Part A – Introduction and background information

1. Introduction

This Chapter provides a background to the Capital Metro Light Rail Stage 1 project (the Project), identifies the key features of the Project, and provides a summary of the justification for the Project.

1.1 Purpose of this document

This Environmental Impact Statement (EIS) has been prepared by Parsons Brinckerhoff on behalf of the Capital Metro Agency (CMA) to describe the proposed Capital Metro Light Rail Stage 1 — Gungahlin to Civic Project (the Project) and to document and assess the risk of potential impacts of the Project on the environment. The EIS identifies a number of protective mitigation measures to be implemented to manage the environmental impacts.

This EIS assesses a range of environmental and social impacts associated with the Project and addresses all matters specified within the ACT Government Environment and Planning Directorate’s (EPD) scoping document requirements dated 14 October 2014, in accordance with Section 212 of the Planning and Development Act 2007 (P&D Act) and other relevant legislation.

1.2 Capital Metro – Canberra’s Light Rail

1.2.1 Background

At its inception, Canberra was planned as a polycentric city with the Parliamentary Triangle and the City serving as the city’s civic centre with provision for town centres at Belconnen, Tuggeranong and Woden, Gungahlin and Weston Creek. Parkways and rapid transit links were intended to be built between each town centre and the City.

Whilst the parkways are ingrained into the shape of Canberra, the aspiration of developing the envisaged rapid transit link continues to this day. The city centre of Canberra is proposed to house up to 10 per cent of the Australian Capital Territory’s (ACT’s) population growth over the next 20 years accommodating an anticipated total population of over 600,000 by 2050.

The ACT Government supports a sustainable Canberra, evidenced by its complementary policy documents, the ACT Planning Strategy (ACT Government, ESDD, 2012a) and the Transport for Canberra policy (ACT Government, ESDD 2012b) that establish a strong framework for the integration of transport and land use planning to deliver a compact and sustainable city and Territory.
The ACT Government has identified Canberra’s need for accessible, high capacity and high quality public transport to increase the transport mode share and reduce private vehicle dependence. In the Parliamentary Agreement for the 8th Legislative Assembly for the ACT (the Parliamentary Agreement), effective from November 2012, the ACT Government committed to delivering an operational light rail network by 2018/2019. To achieve this goal, Capital Metro Agency (CMA), a statutory independent authority, was established on 1 July 2013, with the principle objective of managing all aspects of the planning, design and delivery of Stage 1 of a light rail network for the Territory. This agency assumed the responsibility for developing the project by the Environment and Sustainable Development Directorate (ESDD, now EPD).

The Capital Metro vision is to boost Canberra’s sustainable development by changing and improving transport options, settlement patterns and employment opportunities.

Planning for Stage 1 of the light rail network has commenced with CMA identifying the proposed alignment as the Capital Metro Light Rail Stage 1 — Gungahlin to Civic Project, a 12 kilometre light rail service linking the fast-developing area of Gungahlin in the north, to the City. The alignment would follow Hibberson Street, Flemington Road, the Federal Highway and Northbourne Avenue, and would be the primary transport corridor connecting Canberra’s growing northern suburbs with the City and the South.

The City to Gungahlin corridor is an important part of the Transport for Canberra policy, which maps out ways to deliver faster, more convenient and sustainable transport options for Canberra over the next 20 years.

1.2.2 Overview of the Project

The ACT Government is proposing to construct the Capital Metro Light Rail Stage 1 — Gungahlin to Civic Project (hereafter, referred to as the Project). The Project involves a 12 kilometre light rail service that would link the newly developed area of Gungahlin in the north to Civic in Canberra. The aims of the light rail service are to provide an incentive for people to use public transport and ease congestion as the city’s population continues to grow.

The Project is anticipated to include the following key features:

- the construction of approximately 12 kilometres of light rail track primarily within existing road medians
- 13 stops including major transport interchanges at Gungahlin, Dickson and Civic
- a light rail vehicle (LRV) only/pedestrian friendly zone in Hibberson Street, Gungahlin
- platforms at all stops designed to a minimum of 33 metres and be capable of extension to accommodate 45-metre long LRVs (allowing for extended LRVs as part of future operations)
- overhead line equipment providing traction power and electrical substation facilities for the provision of power along the route
- potential impacts to existing bridge structures and construction of a new bridge
- a series of crossovers and turnback facilities to allow light rail vehicles turn back at certain points along the alignment
- the provision of new signals at up to nine existing unsignalised intersections
- passenger information systems at stops and on light rail vehicles
- a stabling depot and maintenance facility in Mitchell incorporating the Control Centre and the operator’s management and administrative teams as well as operations and maintenance staff, the LRV maintenance building and stabling for the fleet of LRVs
- changes to the road layout in some sections of the route (e.g. modifications to slip lanes, right/left turns, footpaths and kerbs, etc.)
The Project would consist of an ‘inbound’ track (heading towards Civic stop away from Gungahlin) and an ‘outbound’ track (heading away from Civic stop towards Gungahlin) for LRVs and a series of cross-overs and turnouts throughout the corridor.

An overview of the alignment of the Project is provided in Figure 1.1.

The Project is anticipated to commence with an initial fleet of approximately 14 LRVs about 33-metres long. The Project would operate between 6.00 am and midnight Monday to Thursday, 6.00 am and 1.30 am on Fridays and Saturdays and between 8.00 am and midnight on Sundays. The Project would commence operations at a frequency of:

- six minutes between 7.00 am and 9.00 am and between 4.00 pm and 6.00 pm on weekdays
- 10 minutes between 9.00 am and 4.00 pm on weekdays
- 15 minutes at other times on weekdays, Saturdays and Sundays.

The journey time is anticipated to be 25 minutes from Gungahlin to Civic, with no significant difference between peak and off-peak. Construction of the Project would take approximately three years, with work beginning at multiple sites along the alignment from the fourth quarter of 2016 (subject to planning approval). The Project is expected to be commissioned (i.e. become operational) in the fourth quarter of 2019/early 2020. This program is based on the current design and construction staging. Therefore, the program is indicative and may change once the construction contractor(s) is engaged.

Construction would be staged to minimise disruption to residents, businesses and existing transport operations. Some construction work may be required outside of normal construction hours such as work across major intersections, utility diversion works or works that can occur without exceeding night-time noise criteria at the closest residential receivers (refer to section 2.2.3 for details). A number of temporary construction compounds would be required during the construction phase. The full construction program and methodology is detail in section 2.2.3.
Capital Metro Authority  
Capital Metro Light Rail Stage 1 — Gungahlin to Civic
Draft Environmental Impact Statement

Source: HASSELL Architects

Figure 1.1  
Capital Metro Light Rail Stage 1 — Gungahlin to Civic Project
1.2.3 Project need and justification

Canberra’s CBD and northern suburbs are proposed to house up to 10 per cent of the ACT’s population growth over the next 20 years accommodating a total population of over 600,000 by 2050. This increase will put pressure on the existing transport network (road and bus) and associated infrastructure. Improvements are therefore required to meet the transport network capacity, efficiency and reliability expectations associated with the projected population growth.

*The Transport for Canberra — Transport for a Sustainable City 2012-2031 Policy* (Transport for Canberra) (ACT Government, ESDD 2012b) has set the foundation for transport planning over the next 20 years. This policy aims to create a transport system that puts people first and links new development to investment in public transport.

The City to Gungahlin corridor has a range of current and emerging issues that are intertwined and which are to be resolved to meet the needs of Canberra’s population in the future. These issues include:

1. growing road congestion
2. high levels of private vehicle dependency
3. a fast growing population
4. a mismatch between population and employment
5. low land productivity
6. diminishing corridor amenity
7. high greenhouse gas intensity.

All of the issues outlined above impede on achieving goals and objectives as outlined by the ACT Government. Issues 1 to 5 are associated with delivering public transport capacity, managing road congestion, supporting Canberra’s core advantages, improving equity and liveability. Issue 6 provides a hindrance to achieving the goal of maintaining and improving the amenity along the Project corridor, and Issue 7 represents an impediment towards creating an environmentally friendly transport system.

The Project would assist in generating a number of economic and social benefits. Without intervention, future growth within the Project corridor would lead to a further decline in traffic speeds, increasing travel time which impedes access to employment, community facilities, social and recreational activities. The Project would assist the city centre in realising its full potential as a vibrant, lively and attractive core to a prosperous Canberra. Urban renewal and transformation along the transport corridor is expected to drive new opportunities for Canberra as a whole, such as employment opportunities and new investment.

Upon commencement of operations, the City to Gungahlin route would operate at least every 6 minutes frequency during peak hours and generally every 10 minutes outside of peak hour (on week days), and stop at three main stops with interchange to the bus network (City, Dickson and Gungahlin), as well as other local stops.

Further discussion regarding the strategic need and justification for the Project is provided in section 2.3 of this EIS.
1.3 Structure of this EIS

The structure and content of this report is as follows:

- **Part A – Introduction and background information**
  - Chapter 1 – Introduction: Outlines the Project background and key features and the purpose of this EIS.
  - Chapter 2 – Proposal details: Outlines the details of the Project, its key objectives and anticipated benefits, an outline the alternatives considered and the potential future of the light rail network.

- **Part B – EIS Process**
  - Chapter 3 – Legislative context: Provides an outline of the legislative context for the Project. This section provides a description of the EIS process including any statutory approvals obtained or required for the Project.
  - Chapter 4 – Pre-Mitigation risk assessment – provides a risk assessment of the Project in accordance with the Australian and New Zealand Standard for risk management AS/NZS ISO 31000:2009 Risk Management – Principles and guidelines.

- **Part C – Assessment of potential impacts**
  - Chapters 5 to 20 – Assessment of environmental impacts: Provides an assessment of potential environmental impacts including key and non-key issues.

- **Part D – Additional information and recommendations**
  - Chapter 21 – Community and stakeholder consultation: Provides an overview of the community and stakeholder consultation processes that have been undertaken regarding the overall development of the Project.
  - Chapter 22 – Recommendations: details the draft Project commitments to impact prevention, mitigation measures, offsetting measures and other actions which have been identified within this EIS. This section also provides a summary outlining the residual risk assessment following implementation of these recommendations.
  - Chapter 23 – Justification and conclusion: Summarises the justification and conclusions presented in the EIS.
  - Chapter 24 – References: Identifies the key reports and documents used to generate this report.