



ACT
Government

City to Gungahlin Light Rail
Benefits Realisation — Snapshot

MAJOR PROJECTS CANBERRA

MAY 2020



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1. EXECUTIVE SUMMARY

1.1 Purpose of Report

The City to Gungahlin Light Rail project represents the largest single infrastructure project undertaken by the Territory since self-government. It is also one of the most significant investments in the history of Canberra.

The ACT Government, through the Transport Canberra and City Services Directorate, previously released the Project Delivery Report for the project (June 2019). That report provided interested stakeholders with a summary of the project’s aspirations, key features and an initial ‘Post-Implementation Review’ under the ACT Government’s Capital Framework, including assessing and reporting on key lessons learned. At the time, it was envisaged that a future review of benefits would occur by 12 months from operations commencing.

The ACT Government, through Major Projects Canberra, has prepared this Benefits Realisation Report (the Report) with the assistance of Deloitte and others. It is a retrospective exercise, committed to in the Project Delivery Report and reflects upon outcomes from the first 12 months of operations of the City to Gungahlin Light Rail project.

This document summarises the performance of, and key lessons learnt from, the first year of the project’s operations. These lessons will inform other complex infrastructure projects across the Territory and future expansions of the light rail network.

The emergence of the COVID-19 health emergency preceded the first anniversary of light rail operations in Canberra. The pandemic has provided a constraint to certain of the analysis contained in this report, noting public transport patronage across the globe has been severely impacted by the health emergency and consultation with local businesses has been affected. Nevertheless, this report seeks to set out a snapshot of the benefits and other lessons from the first 12 months of light rail operations in Canberra.



1.2 Overview of Benefits Realisation

The City to Gungahlin Light Rail (the Project) commenced operations on 20 April 2019 and Canberrans clearly have benefitted from it through its first 12 months of operations.

Over the last 12 months, a number of key benefit indicators have been captured across three broad categories: Improved Transport Network, Land Use and Wider Economic Impacts.

In relation to the Improved Transport Network category, the Project has demonstrated ‘on-track’ performance through the regular monitoring of patronage performance as well biannual Canberra Metro customer satisfaction surveys. Average patronage has exceeded the 2021 target for most months, excluding school holiday periods and the impact of Covid-19 through March and April 2020. Quantitatively, the February 2020 survey has provided further evidence as to the quality of the light rail service, with 89% of light rail passengers expressing satisfaction with the overall standard of services.

With respect to Land Use benefits, population growth along the light rail corridor has exceeded expectations within the business case, with significant growth in the Gungahlin suburbs of Harrison and Franklin and clear activity occurring in the Northbourne Avenue corridor.

Finally, the Project has delivered positive Wider Economic Impact benefits through the provision of local employment opportunities during both the construction and the delivery phases of the Project. Not only has light rail created over 90 direct jobs through its operations, the introduction of the expanded new public transport network has also resulted in 60 additional bus operators as at June 2019 compared with 12 months earlier, prior to the introduction of light rail.

There has also been a noticeable increase in footfall within the light rail corridor across the primary business centres at Gungahlin, Dickson and Civic as measured through pedestrian counts undertaken in April 2019 before light rail and in December 2019 once light rail had commenced operations.

1.3 Lessons Learnt

This Report identifies a number of key benefit indicators that may be used to track project performance now and in the future.

A number of key benefit indicators may be of relevance in the future as data becomes available. For example, the 2021 ABS Census will enable the Project to track the status of urban densification within the City to Gungahlin light rail corridor. That data will also enable the ACT Government to monitor and analyse the changes to travel patterns and mode choice over time.

Regular and consistent customer and stakeholder satisfaction surveys will provide a granular understanding of customer satisfaction over time, informing the delivery of future projects (including further stages of light rail) and allow Transport Canberra to improve its service offerings to the passengers and the broader community.

Frequent and consistent pedestrian surveys can allow the monitoring and analysis of footfall and the impact on business and commercial growth through the project stages from construction, to commissioning and operations. Ongoing traffic analysis may also inform potential future stages of light rail.

Engagement with businesses and community members who have experienced the project from inception through to commencement of services also provides valuable insight and contributes to lessons learnt. These lessons can inform development of future programs of support and communications strategies as well as advise construction schedules and traffic management plans to assist in reducing or mitigating impacts.

A snapshot of ideas from recent engagement with businesses along the alignment includes feedback relating to:

- ▶ Ensuring parking provision for staff and clients is considered during construction
- ▶ Providing accurate and robust information about project timeframes
- ▶ Reducing multiple road closures and limiting lane/road closures during peak times
- ▶ Limiting or phasing the number of simultaneous traffic projects
- ▶ Taking advantage of historic business shutdowns such as the Christmas period to undertake condensed and extended construction activities
- ▶ Utilising special interest groups such as traders’ associations to assist achieving consensus and better delivering engagement activities
- ▶ Better utilising construction wayfinding signage, direct mailouts (email) and social media which has real-time relevance
- ▶ Reducing the length of construction programs, and planning for all work to be integrated as far as possible so as to minimise reopening sites multiple times
- ▶ Reducing physical impediments to access for staff and customers and providing extended notice of planned works
- ▶ Providing a holistic program of support for businesses prior to and during construction including marketing materials and activities, advice/business expertise support and wayfinding signage/branding
- ▶ Giving consideration to business rate/registration payments and administrative costs for businesses during construction and other potential support measures.
- ▶ Continually improving integration with existing public transport services including buses
- ▶ Considering the impact of public transport infrastructure on community safety, urban aspect and hygiene

2. PROJECT OVERVIEW

2.1 Project Overview

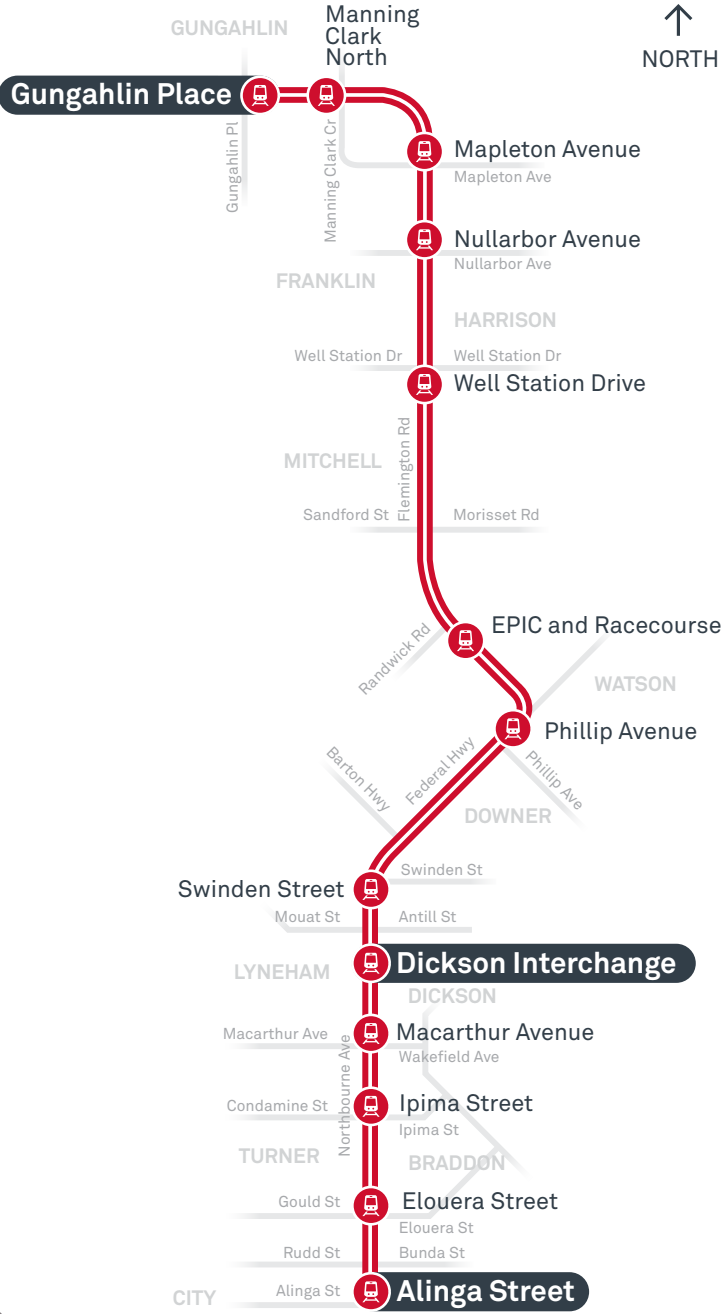
The City to Gungahlin Light Rail (the Project) is the first stage of a city-wide light rail network that is having a transformative effect on the future of our city. Light rail is improving the way we move around our city, stimulating urban renewal and allowing us to respond to growth in a way that is sustainable and maintains our high standard of living.

On 17 May 2016, the Territory entered an availability-based Public Private Partnership (PPP) with Canberra Metro Pty Ltd (Canberra Metro) for the City to Gungahlin Light Rail project with two key project phases:

- **Delivery:** including the design, construction, commissioning and completion of the system from Gungahlin to the City; and
- **Operations:** including the operation and maintenance of that light rail system over a 20-year period.

On 20 April 2019, the City to Gungahlin Light Rail service commenced public passenger operations. It is a 12km light rail service, comprising 13 stops, 14 Light Rail Vehicles (LRV's) and one maintenance depot. The project encompasses the design, construction, finance, operations and maintenance of the light rail system.

Figure 1 shows the operational route from Gungahlin Place in the north through to the Alinga Street terminus in the city.



▲ Figure 1: Route for the Capital Metro between Gungahlin Place and Alinga Street

2.2 Project Goals and Aspirations

The Canberra Statement of Ambition envisions Canberra as one of the world's most liveable, welcoming and competitive cities.

Canberra is a dynamic, vibrant and growing city with a desire to embrace change while celebrating its heritage. Achieving this vision requires investment in a better transport network that supports a diverse economy and urban renewal, and that allows the city to grow in an economically and environmentally sustainable manner.

The City to Gungahlin Light Rail project supports the future ambitions for the City and cements its role in the broader Canberra region.

The original business case approved by Cabinet sets out the project vision as:¹

To boost Canberra's sustainable development by changing and improving transport options, settlement patterns and employment opportunities.

In doing so the project aimed to address two key problems:

- The need for better, more sustainable transport options to reduce car dependency and improve transport capacity; and
- The need for sustainable urban form.

The Business Case identified that other problems faced the ACT Government which may be addressed in part by the project:

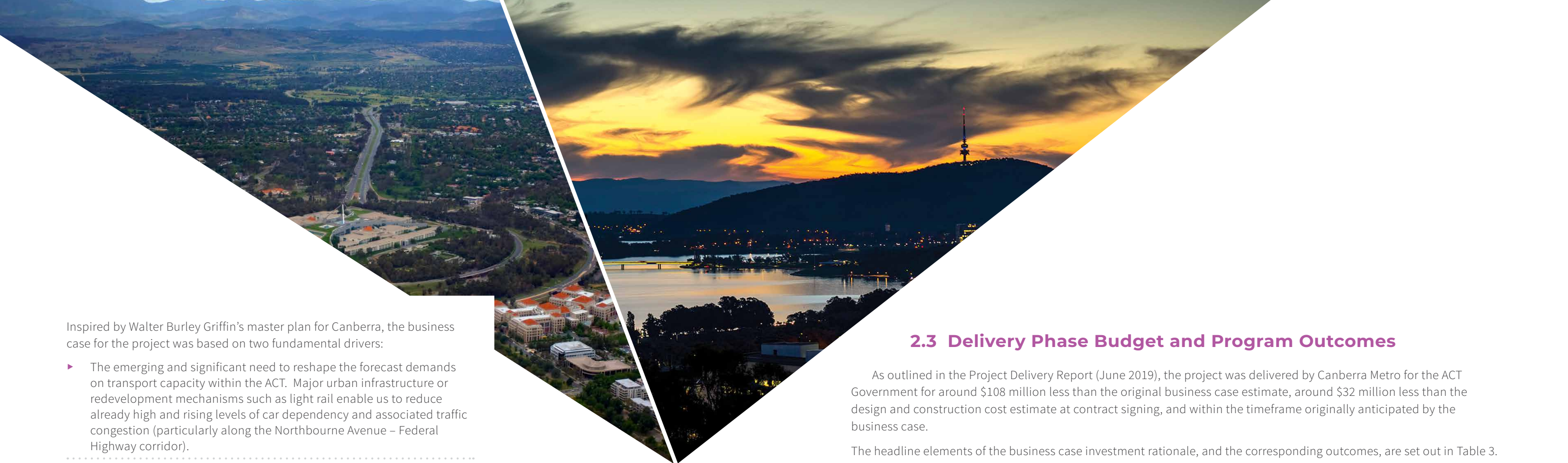
- Economic challenges faced by the ACT; and
- Elements of the Federal Highway – Northbourne Avenue corridor may be regarded as an aesthetically sub-optimal gateway to the nation's capital.

These problems, and the identified value of the light rail project, are discussed in Table 1.

▼ Table 1: Alignment of the Project to city aspirations

NEEDS OF THE TERRITORY	VALUE OF LIGHT RAIL
Building alternative transport capacity	<ul style="list-style-type: none">► Improve customer experience, health and accessibility for locals and visitors► Reduce traffic congestion and ACT's carbon emissions per capita► Increase public transport mode share
The need for sustainable urban re-development and increased urban densification	<ul style="list-style-type: none">► Deliver cost-effective public infrastructure and services to households► Increase productivity► Facilitate densification that , in turn, propels higher population growth
Canberra faces substantial economic challenges which have the potential to increase social and economic dislocations	<ul style="list-style-type: none">► Create jobs and economic growth► Increase diversity and resilience of the Territory economy► Increase revenue through appreciation of land values along the corridor
The Federal Highway-Northbourne Avenue corridor is a sub-optimal gateway to the Nation's capital	<ul style="list-style-type: none">► Fulfil the Griffin vision for the city► Create a grander entrance to the City befitting its status as the National Capital

¹ CMA Full Business Case, page 27



Inspired by Walter Burley Griffin’s master plan for Canberra, the business case for the project was based on two fundamental drivers:

- ▶ The emerging and significant need to reshape the forecast demands on transport capacity within the ACT. Major urban infrastructure or redevelopment mechanisms such as light rail enable us to reduce already high and rising levels of car dependency and associated traffic congestion (particularly along the Northbourne Avenue – Federal Highway corridor).
- ▶ The growing and essential requirement within the Territory for sustainable urban re-development to reduce the negative impacts resulting from population dispersion. This is to be achieved in part by increasing densification within the ACT (as outlined in the ACT Planning Strategy).

To realise these benefits, the ACT Government established four principles for the Project which informed all aspects of its design, procurement and delivery.

▼ Table 2: Project aspirations

	PROJECT ASPIRATION	COMMUNITY OUTCOMES
CUSTOMER EXPERIENCE	To attract Canberrans to public transport through frequent, reliable, easy to use, seamless, safe, clean and modern light rail services	<ul style="list-style-type: none">▶ Increase in mode share of public transport▶ Optimised frequency▶ Service reliability
URBAN DESIGN	To provide a light rail system that demonstrates excellence in urban design befitting its prominent location in the primary gateway to Australia's capital city. The system will exhibit exemplary and creative integration with the built environment and stimulate urban renewal.	<ul style="list-style-type: none">▶ Sustainable urban redevelopment stimulated along the corridor▶ Revitalisation of the Northbourne Avenue corridor
COMMUNITY	To engage local industry, minimise disruption and reflect the Territory's environmental focus in the Project's delivery and operations	<ul style="list-style-type: none">▶ Grow a more diversified Canberra economy▶ Increase social and economic participation▶ Reduce carbon and other emissions
AFFORDABILITY	To procure a light rail system that is affordable for the ACT community	<ul style="list-style-type: none">▶ Affordable capital and operational costs

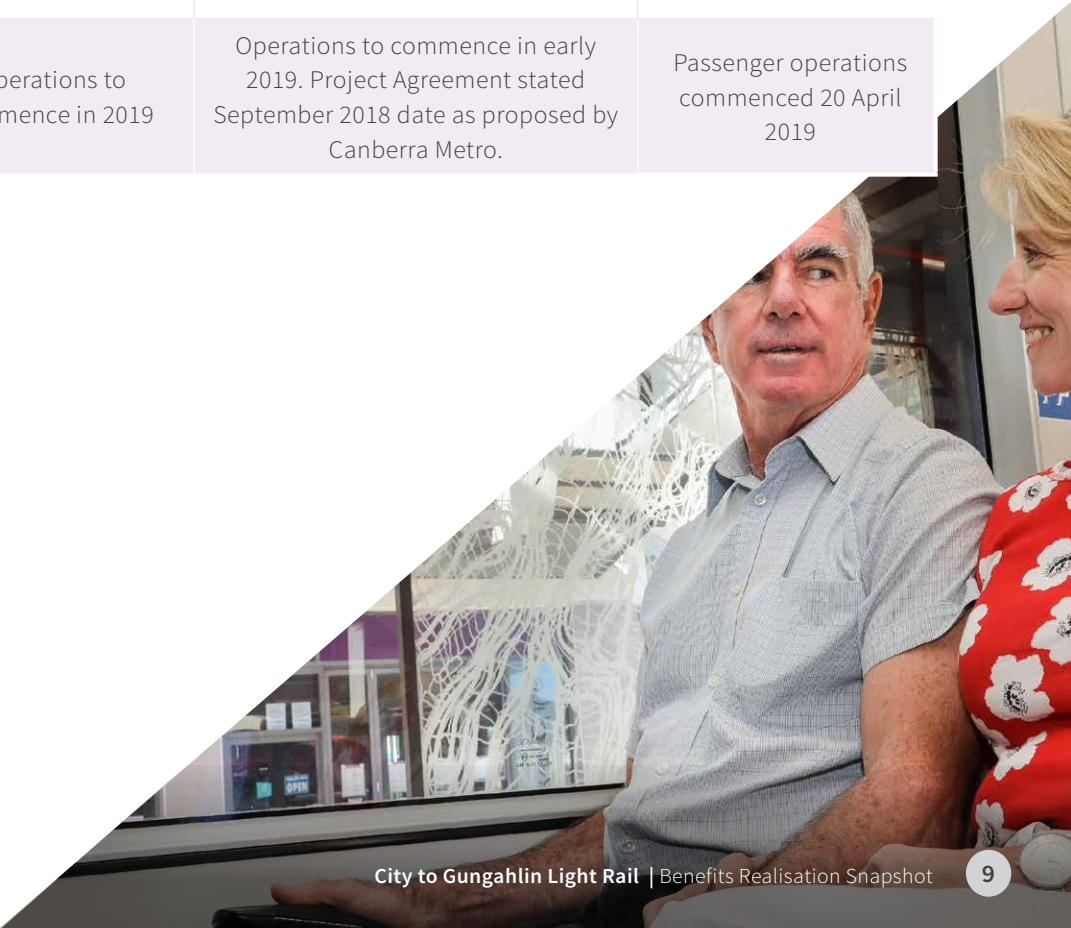
2.3 Delivery Phase Budget and Program Outcomes

As outlined in the Project Delivery Report (June 2019), the project was delivered by Canberra Metro for the ACT Government for around \$108 million less than the original business case estimate, around \$32 million less than the design and construction cost estimate at contract signing, and within the timeframe originally anticipated by the business case.

The headline elements of the business case investment rationale, and the corresponding outcomes, are set out in Table 3.

▼ Table 3: Comparison to key elements of the 2014 business case

	BUSINESS CASE (2014)	CONTRACT SUMMARY (2016)	FINAL OUTCOME (2019)
CAPITAL COST (inc. Territory-held contingency)	\$783m	\$707m	\$675m
COMPLETION DATE / COMMENCEMENT OF SERVICES	Operations to commence in 2019	Operations to commence in early 2019. Project Agreement stated September 2018 date as proposed by Canberra Metro.	Passenger operations commenced 20 April 2019



3. BENEFITS REALISATION

3.1 Measuring Benefits

In accordance with the 2014 Project Business Case, the Project's benefits are divided into three broad categories:



The Business Case estimated the City to Gungahlin light rail project would deliver benefits to the community with a value of around \$3.6 billion over 30 years in nominal terms, or approximately \$1 billion in present value (PV) terms.

In addition to transport benefits totalling \$406 million PV, the project was anticipated to deliver significant land use benefits by unlocking higher density developments along the light rail corridor, anticipated to total \$381 million. Additionally, wider economic impacts delivered through improved connectivity between firms and to workers were anticipated to provide \$198 million in benefits.

Due to the long-term nature of investment in infrastructure of this size, benefits are measured over many years and decades.



Benefits realisation has been enhanced through an active approach to benefits management. To this end, the ACT Government identified key indicators to measure and track the realisation of benefits outlined in the original business case.

Benefits are extracted from higher level strategic outcomes, underlying business case assumptions as well as benefits identified through the economic analysis. Indicators used to measure the achievement of benefits draw on existing data and reporting sources.

Tables 4 – 6 on the following pages indicate that, with respect to the benefits outlined in the Project Business Case, the project is generally on track to realise its stated benefits.



▼ Table 4: Transport benefits

PROJECT BENEFIT	DESCRIPTION	ACTUAL VS EXPECTED	COMMENTARY
PUBLIC TRANSPORT USE	Increase the mode share of public transport and increase the use of public transport for trips to work and at other times.	On track	Patronage is being monitored on a regular basis and across the first year has been in line with or exceeded business case estimates at 2021. A number of months (May, August – November 2019 and February 2020) were above the projected 15,100 boardings per weekday for 2021.
ROAD TRAFFIC CONGESTION	Reduce road traffic congestion and associated costs, particularly on and adjacent to the light rail corridor.	Data still emerging	Data will be captured and analysed as it becomes available, in particular through the 2021 ABS Census and related surveys. Road count data shows up to a 20 per cent reduction in vehicles travelling along Northbourne Avenue during the morning peak period.
CARBON EMISSIONS	Reduce per-capita carbon and other emissions.	Data not yet available	This benefit is expected to flow from increased use of public transport. Data will be captured and analysed as it becomes available, in particular through the 2021 ABS Census and related surveys.
CUSTOMER EXPERIENCE	Improve customer experience for locals and visitors.	On track	Transport Canberra has invested in wayfinding, better passenger information systems, integrated ticketing and complementary infrastructure to help the customer access, use and understand the network and enhance their overall experience. Regular surveys are undertaken, with the February 2020 survey finding high levels of satisfaction with the ease of using light rail (94% overall satisfaction; and three in four (74%) were very satisfied). Almost all participants would recommend light rail to their friends and family (95% likely). Three in four are very likely (76%) and one in five are likely (19%).
ACCESSIBILITY	Improve accessibility to services, business, and places of employment, recreation, entertainment, cultural or social significance for the people of Canberra	On track	Light rail is connecting the fastest growing population areas with the fastest growing jobs precinct in the city. It also connects to our major events and celebrations hub in the city.
ACTIVE TRAVEL	Support uptake of active travel including cycling and walking.	Data still emerging	All light rail stops are connected to the broader active travel network and all LRVs have the ability for passengers to board with bicycles to promote active travel and public transport mixed-mode journeys. Based on February 2020 survey data, around three in five customers used active travel to get to the light rail stop: 57% walked while 3% rode a bike and had it on board and 1% rode a bike and left it at the station.

▼ Table 5: Land use benefits

PROJECT BENEFIT	DESCRIPTION	ACTUAL VS EXPECTED	COMMENTARY
URBAN DENSIFICATION	Stimulate residential development and re-development along the light rail corridor generating higher population density.	On track	Redevelopment is underway along the corridor – with a strong focus on the Northbourne Avenue section. Based on 2016 ABS Census data, population growth in suburbs along the corridor has exceeded what was initially expected in the business case by nearly 2,500 people.
PUBLIC HOUSING RENEWAL	Improve outcomes for public housing tenants and support the renewal of Canberra’s urban areas.	On track	The Public Housing Renewal Program has replaced 1288 aged public houses and relocated public housing tenants to newer, higher quality public housing.
BUSINESS AND COMMERCIAL GROWTH	Grow a more diversified Canberra economy through increased business/commercial floor space along the light rail corridor.	On track	Redevelopment of the corridor, particularly Northbourne Avenue is attracting new business and commercial operations, including the new ACT Government office and mixed-use development at the Dickson interchange.
EFFICIENT PUBLIC INFRASTRUCTURE AND SERVICES	Deliver more efficient public infrastructure and services through higher population densities along the light rail corridor.	On track	Redevelopment of the corridor is incorporating upgrade and optimisation of public infrastructure.
DEVELOPMENT PRESSURE	Relieve pressure on greenfield development in the ACT and protect conservation values through increased development and population density along the light rail corridor.	On track	Development and sales programs in the corridor are helping meet demand from property buyers and enabling population growth in Canberra without increasing demand for greenfield sites
PROPERTY VALUES	Contribute to increasing property values within the light rail corridor.	On track	From 2014-2018, average house prices increased by 17% across the whole of the ACT but were higher in the regions incorporating the light rail corridor – 39% in the Inner North and 27% in Gungahlin over the same period.
CITY ENTRANCE	Contribute to the enhancement of Northbourne Avenue as a grand entrance to the city of Canberra in alignment with the historic Griffin vision for the corridor	On track	A City and Gateway Urban Design Framework was jointly launched by the ACT and Commonwealth in December 2018.
PUBLIC REALM	Contribute to the enhancement of the urban design and public realm, particularly in the Civic Plaza precinct.	On track	The use of a Design Review Panel and close collaboration through the NCA works approval resulted in an enhanced quality design.

▼ Table 6: Wider economic benefits

PROJECT BENEFIT	DESCRIPTION	ACTUAL VS EXPECTED	COMMENTARY
ASSET RECYCLING	Maximise to the Territory the benefit of the Commonwealth Asset Recycling Initiative.	Achieved	The Territory received the maximum bonus under the ARI, providing Commonwealth funding for the project.
EMPLOYMENT, DIRECT	Create jobs through both construction and operational phases.	Mostly Achieved	During the delivery phase over 4,750 workers were inducted to the worksite. 33 additional undergraduate roles filled. 75% of all jobs were “Local Sustainable Jobs”. Target of 70% met. 30% Diversity and Equity representation. Target of 10% met. The delivery phase apprenticeship and traineeship target was not met, in part due to the specific nature of the work required, with 17 apprentice and 1 trainee positions filled. The new public transport network has resulted in the employment of 60 additional bus operators at June 2019 compared with 12 months earlier prior to the introduction of light rail.
EMPLOYMENT THROUGH ECONOMIC GROWTH	Create jobs through the economic growth and development stimulated by light rail	Data still emerging	Linked to overall population growth in the corridor. Data will be captured and analysed as it becomes available, in particular through the 2021 ABS Census and related surveys. ABS data shows the number of business within the suburb of Gungahlin continued to grow through the construction period from a base of 490 in 2014, to 529 in 2017 and 566 in 2018. However, this growth would be influenced by land release and population growth in the area.

3.2 Status of Benefits Realisation

The tables below use different metrics to indicate the current status of benefits realised within the first 12 months of operations commencing, consistent with the ACT Government's Capital Framework. When benefits are measured in future years, the use of specific metrics may change as new data sets become available.

Aligned with the 2014 Project Business Case, the Project's current benefits are divided into three broad categories: Improved Transport Network, Land Use and Wider Economic Impacts.

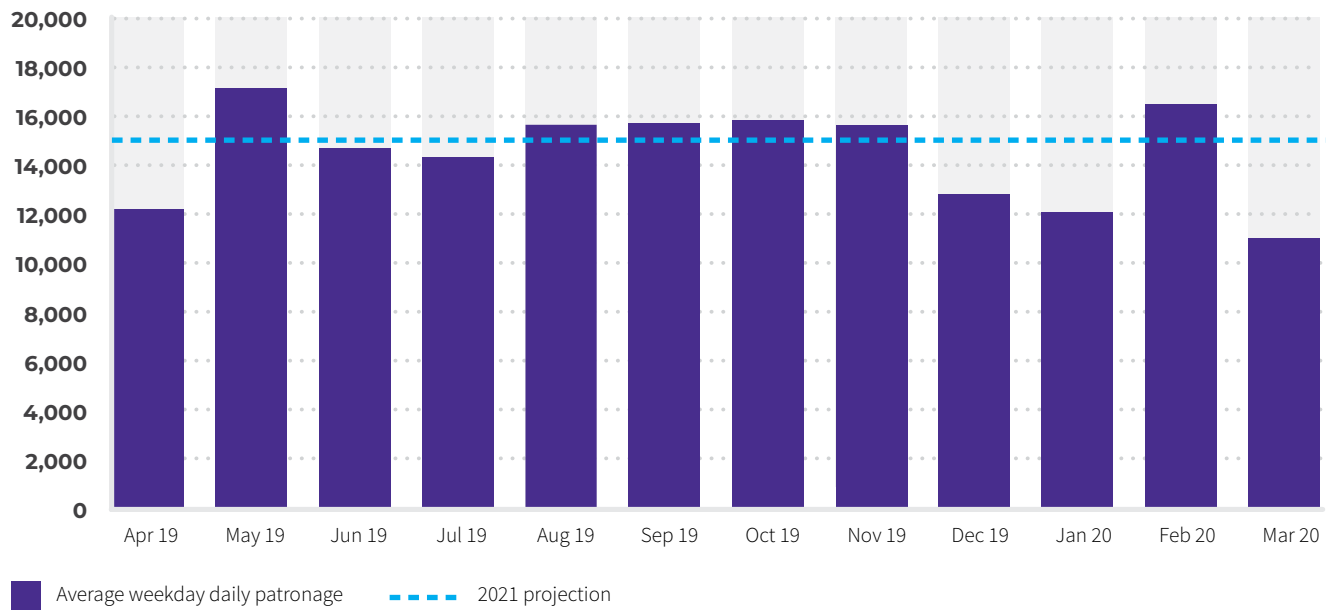
3.2.1 IMPROVED TRANSPORT NETWORK

Metrics which provide an indication of transport network benefits achieved to date include the following:

BENEFIT: PUBLIC TRANSPORT USE

PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Average daily patronage by month (weekday)	The light rail patronage - the number of people using light rail for trips to work and for other purposes.	Over the 12-month period since the commencement of light rail operations, the average daily patronage on weekdays has been observed to be 'on-track' or above expectations. Seasonality and Covid-19 pandemic impact have an impact on the monthly patronage.

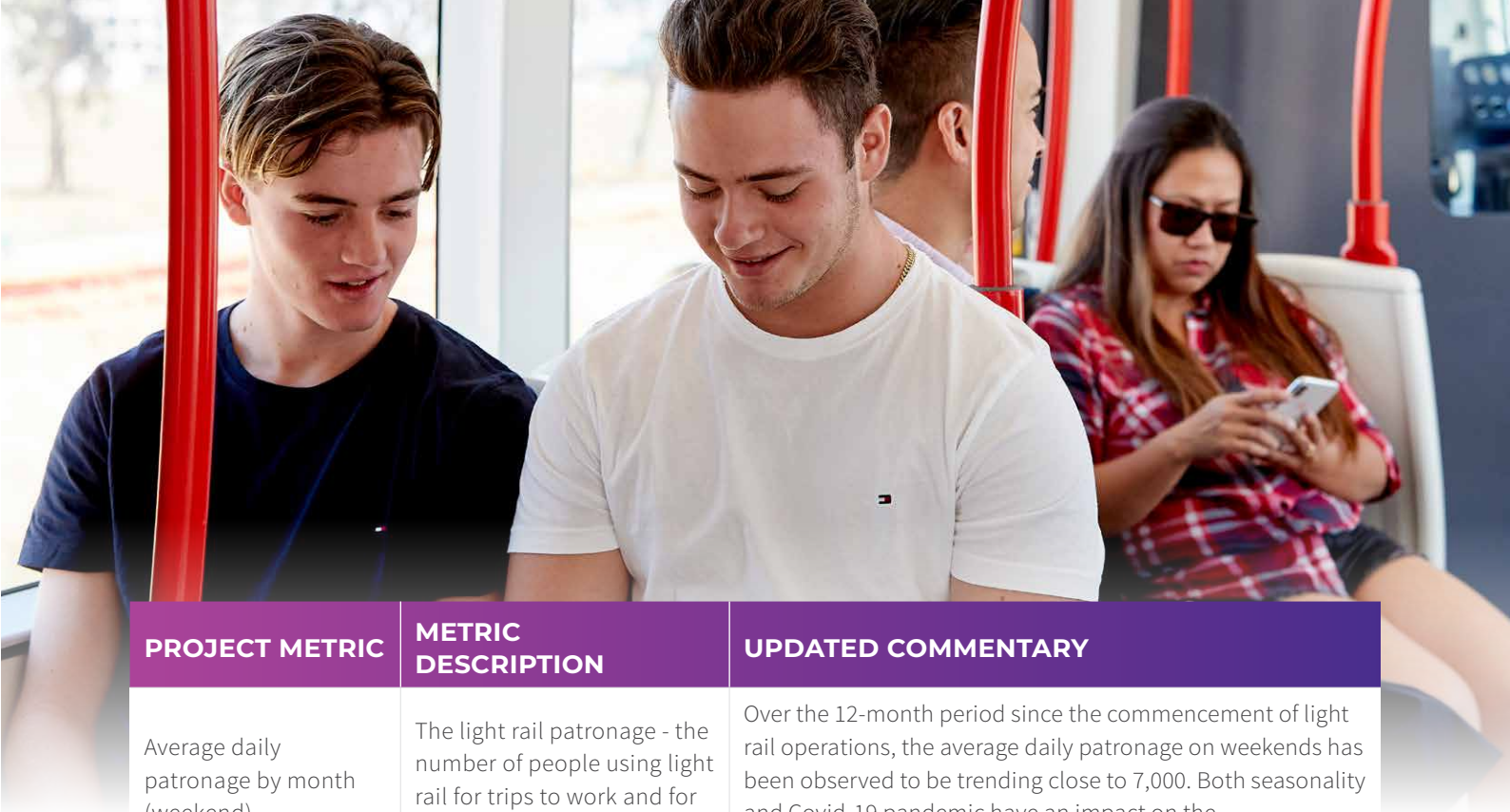
Weekday Average daily patronage between 20 April 2019 and 30 March 2020



Explanatory Notes

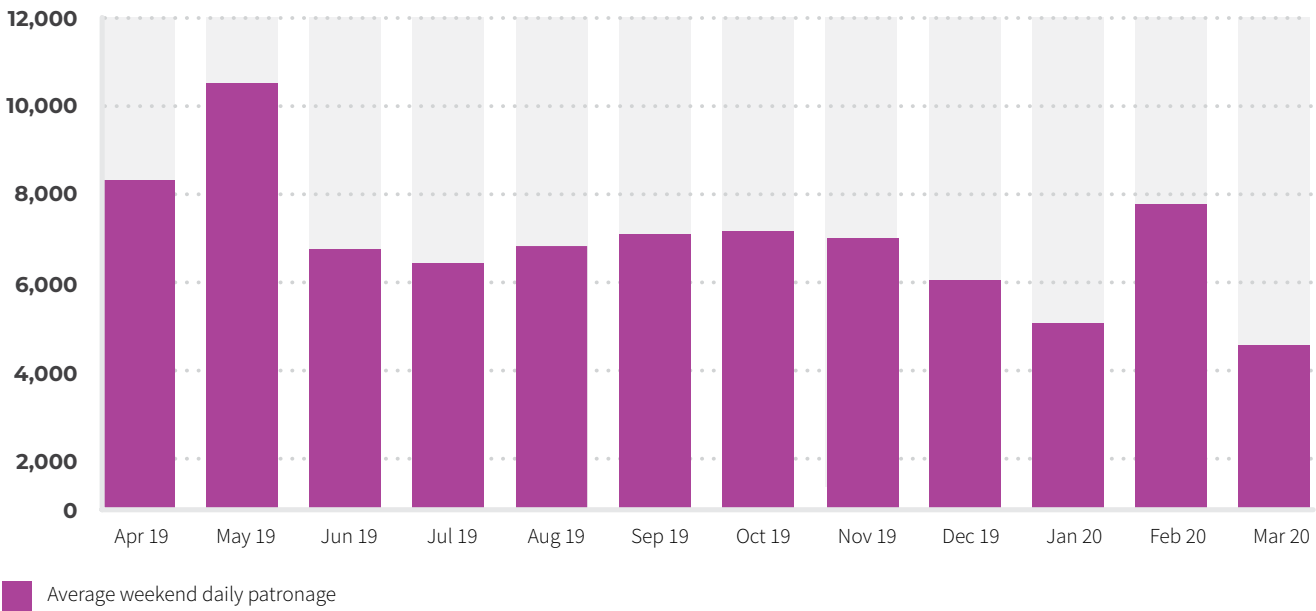
1. The data excluded the light rail launch weekend;
2. May 2019 was a free travel month across all public transport;
3. The light rail patronage fluctuates by season, and especially so during school holidays i.e. December and January; and
4. The Covid-19 pandemic and the Public Health Emergency impacted March 2020 patronage.

The project is tracking very well against the 15,120 weekday target projection at 2021 as set out in the Business Case based upon the first year of performance. Seasonality such as the school holidays as well as Covid-19 pandemic have had an impact on light rail patronage at different times through the year.



PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Average daily patronage by month (weekend)	The light rail patronage - the number of people using light rail for trips to work and for other purposes	Over the 12-month period since the commencement of light rail operations, the average daily patronage on weekends has been observed to be trending close to 7,000. Both seasonality and Covid-19 pandemic have an impact on the monthly patronage.

Weekend Average daily patronage between 20 April 2019 and 30 March 2020



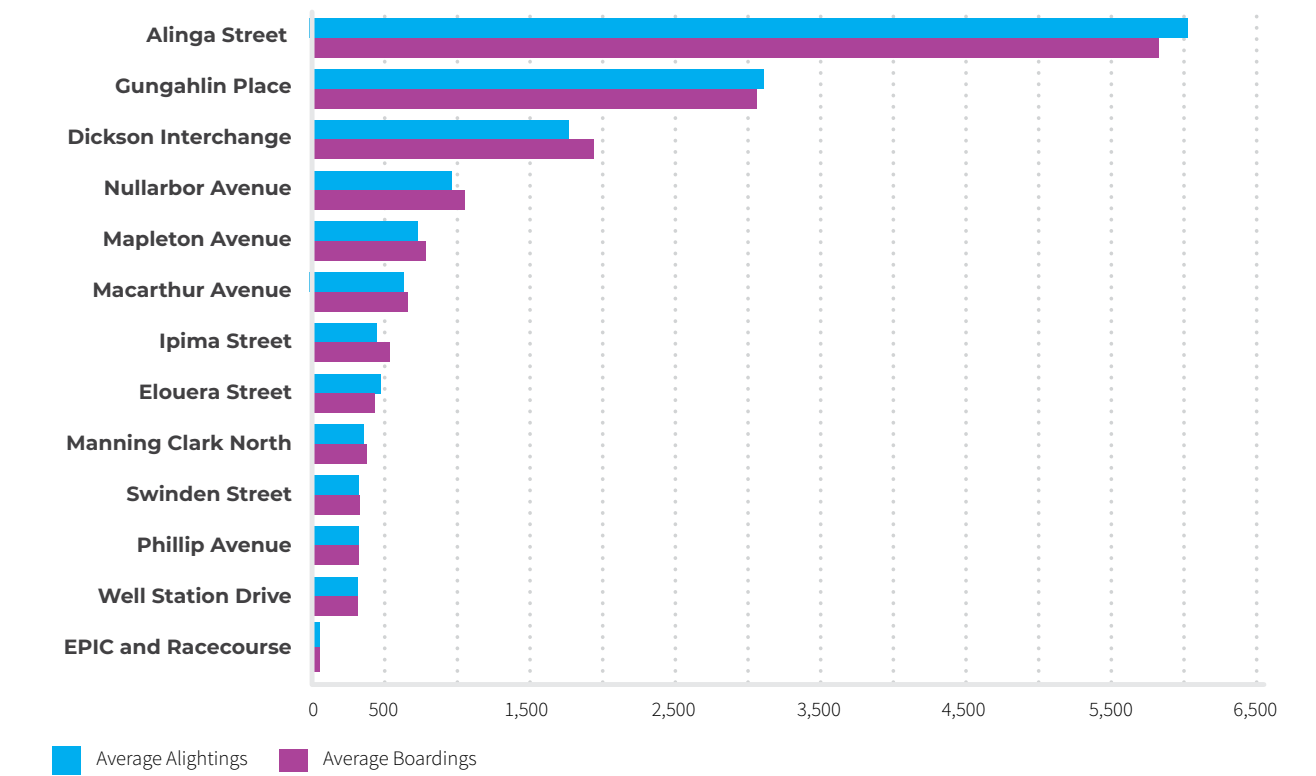
Explanatory Notes

1. The data excluded the light rail launch weekend;
2. May 2019 was a free travel month across all public transport;
3. The light rail patronage fluctuates by season, and especially so during school holidays i.e. December and January; and
4. The Covid-19 pandemic and the Public Health Emergency impacted March 2020 patronage.

The weekend average daily patronage is tracking at almost 7,000 excluding the fluctuations from the initial launch months, the school holidays and the Covid-19 impact. Seasonality such as the school holidays as well as Covid-19 pandemic have an impact on light rail patronage.

PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Average patronage by stops (weekday)	The average patronage measures the number of people boarding and alighting the light rail for each stop	Alinga Street had the highest average number boardings and alightings in February 2020. This is followed by passengers from Gungahlin Place, Dickson and Nullarbor Avenue.

Average weekday patronage (by stops)



Explanatory Notes

- February 2020 patronage data are used for analysis
- The trend is likely to be consistent across all other months as it does not account for the school holiday fluctuations and represents the pre Covid-19 month.

Both seasonality and Covid-19 pandemic will have an impact on the monthly patronage of light rail. By observing the similar weekdays boarding and alighting patterns for each stop, it appears to suggest that majority of passengers who commute to city for work come from Gungahlin Place, Dickson and Nullarbor Avenue.

PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Public Transport Network Patronage	The light rail development has led to the remodelling of the bus network, where there is an increased frequency and number of bus services connecting the citizens to major events or places of employment within Canberra	The introduction of the new bus network in conjunction with light rail in April 2019 has seen a significant increase in public transport patronage, recording a 7.1 per cent increase in public transport journeys in the December quarter of 2019 when compared against the same period in 2018.



BENEFIT: ROAD TRAFFIC CONGESTION

PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Average number of motor vehicles along the light rail corridor	Reduction in use of motor vehicles since the light rail implementation	Road count data shows up to a 20 per cent reduction in vehicles travelling along Northbourne Avenue during the morning peak period. This figure is based off a comparison of road counter data (October 2016 versus October 2019) at the Northbourne Avenue intersections with Barry Drive and Macarthur Avenue.

BENEFIT: CUSTOMER EXPERIENCE

PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Delta change in customer experience	Measures the changes in customer experience for locals and visitors due to light rail	The February 2020 survey indicated that over 90% of light rail passengers expressed satisfaction with Transport Canberra light rail services

SAFETY AND SECURITY

93% of participants in the February 2020 survey reported that they feel either very satisfied or satisfied with the safety and security standards of Light Rail.



Light rail is a safe mode of transport and the Canberra light rail system meets world class safety standards. Each light rail stop is fitted with good lighting, emergency help points and CCTV as safety features.

All road traffic crossing the light rail tracks is controlled by traffic lights to ensure interaction is managed safely. Pedestrians are required to cross at designated crossing points, most of which are traffic light controlled.



ACCESSIBILITY

Light rail stops

The light rail network, including stops and vehicles, is fully accessible and complies with the Disability Standards for Accessible Public Transport 2002. There are dedicated areas at stops and on board for mobility aid users, and red priority seating for people with mobility needs.

All stops are accessible via ramps to provide improved access for passengers who use mobility aids (wheelchairs, scooters or motorised vehicles), parents with prams and those who find using stairs difficult. There are accessibility symbols on the ground located at stops and on board for mobility aid users.

The LRV door entry is level at every stop. The level can change slightly, depending on the passenger loading.

Passenger Information Displays provide real time expected arrivals and information. Public announcements are also made on board, identifying the next stop and information during service disruptions.

Hearing Loops have been installed at each stop and on board all LRVs to assist those passengers with hearing aids.

Braille lettering and raised pictograms are located at each stop on the help point and on the information totem pole. Similarly, braille lettering can be found on every LRV door button. A pre-recorded public announcement message assists visually impaired passengers with information about the stop facilities.

Emergency help points and closed-circuit television are located on board every LRV and each stop for your safety. Boarding Ramps are available to assist those passengers who need assistance boarding or exiting the LRV.



On Board

Each LRV has a designated space for passengers with mobility aids or prams. A restraint is available to secure the mobility aid in place. By depressing the blue button in this space, a passenger can alert the driver to their stop. This also enables the doors to stay open longer.

LRVs are designed with a spacious interior and even low floor design allowing for easy movement inside the LRV.

Priority seating has also been allocated on board the LRVs by the use of red seating with signage showing who the seats are intended for. Upon request these seats must be vacated for pregnant women, seniors, or passengers with a vision impairment, injury or illness.

BENEFIT: ACTIVE TRAVEL

PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Uptake in active travel <ul style="list-style-type: none">Number of walk/cycle access	Measures the uptake of healthy physical lifestyle choices as a result of light rail	Based on February 2020 survey data, around three in five customers used active travel to get to the light rail stop: 57% walked while 3% rode a bike and had it on board and 1% rode a bike and left it at the station.
Number of bike racks installed on access points/adjacent to Light Rail stops		





3.2.2 LAND USE

Light rail is anticipated to provide ongoing land use benefits, including benefits derived from the more efficient use of land in the light rail corridor. It is clear that urban regeneration is underway in the corridor with many examples of new developments currently being undertaken. Land use benefits were also discussed in the Project Delivery Report.

Future Census data and other information which will be obtained in the coming years will enable future assessment of the realisation of land use benefits. Metrics which provide an immediate indication of land benefits achieved to date include the following:

BENEFIT: PUBLIC HOUSING RENEWAL

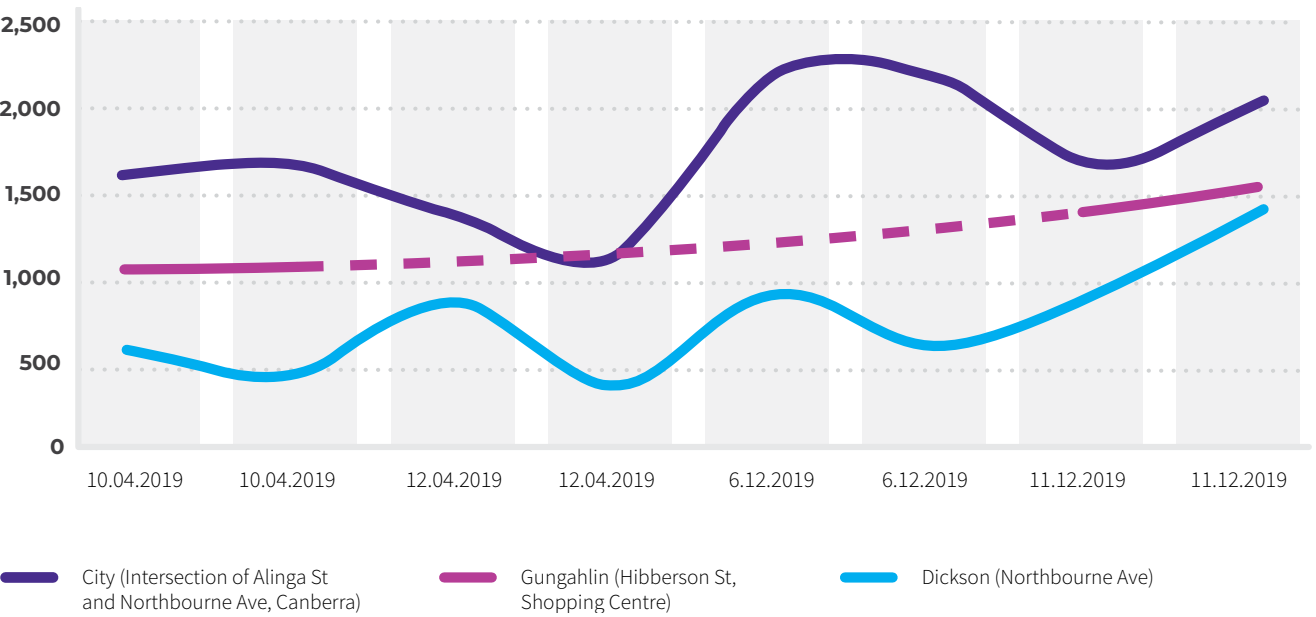
PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Number/Types of public houses built and/or replaced	Measures the new and/or replaced public housing stock.	The Public Housing Renewal Program has replaced 1288 aged public houses.

BENEFIT: BUSINESS AND COMMERCIAL GROWTH

PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Number of Pedestrian crossing (Weekday peak)	Measure the pedestrian footfall along the light rail corridor including Civic, Dickson and Gungahlin vicinity and the corresponding business and commercial growth.	The figure shows a consistent upward trend in footfall including Civic, Dickson and Gungahlin, indicating higher commercial activity occurring along the light rail corridor over April-December 2019

Pedestrian Crossing Footfall along the light rail corridor

Time-series analysis for benefit 8: business and commercial growth



Explanatory Notes

Pedestrian crossing data adjacent to the Light Rail corridor was made available on two days for both months –April 2019 and December 2019 to conduct the peak period analysis over time.

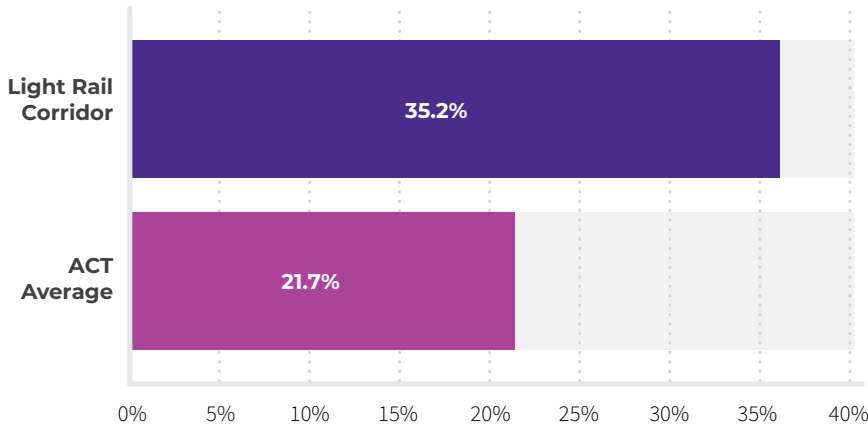
BENEFIT: URBAN DEVELOPMENT

PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Number of new urban residential development along the Light Rail corridor	Assesses new residential development adjacent or near to the Light Rail corridor	Based on 2016 Census data population growth in suburbs along the corridor has exceeded what was initially expected in the business case by nearly 2,500 people.
Number/Types of new business and commercial development	Assess the new business and commercial development along the Light Rail corridor	Employment through economic growth, business growth has increased by 4% along the Gungahlin section of the corridor in 2014-2018.

BENEFIT: PROPERTY VALUES

PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Delta change in unimproved value of blocks	Measures the growth in property values within the light rail corridor between the time period 2011-2018 through the unimproved value of blocks	The increase in the unimproved value of blocks within the light rail corridor between 2011-2018 is 35.2%, which is over 10 percentage points higher than the average value across the ACT.

Increase in Unimproved value of blocks within the Light Rail corridor (2011-2018)



3.2.3 WIDER ECONOMIC IMPACTS

Metrics which provide an indication of wider economic benefits achieved to date include the following:

BENEFIT: EMPLOYMENT, DIRECT

PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Delta change in local employment growth	Measures the new jobs created across the transport service. This includes the creation of public transport jobs for both the light rail and bus services.	<p>Since the light rail commenced on 20 April 2019, the headcount for direct light rail employees has increased from 86 to 93 (March 2020).</p> <p>The growth in the public transport workforce has not only been witnessed in light rail but also for bus operations. The headcount of bus operators was 740 at June 2018 and grew to 801 at June 2019 with the introduction of the new / expanded public transport network.</p>



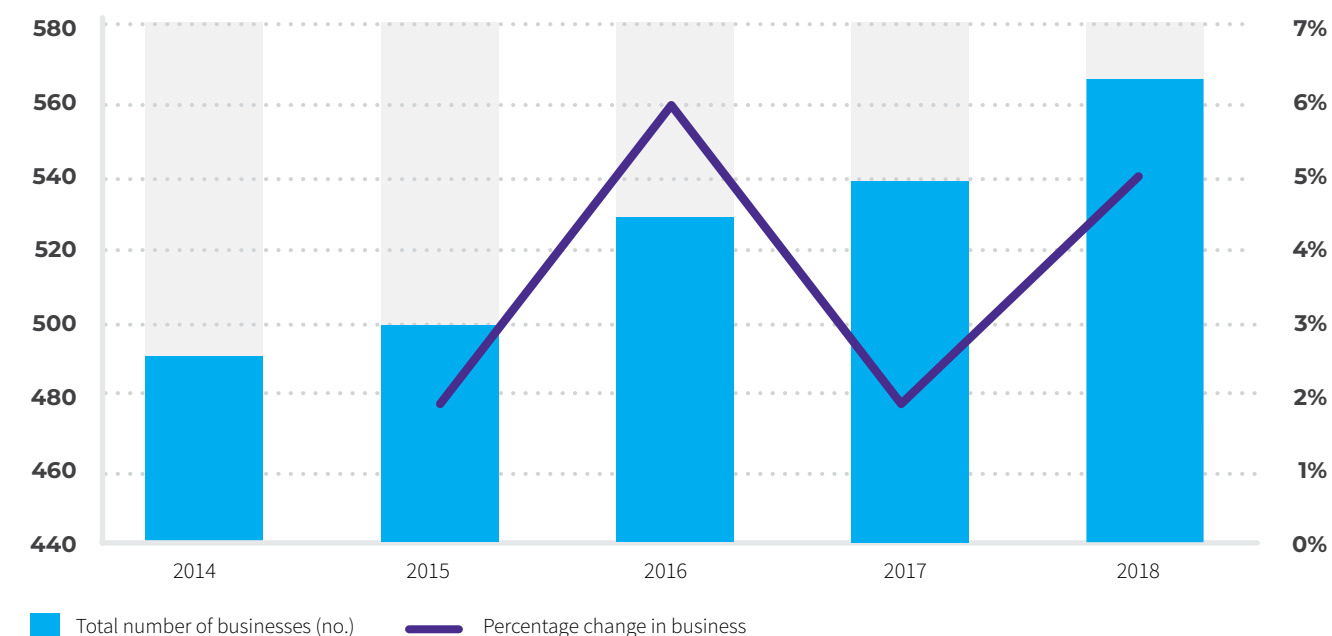


BENEFIT: EMPLOYMENT, THROUGH ECONOMIC GROWTH

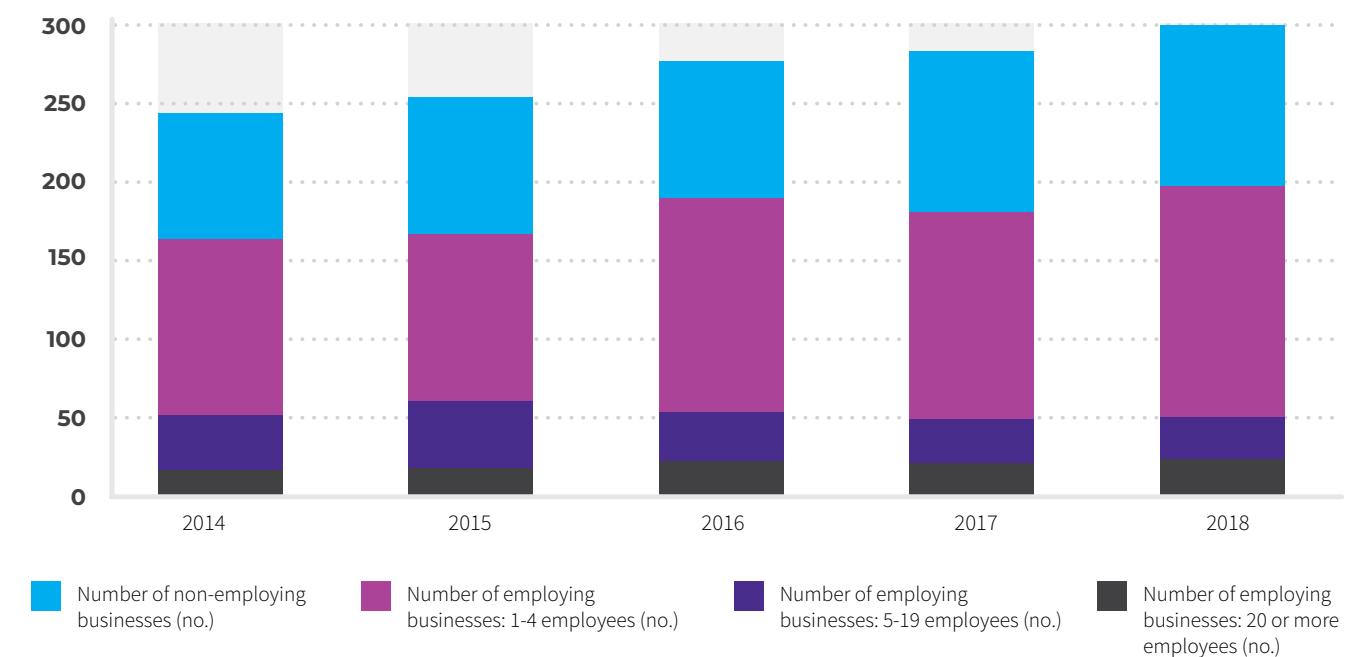
PROJECT METRIC	METRIC DESCRIPTION	UPDATED COMMENTARY
Business growth along the Gungahlin section of the corridor	Measures the business growth along the Gungahlin corridor over the time period 2009-2018	The total number of business in Gungahlin have been growing steadily (4% on average in 2014-18), maintaining positive growth during the light rail construction.

Time-series analysis for benefit 16: Employment, through economic growth

Total number of business in Gungahlin (2014-2018)



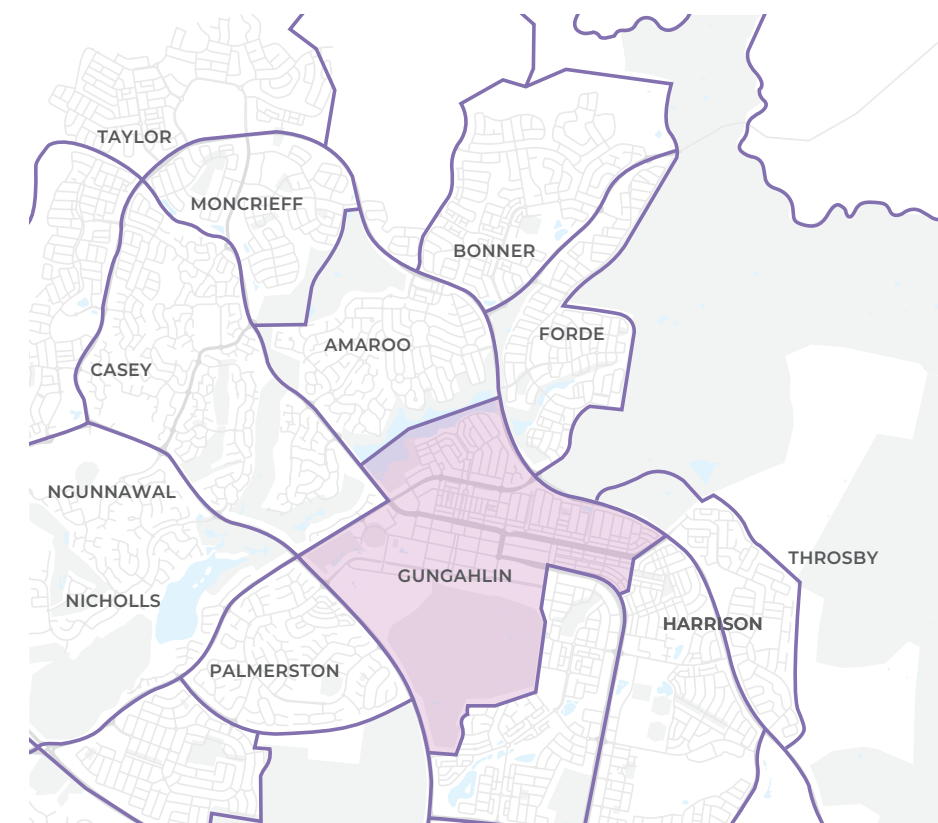
Size of business operating in Gungahlin by number of employees hired



Explanatory Notes

The changes in business growth over the time period 2014-2018 are obtained from ABS dataset of Gungahlin at SA 2 level. It is observed that the ABS data count of the companies of different sizes employing workers does not necessarily add up to the total number of businesses operating within Gungahlin.

The total number of businesses in Gungahlin increases steadily over the years from 490 in 2014 to 566 in 2018.



4. STAKEHOLDER ENGAGEMENT

4.1 Engagement with Local Community

From the commencement of the Project, all relevant parts of the ACT Government worked to create a coordinated and comprehensive pathway to engage with stakeholders across the community.

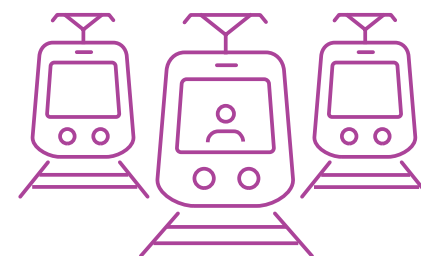
The overall aim was to establish and maintain open communication channels that would keep the Canberra community and stakeholders informed and allow feedback and comments to be shared throughout the project.

There was significant community interest in the project. The key messages shared with the community by the ACT Government (Refer to figure below) in the early stages of planning the light rail network revolved around:

- ▶ Improving public transport: Frequent, fast, reliable light rail services will improve public transport access;
- ▶ Better journeys for customers: Modern, high quality light rail vehicles and stops with a single electronic ticketing will provide reliable, comfortable, accessible journeys for customers;
- ▶ Addressing congestion: Congestion was set to cost Canberra \$700 million a year by 2031. Light rail will provide a more modern, reliable and sustainable alternative;
- ▶ Economic benefits: Light rail is estimated to deliver over \$1 billion in economic benefits for Canberra through improved public transport, productivity and urban renewal; and
- ▶ Sustainable public transport: Light rail offers a clean, quiet, low-emission alternative to cars and buses that provides environmental benefits and encourages healthy active travel

STRONG COMMUNITY ENGAGEMENT ON THE LIGHT RAIL NETWORK

Frequent, Fast, Reliable Light Rail Service



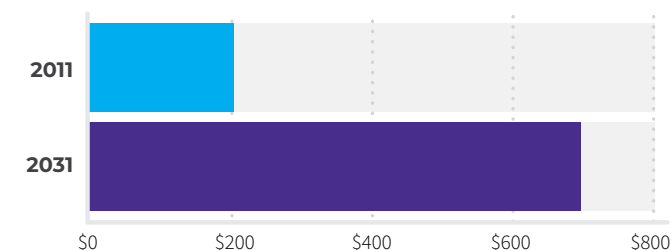
- ▶ Likelihood to recommend the LR to friends or family is at 95% overall.
- ▶ City to Gungahlin in 24 minutes
- ▶ 90% and higher customer satisfaction across all categories

\$700 Million Congestion Cost



- ▶ Travel time savings of 4,033 hours per day across the entire network due to Light Rail (2031).
- ▶ Projected cost of delay to grow to \$700 million by 2031.

Cost of delay on transport network (millions)



\$1 Billion in Economic Benefit for Canberra



Environmental & Other Benefits
\$13 million

Walking & Cycling Health Benefits
\$5 million

Infrastructure Efficiency Savings
\$140 million

Wider Economic Benefits
\$198 million

Transport Time Savings
\$222 million

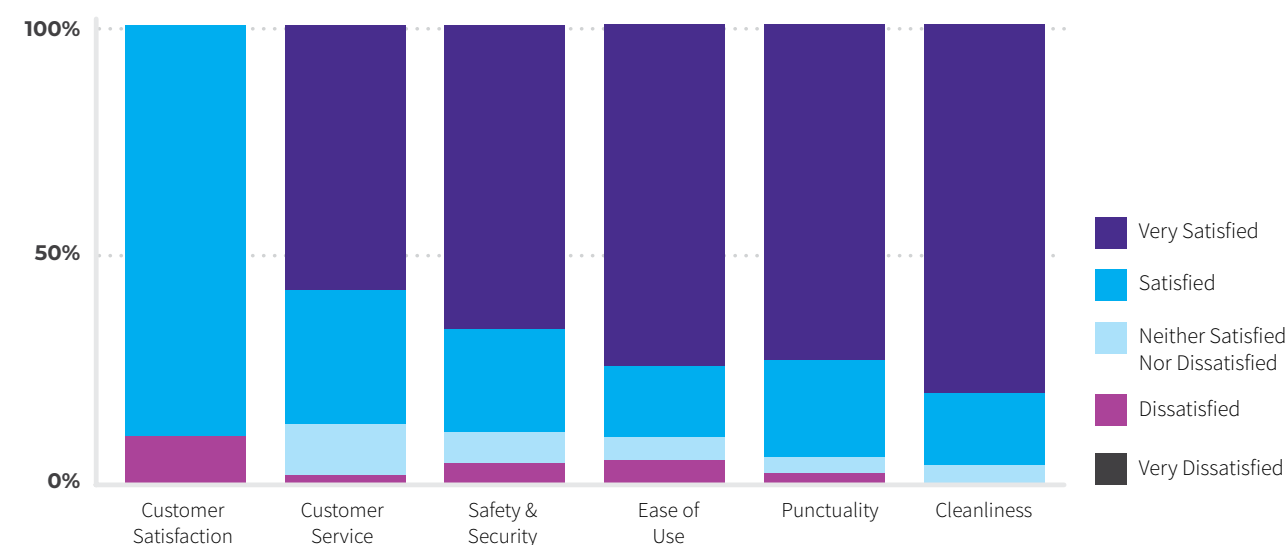
Land Use Benefits
\$240 million

Sustainable Public Transport



- ▶ The reduced congestion have environmental benefits such as reduced air & noise pollution.
- ▶ Reduction in ACT's carbon emissions per capita

Better Journeys for Customers



4.2 Engagement with Business Owners

LIGHT RAIL BUSINESS LINK PROGRAM (CONSTRUCTION PHASE)

The ACT Government appointed the Canberra Business Chamber to undertake engagement with the business community during the project’s construction phase. A dedicated ‘Light Rail Business Link’ program (LRBL) was established to:

- ▶ Manage engagement with local businesses along the corridor and in the Gungahlin precinct
- ▶ Improve industry engagement
- ▶ Provide information, training and support for local traders and business owners in the Gungahlin precinct
- ▶ Dedicate time, expertise and marketing support for local businesses to prepare for the arrival of light rail terminus to the precinct
- ▶ Conduct business forums and support for new business initiatives through dedicated engagement and communications inputs.

The LRBL sought to engage businesses surrounding the construction activities along the length of the corridor.

In 2018 the Territory, with the support of the LRBL, prepared a Business Impact Assessment of Territory-led construction projects in Gungahlin to better understand the cumulative impact of construction activities and to identify areas for possible improvement for current and future projects.

The Canberra Business Chamber, via the LRBL, undertook a survey of businesses to garner perceived business impacts and sentiment about the future. Although construction activities were perceived to have a negative impact on businesses, there was general optimism for the future.

The study highlighted areas of potential improvement to reduce business impacts from construction projects. These ideas ranged from strategically sequencing works, providing greater certainty about the timing and extent of road closure and noisy activities, assistance with better wayfinding signage for customers and practical measures like window and façade cleaning where construction activities generate excessive dust.

The study also found that whilst the Project undoubtedly resulted in disruption to local businesses during its construction phase, the exact influence attributable to the Project was difficult to discern in the context of other projects in the vicinity, the expansion of other shopping districts in the region, general business conditions and individual business strategies.

STAGE 1 CASE STUDIES (OPERATION PHASE)

In September 2019, Major Projects Canberra developed a series of case studies with businesses who had experienced construction activities and who could provide insight and lessons learnt from Stage 1. The anecdotal feedback was that, although construction had been impactful, the commencement of light rail had also had a positive impact on their businesses by way of increased exposure/footfall, revenue, ease of access for clients and marketing opportunities.

Suggestions for improvement included assisting businesses with their online strategies prior to project commencement, considering other practical means of support, providing early and accurate construction information and limiting construction impacts/time in the area as much as possible. These case studies included a mix of hospitality, health & beauty and retail businesses.

Since operations have commenced, engagement along the alignment has also occurred with specific interest groups such as Pedal Power, The Disability Trust, Guide Dogs ACT/NSW, the Canberra Business Chamber and various other community representatives. These groups provided feedback that describes, or suggests measures to mitigate against, impacts of construction and operations on both business and the community.

This engagement with community interest groups has resulted in the following feedback:

- ▶ A combined disability reference group will assist with future stages of light rail to assist implementation of best practice outcomes
- ▶ Although Stage 1 has been popular, congestion on the vehicles may create uneasiness amongst certain community members.
- ▶ More end of trip facilities may be beneficial for bike riders or active pedestrians/runners, along with cycle routes which see light rail and cyclists in alignment.
- ▶ There is a perception across the public transport network that certain stops may attract loitering so that women, at times, may not be comfortable alone at a stop. This issue will be considered in urban realm, stop location and pedestrian access planning.
- ▶ Consideration of Park & Ride availability may assist commuters
- ▶ Construction of a stop at Mitchell would support a growing industrial area



BUSINESS INSIGHTS – ONE YEAR ON SURVEY (OPERATION PHASE)

In April 2020, Major Projects Canberra undertook a business' insights survey with a number of traders located along the Light Rail Stage 1 alignment, focusing particularly on businesses located in Gungahlin and Mitchell. The objective of this research was to update the ACT Government's understanding of the relationship businesses have with light rail. This research was also undertaken to collect further 'lessons learnt' and experiential feedback to assist the ACT Government better engage and support businesses during future construction projects.

The Business Insights survey was undertaken as a snapshot at the point of 12 months of light rail operations, acknowledging the impact and constraints of COVID-19. Of the businesses surveyed as part of the LBRL research, supplemented with a list of known operational businesses, 100 businesses were targeted and sent online surveys which sought feedback on their experience with light rail. Of these, 37 responses were received as at the date of this report which has provided insight into their more recent experiences. 70 per cent of the business responses came from the Mitchell area and 30 per cent from Gungahlin. The survey found that 73 per cent of the responses were from business over ten years old, and almost 25 per cent had run their business for over 20 years.

Businesses were asked to indicate how, in hindsight, they were impacted or benefited by the construction of Light Rail Stage 1. Whilst the responses are only indicative, as other factors may have contributed and are not quantified, these responses provide a measure of business impacts during the construction phase. Of the respondents, many believed their business experienced a decline in footfall, revenue and visibility of their business during the construction phase, and approximately half indicated they had been impacted by noise and dust pollution. Few businesses felt there was any improvement in areas of their business during the construction period. However, at least 50 per cent of businesses felt that during the construction phase there was no change in accessibility for suppliers, air quality, visibility of their business and access/mobility for special needs groups.

Businesses were then asked to consider the period of operation after the commencement of Light Rail Stage 1 and any changes to business aspects. In general, businesses indicated there had been an improvement (either slight or significant) in revenue, footfall, accessibility and visibility. The more positive responses came from businesses located in Gungahlin who have benefited from closer proximity to a light rail stop.

To assist in developing future engagement strategies including construction communications, businesses were asked to nominate modes of communication which they felt helpful during the project. Signage and social media/website updates were ranked as the most useful. Additionally, almost half of businesses used and found printed construction communications useful. A variety of quantitative suggestions provided further insight that can be considered in the delivery of infrastructure across Canberra.

By delivering the light rail network in stages, there is an opportunity for continual improvement. The findings of this insights survey are underpinned by ongoing engagement which has focused on the Stage 2A project area. By continuing the conversation with stakeholders in Stage 1 and engaging early with stakeholders along the Stage 2 alignment we can better support the health of businesses in both the short and long term.

BUSINESS ENGAGEMENT – CITY WEST (PRE-CONSTRUCTION PHASE STAGE 2A)

In August 2019, Major Projects Canberra commenced consultation with City West businesses to inform future planning of Stage 2A, taking into consideration feedback and findings from the Stage 1 business engagement activities.

Of the identified 370 businesses who at that time were situated within one block of the alignment, 161 surveys were collected (44 per cent).

The consultation included face-to-face discussions, pop-up engagement events, electronic newsletters, an online survey and two rounds of doorknocks. The objective was to raise awareness of the next stages of Light Rail and seek feedback on:

- ▶ General operational information including trading hours, logistics, staffing, access etc
- ▶ Opportunities and challenges for construction planning
- ▶ Preferences and interest levels for future communication with the project
- ▶ Existing awareness levels of the current and future stages

Although the survey captured a mix of qualitative and quantitative information, a summary of the feedback provided during face-to-face interactions, and of suggested follow-up action is outlined below:

- ▶ In general, there was enthusiasm and support for the next stages of light rail
- ▶ Stakeholders had a low understanding of, or no experience with, construction within a built-up environment, so had a lack of urgency to 'engage' with the project
- ▶ Vacancy rates in commercial properties are estimated at over 10% within City West, with a number of redevelopments pending that may further impact this number.
- ▶ A number of businesses were currently unable to renew leases as landlords plan to sell, renovate or demolish buildings anticipating development in the area.
- ▶ Respondents felt strongly about the need to ensure parking provision for staff and clients during construction
- ▶ Over 70 per cent of respondents indicated a shut down over Christmas of up to two weeks. An opportunity exists to consult early with stakeholders and undertake a condensed construction program during the Christmas period while many businesses are shut down.
- ▶ Business rate payments, compensation and support prior and during construction was questioned.

Based on these findings a series of consultation and support measures can be considered to support local business during the next stage of light rail construction.



5. KEY LESSONS

The City to Gungahlin Light Rail project is the most significant transport infrastructure project ever undertaken by the Territory, as well as its largest Public Private Partnership (PPP).

The first year of operations has presented an opportunity to reflect on the project to date, including through project inception, scoping, procurement and delivery and recognise the lessons that can be taken from those processes.

A range of “lessons learned” across procurement and construction were set out in the Project Delivery Report (June 2019). A snap shot of feedback from more recent engagement with local businesses it set out below.

5.1 Community and Business Engagement

The LRBL program was designed to maximise the benefits of the Light Rail City to Gungahlin for all Canberrans by building links between Government, the local business community, and Canberra Metro. Acting as a conduit between stakeholder groups, the LRBL program was intended to ensure opportunities for local business are maximised and any concerns are communicated. All businesses were encouraged to be “project ready”, to take advantage of this significant infrastructure investment by ensuring they have appropriate skills to participate where possible. Specific training opportunities and information sessions were available.

Notwithstanding the opportunities presented by the LRBL, the ACT Government’s Business Impact Assessment

of ACT Government-led construction activities in Gungahlin, published in September 2018, also identified areas that respondents believed the ACT Government could improve on for future construction projects to reduce business impacts. These findings have been reinforced by ongoing consultation carried out by Major Projects Canberra.

Engagement with businesses and community members who have experienced the project from inception through to commencement of services, provides valuable insight and contributes to lessons learnt. These lessons can inform development of future programs of support and communications strategies as well as advise construction schedules and traffic management plans to assist in reducing or mitigating impacts.

A snapshot of ideas from recent engagement with businesses along the alignment includes feedback relating to:



Taking advantage of historic business shutdowns such as the Christmas period to undertake condensed and extended construction activities



Utilising special interest groups such as traders’ associations to assist in achieving consensus and better delivering engagement activities



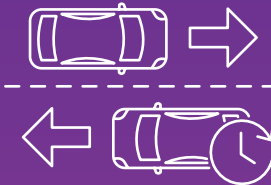
Reducing the length of construction programs, and planning for all work to be integrated rather than reopening sites multiple times



Ensuring parking provision for staff and clients is considered during construction



Providing accurate and robust information about project timeframes



Reducing multiple road closures and limiting lane/road closures during peak times



Limiting or phasing the number of simultaneous traffic projects



Continually improving integration with existing public transport services including buses



Better utilising construction wayfinding signage, direct mailouts (email) and social media which has real-time relevance



Reducing physical impediments to access for staff and customers and providing extended notice of planned works



Considering the impact of public transport infrastructure on community safety, urban aspect and hygiene



Providing a holistic program of support for businesses prior and during construction including marketing materials and activities, advise/business expertise support and wayfinding signage/branding



Giving consideration to business rate/ registration payments, and administrative costs for businesses during construction and other potential support measures.

The ACT Government will consider these findings when planning for future construction activities to better understand and communicate impacts to businesses and to minimise construction impacts.

6. GLOSSARY AND INTERPRETIVE NOTES

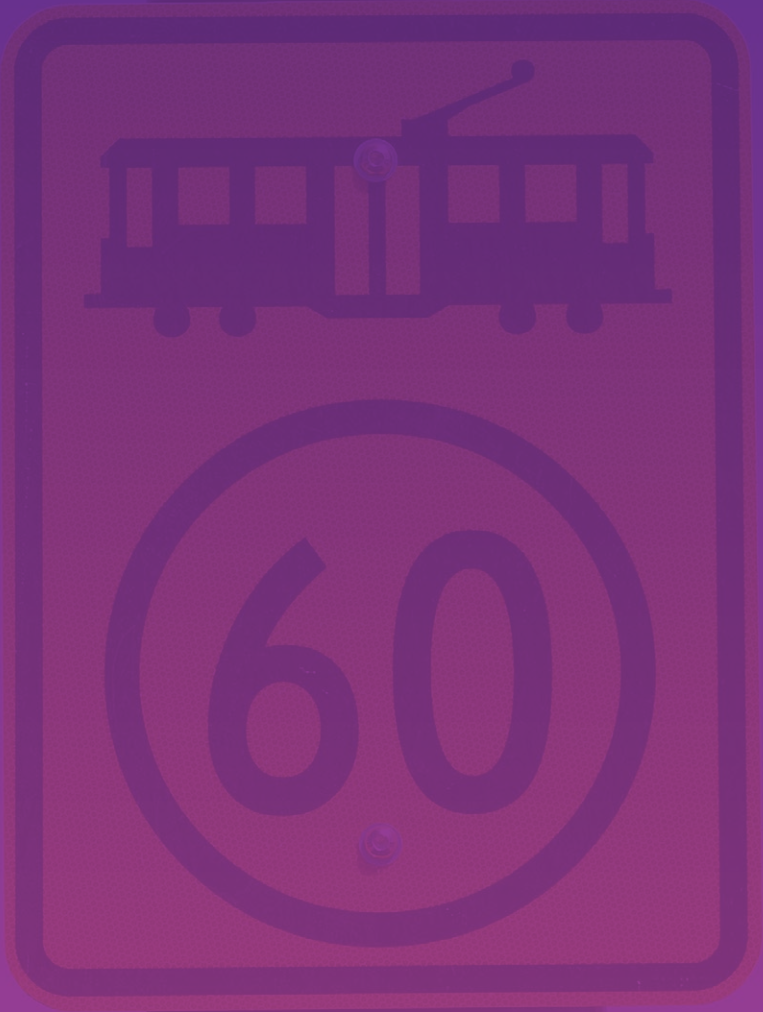
TERM	DEFINITION
ACT	The Australian Capital Territory (ACT) as self-governing territory in the south east of Australia
ACT Government	The ACT Government as the executive authority of the ACT.
Business Case	The Business Case for City to Gungahlin Light Rail
Chief Minister	The Chief Minister of the ACT Government, Andrew Barr MLA.
Canberra Metro	Main contracting party with the Territory, which has entered into contractual relationships with consortium partners to deliver the Project. Ultimately responsible for project delivery and operations .
CMA	Capital Metro Agency - A former agency of the ACT Public Service, merged with TAMS in July 2016 to form the Transport Canberra and City Services Directorate (TCCS).
EOI	Expressions of Interest - an invitation for the private sector to express their interest in delivering the Project.
MPC	Major Projects Canberra
NCA	National Capital Authority - A Federal Government body responsible for the management of commonwealth land within the ACT.
PPP	Public-Private Partnership - a procurement mechanism for which the ACT Government is procuring a private consortium to design, construct, finance, maintain and operate light rail.
Project Board or Board	The Light Rail Project Board
The Project	Stage 1 of the Canberra Light Rail Network - a 12 kilometre route from Gungahlin in Canberra's north to the City (down Flemington Road and Northbourne Avenue).
Transport Canberra and City Services (TCCS)	Previously Capital Metro Authority (CMA) . On 1 July 2016 the Capital Metro Agency was amalgamated with Territory and Municipal Services Directorate to form a new ACT Government directorate, Transport Canberra and City Services (TCCS).

7. DATA APPROACH

7.1 Data and Information Source

As at 22 April 2020, the following provides an illustrative list of the sources used:

- ▶ My Way patronage Data
- ▶ Transport Canberra Light Rail Data
- ▶ Australian Bureau of Statistic Economy and Industry Data (SA2)
- ▶ Australian Bureau of Statistics 2016 Census Data
- ▶ Australian Bureau of Statistic Resident Population Data
- ▶ ACT Revenue Land Uplift Data
- ▶ CMET Customer Satisfaction Survey Report – August 2019, February 2020
- ▶ TCCS Satisfaction Survey (March 2020)
- ▶ Capital Metro 2014 Business Case
- ▶ Capital Metro 2016 Benefits Realisation Plan
- ▶ Capital Metro Business case brochure
- ▶ Australian Infrastructure Audit Report- Volume 2, April 2015





GET INVOLVED

Join the conversation about light rail.
Subscribe to project updates via the website
to get the latest information on the project
as it progresses and stay in touch with how
you can be involved.

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