Institute of Technology, and Canberra Girls Grammar School;
- health facilities, including Calvary John James Private Hospital; and
- local peak groups, such as the ACT Property Council, the Canberra Business Chamber and the Public Transport Association of Canberra.²

4.5 The ACT Government advised that the next phase of consultation is expected to commence following the conclusion of the committee's inquiry.³

National Capital Authority

4.6 The NCA explained that it would seek community feedback on the LRS2 project at both the strategic and the works level. It noted that it received strategic feedback from the community regarding rapid transport route alignments (albeit not the mode of transport to be used) during its consultation for the revision of the National Capital Plan in 2016.⁴

4.7 The NCA told the committee that its next stage of public consultation will be at the detailed works level and will follow the receipt of a formal works application from the ACT Government. The Chief Planner at the NCA, Andrew Smith, advised that the NCA would not conduct this stage of public consultation unless it was satisfied that the plan and design of the project were of 'appropriate quality', explaining that:

We'll be looking to understand and take to community comments about which particular materials, where they'll be, clear

2 ACT Government, *Submission 25*, p. 67.

3 ACT Government, *Submission 25*, p. 68.

4 Mr Andrew Smith, Chief Planner, National Capital Authority, *Proof Committee Hansard*, Canberra, 21 June 2018, p. 20.

identification of loss of trees if that's proposed, new planting, and new safety measures that are proposed for [the project].⁵

- 4.8 Mr Smith advised that the NCA will continue to interact with the ACT Government as it develops the project.⁶

Heritage concerns

- 4.9 A range of concerns regarding the LRS2 project's potential impact on the heritage of the Parliamentary Zone, Parliament House and its vistas, and Commonwealth Avenue Bridge were raised throughout the inquiry. In particular, submissions raised concerns regarding:
- the need for a detailed heritage assessment;
 - the use of overhead wires and poles in Designated Areas and their impact on views of Parliament House and the Parliament House Vista;
 - the appearance of light rail stops, signs, and landscaping; and
 - the removal of trees planted by Charles Weston.

Detailed heritage assessment

- 4.10 The NCA stated that it remains concerned that the LRS2 project to date 'does not adequately demonstrate sensitivity to the importance of the place through which the rail is proposed to travel'. Furthermore, 'it does not appear to have been designed with sufficient understanding of the symbolic, functional, and ceremonial or heritage values that are core to the Central National Area'. The NCA explained that:

The NCA has regularly noted, most recently in correspondence to the ACT Government dated 13 April 2018, the national significance of the area that the proposed light rail project will traverse and expectations that a comprehensive heritage assessment with appropriate mitigation or treatment measures should be the basis of the project. Such assessments are a matter of routine for proponents of projects in the Parliamentary Zone.⁷

- 4.11 The NCA asserted that the proposed route passing through the Parliamentary Zone is a significant heritage issue that will require a full heritage impact assessment to be completed prior to it finalising its view.

5 Mr Andrew Smith, Chief Planner, National Capital Authority, *Proof Committee Hansard*, Canberra, 21 June 2018, p. 20.

6 Mr Andrew Smith, Chief Planner, National Capital Authority, *Proof Committee Hansard*, Canberra, 21 June 2018, p. 20.

7 National Capital Authority, *Supplementary Submission 22.2*, p. [1].

It explained that the proposal must be sufficiently advanced as to demonstrate that a safe, barrier-free environment is created with an urban design character that is appropriate to the Parliamentary Zone.⁸

4.12 As noted in Chapter 3, the NCA further advised that the independent heritage assessment, provided by the ACT Government, will need to demonstrate that heritage impacts can be acceptably mitigated for light rail on Commonwealth Avenue and Commonwealth Avenue Bridge.⁹

4.13 The NCA commissioned advice from independent heritage advisors, Professor Richard Mackay AM from Mackay Strategic and Adjunct Professor Peter Elliott AM from Peter Elliott Architecture and Urban Design, regarding the LRS2 project. Professor Mackay stressed that the potential impact on places within the Central National Area and their National and Commonwealth heritage values 'should be a key issue in decision-making regarding the light rail project', noting that:

The light rail passes through, adjacent to, or near some of the most important cultural sites in the nation and the light rail project has considerable potential to affect the National, Commonwealth and/or other heritage values of those places. The potential effects include not only physical impacts, but changes to the visual setting of these places, including changes resulting from movable elements, such as light rail carriages.¹⁰

4.14 Professor Mackay also questioned some of the information presented to the committee, especially visualisations and artist impressions of the light rail. He noted that these images show a long-term best-case scenario of the how the light rail might eventually look and may be misleading for decision-makers. He explained that:

The images shown include montages with mature avenues of new trees and are unlikely to depict how the subject section of the light rail project will appear in the period immediately following construction. Well-informed decision-making requires a thorough understanding of the effects of this project...a thorough and reliable heritage impact assessment is required, founded on accurate information, rather than optimistic (and potentially misleading) scenarios.¹¹

4.15 Adjunct Professor Elliott noted that public infrastructure projects of this importance would normally be expected to present a well-researched

8 National Capital Authority, *Supplementary Submission 22.2*, p. [19].

9 National Capital Authority, *Supplementary Submission 22.2*, p. [17].

10 National Capital Authority, *Supplementary Submission 22.2*, p. [8].

11 National Capital Authority, *Supplementary Submission 22.2*, p. [10].

urban design and landscape framework or strategy. He also cautioned that project parameters must be mandated and enforced to ensure that the design and quality presented in the proposal is maintained throughout the project:

Given that the project will be delivered by an industry partnership based on a 'reference design' it is critical to understand how the project parameters will be mandated and enforced. Large infrastructure projects like this have the potential to be watered down or altered as they proceed.¹²

- 4.16 Adjunct Professor Elliott proposed that a Design Review Panel comprising experts in landscape architecture, urban design, architecture, heritage, conservation, transport engineering and planning be established to provide independent advice regarding the project's design values.¹³
- 4.17 Adjunct Professor Elliott also emphasised the value of benchmarking other similar projects, explaining that 'submitting parties should be required to provide a benchmarking study to demonstrate an understanding of best practice through real examples and how that has informed their design thinking'.¹⁴
- 4.18 The ACT Government assured the committee that it is 'acutely aware of the national significance of many locations' along the City to Woden corridor and within the Parliamentary Zone. It advised that a Heritage Management Plan will be included for construction activities and then updated for the start of operations and that 'potential impacts on items of heritage significance will be rigorously assessed under existing legislative provisions'.¹⁵
- 4.19 The ACT Government noted that its preliminary assessment of relevant heritage registers identified 20 heritage listed and nominated items that will be considered during the development of the LRS2 project (see Figure 4.1). It explained that it would engage with the custodians of each of the heritage listings as part of the Environmental Impact Statement (EIS) process and that the design of the light rail alignment, stops, and other features will be 'carefully managed to respect and enhance the heritage value of these locations'.¹⁶

12 National Capital Authority, *Supplementary Submission 22.2*, p. [14].

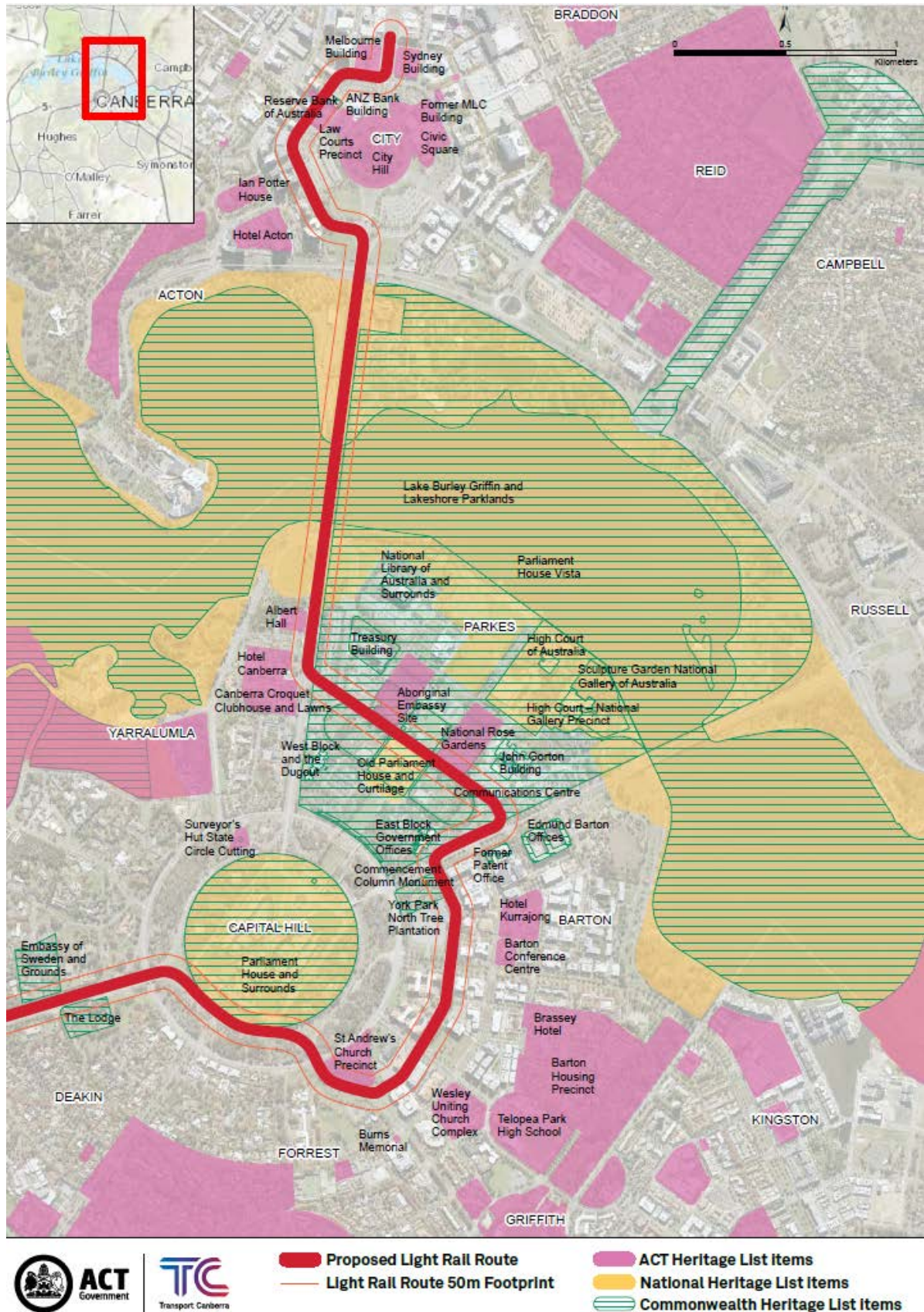
13 National Capital Authority, *Supplementary Submission 22.2*, p. [12].

14 National Capital Authority, *Supplementary Submission 22.2*, p. [13].

15 ACT Government, *Submission 25*, pp. 8, 48-49.

16 ACT Government, *Submission 25*, pp. 8, 48-49.

Figure 4.1 Identified heritage items located near the light rail corridor



Source ACT Government, Submission 25, p. 48.

4.20 The ACT Government told the committee that the implications for heritage places will be determined once detailed assessment requirements are issued from the Department of the Environment and Energy in response to the project's referral under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). It explained that:

The ACT Government is fully aware that the project will result in changes to the area that would be important and notable, particularly given the sensitivity, value and quality of the Central National Area. It is for this reason that the ACT Government expects the project will be a controlled action under the [EPBC Act], and will require a detailed EIS, and ultimately consideration by the Commonwealth Minister for Environment and Energy.¹⁷

4.21 The Commonwealth approvals process is discussed in greater detail in Chapter 2.

Underground tunnel

4.22 It was suggested that, similar to commuter rail in Washington DC, an underground tunnel that travels across Lake Burley Griffin and through the Parliamentary Zone could mitigate the impact of light rail on the Parliament House Vista as well as impacts on the heritage and character of these significant areas.¹⁸

4.23 The ACT Government advised that consideration was given to an underground tunnel in the very early planning stages but was dismissed due to the significant cost associated with tunnelling.¹⁹ The ACT Government also noted the differences between the heavy rail of Washington DC's metro network and light rail in the ACT, advising that:

Light rail is a choice made by cities not just as a transport solution but as a combined urban renewal and land use solution as well. You'll note that in Sydney, for instance, they have heavy rail under the ground, but they are investing in light rail above the ground.²⁰

Overhead wires and poles

4.24 A number of submissions cautioned against the use of overhead wires and poles in the Parliamentary Zone and other Designated Areas, asserting that they may negatively impact the aesthetics, character, and heritage of

17 ACT Government, *Supplementary Submission 25.1*, p. 13.

18 *Proof Committee Hansard*, Canberra, 16 August 2018, p. 7.

19 Mr Duncan Edgehill, Deputy Director-General, Transport Canberra, Australian Capital Territory Government, *Proof Committee Hansard*, Canberra, Thursday 21 June 2018, p. 7.

20 Ms Emma Thomas, Director-General, Transport Canberra and City Services, Australian Capital Territory Government, *Proof Committee Hansard*, Canberra, 16 August 2018, p. 13.

these significant areas.²¹ The Australian Institute of Architects explained that:

It is critically important that the Light Rail route through the Parliamentary Zone is overhead and wire-free with no vertical infrastructure so that it is not impacting upon the Vista of Parliament House, the views of significant buildings within the Parliamentary Zone, and its overall visual amenity.²²

4.25 The ACT Government advised the committee that LRS2 will utilise both overhead wires and poles and wire-free running along the proposed route alignment. The current proposed alignment features wire-free running from Alinga Street to Sydney Avenue, and again in Woden from the Phillip Oval stop to the Woden Town Centre (see Figure 4.2).

4.26 The NCA told the committee that it has advised the ACT Government that these designs are not consistent with the previously stated requirement that the LRS2 route within Designated Areas be entirely wire-free.²³ The Chief Executive Officer of the NCA, Sally Barnes, told the committee that the NCA would prefer the wire-free section of the route to continue along Adelaide Avenue:

...Adelaide Avenue is an important avenue in that it's also linked to the Lodge and to the Governor-General's residence. For visiting dignitaries and just the look and feel of that area we would prefer Adelaide Avenue to be wire-free.²⁴

21 For example: Australian Institute of Architects, *Submission 40*; National Capital Authority, *Submission 22*; Ms Dione Smith, *Submission 29*; Deakin Residents Association, *Submission 18*; Inner South Canberra Community Council, *Submission 26*; Griffith-Narrabundah Community Association, *Submission 9*; Dr John Smith, *Submission 8*; Lake Burley Griffin Guardians, *Submission 6*; Mr Duncan Marshall and Dr Michael Pearson AO, *Submission 12*; Farrer Residents Association, *Submission 30*.

22 Australian Institute of Architects, *Submission 40*, p. 2.

23 National Capital Authority, *Submission 22*, p. 16.

24 Ms Sally Barnes, Chief Executive Officer, National Capital Authority, *Proof Committee Hansard*, Canberra, 21 June 2018, pp. 17-18.

Figure 4.2 Overhead line power and wire-free running locations



 **ACT** Government  **TCC** Transport Canberra

 Proposed Light Rail Route  Light rail stop

 Wire free running

Source ACT Government, Submission 25, p. 52.

- 4.27 Mr Harold Guida, a Moral Rights Holder for Parliament House, emphasised the importance of ensuring that wires and poles do not impact the views of Parliament House from the surrounding areas:

....through the parliamentary area and all the way, I would hope, to Adelaide Avenue, the system would be wire-free so that we don't have anything crossing the views of the parliament from any of the vantage points within the parliamentary area...if we don't have the system wire-free until we get to Adelaide Avenue, you'll see the mast through the drooping wires or whatever it might be.²⁵

- 4.28 The Australian Institute of Architects (AIA) also expressed concerns regarding the return to overhead wires and poles at Sydney Avenue and the impact this will have on views of Parliament House and St Andrew's Church from Canberra Avenue:

...significant vehicular, and some pedestrian traffic, heading west on Canberra Avenue, would view the [Parliament House] flag mast and the spire of St Andrew's church through the lateral crossing of wires and their support posts.²⁶

- 4.29 The ACT Government told the committee that it is continuing to negotiate with the NCA, 'seeking to determine an acceptable outcome for the precise extent of wire-free operations'.²⁷ It explained that some use of wires and poles within Designated Areas may be unavoidable due to the limitations of the available technology:

Due to the curves and gradient, traffic intersections, and the distance between the stops, the Sydney Avenue to Hopetown Circuit section may require more energy than can currently be stored on board the LRVs [Light Rail Vehicles] using technology available today.²⁸

Appearance of light rail stops, signs and landscaping

- 4.30 AIA highlighted the importance of ensuring that light rail stops in the Parliamentary Zone do not negatively impact the heritage of the area and surrounding buildings:

If the proposed Parliamentary Zone stops are used for high usage/daily commutes, there will be a reasonable call for (winter/summer/rain/sun/night) shelters/buildings with the

25 Mr Harold Guida, Parliament House Moral Rights Holder, Guida Moseley Brown Architects, *Proof Committee Hansard*, Canberra, 16 August 2018, p. 1.

26 Australian Institute of Architects, *Submission 40*, p. 2.

27 ACT Government, *Submission 25*, p. 51.

28 ACT Government, *Supplementary Submission 25.1*, pp. 28-31.

expected aspects of roof, support structure, walls, seating, signage, etc...Further, the architecture of the stops (shelter/seating/lighting/information) will be of significance.²⁹

- 4.31 AIA also cautioned against prioritising consistency of stop design along the route over ensuring that heritage is not adversely impacted in the Parliamentary Zone:

While it is often the case that stop structures are consistent in design along a light rail route for ease of identification/branding, the Parliamentary Zone might require more design consideration in terms of stops' placement, form, scale, materials, lighting and signage.³⁰

- 4.32 The ACT Government assured the committee that the 'landscaping surrounding each stop has been carefully considered to allow for tailored design solutions that respect and enhance the local environment and heritage value'. It advised that it is looking to examples of international best practice to guide its design approach, particularly to inform the design of the proposed stop located in front of the Museum of Australian Democracy (MoAD), commonly referred to as Old Parliament House.³¹

- 4.33 The ACT Government raised the example of light rail that passes in front of the Place de la Bourse in Bordeaux, France, where 'the stop surface is integrated into the fabric of the square and it has no canopy to obscure view lines'. It advised that 'this type of approach is planned for the MoAD light rail stop to reflect its iconic location'.³²

- 4.34 The AIA agreed that the Bordeaux example was elegant, but questioned its applicability to the MoAD stop, noting that '[Place de la Bourse stop] is incorporated within a plaza fronting a passing street and is not part of a city-wide landscape visual axis'.³³

Weston plantings

- 4.35 Some submissions raised concerns regarding the removal of trees planted by Charles Weston, an Australian horticulturalist who was responsible for the afforestation of Canberra in collaboration with the Griffins, along the

29 Australian Institute of Architects, *Submission 40*, p. 3.

30 Australian Institute of Architects, *Submission 40*, p. 3.

31 ACT Government, *Submission 25*, p. 34; ACT Government, *Supplementary Submission 25.1*, pp. 13-14.

32 ACT Government, *Submission 25*, p. 34.

33 Australian Institute of Architects, *Submission 40*, p. 3.

proposed route.³⁴ The Chief Planner at the NCA, Andrew Smith, explained the heritage significance of the trees:

For heritage assessment there is a process, a rigour, to it that basically identifies the significance of the object... In the case of the plantings... Weston was a significant person in the early days of the national capital. By virtue of being associated with him, they become important... in terms of the original design character of the city they become important. Through association with the Griffin design of the city, they're a particular marker of that, so they are important... they are of heritage significance.³⁵

4.36 Dr John Gray OAM, a retired fellow of the Australian Institute of Landscape Architects, raised concerns that the ACT Government has not provided a detailed report regarding the proposed removal and replacement of the Weston plantings along the proposed LRS2 route alignment for public consultation:

The community react unfavourably when chainsaws make their presence known without adequate prior consultation... Generally speaking Canberra citizens can be convinced that tree removals are justified if they are told in a report why there is need to do so and the Government reveals in detail how this will be done.³⁶

4.37 Dr Gray emphasised the importance of minimising the visual impact of the loss of trees by planting replacement trees at least a year before the removal of existing trees. He noted that this did not take place for the removal and replacement of trees along Northbourne Avenue for Stage 1 of the light rail:

The existing suitable trees [on Northbourne Avenue] were instead clear felled before rail construction commenced and the replacement trees will be planted later with unsuitable species. The avenue landscape will thus take many years to recover... the highly significant main entrance route into the National Capital will thus remain unattractive for many years to come.³⁷

34 For example: Lake Burley Griffin Guardians, *Supplementary Submission 6.1*; Dr John Gray OAM, *Submission 41*.

35 Mr Andrew Smith, Chief Planner, National Capital Authority, *Committee Hansard*, Canberra, 16 August 2018, p. 7.

36 Dr John Gray OAM, *Submission 41*, p. 2.

37 Dr John Gray OAM, *Submission 41*, p. 3.

Committee comment

- 4.38 The importance of preserving the heritage and character of the Central National Area and the Parliamentary Zone cannot be overstated. The committee supports the ongoing development and improvement of amenities in Canberra, but progress must never be prioritised over the protection of the nation's most significant areas, institutions, and buildings.
- 4.39 The committee notes the NCA's concerns that the LRS2 project to date has not adequately demonstrated sensitivity to the importance of the Central National Area or Parliamentary Zone. Furthermore, as discussed in previous chapters, the proposed route alignment is partially inconsistent with the National Capital Plan. The committee supports the NCA's requirements regarding the provision of a full heritage assessment prior to the NCA finalising its view on the proposed route alignment.
- 4.40 The committee also supports the NCA's requirement that the ACT Government provide an independent heritage assessment that demonstrates that heritage impacts can be acceptably mitigated for light rail on Commonwealth Avenue and Commonwealth Avenue Bridge.
- 4.41 The committee acknowledges the ACT Government's proposal for wire-free running and agrees that this would mitigate the impact of overhead wires and poles. It also understands the current limitations of the proposed wire-free technology and the challenges of making the sections of LRS2 that pass through Designated Areas entirely wire-free. Nonetheless, the committee is concerned that the ACT Government does not appear to be heeding the advice of the NCA with regard to this matter.
- 4.42 The committee supports the NCA's view that the LRS2 route within Designated Areas should be entirely wire-free. The use of overhead wires and poles around Parliament House and along Adelaide Avenue to Kent Street is an unacceptable impact on the heritage and aesthetics of Parliament House and the Designated Areas.

Recommendation 4

4.43 **The committee recommends that the Parliament require any light rail on, or crossing:**

- **Commonwealth Avenue;**
- **Kings Avenue;**
- **State Circle;**
- **Brisbane Avenue;**
- **Sydney Avenue;**
- **Canberra Avenue (to Manuka Circle);**
- **Hobart Avenue;**
- **Melbourne Avenue;**
- **Adelaide Avenue (to Kent Street);**

and in the Parliamentary Zone, be wire-free.

4.44 At this stage, there is little information regarding the design and appearance of light rail stops, signs, and landscaping within the Parliamentary Zone. The committee acknowledges the artist impressions that the ACT Government has provided. However, more detailed information is necessary to form a view.

4.45 The committee is of the view that the ACT Government should prioritise complementing the heritage and character of the Central National Area, and particularly the Parliamentary Zone, over providing consistency of design along the route when designing light rail stops, landscaping and signage.

Recommendation 5

4.46 **The committee recommends that Parliament require the placement and appearance of light rail stops, landscaping, and signage to be unobtrusive and complementary to the heritage value of nearby buildings, views of Parliament, and the character of the Central National Area and Parliamentary Zone.**

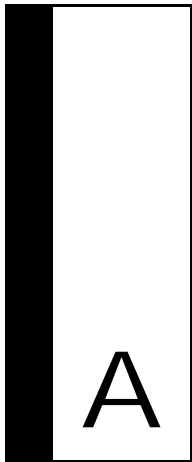
- 4.47 The committee understands that the removal of some trees planted by Charles Weston is necessary for LRS2 to travel along the median of Commonwealth Avenue. Nonetheless, it is important that the visual impact of the loss of trees is minimised and their heritage value is taken into consideration when developing the removal, replanting and landscaping strategy.

Recommendation 6

- 4.48 **The committee recommends that Parliament require that the removal of any trees with heritage value, such as the Weston plantings, be met with an appropriate replanting and landscaping strategy that maintains heritage values in the Central National Area and the Parliamentary Zone.**

Mr Ben Morton MP
Chair

18 October 2018



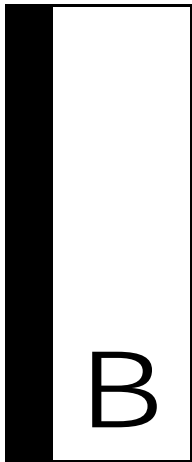
Appendix A: List of Submissions

Submissions

- 1 Mr Joseph de Riva O'Phelan
- 2 Mr Gerald Lynch
- 3 Mr Jack Kershaw
- 3.1 Supplementary to submission 3
- 4 Mr Leon Arundell
- 5 Smart Canberra Transport
- 5.1 Supplementary to submission 5
- 6 Lake Burley Giffin Guardians
- 6.1 Supplementary to submission 6
- 7 Mr Michael Quirk
- 8 Dr John Smith
- 8.1 Supplementary to submission 8
- 9 Griffith-Narrabundah Community Association
- 10 Mr Lukas Sigut
- 11 Mr Damien McGrath
- 12 Duncan Marshall and Dr Michael Pearson AO
- 13 Weston Creek Community Council
- 14 Public Transport Association of Canberra

- 14.1 Supplementary to submission 14
- 15 Mr Bill Gemmell
- 16 Department of Infrastructure, Regional Development and Cities
- 16.1 Supplementary to submission 16
- 17 Department of Parliamentary Services
- 18 Deakin Residents Association
- 19 Mr Mark Dando
- 20 Mr Jim Mitchell
- 21 Mr Elias Hallaj
- 22 National Capital Authority
- 22.1 Supplementary to submission 22
- 22.2 Supplementary to submission 22
- 23 Kingston and Batton Residents' Group
- 24 Planning Institute of Australia
- 24.1 Supplementary to submission 24
- 25 ACT Government
- 25.1 Supplementary to submission 25
- 25.2 Supplementary to submission 25
- 26 Inner South Canberra Community Council
- 27 Mr Kent Fitch
- 28 Mr Ryan Hemsley
- 29 Ms Dione Smith
- 30 Farrer Residents Association Inc.
- 31 Australasian Railway Association
- 32 Canberra Business Chamber
- 33 University of Canberra
- 34 Woden Valley Community Council
- 35 Dr Andrew Leigh MP

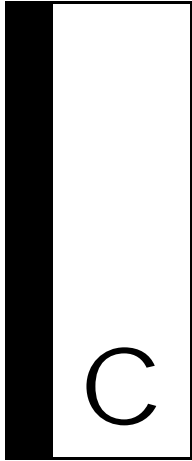
36	Mr Robert Henderson
37	Property Council of Australia
38	Ms Emma Davidson
39	Mr David Flannery
40	Australian Institute of Architects
41	Dr John Gray OAM
42	Productivity Commission
43	Department of the Environment and Energy



Appendix B: List of Exhibits

Exhibits

1. Public Transport Association of Canberra; List of Attached Images and Sources
2. National Capital Authority, Commonwealth Heritage Assessments for *Certain Roads on National Land in Central Canberra*; Prepared by Duncan Marshall, Chris Betteridge, Navin Officer Heritage Consultants and Dr Warren Nicholls with assistance from Professor Robert Freestone and Dr Michael Pearson – 2014



Appendix C: List of public hearings and witnesses

Thursday, 21 June 2018 – Canberra, ACT

Australian Capital Territory Government

- Mr Duncan Edghill, Deputy Director General, Transport Canberra and City Services
- Dr Pam Nelson, Project Director, Light Rail City to Woden
- Ms Emma Thomas, Director-General, Transport Canberra and City Services

Department of Infrastructure, Regional Development and Cities

- Ms Susan Forbes, Director
- Mrs Marie Taylor, Executive Director
- Mr Stephen Wilks, Policy Officer
- Ms Judith Zielke, Deputy Secretary

Inner South Canberra Community Council

- Ms Marea Fatseas, Chair
- Mr George Wilson, Member

Kingston and Barton Residents Group

- Dr Janet Hughes, Vice President

Lake Burley Griffin Guardians

- Mr Michael Lawson, Member
- Ms Juliet Ramsay, Convenor

National Capital Authority

- Ms Sally Barnes, Chief Executive Officer
- Mr Andrew Smith, Chief Planner
- Mr Lachlan Wood, Executive Director, National Capital Estate

Thursday, 28 June 2018 – Canberra, ACT

Department of the Environment and Energy

- Ms Jennifer Carter, Acting Assistant Secretary, Heritage Branch
- Ms Kim Farrant, Assistant Secretary, Assessments and Waste Branch
- Mr Michael Smith, Director, Southern New South Wales and ACT Assessment Section, Assessments and Waste Branch

Department of Parliamentary Services

- Mrs Fiona Knight, Assistant Secretary, Building Services Branch
- Mr Rob Stefanic, Secretary

Planning Institute of Australia

- Mr John Brockhoff, Principal Policy Officer, NSW

Public Transport Association of Canberra

- Mr David Flannery, Committee Member
- Mr Damien Haas, Chair
- Mr Ryan Hemsley, Committee Member

Thursday, 16 August 2018 – Canberra, ACT

Australian Capital Territory Government

- Mr Duncan Edghill, Deputy Director-General, Transport Canberra and City Services
- Dr Pam Nelson, Project Director, Light Rail City to Woden
- Ms Emma Thomas, Director-General, Transport Canberra and City Services

Guida Moseley Brown Architects

- Mr Harold Seymour Guida, Parliament House Moral Rights Holder

National Capital Authority

- Ms Sally Barnes, Chief Executive Officer
- Mr Andrew Smith, Chief Planner