

# Canberra Light Rail Stage 2B

## Urban Infill Capability Assessment

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Images: Google Earth

## Project Director



## Contributors



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\* This document is for discussion purposes only unless signed and dated by the persons identified. This document has been reviewed by the Project Director.

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# Executive Summary

The ACT Government is progressively developing the Canberra Light Rail (CLR) network with an aim to provide more convenient, reliable and high-quality public transport services that better connect Canberrans, while supporting opportunities for urban renewal across the Territory.

Whilst providing for transport and wider economic benefits, investment in light rail can also have city shaping effects if the population (residential and workforce) in areas adjacent to the corridor increases. This makes the city more compact and connected than it would have been otherwise, and can change the way in which residents experience and move around the city.

The purpose of this urban infill capability assessment is to understand the potential for residential and employment intensification in the corridor adjacent to stage 2B of the CLR project, provide guidance on the appropriate built urban forms, dwelling diversity and density for future urban development for land adjacent to the stage 2B corridor, predominately at a precinct level. The purpose was also to provide dwelling and employment forecasts under various scenarios to 2046, to inform the ACT Government's future planning.

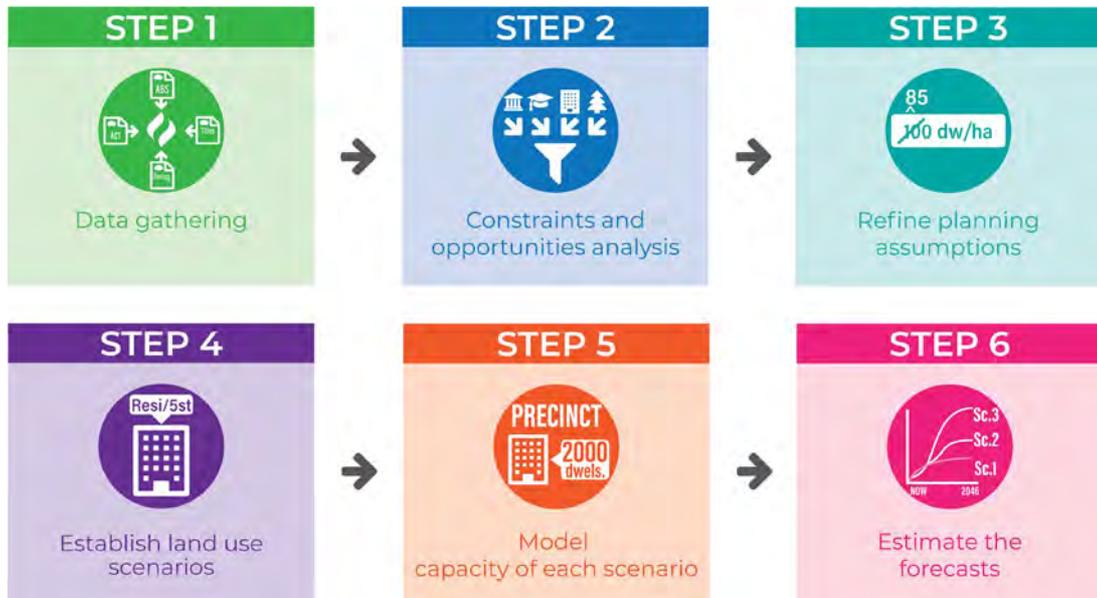
The Study Area for the analysis is shown in Figure 1, and contains five precincts:

1. West Deakin
2. Curtin Horse paddocks (ACT land component only, noting that the remaining area of the horse paddocks is proposed to become a diplomatic estate and is not part of this Project)
3. Phillip/ Woden Town Centre
4. Mawson
5. Remainder of the corridor.

The methodology to undertake the assessment is shown in Figure 2. It involved the development of a detailed GIS-based model to quantify planning capacity and the potential for growth under three scenarios, and was developed in conjunction with government stakeholder support and feedback. The six steps of the methodology are:

1. Data gathering and review to understand current statutory framework, available data sources and data gaps.
2. Using the data gathered, undertake a constraints and opportunities analysis.
3. Refine underlying planning assumptions such dwelling size and workspace ratios.
4. Establish three scenarios, being a base, medium and high land use scenarios.
5. Model the theoretical planning capacity of each scenario.
6. Estimate the market take-up of the planning capacities over time.





**Figure 2: General modelling methodology**

Source: Mecone 2021

## Findings

The analysis identified that the existing planning framework, assessed under a 'base case' scenario, has significant capacity for growth. There is a total around 13,100 dwellings and 31,300 jobs on the ground today (2021), though capacity modelling indicates the planning controls could already support an increase to 23,800 dwellings and 78,900 jobs (assuming a rezoning at the Curtin Horse Paddocks for low density residential purposes). The Phillip-Woden Precinct has the potential to provide the most significant quantum of that growth, with capacity in the existing master plan / planning controls for a total of 9,200 dwellings and 52,200 jobs. This is 38% and 66% of the entire Study Area's residential and employment capacity respectively.

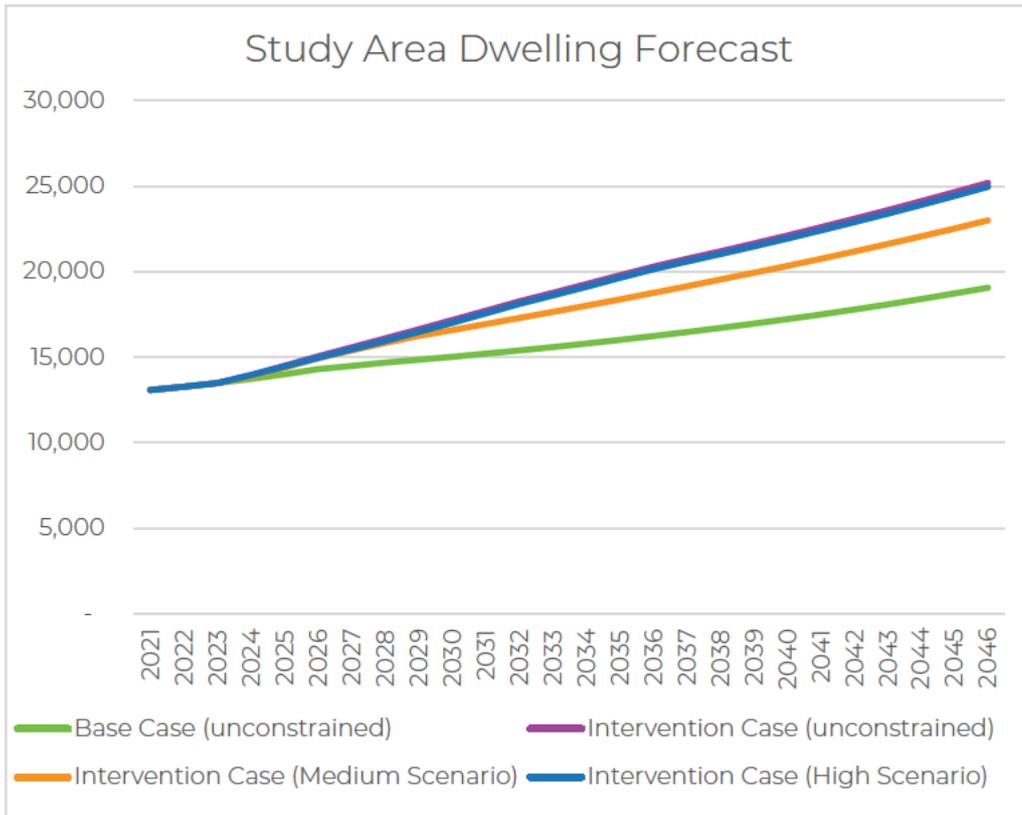
Accordingly, whilst increasing densities around transit nodes such as the future CLR Stage 2b stops is a sound planning principle in general, the need for catalytic changes to the planning controls in the Study Area is not considered critical when purely considering the capacity for growth that already exists in the controls. Nevertheless, theoretical planning capacity is only one consideration. Commercial viability must also be considered, as it is not always feasible to develop a site to its permitted densities. Accordingly, the analysis has suggested relatively minor increases to the maximum height limits on some key sites within each precinct under two uplift scenarios, which would improve development viability and lead to a more significant market response.

The market take-up assessment indicated the opportunity for CLR Stage 2b to contribute towards the momentum of development in many of the precincts. In particular, Phillip-Woden is seen as the key opportunity for sustainable and accessible growth – the precinct already has development activity and light rail would contribute towards the viability of higher densities and increase desirability for business floorspace in the precinct.

The outcomes of the market take-up analysis are shown in Figure 3 and Figure 4. It shows that in an unconstrained base case, the study area could grow from around 13,100 dwellings today to just short of 20,000 by 2046, and from around 31,300 jobs today to just below 60,000 jobs by 2046. In the medium and high scenarios, where the combined effect of additional amenity provided by new light rail connections and more viable land use planning controls has been modelled, these forecasts increase to around 25,000 dwellings and just short of 70,000 jobs in the same time period.

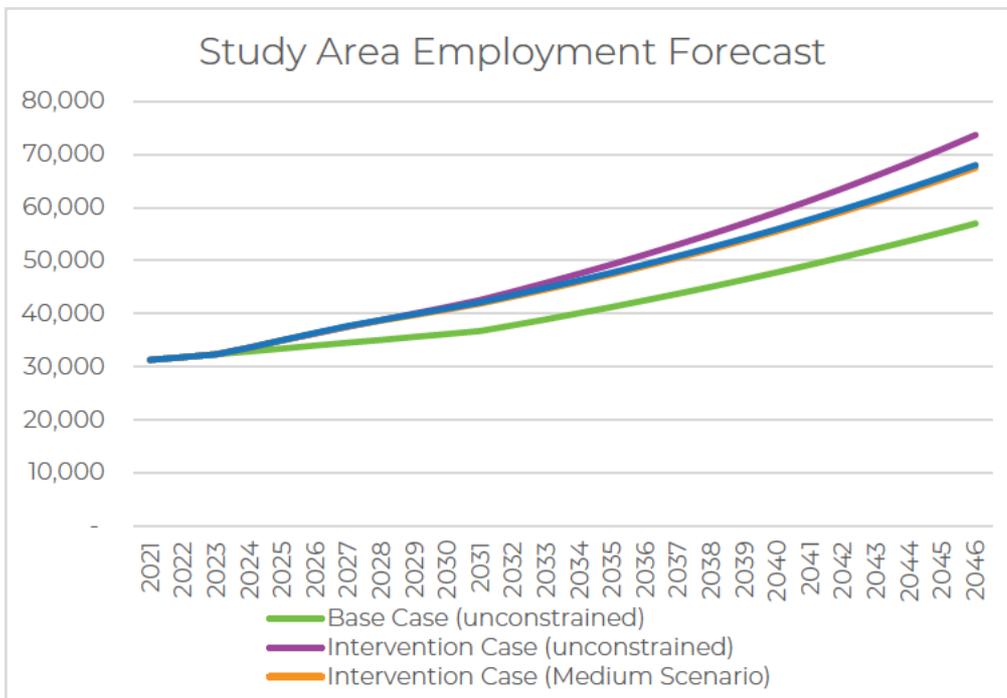
Alongside increased residential and employment development to 2046, the analysis has also shown the potential for the project to contribute towards a greater proportion of medium- to higher-density housing in the precincts, providing more housing choice in the region overall. The study also identifies the need for urban realm improvements, such as pedestrian bridges, or pedestrian priority or signalised road crossings, to help improve pedestrian amenity and encourage mode shift and patronage.

Finally, the need for additional enabling infrastructure to achieve the forecasts and support changes to land use planning controls is acknowledged. It was not within the scope of this assessment to undertake a baseline assessment of the capacity of 'hard' (transport, water, electricity etc.) or 'soft' (schools, open space, health etc.) infrastructure in the study area. Prioritisation of areas for growth should consider the potential need for infrastructure supply to ensure that growth can be orderly and equitable.



**Figure 3: Study Area Dwelling Forecast**

Source: Atlas Urban Economics



**Figure 4: Study Area Employment Forecast**

Source: Atlas Urban Economics