



# ACT TRANSPORT STRATEGY 2020









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# Minister's Foreword

## **Our vision for transport is for a world class system that supports a compact, sustainable and vibrant city.**

This means providing flexible, reliable and sustainable options for Canberrans to make their journeys. Convenient and connected public transport; high quality environments for walking and cycling; and a road network that allows us to move people and goods safely and reliably across the city will give our community the choice to live in a way that works for them and contribute to our city's status as one of the most liveable in the world.

The *ACT Transport Strategy 2020* sets out the Government's approach to achieving this vision and provides a framework for planning and investment in transport for the next 20 years. In so doing it replaces the Government's previous transport strategy, *Transport for Canberra 2012-31*, building upon and updating its objectives.

This strategy has been developed alongside the *ACT Planning Strategy 2018* and *Climate Change Strategy 2019-2025* so that the critical partnership between transport and land use is optimised to meet the objectives for the ACT Government established in the 2016 *Canberra: A Statement of Ambition*.

The *ACT Climate Change Strategy 2019-2025* sets out pathways for reducing transport emissions by reducing car use and encouraging a shift to walking, cycling and public transport. This strategy takes those pathways forward and provides a vision and direction for the future of zero emissions travel in Canberra.

The importance of transport in supporting a sustainable, vibrant and liveable city has been considered with the latest data to define the Government's focus for transport investment. This renewed focus will ensure our transport network complements the renewal and strengthening of inner precincts and suburbs as well as supporting the reduction of greenhouse gas emissions created through transport.

The commencement of 2020 has seen the COVID-19 pandemic which has brought unprecedented challenges to the Canberra community. Throughout this time, we took necessary steps to protect against infection by reducing all non-essential travel. As a result, we saw a record decrease

in overall travel demand with particularly steep declines in personal car and public transport use. However, we also saw an increase in walking and cycling in our local communities.

Recent months have demonstrated the benefits of reduced traffic on roads and more people out walking and cycling. Less traffic has meant we are able to access services and work sites more easily, given us time back in our days to spend with family, reduced noise and air pollution, and made it safer and more inviting to walk and cycle in local neighbourhoods. As Canberrans return to work and school, we are presented with a once in a generation opportunity to reconsider individual transport behaviours to maintain the economic, health and environmental potential of reduced congestion.

Transport will play a critical role to our success in managing our transition beyond COVID-19 and in the months and years ahead. This strategy will be supported by an *ACT Transport Recovery Plan* which will identify specific measures to achieve a sustainable and healthy transport transition to enable us all to make the most of what Canberra has to offer once more.

Since *Transport for Canberra 2012-31*, Canberra has experienced significant and transformational change. The city has grown dramatically from a population of 356,000 in 2011 to over 420,000 in 2019 and is forecast to reach 580,000 by 2040. New suburbs have been built in Gungahlin and the Molonglo Valley and a greater emphasis on urban infill has fueled a renaissance in the city's inner precincts. Lifestyle choices are shifting as social attitudes evolve and technology empowers greater choice in how people work and socialise. New business models, utilising digital technology, are powering a 24/7 economy with new opportunities for economic growth and new expectations of what services should be provided. A greater understanding of the human impact on the natural environment is fundamentally altering community perceptions of sustainability. These social changes have placed new demands on our transport networks as the volume and nature of trips have adapted to our evolving way of life.



*Transport for Canberra 2012-31* supported the ACT Government in proactively meeting these changing demands. The continued investment in Canberra's strategic road network, cycling and walking network and public transport as well as the introduction of light rail in 2019 have enabled Canberra to meet increasing demand and retain excellent transport outcomes. This experience, and the proliferation of new transport technologies available, has allowed the ACT Government, through this strategy, to refine its vision for transport's contribution to a sustainable, compact and efficient Canberra, able to meet future demands and remain one of the world's most liveable and competitive cities.

Due primarily to population growth, Infrastructure Australia forecasts that by the 2030s the ACT and Queanbeyan will generate almost one third more trips a day. Recovery from COVID-19 may impact growth in the short term, but the long-term upward trend will continue. In 2016 Canberrans drove the most car kilometers per person of any Australian city. If these new trips also feature a high level of car use, Canberra's transport network is predicted to become more congested and crowded by the 2030s. In economic terms, the daily economic cost of road congestion is forecast to increase from \$800,000 in 2016 to \$1.5m in 2031, and the cost of public transport crowding will also rise.

Feedback from the draft strategy consultation and a wide range of channels tells us Canberrans are seeking more transport options as lifestyles change. We know people expect a high-quality customer experience when travelling and are looking for transport that flexibly meets their needs.

Many Canberrans will continue to need to use their car for certain trips but the positive response to Light Rail Stage 1 demonstrates that Canberrans are keen to embrace new transport options when they are genuinely attractive and convenient. Quality public transport options provide opportunities for new housing, services and businesses, which help to keep pace with the expectations our changing lifestyles bring.

## Policy response

Future transport in Canberra will feature more attractive, flexible travel options that increase choice, reduce carbon emissions and facilitate a compact, vibrant urban form.

Public transport, cycling and walking are low emission forms of transport that make highly efficient use of space and support the activation of streets and places. Canberra's future transport network will support a shift towards these modes. Not all trips can be made in this way, and Canberrans will continue to enjoy reliable, safe roads and freight networks when needed.

To tackle transport emissions, we will transition to a zero emissions public transport fleet by 2040 as part of the Transport Canberra Zero Emissions Transition Plan.

The *ACT Planning Strategy 2018* introduces the concept of 'Movement and Place' for the first time to Canberra. This is a framework for integrating land use and transport. It recognises that roads and streets have dual purposes, they are both places for people to move through and places for people to stop and spend time.

As Canberra becomes denser more streets will evolve to have both a high movement and a high place function. The streets of Civic and our town centres are good examples of this.

Key to transport's city building role, will be its ability to reflect and respond to the place making priorities as set out in the *ACT Planning Strategy 2018*. To this end, Canberra's transport network will evolve to reflect a structure of local, central, orbital and regional links that respond to their location.

Transport in our neighbourhoods and centres will focus on attractive walking and cycling environments, connections between centres will focus on more convenient public transport and cycling, and cross city and regional links will focus on maintaining safe and efficient car and freight travel.

We will further augment the network by harnessing new opportunities created by on-demand transport (taxi, ride-share, flexible buses etc.) to fill the last leg of journeys by public transport.

Canberrans are generally early adopters of technology. There will be unprecedented opportunities from the emergence of viable electric and autonomous vehicle technology, to contactless and subscription ticketing services, to drone delivery technology.

## Making it happen

At a strategic level, we will employ four main avenues to bring about the transport system of the future:

**A FUTURE-FOCUSED INVESTMENT FRAMEWORK** which supports long-term sustainable benefits. We will consider the sustainability of a solution and look to its impact not just for the immediate transport solution but its broader contribution to the liveability of the city. Practically this will involve the continued rebalancing of investment towards public transport, cycling and walking while we will continue to invest in the safety and maintenance of our road network to ensure safe and accessible choice which will support the future growth of Canberra.

**REFOCUSED NETWORK PLANNING AND DESIGN** which will increase our city building efforts by better integrated transport and land use. We will collaborate with partners across Government and the community to employ the Movement and Place framework to weave transport and places together; improving the social and urban fabric of our city. Importantly, we will work to improve safety on our roads for all road users by employing the Safe Systems Approach. This will support people through any transport choice to make the most of what Canberra has to offer by ensuring road environments are safe for all.

**OPTIMISING OUR INFRASTRUCTURE** which will continuously improve the capability of Canberra's already excellent transport infrastructure. We will assess the performance of roads and paths and look for new solutions to maximise their use efficiently, sustainably and safely. We will embrace the opportunities created through new technology to better manage our network and increase capacity to accommodate future demand and emerging transport modes.

**AN ACT TRANSPORT RECOVERY PLAN** will lead our efforts to set transport once again on a healthy and sustainable path as we move beyond COVID-19. The plan will focus on harnessing this opportunity to adapt, improve and innovate, so that we can make the most of this period, for the benefit of all Canberrans, now and in the future.

The reimagining of our transport network which begun through *Transport for Canberra 2012-31* has provided Canberra with a once in a generation opportunity to recast expectations of how transport and land use planning can shape the future of our city. Through this strategy, the ACT Government will now build on that foundation, delivering world-class public transport, attractive and viable options for cycling and walking, and a safe and efficient road network to allow Canberrans to connect with a vibrant, liveable and exciting future.



**Chris Steel** MLA  
Minister for Transport



# Setting the scene

## A renewed transport strategy

Since the development of *Transport for Canberra 2012-2031*, Canberra has seen considerable growth and the policy context has evolved and changed. Several critical policies have articulated our ambition for a dynamic, sustainable and resilient city in the future.

The 2016 *Canberra: A Statement of Ambition* defines the Government's vision for a world class public transport system that supports a dynamic, globally connected city. The *ACT Planning Strategy 2018* has introduced a plan for a more compact and efficient urban form, complemented by liveable neighbourhoods. The *ACT Climate Change Strategy 2019-2025* has outlined a pathway to reduce the ACT's carbon emissions to zero by 2045 at the latest. The *ACT Infrastructure Plan* has articulated the future direction for our transport investments.

In 2019 Infrastructure Australia released modelling that forecasts a near doubling of congestion on our roads and crowding on our buses by the 2030s without renewed investment and innovative policy approaches. In Australia, lifestyles are changing. Family travel patterns are more dynamic and changing working patterns means demand for weekend and night-time travel is increasing. COVID-19 has hastened these trends in working patterns and working remotely has become a part of the way Canberrans do business. No longer is transport just catering to the nine-to-five and the peak hour commute. People have more choice and control over when they travel, and have shifted household, personal and business shopping online. Globally, we have seen the emergence of autonomous vehicles and new business models such as transport paid for via subscription services and shared bike and scooter systems.

In recent months, COVID-19 has impacted travel and transport in a way we have never seen before. As we transition beyond COVID-19, certain trends will likely be retained, and new trends will emerge. This strategy and the complementary *ACT Transport Recovery Plan* will outline how we can make the most of positive trends and mitigate the risks associated with others.

Transport is a world of opportunity and to ensure Canberra is well placed to harness this opportunity, a renewed transport strategy is needed now to set the direction for transport policy and investment in Canberra over the next 20 years.



## What we heard

From December 2018 to March 2019, the Canberra community provided feedback on the draft Transport Strategy *Moving Canberra*.

While the focus on improved public transport, cycling and walking was strongly supported by respondents, there was also an expectation that the strategy would more clearly account for necessary car trips, particularly for those in outer suburbs. People desired more transport options irrespective of their location. The community also expressed the need for a clear pathway to better integrate land use planning and transport – including how infrastructure and development will be jointly planned, sequenced and delivered.

Since the draft strategy was released, several key developments occurred including:

- Introduction of a new bus network and Light Rail Stage 1, which have shaped both perceptions and expectations of our future public transport network.
- Release of the Planning and Climate Change strategies which are closely linked with transport.
- The *Australian Infrastructure Audit Report 2019* on Australia's future infrastructure needs has been finalised and released.

The ACT specific transport modelling, analysis and forecasting have heavily informed our approach to design a future ready transport system.

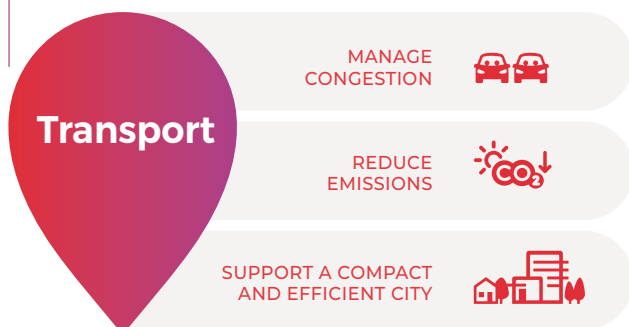
This final strategy considers the consultation feedback and responds to recent developments. It outlines the strategic vision for transport in Canberra over the next 20 years. It will be complemented by a forward program with accompanying plans and policies to implement the strategic vision.

## Policy context

Our city offers access to our daily needs such as jobs and services generally within 30 minutes of our homes. This is the lifestyle Canberrans would like to retain into the future. However, as our city grows Canberra's transport network is predicted to become more congested and crowded.

The ACT Government has set objectives to create a more compact and efficient urban form and reduce carbon emissions through the ACT Planning and Climate Change Strategies.

### Key transport outcomes



The transport strategy must address these three objectives and provide a response that gives Canberrans more attractive transport options, whilst maintaining the best of what we have.

### Canberra: A Statement of Ambition

The Statement of Ambition sets out the ACT Government's vision for Canberra as one of the world's most liveable and competitive cities – welcoming to all.

Key to delivering this vision is the provision of better metropolitan infrastructure that helps to renew our inner precincts, strengthening our suburbs and providing opportunities for all.

Transport has a critical role to play in this as highlighted in the 2016 *Canberra: A Statement of Ambition*, "Everywhere there is the demand from an increasingly time hungry workforce and community to live in the '30 minute city' – the city of short commutes and journeys that manages congestion with a first class public transport system at its heart." This is being driven by changing lifestyle preferences of modern families and workers in the global knowledge economy.

For many years, Canberra has met this desire through the building and widening of roads as the city expanded. However, the future of the city is to contain outward expansion. To maintain our 30-minute travel status in a growing city we will need to refocus our investment to support a more compact and efficient city and provide the

opportunities for the renewal and strengthening of suburbs envisioned in the Statement of Ambition.

By providing a choice of high-quality accessible transport options we also provide greater opportunities for people to better connect with services. In turn this connection leads to vibrant community spaces which support our evolving lifestyles and promote urban infill.

In the coming years, the ACT Government will increase the options available to the community by shifting our focus to public transport, walking and cycling, while maintaining safe and reliable roads for driving and freight. Experience from other major cities has shown that investment in high-quality transport choices, partnered with effective planning, is the most effective way to conveniently and efficiently connect people with the places they need to go, while also increasing liveability and competitiveness.

### ACT Planning Strategy 2018

The *ACT Planning Strategy 2018* provides a vision for a more compact and efficient city and a strategic direction that future urban growth will be supported by delivering up to 70% of new homes within Canberra's existing urban footprint. To achieve this, new development will be concentrated in areas located close to the city centre, town and group centres and along key transit corridors. This urban form is highlighted in the *ACT Planning Strategy Policy Plan Map*.

The *ACT Planning Strategy 2018* seeks to deliver well designed, safe and sustainable streets along with public spaces to create walkable neighbourhoods that are inclusive and fair. This will, in turn, support the creation of a better experience for walking and cycling into and within the city centre and our town centres.

The *ACT Planning Strategy 2018* calls for the integration of land use and transport planning to make Canberra a more liveable city. It introduces the concept of Movement and Place to acknowledge the dual nature of roads and streets as places for both transport and people. Movement and Place provides a collaborative framework for ACT Government Directorates to work together and with the community to enhance the city by creating streets that work from both a place and a transport perspective.

### The ACT Climate Change Strategy 2019-2025

In May 2019, the ACT joined many other cities, states and territories around the world in declaring a state of climate emergency. The *ACT Climate Change Strategy 2019-2025* sets out the Government's response. It outlines actions to meet the ACT's legislated emissions reduction target of 50–60% (below 1990 levels) by 2025 and establishes a pathway for achieving net zero emissions by 2045, including the move to a zero-emission bus fleet by 2040.

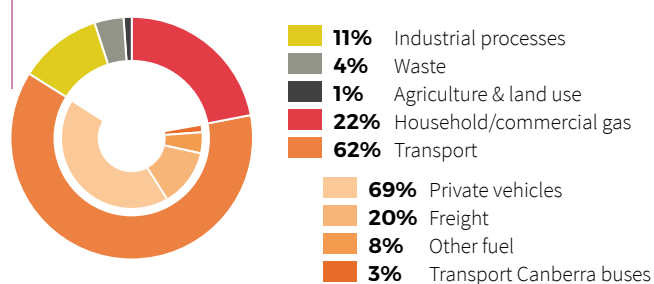
Transport is the largest source of ACT greenhouse gas emissions now that the Territory is supplied with 100%



renewable electricity. Transport currently accounts for around 60% of the ACT's greenhouse gas emissions. While emissions from transport may decrease in the short-term due to COVID-19 restrictions, transport will remain the ACT's largest source of greenhouse gas emissions and will be a high priority for emissions reduction efforts in coming years.

Most of these emissions are from private vehicles (69%), followed by freight (20%), and public transport such as buses (3%), respectively. Reducing greenhouse gas emissions from transport is a key part of the ACT Government's response to climate change.

### Modelled ACT greenhouse gas emissions in 2020



Source: ACT and Queanbeyan-Palerang Household Travel Survey, 2017

Achieving this will require fundamental changes such as switching our private and public transport fleets to new and innovative zero emissions technologies, making more of our journeys via clean public transport options such as light rail and zero emissions buses, making more of our journeys by walking and cycling, and taking steps to reduce our need to travel by building a compact, efficient and inclusive city. The *ACT Climate Change Strategy 2019-2025* sets out pathways for reducing transport emissions by reducing car use and encouraging a shift to walking, cycling and public transport. Canberra's *Living Infrastructure Plan's* directions for keeping our city cool, healthy and liveable in a changing climate will be a key part of this.

## The ACT Wellbeing Framework

The ACT Wellbeing Framework describes that qualities such as "having the opportunity and ability to lead lives of personal and community value – with qualities such as good health, time to enjoy the things in life that matter, in an environment that promotes personal growth – are at the heart of wellbeing."

Transport plays a critical role in improving wellbeing in the Territory. It ensures we have access to the things we need to lead a good life; enables land to be developed to provide housing and services; and is a driver in social equity and inclusion.

This strategy will contribute to the progress towards wellbeing in the ACT, particularly in the domains of 'Access and Connectivity' and 'Time' identified by the ACT Wellbeing Framework.

## Healthy Canberra: ACT Preventative Health Plan 2020-2025

The *Healthy Canberra Plan* seeks to improve health and wellbeing by supporting and promoting healthy and active lifestyles. This includes promoting and enabling active living, for instance by developing Canberra as a walkable and cycle-friendly city, and prioritising walking and cycling as a mode of transport for people of all ages and abilities. The *Healthy Canberra Plan* aims to see more adults and children using active modes of transport as we know that physical activity and movement have many physical and mental health benefits and can reduce the risk of developing chronic diseases.

## ACT Infrastructure Plan

The Infrastructure Plan provides a framework for how the ACT Government will renew established infrastructure to cater for a city of 500,000 people. The plan is a comprehensive, multi-decade plan detailing over \$14 billion worth of infrastructure investments. The focus of the plan is on health, education, transport and community services.

The priorities for future transport planning and investment are walking, cycling and public transport that is well-integrated with land use planning. At the centre of this investment is our city-shaping light rail network along with supporting investment in rapid suburban bus routes, footpaths, cycleways and Park/Bike and Ride.

## Regional planning and policies

The *Prospectus for a Canberra Region Deal* outlines cooperation and coordination with NSW Government and Councils to support the region's transport future. A key element to this is to build faster rail between Canberra and Sydney to improve connectivity, housing choice and employment options in the region. Upgrades to track, infrastructure and rolling stock can make rail an attractive and effective transport option for the region. High Speed Rail remains an additional option for Canberra and the ACT Government has protected future potential sites to support this.

Further, this strategy describes Canberra's global, regional and cross-border links in alignment with the *ACT/NSW Memorandum of Understanding for Regional Collaboration*, the *South East and Tablelands Regional Plan* and the *NSW Regional Services and Infrastructure Plan*.

The ACT has worked in collaboration with State, Territory and Commonwealth Governments to agree the *National Freight and Supply Chain Strategy 2019* and associated *National Action Plan 2019*. Implementation of the National Action Plan will provide a mechanism to ratchet up ambition over time and further support the performance of our freight network. The National Freight Strategy has a vision of a nationally integrated freight system supporting a strong and prosperous Australia through efficiency and productivity, international competitiveness, safety and security, sustainability, skilled workforce and community acceptance.

# Where we are now

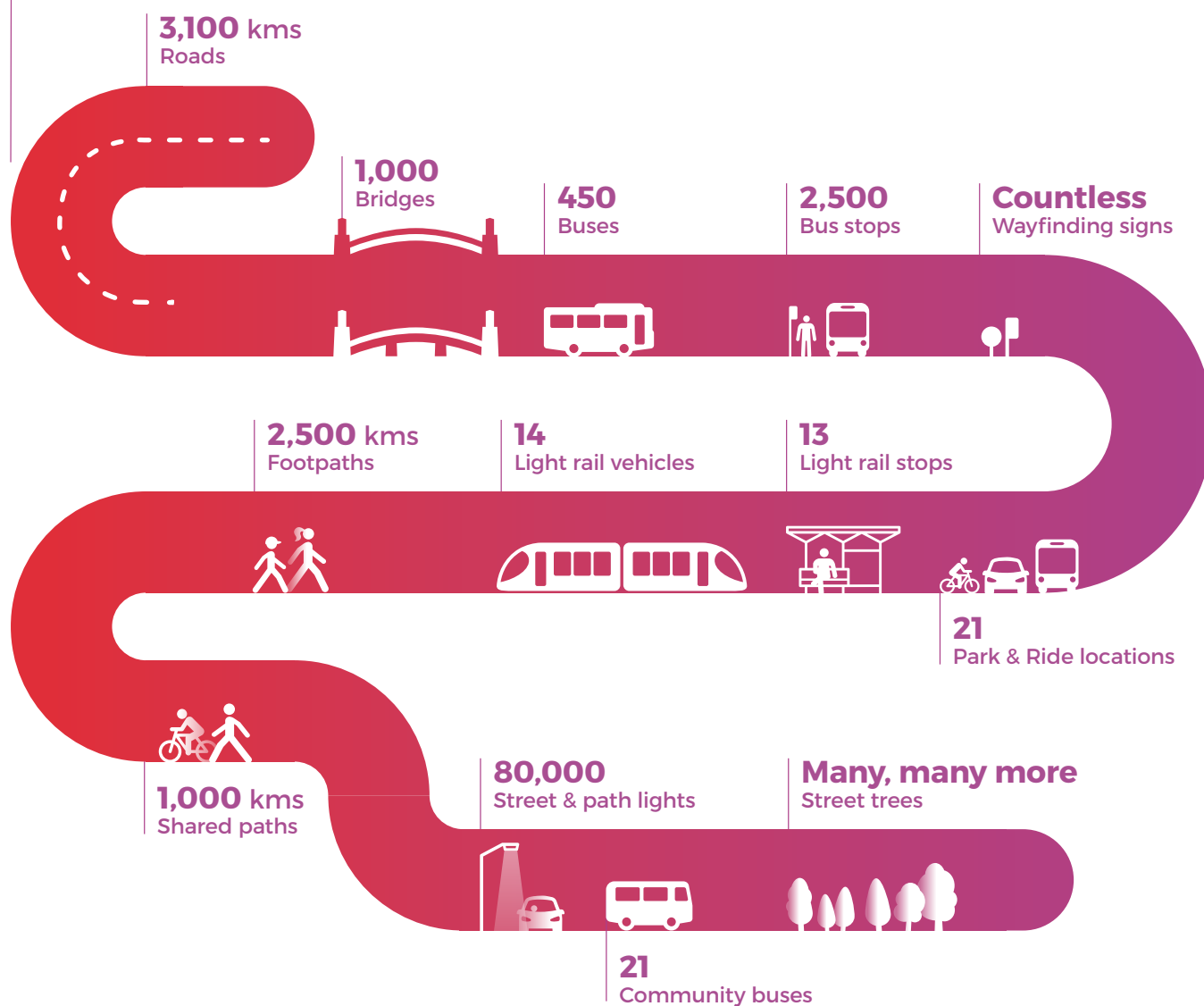
## Transport in Canberra

Canberra's transport network is the backbone of our city. It connects people and places, enabling access to jobs and services, and facilitates commercial activities. The network is a comprehensive system made up of all the infrastructure and services needed to move people and goods in and around Canberra. We might think of our transport network only in terms of roads or vehicles, but our network encompasses all the varied elements needed to make a seamless journey. It extends from our roads, footpaths, cycle paths and parking lots, to our public transport and flexible transport services, to our cross-border coach, rail and air

services. It also includes lesser obvious elements, such as Canberra's journey planning applications and traffic lights and bluetooth sensors; even our street trees, which provide shade and shelter for people walking or cycling and add to the beauty of our city.

Canberra's transport network is far more than the sum of its parts. When everything works together as a single, seamless network, it provides unlimited choices for Canberrans' many and diverse travel needs. It really is one network for many journeys.

### Transport in Canberra: One network for many journeys





## Travel in Canberra

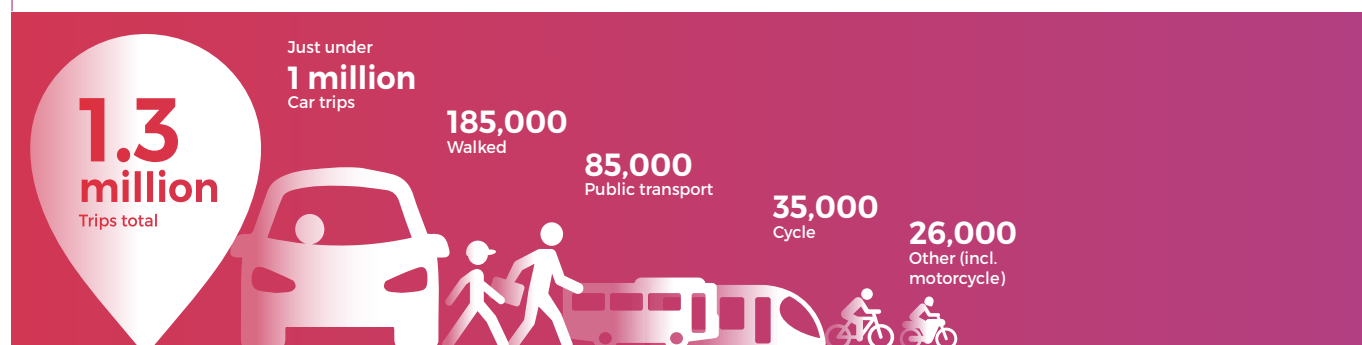
Canberrans make over a million trips a day and the main way we travel is by car, either as driver or passenger. But many people walk and use public transport and we have higher proportions of trips made by cycling compared to other Australian cities. When we consider that Canberra has the highest level of cycling in Australia, we can be proud of our clean, green credentials. Nonetheless, looking to the future, if we are to manage the long-term growth in demand for travel in Canberra the choice we have is clear. If we attempt to meet that demand with the same mode share pattern as we currently have, we will see an almost doubling of congestion. If we proactively invest for our future, to encourage those new trips to be made by walking, cycling and public transport, we will be able to maintain our status as a liveable and convenient city to live in and visit.

The data below provide a snapshot of travel trends in Canberra, prior to COVID-19, and remain relevant as an indication of general trends in Canberra. The impact of

COVID-19 and its implications for travel patterns going forward will be explored in the next section.

Canberrans travel for a variety of reasons. While work makes up for around one quarter of trips made on any given weekday, leisure trips for social and recreational purposes are also very important, as well as shopping and personal business. That's why our transport network must cater for a wide variety of trip purposes, not only the 9-to-5, city-to-suburb commutes. As an example, picking up/dropping off someone (usually to school) makes up a significant proportion of trip purposes. These trips usually occur during the morning peak period. When combined with trips to education, we can see how important the school run is to the functioning of our transport network. Providing viable options for children to walk, cycle and catch public transport to school and looking to travel demand management methods such as more flexible employment hours and locations will be key to managing congestion on our roads.

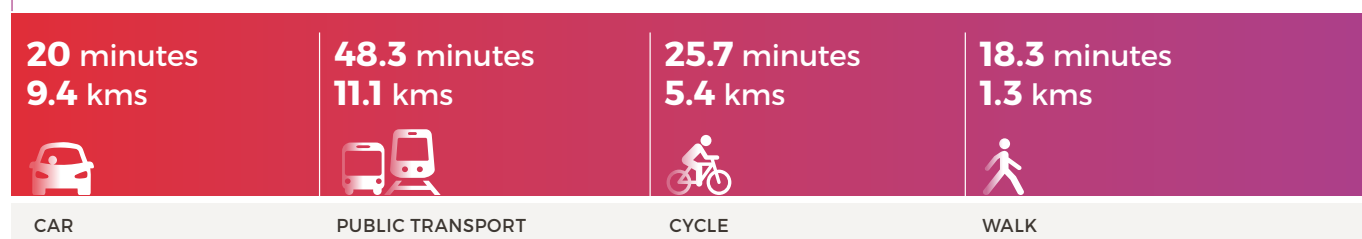
### Every day we make...



### We travel for...



### Average travel time and distance by mode



Source: ACT and Queanbeyan-Palerang Household Travel Survey, 2017

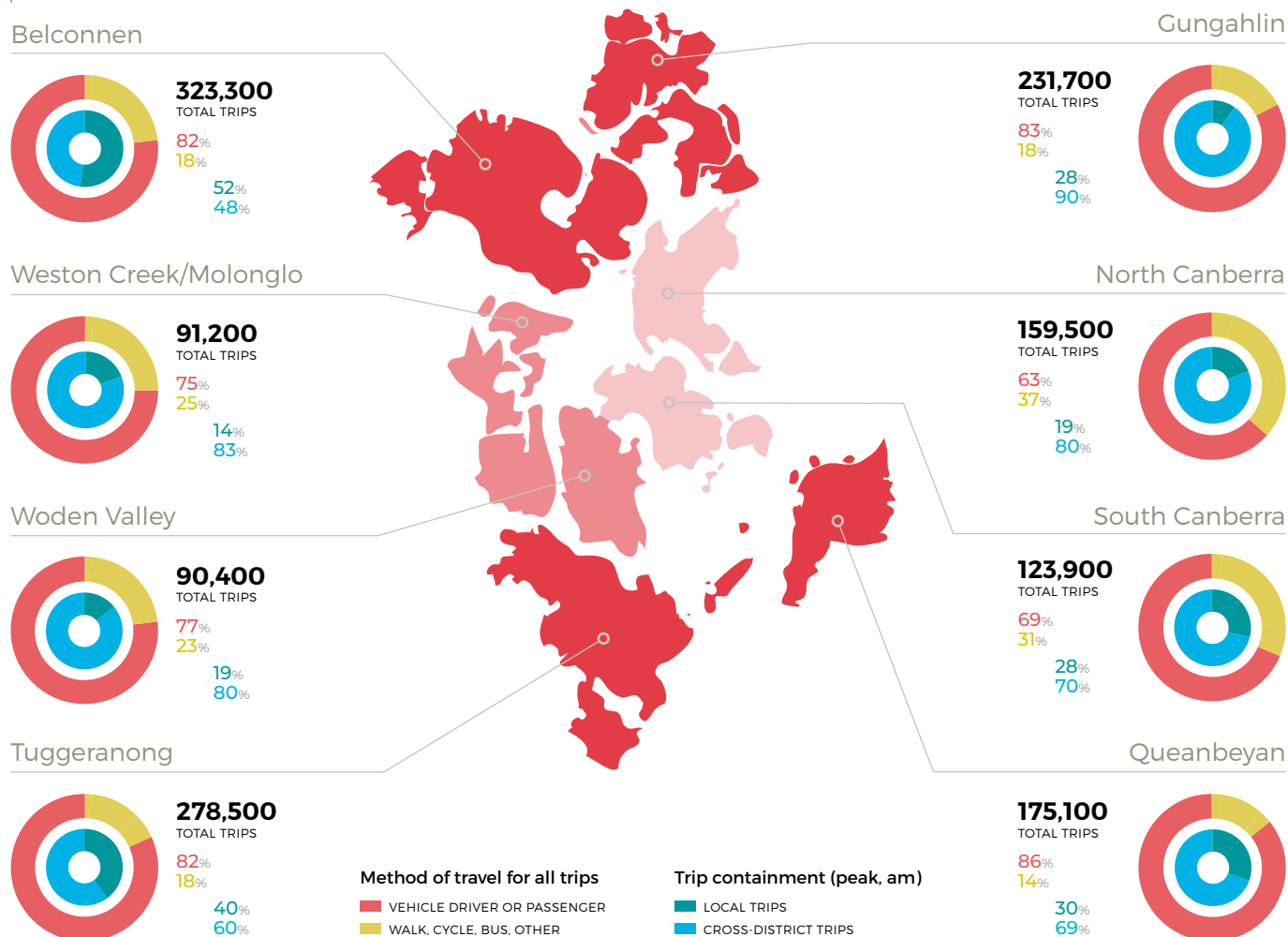
## Canberrans travel differently depending on where they live

Canberrans tend to walk, cycle and use public transport more in inner districts where distances to destinations are shorter and travel choice is greater. We tend to use private vehicle travel more in outer districts when distances are longer and travel choices can be more limited. This is a pattern seen in cities around Australia. Travel demand and modal choice is often an outcome of land uses. Mixed use developments which feature homes, jobs, shops and leisure opportunities, tend to reduce overall demand for travel and increase the uptake of sustainable transport modes. As Canberra grows and the more compact urban form envisioned by the

*ACT Planning Strategy 2018* is implemented, walking, cycling and public transport will become the natural choice for more Canberrans.

It is sometimes suggested that Canberra has a car culture, but the data shows that Canberrans embrace a wide range of transport options when they are available. For example, 22% of trips made in South Canberra on any given weekday are made by walking. Continuing to increase flexibility, by building on the modern public transport network introduced in 2019 and harnessing the opportunities of on-demand travel, especially in our outer suburbs, will offer people more choice over how they travel.

### Canberrans travel differently by districts...



Source: ACT and Queanbeyan-Palerang Household Travel Survey, 2017





## Canberrans travel differently along the life course

Canberrans' travel differs depending on their individual needs – there is no one size fits all when it comes to transport.

We know that Canberra is evolving, the way we live now is different to how we might have lived 20 years ago and will be different 20 years into the future. This means our transport network needs to continue to evolve with us. To demonstrate how the network might evolve over the next 20 years and meet the needs of different people, we will look at Canberrans' diverse transport needs in the following case studies.

A 22-year-old university graduate has just moved to Canberra to start their career. They live an active lifestyle and are keen to experience all the food and entertainment Canberra has to offer. They may decide that inner north is perfect for them at this stage of life and move into an apartment. They get to work in the City either by cycling or walking from their apartment to the nearest light rail stop. They feel the location is perfect; it's walking distance to town and city centres including shopping and dining precincts and they have reliable and convenient access to the City via the light rail for both work and play.

A young couple with a young child in day care work in the north but live in an outer suburb towards the south of Canberra in a freestanding house with a large yard. They take a rapid bus from their shops after dropping off their child at the local day care. Multiple days a week they work at home

or at an office site closer to home. The family spend their weekends around the local shopping precinct and taking walks around Lake Tuggeranong. They take their car to travel across Canberra as and when needed. An outer suburb in the south as a location to raise a family feels perfect to this couple.

A middle-aged single parent, with a teenager who is involved in sports after school, works in Woden. They live in a suburb in the inner south and feel the location meets their daily needs in terms of the services they access. During school holidays they locate interstate to be closer to extended family while continuing to work and study. The teenager can cycle to school and use public transport to get to school sports. The parent enjoys cycling to the Bike and Ride facility to catch a bus to work. Access to Canberra Airport enables convenient access to family.

A retired Canberran wishes to spend more time volunteering around Canberra, seeing friends and being with their family. They have a grandson who they pick up several days a week from school located in the north. They live in a townhouse in the far north. This enables them to walk to the local shops and get to school or into the City by bus or light rail when needed.

As our lives change so do our travel preferences. Future transport in Canberra will be increasingly tailored to individual needs, to meet people where they are, rather than the other way around.

## Current network opportunities and challenges

The current transport network performs comparatively well. The network moves people and goods reliably and efficiently throughout our city and region. Commuters in the ACT and Queanbeyan experience low to moderate road congestion and public transport crowding compared with other Australian cities. Yet as our population grows, as lifestyles change, and as we recover from the impacts of COVID-19 there will be challenges to our transport network, without further investment and innovation.

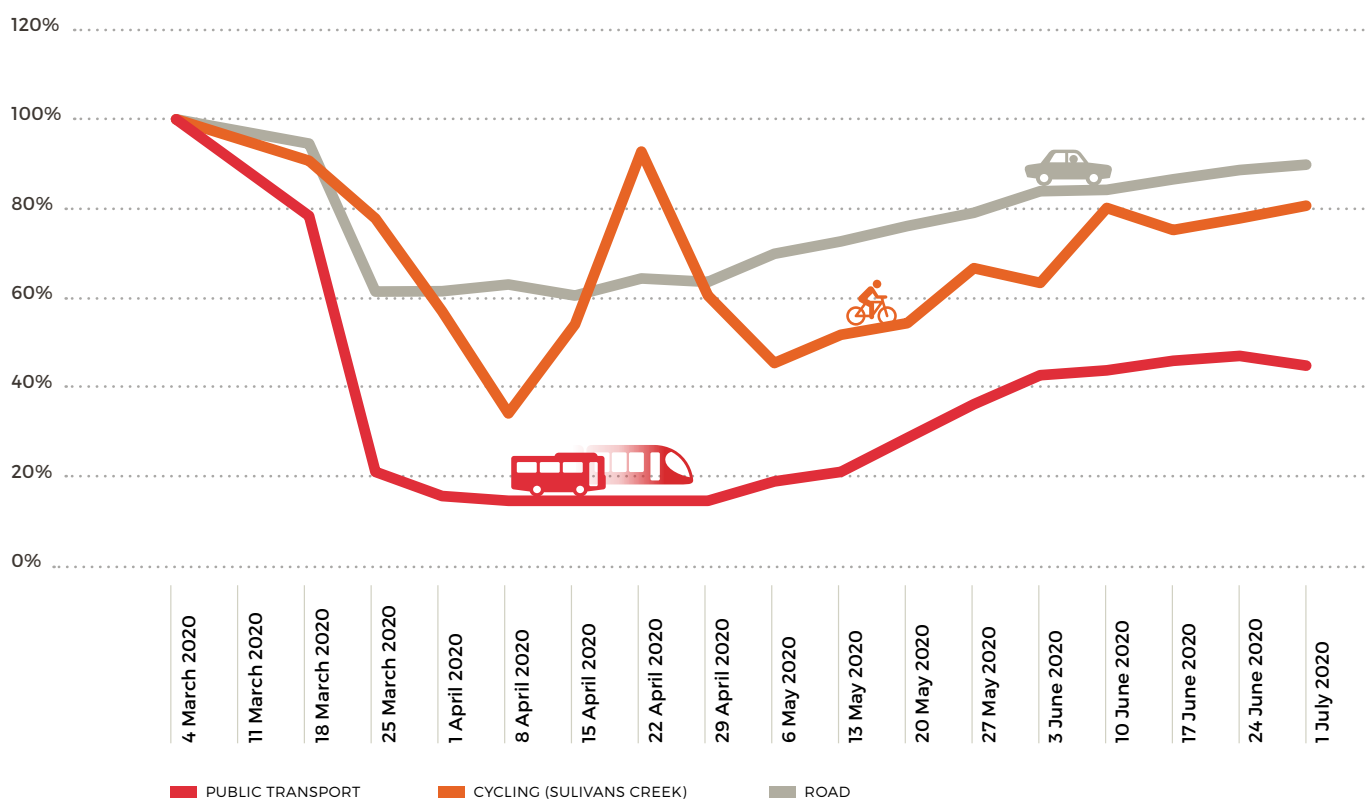
### COVID-19 travel trends and recovery

Canberrans changed their lifestyle and travel habits considerably in response to the COVID-19 pandemic. As a community we worked together to take the necessary steps needed to manage the pandemic and keep everyone safe. As a result, we saw unprecedented changes in the way Canberrans travel.

### Travel trends – public transport and personal car use

Over the period between March and May 2020 there was a significant drop in overall travel demand in Canberra, as Canberrans limited themselves to essential travel. Traffic volumes on Canberra's arterial roads fell by around 40% over the period, before gradually returning to around 85% of regular volumes by June 2020. Echoing this, patronage on public transport fell by around 80% on the same period in 2019, before a gradual return to just over 40% of regular patronage by June 2020. These trends reflect what has been experienced in other Australian capital cities.

### Travel by mode compared to pre-COVID-19



Source: ACT traffic signal loop counters, Sullivans Creek Bike Barometer, and Transport Canberra MyWay card and ticket vending machine data.



## Travel trends – cycling and walking

While the available count data shows cycling levels were also down overall, this data tends to be focused on commuting journeys. In contrast, observations from Canberra's cycle businesses were that many more Canberrans than ever before were purchasing and repairing bikes. Google community mobility data also reveals that trips within residential areas increased by 10% and trips within parks spiked by 50% over the period between March and June 2020. Given local trips tend to be made by walking and cycling, it is likely these modes experienced a slight increase over the period due to walking and cycling being readily accessible ways to exercise during the period. It is also likely people had more time for walking and cycling within their local community as they saved time on commuting to and from work.

## Transport recovery

As we transition beyond COVID-19 and restrictions are relaxed, certain trends will likely be retained, and new trends will emerge. We have an opportunity to make the most of trends which contribute to Canberra's liveability, such as the increase in cycling and walking. We also have the challenge of addressing trends that may be detrimental to Canberra's liveability, such as any potential surge in personal car use or any ongoing reduction in public transport use. We will continue to monitor travel trends closely and adapt our management of the transport network to lock in gains in cycling and walking, welcome people back to public transport and mitigate against excessive personal car use, where viable alternatives are available. The *ACT Transport*

*Recovery Plan* will identify specific measures to achieve a sustainable and healthy transport transition to enable us all to make the most of what Canberra has to offer once more.

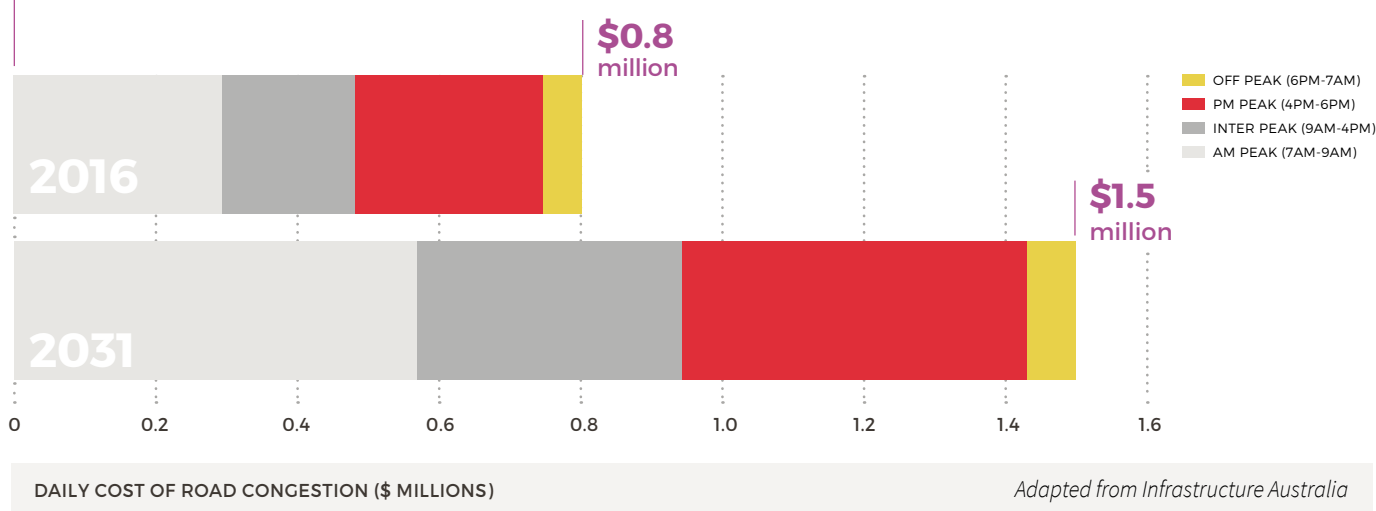
## Growing demand for travel, especially public transport

Due primarily to population growth, by the 2030s the Canberra region will generate almost one third more trips. This growth in travel demand is consistent with a long-term trend seen across Australian cities. While COVID-19 will impact growth in the short-term, over the long-term the factors driving growth in travel demand will likely remain current. Travel by public transport is forecast to grow at a significantly faster rate than car use. The number of daily boardings on public transport will double by the 2030s reflecting the trend seen in other Australian cities and given the majority of people walk to public transport, we will also see walking increase.

Investments made in light rail and buses over recent years are already seeing results. Infrastructure Australia predicts that public transport use will increase due to investment in light rail and higher urban densities. They predict this will "increase the proportion of Canberrans for whom the decision not to use or even own a car, and to use public and active transport instead, will be a natural one".

Investment in better public transport, cycling and walking, as well as intelligent management of our roads and proactive embrace of on-demand services will be needed if congestion on our roads and crowding on our public transport is to be managed throughout the COVID-19 transport recovery and in the coming decade.

## ACT and Queanbeyan average weekday cost of road congestion, 2016 and 2031



## Changing lifestyles and diverse travel patterns

As Canberra's population is becoming more diverse, so too is the demand for travel. Traditionally transport has been geared towards people's needs in peak periods. Changing patterns of work and lifestyles means that there is now greater demand for travel outside of peak periods, particularly on weekends.

### Changing work patterns

The growth of flexible work arrangements, working from home, contract work, casual, and part-time work mean more people are travelling to work outside peak periods and on weekends. Technology enables us to work anywhere and more of us are working from home or from multiple locations more regularly. Our response to COVID-19 has brought forward these trends. Working from home will become part of the way Canberrans do business. This will reduce the need for travel overall, saving people time and money and giving people more choice over when and how they travel. It will have the greatest impact on travel demand during peak periods and may lead to the spreading of peak travel demand to shoulder periods outside the peak. This will help mitigate against congestion and crowding in the short-term.

Working from home will also lead to a greater demand for flexibility in transport fares and timetables. For example, weekly tickets and peak timetables may no longer be well aligned to some traveler's needs as less people carry out a peak hour, 5-day a week commute. Transport will need to adapt to cater to more diverse work patterns.

### Changing lifestyles and expectations

The way we use our free time is also changing. Household roles of men and women are evolving, and the trip patterns of young families are becoming more complex. New centres for entertainment and socialising are emerging based around varied, accessible transport options. We are seeking out services which fit conveniently with our lives, be that travelling to them at a time that suits or having them come to our homes. Our time is becoming ever more precious, raising our expectations of the reliability of our transport choices.

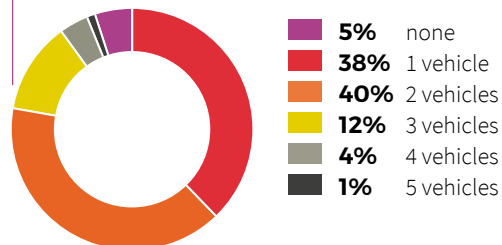
COVID-19 has also meant Australians have increasingly moved online. Disruptive services such as on-demand food delivery, personal shopping, television and music subscription services and new retail payment platforms have all built customer experiences that are seamless and instantaneous.

As Canberrans return to travel and transport we will have higher expectations of similarly seamless, fast, flexible services that anticipate and meet our needs and preferences. Mobility as a service presents great opportunities for transport to tailor itself to Canberrans' personal travel preferences.

## Car-free and car-light lifestyles

Increasingly people are wishing to live a car free lifestyle or reduce the number of cars in their household. Around 38% of households have one car and around 5% of Canberra's households have no car.

### Percentage of registered vehicles by household



Source: ACT and Queanbeyan-Palerang Household Travel Survey, 2017

Younger generations increasingly prefer to pay for a transport service on-demand than own a car. If Canberra is to maintain its edge and remain attractive in the ever-competitive knowledge economy, we must build a transport system that enables people to live the lifestyle they choose equitably whether that includes car travel or not. Factors that support a car-light lifestyle include diverse housing options in accessible locations, high quality public transport, cycling and walking, access to car share and on-demand services.

Better access to real-time transport information is also changing travel patterns. When people have quality, real time information for all transport types, they can make more efficient and effective transport choices.

### Growing need for physical accessibility

Canberra's population is ageing and there is a greater need for physical accessibility. In 2016, 12% of our population was aged 65 or over, with that figure expected to continue to rise. We are also a relatively young population and are home to many young families. Older people and young families need accessible transport options, as they are more likely to have a mobility impairment or to be travelling with prams and luggage.

Accessible and inclusive transport, not only benefits people with a disability, it provides a higher level of service for all Canberrans (including people with prams, carrying shopping and luggage), and helps to build Canberra's reputation as a city welcoming and open to all. Incorporating design principles that will make our transport network accessible to all people, regardless of age, disability or other factors will benefit the 77,300 people with a disability living in the ACT, as well as each member of the community.

Modernising our bus fleet and improving our walking and cycling infrastructure will provide greater access and choice

of employment and services for people who are mobility impaired. Good quality public transport and walking environments will also facilitate the provision of a wider range of housing choices in Canberra's suburbs. This will enable people to more easily age in the place they live and to access housing that meets their needs throughout their lives.

## A focus on health and wellbeing

### Physical activity and travel

Canberrans enjoy one of the highest standards of health and wellbeing in the world and have the highest life expectancy in Australia. However, the increased prevalence of chronic conditions presents a challenge to this. Physical inactivity is the second largest contributor to the burden of disease in the ACT, only behind smoking.

Using active forms of transport such as walking, cycling or public transport, builds physical activity into daily routines. Research from the ACT has demonstrated that neighbourhoods which support walking and cycling, with local services and amenities and healthy food within walking distance, help achieve lower rates of obesity. A connected transport system, where walking and cycling is commonplace, even for part of a journey, will go a long way to improving the health and wellbeing of Canberrans.

### Clean air and travel

Clean air is an important part of keeping a city healthy. Canberra has some of the best urban air quality in the world. Smoke is the main air pollutant in Canberra, and when our

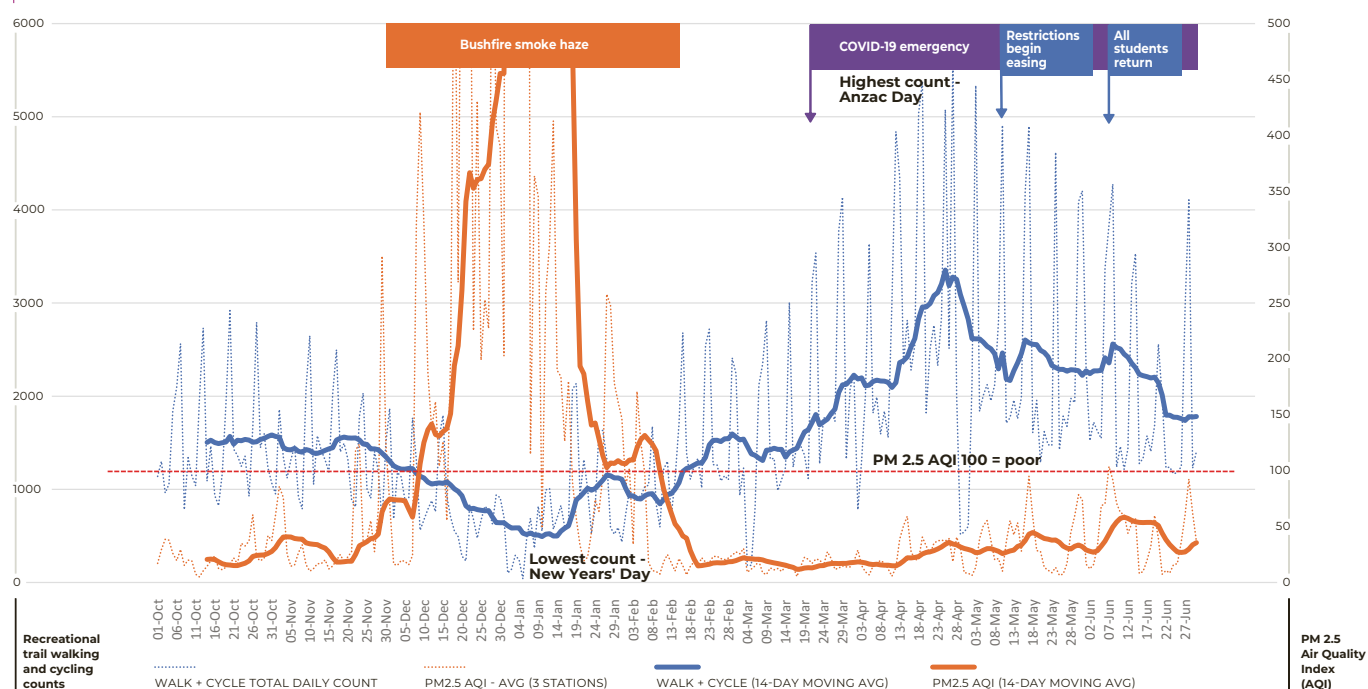
air quality deteriorates, it is primarily due to an increase in fine particulate air pollutants such as PM2.5. These are solid particles suspended in the air which are so small they can get deep into the lungs and into the bloodstream. Exposure to PM2.5 over long periods can cause adverse health effects including reduced lung function and the development of cardiovascular and respiratory diseases.

A study by ACT Health from May 2014 to July 2015 revealed that the two main PM2.5 sources across Canberra were traffic and wood burning – about 60% and 30%, respectively, of the total PM pollution.

As the accompanying graph illustrates, throughout 2020, Canberrans have experienced both the best and worst of air pollution and active travel scenarios. The intense bushfires burning across South East Australia throughout late 2019 and early 2020 brought to Canberra months of smoke pollution and days when Canberra's air pollution was amongst the worst in the world. Walking and cycling levels dropped to record low levels. Just months after this, the decrease in motor vehicle traffic associated with COVID-19 and combined with the seasonal lack of smoke from residential wood burning created some of the cleanest air quality levels on record and record high active travel levels were recorded.

We now have an opportunity to maintain reduced PM2.5 levels by decreasing car use and increasing the use of walking, cycling and public transport. Switching to zero emissions technologies such as electric vehicles is a further way to decrease pollution in our air.

## Active travel and PM2.5 levels 2019-2020



Source: ACT Air Quality Index for smoky air (PM 2.5 AQI) and ACT Automated Walking Trail Counters for six Canberra Nature Parks



## Public transport and health beyond COVID-19

Following COVID-19 there may be a reluctance to use public transport due to a perceived risk of being exposed to COVID-19, or another contagious disease. While it was necessary to advise people to avoid public transport during the height of the pandemic, this does not mean that public transport is inherently unsafe. As we move beyond COVID-19, so too can we transition to the safe use of public transport once more. The *ACT Transport Recovery Plan* will guide us through this transition.

We must also consider that public transport brings with it the proven health benefit of increased incidental physical activity as we travel to and from services. Without this incidental physical activity Canberra's population would be more susceptible to non-contagious diseases such as heart-disease, stroke and obesity.

For the long-term health benefit of all Canberrans, we will make a healthy transport transition to a new normal that puts walking, cycling and public transport at the centre of a connected city.

**“ Community input to the Wellbeing Indicators project has identified transport as a key area enabling quality of life and wellbeing. Feedback is that the government should continue to focus on public infrastructure, road projects and active travel and that effective transport links are important to daily life for most Canberrans.”**

## Need for more transport choice

People living in Canberra's outer suburbs will continue to seek more transport choices. Clever transport coordination and use of new technology will create new travel opportunities. While we know many Canberrans have good access to employment, education and services via our transport system, some people do not. For those living in Canberra's outer suburbs transport choice can be limited. This can be a problem for those who cannot afford the costs of driving or are unable to drive due to mobility impairment.

Equality of access to the jobs and the services we all need means that wherever you live in Canberra you have control and flexibility over how and when you travel. Exploring innovative options such as Park and Ride, Bike and Ride and on-demand services, will not only widen transport choice for people living in Canberra's outer suburbs and emerging greenfield areas, but also support equitable access for all Canberrans, regardless of where they live.







Finding ways to cost effectively expand the provision of non-traditional public transport through demand responsive services in Canberra is essential to ensure that public transport continues to meet the needs of all Canberrans.

### Factors influencing mode choice

Generally, people make decisions on how to travel based on facts, perceptions and habits but they also make travel choices based on personal values such as for health or environmental reasons.

Increasing and improving available information and working to improve perceptions of public transport, cycling and walking, can help open new travel choices to people and support affordability by creating greater choice.

### Factors influencing mode choice

 TRAVEL TIME	 COST	 CONVENIENCE AND RELIABILITY	 SAFETY	 LEGIBILITY	 COMFORT
How long will the complete trip take?	What is the most affordable option (perceived and real)?	Will the service be available when I need it, does it run on time, and how accessible is it?	Will I feel safe, regardless of it being night or daytime?	Is it easy to navigate the system and transfer between modes?	Will I be exposed to the weather, will I have space to move, will I have to stand up?

*Adapted from Brisbane City Council*

## Emerging autonomous vehicle technology

Autonomous, or self-driving, vehicles are emerging technologies that have the potential to significantly change how we use vehicles. When used as shared vehicles on a subscription service they will create new travel opportunities for Canberrans and support car free lifestyles. Forecasts of the availability of differing levels of autonomous vehicles are varied at present, however it is likely that autonomous vehicles will also be electric. The ACT Government has partnered with IRT Kangara Waters Retirement Village to run a successful trial of an autonomous shuttle bus on a publicly accessible road. We will continue to work with partners to undertake trials of autonomous vehicles to ensure the ACT is ready to embrace this technology as it matures.

## Zero Emissions Travel

### *Climate strategy principles*

Reducing greenhouse gas emissions from transport is a key part of the ACT Government's response to climate change. Now that the ACT has reached 100% renewable electricity, transport emissions are the largest source of emissions, accounting for about 60% of all ACT emissions. The *ACT Climate Change Strategy 2019-2025* sets out pathways for reducing transport emissions by reducing car use and encouraging a shift to walking, cycling and public transport.

### *Zero emissions public transport*

The ACT Government is transitioning public transport to zero emissions by 2040. The detailed plan to achieve zero emissions public transport will be outlined in the *Transport Canberra Zero Emissions Transition Plan* (the Plan). Light rail already runs on 100% renewable electricity, and accounts for around 20% of trips across our public transport network. The Plan will see the replacement of all diesel and CNG buses to zero emissions by 2040, with no new non-zero-emissions buses purchased after 2025. The Plan sets out the significant infrastructure requirements to support zero emissions buses including depots and charging equipment. Workforce planning and training are also a significant part of the transition plan, and the ACT Government is committed to ensuring that all workers are trained to work with zero emissions technology to make sure that there is a just transition.

### *Private and commercial vehicles*

The ACT's *Transition to Zero Emissions Vehicles (ZEV) Action Plan 2018-2021* sets a clear direction for the ACT to accelerate and support the uptake of ZEVs, including battery electric vehicles, plug-in hybrid electric vehicles, hydrogen fuel cell vehicles and electric bikes. The Plan calls for: at least 50% of all newly leased ACT Government fleet passenger vehicles to be ZEVs in 2019-20, increasing to 100% from 2020-21 (where

fit for purpose). As identified in the *ACT Climate Change Strategy 2019-2025*, the ACT Government will also identify new actions to support the uptake of zero emissions vehicles from 2021 onwards.

The ACT Government will continue to encourage the uptake of zero emissions vehicles by exploring and trialling financial incentives. The ACT already has Australia's most generous financial incentives for the purchase and registration of ZEVs providing a full stamp duty exemption, for the first time a ZEV is purchased, and an ongoing annual vehicle registration discount of 20%. ZEVs can use ACT transit lanes from 1 July 2019 to the end of 2023. Under the *ACT Climate Change Strategy 2019-2025*, the ACT Government will also investigate regulatory options to encourage the uptake of zero emissions vehicles in commercial vehicle fleets. In addition, road rules were amended in 2019 to now facilitate the safe use of new micro and personal mobility options, such as electric scooters.

### *Zero emissions freight*

Zero emissions freight vehicles are a less mature industry, but an important next step in reducing transport emissions. To foster new approaches and emerging technologies, Government will investigate ways to develop partnerships with industry to trial zero emissions freight options. We will continue to work with our partners in the Commonwealth Government to encourage the uptake of electric vehicles and with NSW Government on regional charging infrastructure to support Canberrans travelling interstate by electric vehicle.

### *Encourage walking, cycling and the use of public transport*

Walking and cycling offer a zero emissions transport option with health, air quality and wellbeing benefits. We will encourage walking and cycling by continuing to improve infrastructure and walkability. In addition, the ACT Government will implement measures to encourage the uptake of electric bikes, which offer a solution for longer trips and make cycling more accessible to a wider section of the community.

We will continue to prioritise improving public transport services and supporting infrastructure, including buses, Light Rail Stage 2 and connecting services. To achieve mode shift, public transport will connect seamlessly with quality walking and cycling infrastructure, and last kilometre solutions such as on-demand transport, car share, Bike and Ride and Park and Ride. When services connect seamlessly together, an expanded range of travel options is unlocked and greater choice, flexibility, comfort and convenience is achieved. In that way, one seamless network can cater to many different journeys.











# Where we want to be

## Vision and Principles

**Our vision is for a world class transport system that supports a compact, sustainable and vibrant city.**

A world class transport system encompasses safe, reliable, efficient and attractive transport to serve people's needs now and into the future. Drawing from this vision and the feedback received through consultation, several key principles will guide the future development of the transport network. These transport principles will form a checklist for decisions as we deliver a world class transport system.

### Transport network development principles

	PRINCIPLE	DIRECTION
	PEOPLE FOCUSED	Meets the diverse needs of all Canberrans with high-quality customer experience and accessible design.
	SAFE	Improves the safety performance of our network to enable safe and secure travel by all transport types.
	CITY SHAPING	Integrated with land use planning to shape a more compact, vibrant, and accessible city.
	FUTURE FOCUSED	Proactively plans for future scenarios by acting ahead of the curve wherever possible, remaining adaptable and embracing new technologies and ways of doing things.
	CONNECTED	Services work together seamlessly and across Territory borders to create a whole journey experience with a clear path from start to finish.
	FLEXIBLE	Provides a wide range of journey opportunities, and the ability to travel at different times of the day and to change destination mid-trip.
	RELIABLE	Gets people and goods to where they need to be, when they need to be there, in a predictable manner, remaining resilient to unforeseen events.
	EFFICIENT	Uses space and resources well to carry the greatest amount of people and goods around the city.
	SUSTAINABLE	Leads the way in the switch to zero emission transport technologies and provides choices that will reduce the ACT carbon emissions.
	HEALTHY	Improves the health and wellbeing of all Canberrans by expanding opportunities to travel by public transport, walking and cycling.



## Canberra's Future Transport Network

Canberra's future is a truly connected network for many diverse journeys, that makes the most of all transport types and creates many possible journeys to varied locations.

To do this, we will target investment to support the efficient movement of people and make good use of limited road space, reduce carbon emissions and drive a compact urban form. This means continuing to invest in public transport, creating streets that are safe and attractive to walk or cycle in, maintaining a reliable orbital road network for private vehicle travel and freight; and improving connections to our region and the rest of Australia.

Historically, planning and investment tended to focus on road expansion to support urban growth. Investment in single modal solutions in isolation, will no longer meet our strategic objectives or capacity needs. Public transport, cycling and walking are low emission forms of transport that make highly efficient use of space and support the activation

of places. But they cannot meet all trip needs. Canberrans will continue to need to use the car for certain trips and freight will remain important for prosperity.

The 30-minute city is as much about planning as it is about transport. It is a land use planning tool that is about creating mixed use neighbourhoods that allow people to have all their daily needs met – work, education, shopping, health, social or culture within 30-minutes of their home.

To manage growth and meet strategic objectives, our transport network will need to support a shift towards public transport, cycling and walking, while recognising the need for car trips for cross city journeys and freight movement. The transport network will support all trips and all transport types, but to enable more efficient movement, it will focus movement according to location in reflection of the strategic directions set out in the *ACT Planning Strategy 2018*.

### Space efficient transport for a more compact city

#### 9.2

car (average occupancy)



**1.9**  
motorcycle



**1.5**  
bicycle



**0.6**  
light rail



**0.5**  
walk



SPACE PER PERSON (m<sup>2</sup>) FOR DIFFERENT MODES OF TRANSPORT

*Adapted from Melbourne City Council*



## Network structure

Movement and Place is a key shared concept of the *ACT Planning Strategy 2018* and this strategy. Drawing on the Movement and Place concept, Canberra's transport network will be structured through local, central, orbital and regional links. The combination of central and orbital links will provide the backbone of Canberra's future transport network. Different links will focus on the most efficient and appropriate movement type for that link and surrounding land uses. This will encourage people to make appropriate transport choices depending on their destination, purpose and time of day. In this way, our network will operate to reduce congestion, reduce emissions and support a more liveable city.

**LOCAL LINKS** provide for short trips within local areas, focused on walking and cycling. These links will be highly integrated with places for meeting and interacting. They will also be connected into our public transport network to support safe, accessible access. Supporting the core of Canberra's social fabric, local links are integral to the creation of accessible places for social interaction to enhance quality of life. Canberra's city centre, town, group and local centres, as well as neighbourhoods, will feature high quality walking environments to support liveability, social connection and vibrancy.

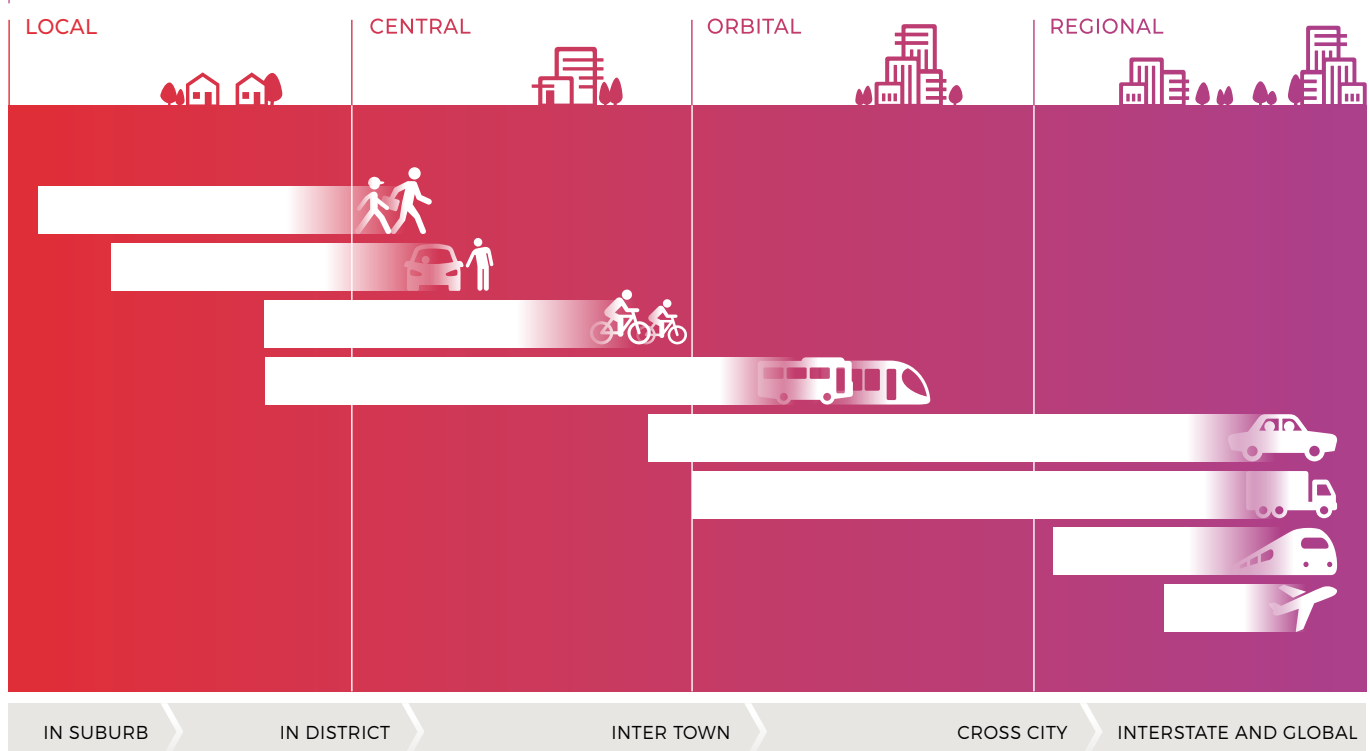
**CENTRAL LINKS** will focus on the efficient movement between centres and urban intensification areas by public transport, walking and cycling. The primary function of the central links is to support the development of centres and urban intensification areas by moving people efficiently between areas that are likely to see more activity in the future.

**ORBITAL LINKS** will support trips around and across the city, for private vehicles and freight. These links maintain the private vehicle journey times we all rely on to get around Canberra quickly. Road quality will be enhanced to improve safety and reliability. Intelligent technologies will help proactively manage congestion and provide people with real-time information about their journey and road condition in advance.

The freight network will be based on orbital links and will continue to support national standards for heavy vehicles set out by the *National Freight and Supply Chain Strategy 2019* for larger freight vehicles to travel safely and efficiently on our roads.

**REGIONAL LINKS** will focus on enhancing regional connectivity. This includes rail between Canberra and Sydney, road freight routes for trade connections to inland and coast regions, and air routes that link Canberra to the world.

### A network structure that focuses movement by place and location

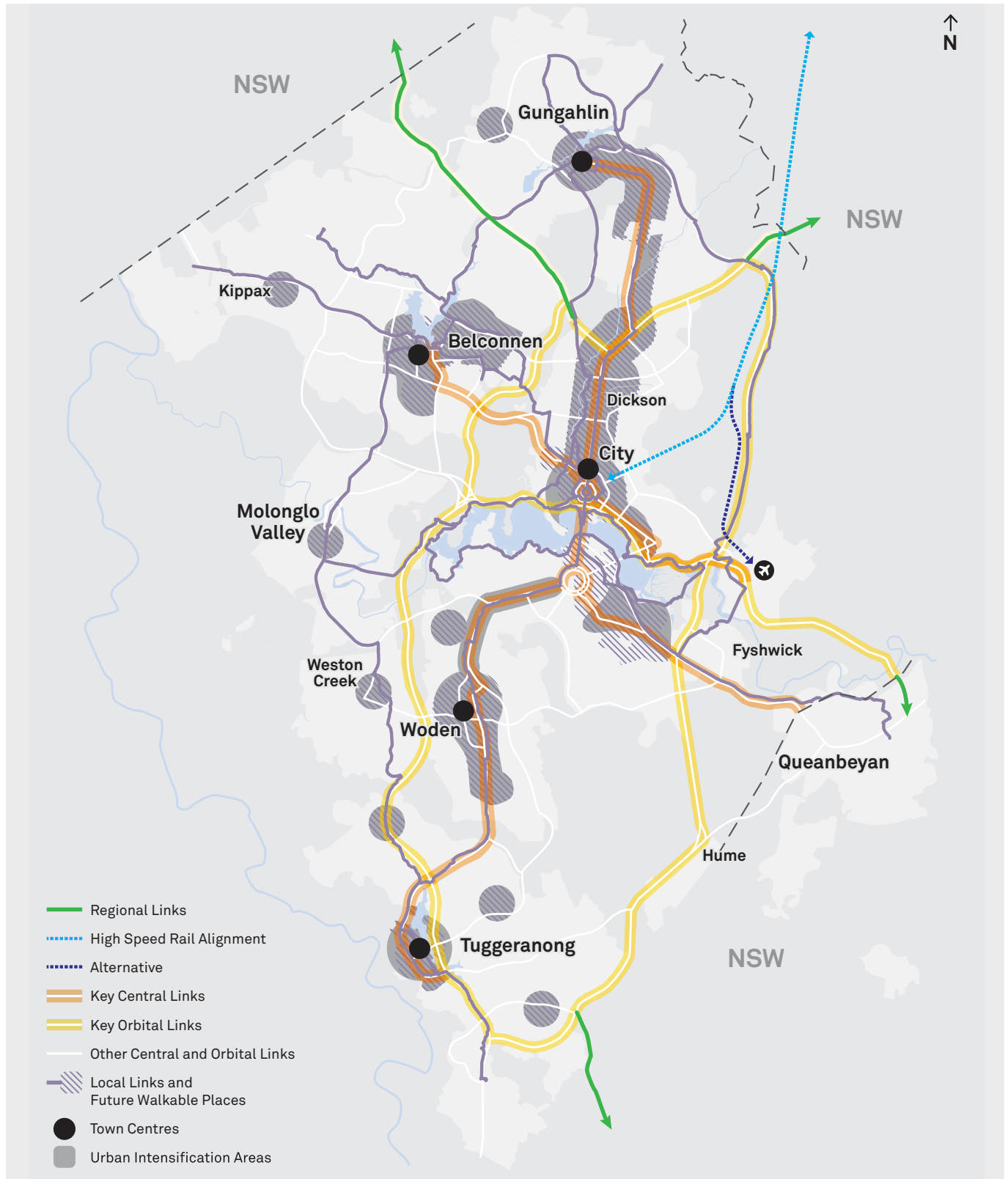


## Future Network overview

The future network structure supports and reinforces the *ACT Planning Strategy's* plan for future land use in Canberra. The following map outlines the conceptual policy framework

for Canberra's future transport network to both respond to the place making priorities and shape the city's future urban form.

MAP 1 **ACT Transport Policy Plan Map – Conceptual transport network 2045**





## World class public transport for a compact, efficient city

Canberra's public transport helps make our city less congested, more sustainable and more equitable. Attractive, convenient and connected public transport is critical to achieving a more compact, efficient and liveable city. As Canberra moves towards its vision of a more compact urban form, buses and light rail offer the potential to move people in a safe, efficient and timely manner that supports liveable places. As identified in the 2016 *Canberra: A Statement of Ambition*, world class public transport is key to a high quality of life in a globally competitive city.

### Towards better public transport

In past decades, public transport systems across the world saw a trend to incremental and ad-hoc development. Many cities saw routes develop that were indirect, time consuming and uncoordinated. This was financially and environmentally inefficient and led to a lower quality customer experience. As a result, in many cities bus ridership declined, and Canberra's public transport system and ridership levels tended to reflect this trend. Recognising this, the ACT Government outlined its vision in *Transport for Canberra 2012* to develop a public transport system that fully meets the needs of Canberrans and realises its city shaping potential.

In 2019, building on wide ranging planning and investment and broad community consultation, we introduced a new public transport network to drive the step change needed to deliver a high-quality, modern and sustainable public transport service. What we learnt from our research and experience drawn from around the world is that successful public transport features six key principles:

- direct routes, frequent services, quick transfers;
- a clear route hierarchy;
- a networked approach of intersecting orbital and radial routes;
- convenient trip planning and ticketing;
- accessible infrastructure; and
- good connections with other modes.

### A new network for a growing city



The new network improves travel choice and flexibility by giving people a range of destination choices through transfers, broadening the range of hours transport is available, and making services simpler and easier to use. It is also more financially and environmentally sustainable because the network design reduces duplication in routes. It has allowed greater area coverage with the same number of vehicle kilometres travelled.

Already this new network is showing positive results. In the first quarter of 2019-20 (1 July to 30 September 2019), there were around 5% more weekday and around 20% more weekend journeys on public transport than during the same time in 2018. This new weekend travel demonstrates that the network is now catering to a more diverse range of trip needs including weekend travel, which tends to be more focused on leisure and shopping trips.

As we transition beyond COVID-19, the new network and the principles it is based upon will become ever more relevant. The new network caters to a more diverse range of trip needs, which aligns with the changes in working life brought about by COVID-19. An all-day rapid network is better able to support flexible work patterns because it meets people's need for direct, frequent services throughout the day, not



## A new network for a growing city

 <b>Where we are going...</b>	 <b>Where we have come from...</b>
Direct routes that run consistently 7 days a week	Indirect routes that differ depending on the day of the week
Frequent services that allow people to turn up and go; running every 15 minutes or better	Infrequent services that require a timetable and careful forward planning
A clear structure of rapid, feeder and local routes	Multiple unrelated route types
A network of intersecting radial and orbital routes that give access to a variety of destinations and allow flexibility to change your mind or stop off along the way	Predominately routes that offer only one or two destinations
Safe and quick transfers	Transfers are time consuming and feel unsafe
Connected to other modes for a seamless journey including walking, cycling, park and ride, bike and ride, car share and on-demand transport	A disconnected journey with barriers to switching between modes

only at peak times. For example, when working from home, people who may have previously made a peak hour commuter trip, will now potentially still need to attend meetings and site visits in the interpeak period. When seamlessly connected with last kilometre and on-demand services such as bike and car share, the new network puts flexibility at its heart, to create a travel experience that meets the diverse needs of all Canberrans.

Beyond adjustments to the network we will also adapt our management practices to enable us to provide more flexible, demand responsive services. This includes adaptation and innovation in all elements of our business from engaging with customers, scheduling services, ticketing, fares and real-time information. In this way, public transport will play its part to reinforce changed travel patterns that spread demand through the day and support the need for flexibility by providing people with more choice and control over how and when they travel.

By reviewing the outcomes of these changes, we will continue to make the incremental adjustments necessary to achieve our vision. As the city grows and intensifies, and demand on our network increases the new network will allow Canberrans to reach more destinations in less time via frequent reliable connections, 7-days a week. We will continue to build and reinforce the new network to ensure we get to where we want to be. The above table provides a quick guide to where we have come from and where we are going.

## Supporting a more compact, walkable and liveable city

Our public transport system is designed to shape a more compact, walkable and liveable city, with connected communities, more accessible services and greater transport choice. It comprises three tiers: rapid, feeder and local. These are aligned with the surrounding street context and urban structure, so users can easily determine the type of service they want and where to find it.

### Rapid routes

High frequency rapid routes lie at the core of the new network to service those corridors with highest demand and destination points. They include a total of 10 rapid routes (including light rail) to provide a frequent, reliable and fast journey into and across the city. The rapid routes comprise our long-term framework for public transport and will largely remain fixed. This will provide certainty for businesses, employers and individuals to make long term decisions on where to live, work and invest.

Continued improvements to service frequency and speed on the core rapid network as well as the connecting local and feeder services will help cater for future population growth and urban intensification. Rapid routes run largely on central links. We will plan bus priority measures on these links to make public transport faster and more reliable, maximise government investment, and to improve access to jobs and services by public transport.

## Light rail

Canberra's future public transport system will have a high capacity light rail network at its core. The first stage of the north-south spine between City and Gungahlin is already operating. Together with the delivery of the second stage between City to Woden, the north-south spine will represent a major and lasting investment in the shape and well-being of the city for future generations. This spine will later be completed by an east-west corridor to service the large demand for travel across our city between Belconnen and Majura Park, the Canberra Airport and Queanbeyan. While COVID-19 has brought forward emerging trends such as working from home and associated reduction in travel demand, the long-term ambition of high-quality light rail to lead a compact and efficient land use pattern will remain relevant to shape the sustainability, liveability and vibrancy of our city.

Future stages will be developed in accordance with the *Light Rail Network Plan* and *ACT Infrastructure Plan* to create a radial mass transit system supported by our orbital feeder and local bus, cycling and walking and private vehicle networks.

## Feeder and local routes

Our rapid routes are complemented by a comprehensive network of feeder and local routes. The feeder and local routes facilitate travel within and beyond our suburbs to the rapid network, local district centres and their services. Along with quality infrastructure, the success of our feeder and local routes relies on seamless transfers, frequency and good connections to other transport types.



## Preparing for growth and delivering new suburbs

As our city grows and demand for services increases, service frequencies will also need to increase. Growth in weekend and local service frequency, will be critical to supporting travel choice and attracting new users to public transport. In order to provide more travel choice, it is critically important to provide new capacity to meet growing demand.

The coordination of land release and transport is key to delivering successful suburbs. New suburbs will be designed with the provision of convenient public transport, walking and cycling routes as a priority. People tend to develop new travel patterns when they move to a place and those travel patterns are retained over time, even when new services become available. That is why providing quality public transport, cycling and walking upfront is critical to the success of new suburbs and to preventing congestion on surrounding roads.

## Comfortable, accessible, zero-emissions fleet

Fleet size and depot capacity dictates the level of service we can provide on our network and plays a major role in customer experience. To ensure Canberrans have a safe and comfortable ride we are growing our fleet and replacing our older fleet with newer, safer, more accessible and more environmentally friendly vehicles.

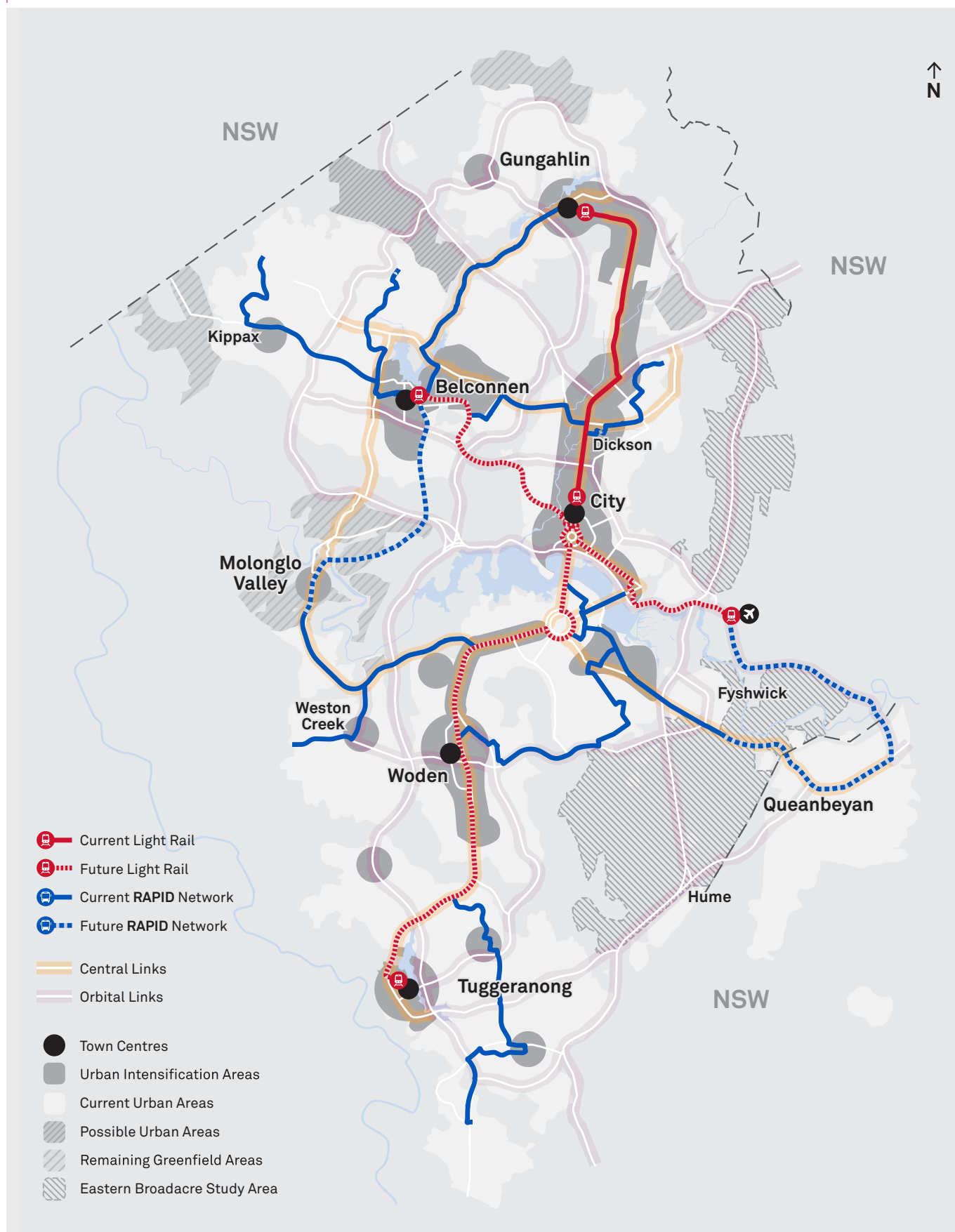
Our light rail vehicles are already zero emissions and we have committed to our entire bus fleet being zero emissions by 2040. Zero emission vehicles will mean a quieter ride inside and healthier, quieter streets outside.

## Whole journey approach

Recognising that journeys begin and end at the front door, we will use a 'whole journey' approach to integrating services. A whole journey approach includes harnessing new technologies to support trip planning and ticketing and fares. That is why we have introduced an online Journey Planner to enable people to get the most out of the new network and we are working with technology providers to ensure quality data is available for app development to improve access to services. We plan to introduce a new public transport ticketing system to allow people to tap on and off with their chosen device, without the need for registering, including credit cards, smart phones and other devices.

A whole journey approach is particularly enabling for people with disabilities, who often experience barriers moving between transport modes. As part of this approach we will ensure that infrastructure and services designed with the needs of people with disabilities in mind from the beginning and bring our fleet up to Australian accessibility standards.

MAP 2 **ACT Transport Strategy – Central links and public transport network**





## Walking and cycling for a liveable city

Walking and cycling are efficient and active transport modes that can move large numbers of people across dense environments. They also emit zero air pollution, greenhouse gas emissions and noise while improving the vibrancy of places. They are ideal for short local trips and for connecting the last leg of public transport journeys.

**“ The ACT Government supports active travel as a key way we will make Canberra a better place to live.”**

– Chief Minister, Andrew Barr

### Walkable places – the City, Town and Group Centres

To support liveable neighbourhoods and urban intensification, the future transport network will feature high quality walking environments in the city and urban intensification areas, including town, group and local centres and school zones. These areas will see:

- high quality footpaths;
- seating to allow rest stops for older people;
- safe opportunities to cross the road; and
- clear walking priority at intersections.

The Government has committed to trial new ways of using roads that most efficiently move people and goods and better support walking, cycling and public transport.

This work will also look at best practice road intersection design from around the world to inform trials of new intersection design, in areas supported by the Movement and Place framework, that prioritise walking and cycling.

The ACT Government will develop best practice guidance for industry and stakeholders to inform better design outcomes for active travel infrastructure.

### Walkable suburbs and school environments

COVID-19 restrictions saw more people walking and cycling around their local area, frequenting local shops, socialising with their neighbours and getting exercise. To lock in these positive trends, we will need to provide high-quality walking environments in Canberra's suburbs to improve access to local shops and public transport. Streets in school environments will put people first by prioritising pedestrian and cyclist safety and be designed with the specific needs of children and parents in mind. Local streets will be designed to be safe, intuitive environments for people walking and cycling.

Canberra's *Living Infrastructure Plan* includes a goal to increase shade cover of Canberra's urban footprint by increasing the number trees located on footpaths and shared paths. This will contribute to the quality of walking environment and improve resilience in the context of a changing climate.

The Safe Systems approach will be used to assess safe speeds to support vulnerable road users walking and cycling in Canberra's town, group and local centres and school environments.

### Build the CBR cycle routes network

Cycling is also an efficient way to support land use intensification in Canberra, as well as improve health outcomes and reduce carbon emissions. Due to Canberra's low-density layout, local trips that cannot be made by walking are often more practical when made by bicycle. Electric bikes are also extending the distance over which it is easy to cycle and making cycling more attractive to a broader range of people. Canberra's relatively flat gradients, dry climate and already existing off-road share path network, make it a transport mode with considerable potential for growth.

Canberra has an extensive network of off-road paths, but they don't always connect people to where they need to go. Existing paths, like roads, also require ongoing maintenance. To make cycling a more attractive travel option, the future CBR cycle routes network will build new and upgraded off-road paths and protected bike lanes for trips across the city and to support urban intensification areas, the Parliamentary Zone and planned growth areas such as the Molonglo Valley. Recognising there are a wide variety of people who cycle or would like to cycle in Canberra, infrastructure will be suitable for all ages and abilities. We are using our stimulus program to accelerate the roll-out of CBR cycle routes by constructing key network and safety improvements, undertaking maintenance on existing paths, as well as installing wayfinding signage.

Bike and Ride particularly offers an effective way to connect more people to public transport, by integrating cycle parking and safe cycle routes with rapid transport. Our buses and light rail vehicles can also carry bikes which makes more places in Canberra accessible to people using a combination of walking, cycling and public transport options.

When new roads are built or roads are upgraded, they will be future proofed for cycling and walking, with the provision of infrastructure according to a case-by-case assessment based on the future network of local links as well as Movement and Place and Safe Systems principles and Municipal Infrastructure Standards for Active Travel.

The Government will also continue to work with the National Capital Authority to encourage walking and cycling around the Parliamentary Triangle including congested sections of routes around and across Lake Burley Griffin.

## An adaptable and flexible approach

As the COVID-19 experience has shown, our travel patterns can change rapidly, and our transport system needs to be flexible in order to respond effectively. Many cities across the globe – Paris and London, for example, but also Sydney and Melbourne – have adapted their transport systems to the pandemic by allocating additional road space to “pop-up” bike lanes and wider footpaths. The network structure of this strategy enables Canberra to allocate more space for cycling, walking and micro-mobility along central corridors and local links.

## Street layouts that encourage walking and cycling

Our transport network will take a future focus to cycling and walking, recognising that facilities need to be built ahead of time to shape transport behaviour for the future. Footpaths and shared paths will be built in new suburbs to anticipate and build walking and cycling demand, ahead of the curve.

**“ Our research has demonstrated that neighbourhoods designed to support active transport, with local services/ amenities and affordable and healthy food within walking distance, help achieve lower rates of overweight and obesity. A cross-sectoral approach that increases as many walkable features as possible is needed to design activity-friendly neighbourhoods.”**

*Professor Rachael Davey, Healthy Canberra: Australian Capital Territory Chief Health Officer's Report, 2018*

The road layouts of Canberra's infill and new estates will be designed to make walking and cycling the natural choice, to promote social and physical wellbeing. Drawing from the Movement and Place Framework, and demonstrated success of suburbs like Vauban in Germany and others from around the world, the layout of new infill places and greenfield suburbs will structure permeability in the following ways:

- Internal suburbs: walking and cycling;
- Inter-suburb and intertown permeability: public transport; and
- Cross city permeability: car and freight.

This will reinforce Canberra's network structure and contribute to liveable neighbourhoods and vibrant places.

The Government will look at improvements to lighting along key walking and cycling corridors to improve safety and make walking and cycling attractive to a wider range of people, across different times of the day.

## An updated strategic plan for active travel

The ACT Government will develop a strategic plan and update *Building an Integrated Network – Active Travel* (often referred to as the Active Travel Framework) to provide coordinated active travel networks across the Territory.

## Active Travel Office and community engagement

The Active Travel Office acts as the key liaison point for the ACT Government on active travel. The Office develops policy, delivers programs and provides expert advice on walking and cycling.

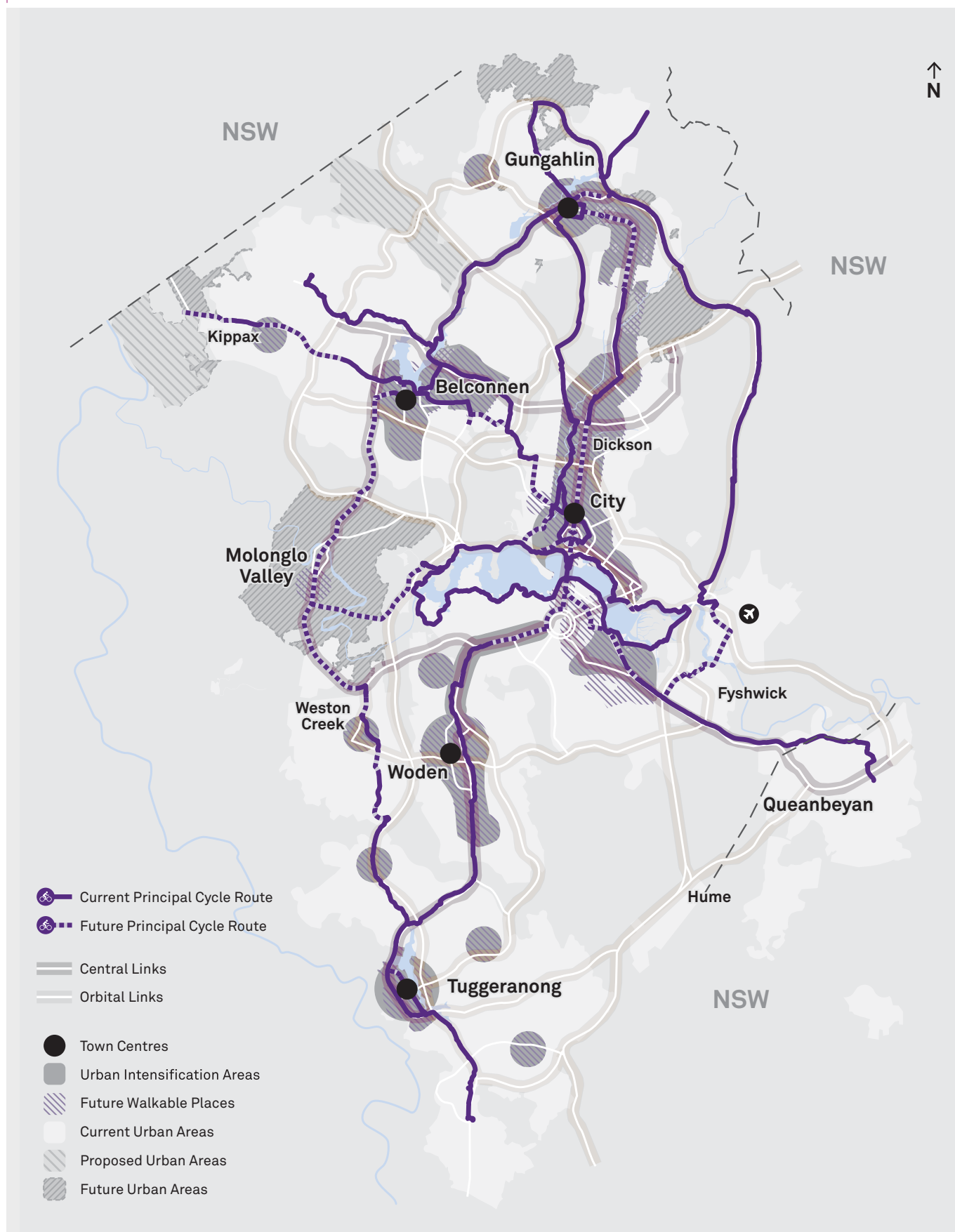
The ACT Government has expanded the role of the Active Travel Office and schools-based active travel initiatives and will continue to ensure that the Office has a leading role in policy development. In addition to the award-winning work with schools, the Office will work across ACT Government to develop an ongoing public education campaign about the practical measures people can take to adopt new walking and cycling habits for local trips, or in combination with public transport.

The Office will continue to work with local communities to find innovative solutions such as the Slower Streets initiative. Slower Streets promotes awareness of local streets as places for walking, cycling and community activity and encourages motorists to slow down.

## Shared and micro-mobility

The ACT Government supports micro-mobility share schemes as ways to improve the effectiveness and accessibility of cycling as a 'last kilometre' solution.

The Government will expand dockless bike share to include electric scooters and electric bikes for use in public spaces across Canberra and continue to welcome shared car and micro-mobility schemes to provide options for Canberrans. To ensure the full benefits of these schemes are realised, associated policies will be reviewed on an ongoing basis to ensure they are achieving the objectives of the transport strategy and other government policy.



## Regional transport for a connected city

Canberra's growing role as a city of global, national and regional significance and its aim of becoming a city of choice, talent and ambition, is dependent on high quality transport connections to other major cities and regions. The ACT and surrounding NSW state and local governments recognise that the people who live in the Canberra Region are committed to a borderless approach. As we grow in population, the need for goods and services will increase, with movements in and out of Canberra increasing and positively affecting our economic growth.

Several collaborative frameworks are also in place to promote the growth and prosperity of the ACT and NSW surrounding region in a borderless environment. The ACT will continue to support these frameworks including the *ACT-NSW Memorandum of Understanding for Regional Collaboration* and the *Canberra Region Joint Organisation Statement of Regional Strategic Priorities*.

### Public Transport

In 2020, the ACT and NSW Governments renewed the *ACT-NSW Memorandum of Understanding for Regional Collaboration* (MoU). Under the renewed MoU, a Cross-Border Public Transport Working Group will be established to identify options (short, medium and long term) to be implemented to support progress towards better integration of public transport for the Canberra Region.

The future transport network will also feature regional nodes, where interstate transport services connect seamlessly to the ACT network. Current examples of regional nodes include the Canberra Railway Station, Kingston and the Jolimont Centre, Civic.

### Freight

Nearly all freight (by volume) into and out of the ACT is road based, with most of the freight task originating from New South Wales, with Victoria being the second largest contributor. The Bureau of Infrastructure, Transport and Regional Economics (BITRE) estimates freight flowing from NSW to the ACT will increase from a 2007 estimate of 720 million tonne-kilometres to 1,422 million tonne-kilometres in 2030, at an average annual growth rate of 3.1%. With regard to Victoria, where the two-way freight volume totals 72 million tonne-kilometres, it is estimated that outbound freight will continue to grow strongly to over 120 million tonne-kilometres.

Urban freight will also grow over the period of this strategy. Key drivers are the movement of construction materials for new infrastructure and residential and commercial development, increasing consumer deliveries as online retail sales increase, and the movement of waste as population grows.

The increase in consumer deliveries is a trend accelerated by COVID-19. Online retail sales grew in Australia by over 10% in the year to March 2020, with the ACT recording the largest increase nationally. This growth will influence the volume and nature of urban freight on Canberra's roads in the future and it will have implications for our management of roads and kerbsides to ensure safety, amenity and access are maintained.

The vision of the *ACT Freight Strategy 2016* to deliver an efficient, safe and sustainable freight network and services for a growing ACT and regional economy while protecting urban amenity continues to be relevant. Freight movement will be prioritised on key orbital routes connecting the Canberra region, NSW and Victoria to industrial areas. Freight hubs will provide an opportunity for the city to capitalise on the potential for freight in the Canberra region, opened by Canberra Airport as an international gateway.

### Canberra Airport

Since 2012, Canberra Airport has undergone significant expansion, transforming it into a world class facility for passenger and freight travel. Canberra Airport now caters to international as well as domestic flights, and as Canberra's tourism sector grows, we will be able to welcome more visitors to our city. The Canberra Airport offers considerable opportunities for regional businesses to access air freight and expand import and export markets into the future. Maintaining and growing public transport between the Airport and the city and beyond, will help enhance Canberra and the Capital Region as a destination for work and leisure.

COVID-19 impacted both passenger and freight travel through Canberra Airport. International flights ceased and domestic flights were reduced significantly. There was a total of 251 aircraft movements at Canberra Airport in April 2020, compared with 3,301 in April 2019. The ACT Government will facilitate the safe return of flights to Canberra as travel restrictions ease.

### Faster and High-Speed Rail

The Canberra to Sydney rail corridor also presents a unique and significant opportunity to improve these regional connections and strengthen the economic, service and social relationship between Canberra, the surrounding regions, and Sydney. Upgrades to this corridor would benefit the broader transport system by increasing the capacity and efficiency of rail freight, enhancing air freight connectivity, relieving pressure on our national road network and leading to improved productivity and road safety outcomes for one of our nation's busiest stretches of highway.

The ACT Government continues to work closely with the NSW Government to explore these opportunities with initial investigations into possible improvements to the Canberra-Sydney service already underway. The ACT Government has commenced corridor preservation for a high-speed rail service into the ACT and will reflect this in its future planning.



MAP 4 **ACT Transport Strategy - Regional links**



## Travel demand management

The reduction in journeys as a result of COVID-19 has demonstrated the significant benefits of reduced demand on our transport network. If we are to retain these benefits into the future, we will need to manage the demand we place on our transport system and reconsider why and when we travel. While acknowledging the greatest drivers of travel demand are population growth and settlement patterns, there are secondary drivers of demand which can be harnessed to assist us get the most out of our current transport assets.

### Reconsidering the need to travel – working from home

The necessary travel restrictions employed during COVID-19 have given us an indication of the types of benefits reconsidering our need for travel can bring. A positive result of this, was that Canberrans experienced less traffic on the road, safer streets for walking and cycling, less noise and air pollution. As restrictions have eased and traffic volumes moved towards normal, the reduction in travel times and the increase in journey reliability is still evident.

This is because a marginal reduction in the number of cars at peak times, when the road network is operating at capacity, can make a large difference to travel times and reliability. This is the same effect that often occurs during school holidays; journey times and reliability increase significantly due to a small reduction in overall travel volumes.

As we move beyond COVID-19, we will seek to retain the benefits that working from home bring to our transport system, in terms of congestion, safety and reliability. We will work with partners in the private and public sectors in the ACT and in NSW, to encourage working from home and remote working. We will support working from home by providing flexible ticketing and pricing options that take people's changed transport patterns into account.

Across ACT Government we will continue to support our workforce to take up opportunities for working from home and investigate opportunities in health and education to encourage virtual access to services.

### Shifting the times of day we travel – flexible work and educational arrangements

As travel volumes have moved towards normal, one area where travel volumes are already exceeding previous levels is around our educational institutions. Traffic observations indicated that students who previously took public transport are now being dropped off by car. Traffic congestion around schools creates unsafe environments for all road users and further discourages the use of active travel to school. If this trend continues the long-term safety and health of students will be put at risk.

To promote healthy and active students, improve safety and reduce traffic and parking congestion around schools, we will continue to prioritise students walking, riding and taking public transport to school and reduce the need for students to be picked up and dropped off by car. We will also encourage part way drop off and collection points for students that need to be dropped off and picked up by car.

Already there is some variation in the operational hours of educational institutions, and there is an opportunity to explore variability further. This may present benefits not only to all travelers but potentially also to learning outcomes and student and educator wellbeing.



## A future ready network for an innovative city

The future will bring innovations that may rapidly change the look, feel and function of transport. Embracing innovation and new transport types can help expand the reach, flexibility and efficiency of Canberra's transport network. A major opportunity is introducing 'mobility as a service' which describes a shift away from personally owned transportation and towards mobility solutions that are consumed as a service. In future, transport may be bought as a subscription service, like some TV services. This creates opportunity to make transport more cost effective and more accessible.

It is likely the popularity of on-demand services will increase as communications and transport related technologies improve. There is considerable opportunity to incorporate on-demand services in Canberra's transport network. They can enhance the network by enabling it to respond to demand, providing tailored door-to-door or door-to-interchange services, especially to improve services in Canberra's outer suburbs both established and emerging.

## Parking

A transport network that supports a compact, sustainable and vibrant city needs to consider its relationship with parking. There currently are around 40,000 publicly accessible spaces in the City and four town centres combined.

Parking allows people to access the services they need when they arrive at their destination. A strategic approach to the provision and management of parking recognises and reflects, the importance of parking for residents and business, and parking's contribution to the viability of centres. It balances this with the need to maximise the efficiency and usage of existing parking and our response to the challenges of climate change and housing affordability and vision for a more walkable, liveable city.

The availability of parking influences transport choices and when not managed effectively can encourage car use and congestion while discouraging people from using public transport, cycling and walking. Looking into the future, there will be a need to consider how new and innovative parking solutions can support a compact, efficient and sustainable city. The ACT Government will develop strategic approaches to achieve this through the forthcoming *Parking Policy*.

## Park and Ride/Bike and Ride

Park and Ride and Bike and Ride are important elements of our parking mix. They increase travel choice by enabling easier access to public transport and help manage congestion in and around the city and urban centres.

In Canberra these facilities have played an important role in supporting convenient access to public transport and are well utilised. For example, at present around 11% of people access light rail via Park and Ride, and around 2% via Bike and Ride.

Going forward we will continue to expand Park and Ride and Bike and Ride to ensure the greatest availability of options for everyone in making effective and convenient transport choices.

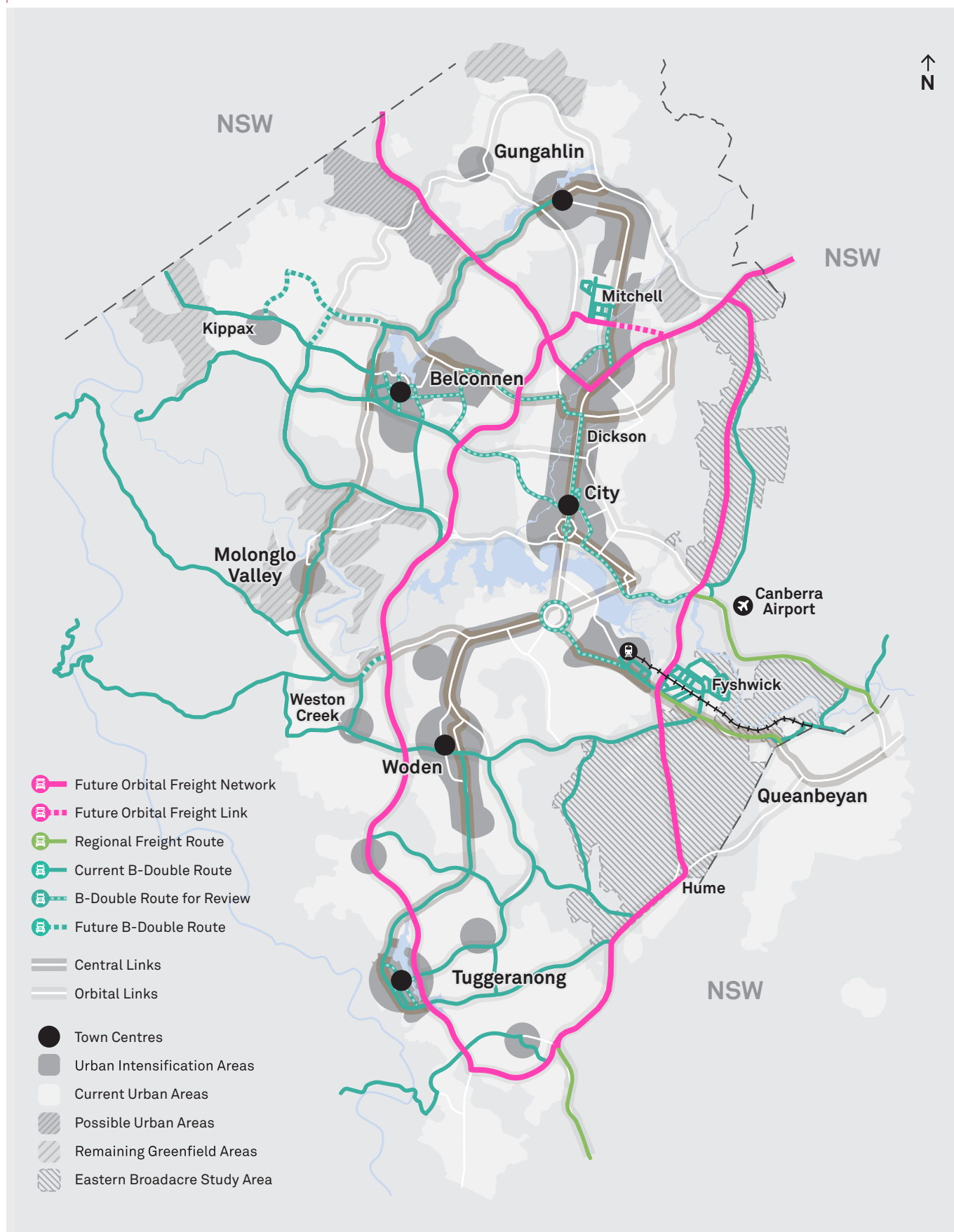
This will be based on a park and ride strategy developed by the ACT Government.

## Freight network for a prosperous and productive city

Canberra's freight network will be developed in accordance with the *ACT Freight Strategy*, and national freight policies. It will feature an orbital backbone to circulate heavy vehicle traffic around the city, augmented by B-Double routes to facilitate access to freight locations within the city. Several through B-Double routes will be reviewed to reflect the *ACT Planning Strategy 2018* plan of urban intensification areas.



MAP 5 **ACT Transport Strategy – Orbital links and freight network**





# Making it happen

In the past, most of Canberra's growth pushed outwards through new suburbs at the edge of the city. With this urban growth pattern came a significant need to improve mobility by investing in building new roads and widening existing roads and intersections. This period of expansion left a legacy of arterial roads that provide Canberrans with a high level of mobility by car compared to other Australian cities.

As more of our future growth is accommodated within and around the city, town centres and central links, our investment in transport needs adapting. The focus of investment will be on a sustainable transport network that supports a compact and efficient city with better access to jobs and services. Going forward, we will continue to invest in Canberra's road network but more of this investment will be focused on improving the safety and efficiency of existing roads and intersections to keep the city moving. Our network management focus will shift towards better coordinating our land use and transport, optimising the use of our current network and putting people first by making safety a priority through the Safe Systems approach.

At a strategic level, we will employ three main avenues to bring about the transport system of the future:

- Future-focused investment
- Refocus network planning and design
- Getting the most out of our existing transport infrastructure.

These strategic actions will be supported by an operational *ACT Transport Recovery Plan*, to steer transport back towards a sustainable and healthy path, as we overcome the impacts of COVID-19 on our community.

## Future-focused investment

A future-focused investment framework supports long-term sustainable benefits. We will consider the sustainability of a solution and look to its impact not just for the immediate transport solution, but its broader contribution to the liveability of the city. Practically this will involve the continued rebalancing of investment towards public transport, cycling and walking while we will continue to invest in the safety and maintenance of our road network to ensure safe and accessible choice which will support the future growth of Canberra.

The current transport appraisal and planning processes in use by many governments tend to promote delaying infrastructure investment until issues reach a critical point.

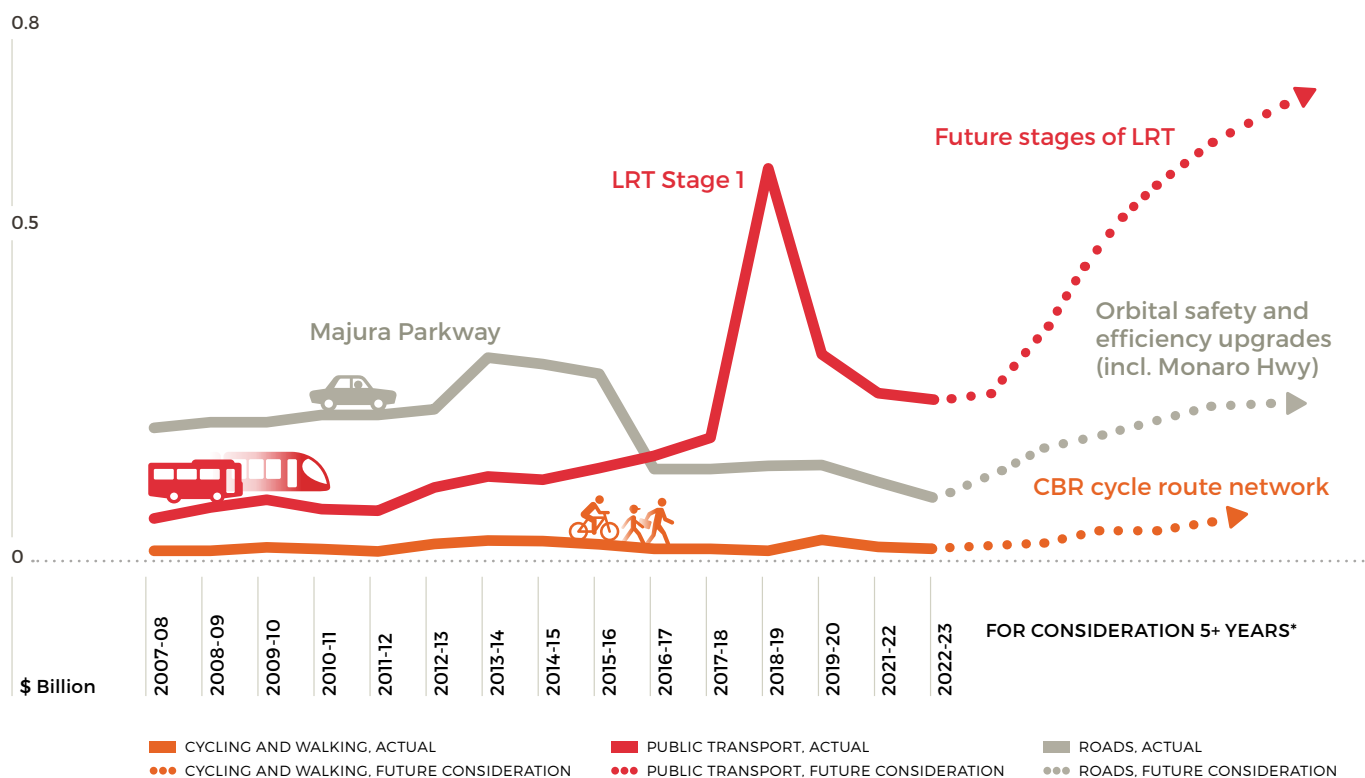
In particular, the cost-benefit analysis undertaken for infrastructure projects often favours addressing current problems rather than securing future benefits. Perversely the same cost-benefit analysis might suggest that a project delayed by 10 years provides a better return on investment even though the costs of delivering the project will have increased significantly. This is because the immediate problems associated with not having the infrastructure are easier to quantify than the future benefits gained, particularly for public transport infrastructure which has such a diverse range of indirect benefits.

We cannot and should not leave public transport investment until traffic delays reach unacceptable levels and impose high social, environmental and economic costs. Where a project is necessary either now or in the future, bringing forward the social and financial benefit can often be the best choice. This ethos has been evident throughout Canberra's history and it is one of the key reasons the city's infrastructure supports our excellent quality of life so well. In its decision making the ACT Government will explore all the benefits of transport initiatives, beyond the purely financial, to ensure that we continue to meet our ambition of a compact, efficient and exceptionally liveable city.

## Rebalancing our investment

In recent years, the ACT Government has recognised the urgent imperative to rebalance investment towards public transport, cycling and walking, taking a future focused approach to building Canberra's transport network and mitigating potential congestion. As the following graphic demonstrates, transport investment is increasing significantly, and we are starting to see a more holistic approach to investing in all modes. With developments outlined in the *ACT Infrastructure Plan*, this is planned to continue.

## ACT Government transport investment – actual and for future consideration



\* Key projects for future consideration are outlined in the ACT Infrastructure Plan

“Walking, cycling and public transport will take priority in the ACT’s future transport planning and investment. At the centre of this is our city-wide integrated public transport network, combining light rail with rapid and suburban bus routes to make public transport a real alternative to the car. We are also stepping up our investment in footpaths, cycleways and infrastructure like Park and Ride facilities which support Canberrans to combine active travel with public transport.”

ACT Infrastructure Plan



## Light Rail Case Study

### A future-focused investment

The introduction of light rail in Canberra, the largest single public investment made by the Territory since self government, demonstrates the benefits of prioritising future focused infrastructure investments.

This project was proactively implemented to meet the anticipated transport need of future development along Northbourne Avenue and in the Gungahlin region. Rather than waiting for the traffic delays to reach unacceptable levels, the project future proofed the corridor against long-term congestion issues.

The *National Infrastructure Plan*, which was released by Infrastructure Australia in July 2013, recognised the Gungahlin to Civic Transport Corridor as an early stage initiative for the *2013 Infrastructure Priority List* but referenced transit bus lanes instead of light rail. The ACT Government recognised the short-term congestion problems the project was measured against were outweighed by the long-term benefits and opportunities the project offered. As a result, the ACT Government proceeded independently of Federal funding.

Subsequently, in February 2016 Infrastructure Australia recognised the Civic to Gungahlin Light Rail project as a national priority. At this point the ACT Government had already been working on the project for several years and had just selected Canberra Metro Consortium as the preferred tenderer.

### Transforming our city

The light rail project was delivered as an urban transformation project rather than an isolated transport solution. A subsequent benefit realised was accelerated urban renewal along the alignment, particularly along Northbourne Avenue. From November 2016 to March 2019, the value of development approvals granted along Northbourne Avenue exceeded \$394m.

While Northbourne Avenue is becoming a more liveable and vibrant place to live, play and do business, it has also become more efficient and is able to carry more people than ever before. While light rail carries around 30% of people along the corridor during the AM peak, these people are carried by less than 20 light rail vehicles, in a highly space efficient way.

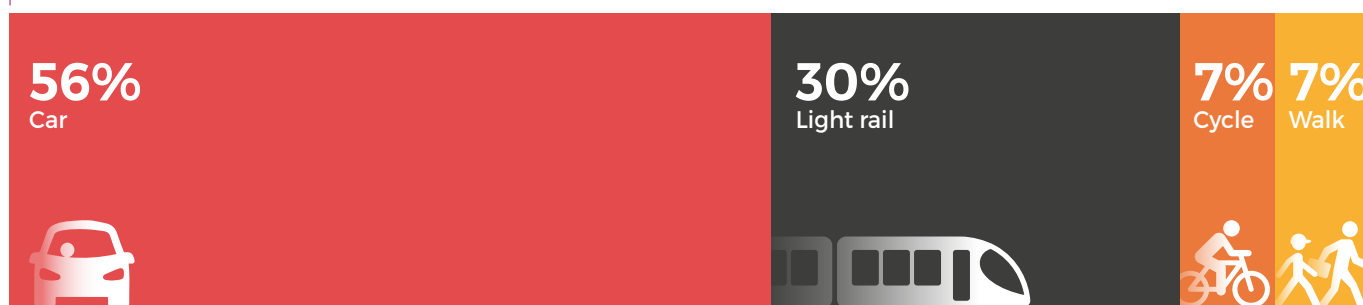
Since operations commenced in April 2019 and COVID-19, the average light rail patronage has exceeded the Light Rail Business Case patronage projections forecasted for 2021.

### Light Rail Stage 2

Building on the success of Light Rail Stage 1, the ACT Government is now progressing with the second stage of building light rail to Woden. Connecting light rail to Woden is occurring in two stages – City to Commonwealth Park (Stage 2A) and Commonwealth Park to Woden (Stage 2B). With the business case for Stage 2A endorsed, work has commenced on extending light rail to Commonwealth Park. This 1.7km extension, due to commence operations in 2024, will see three new stops added to the network and will help move an extra 3,000 passengers daily within the first year of operations. Stage 2 of light rail to Woden is expected to be operational around the mid-2020s.

As with Northbourne Avenue, Light Rail Stage 2 will be a catalyst for the transformation and revitalisation of Adelaide Avenue. This will include a coordinated approach to transport and land use planning. The corridor will evolve on a precinct by precinct basis in tandem with light rail stops. Precincts will reflect the unique characteristics of the surrounding neighbourhoods. Strong connections of these places to the light rail will be a key principle of success. This will result in better places and an enhanced look, feel and function for the corridor.

## Northbourne Ave – share of people moved by mode (am peak hour)



Source: ACT traffic signal loop counters, Sullivans Creek Bike Barometer, and Transport Canberra MyWay card and ticket vending machine data.

## A balanced and strategic investment framework

We will need to make smart, targeted investment decisions to ensure we achieve the future course set out by this strategy. This will involve adopting a balanced and strategic investment framework in line with this strategy's vision and future transport needs. Our aim is to invest in a way that maximises the benefits for the community. To achieve this, we will use an investment framework to identify, assess, and prioritise initiatives.

### Investment framework

 <p>STRATEGIC FIT AGAINST THE VISION AND PRINCIPLES SET OUT IN THIS STRATEGY</p>	 <p>VALUE FOR MONEY</p>
 <p>DELIVERABILITY</p>	 <p>AFFORDABILITY</p>

A key part of this approach is to introduce a strategic merit test alongside the traditional economic appraisal to ensure that investment is integrated with planning and transport strategic directions.







We aim to create a transport system that is innovative and future ready. In identifying and defining solutions we will do so in a way that considers future needs and systems where the benefit of doing so is viable.

To continue to maintain and enhance community outcomes we will seek to manage funding requirements through better use and non-infrastructure initiatives, and we will also continue to use innovative delivery models where these present value for money.

As we move toward more infill development and as our urban infrastructure reaches the end of its useful life, we will explore more innovative ways to seek contributions from those who stand to benefit, to support transport funding. We will also consider broader program-based funding to target funding particularly in managing existing assets.

While we will determine investments on a case by case basis, our approach will be guided by the following investment principles.

### Investment framework: Key pillars

 <p><b>A whole of system approach</b></p>	 <p><b>Matching investment decisions with priorities</b></p>	 <p><b>Improved management and better use</b></p>	 <p><b>Non-infrastructure solutions</b></p>	 <p><b>Future ready</b></p>	 <p><b>Sustainable procurement and delivery</b></p>
<p>At its simplest, the transport network is a single entity enabling the movement of people and goods. To realise its full economic and social value, all the various parts of the system must work together in an integrated and complementary manner.</p>	<p>We will apply our investment framework between modes, project types and initiatives to ensure we identify, compare and prioritise initiatives across our system.</p>	<p>By maintaining the condition of our asset we extend its life (whether it be roads, buses or depots), maintain safe use and delay larger lifecycle costs.</p>	<p>To complement our whole of system and better use approaches, we will consider non-infrastructure solutions to addressing problems.</p>	<p>In identifying and defining solutions we will consider future needs and systems where the benefit of doing so is viable.</p>	<p>We will continue to identify the optimal delivery models which maximise value for money, promote innovation and effectively allocate risks for the Territory.</p>



## Refocusing network planning and design

Achieving our vision is not just about refocusing our investment choices, it is also about how we plan our city and design our roads and places. To support the *ACT Planning Strategy's* vision of a compact and liveable city we will renew our focus on better coordinating land use and transport planning.

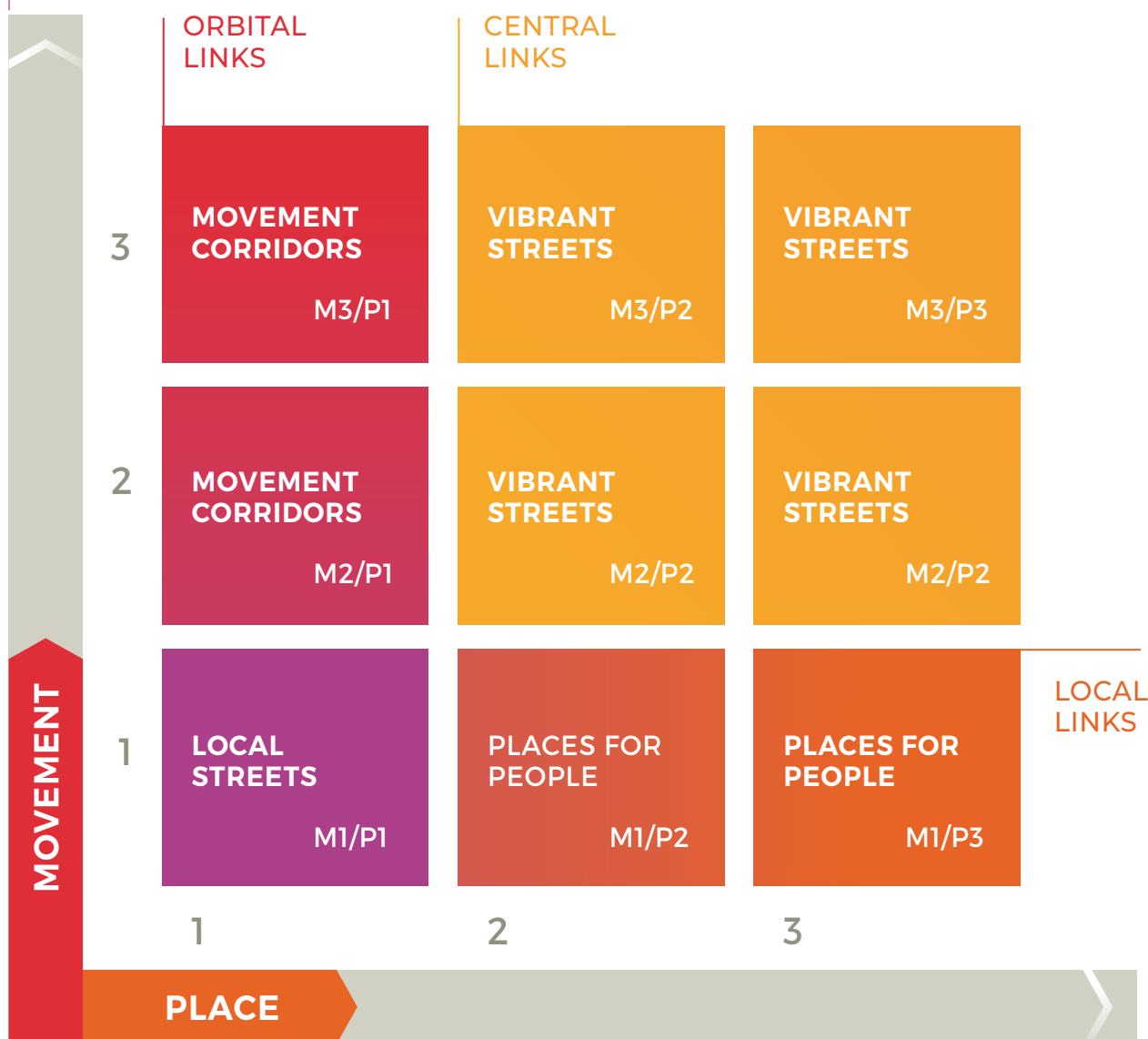
### Movement and Place

The Movement and Place concept balances the dual function of streets, which is moving people and goods and enhancing the places they connect and pass through.

Movement and Place supports a 30-minute city by helping to create liveable places for mixed communities with amenities close by on the one hand and identifying roads for efficient movement on the other. This means the movement function of Canberra's roads and streets will better align with the evolving place function and vice versa.

At a high-level Canberra's streets will be structured around a hierarchy of local, central, orbital and regional links which will reflect the changing role of transport according to location. Transport projects will consider the needs of all transport users both on their journey and as they complete it. To facilitate this further, we will develop a Movement and Place framework to guide design, collaboration and decision making for roads and places.

### A Movement and Place Framework for Canberra



## Safe Systems Approach

A key aspect of the strategy vision is for a safe transport network. We intend to implement the Safe Systems Approach and ensure Vision Zero is at the heart of our decision-making. This is in accordance with the *ACT Road Safety Strategy*. The Safe Systems Approach recognises that safe speeds, safe roads, safe vehicles and safe behaviours, all go together to create a safe system for road travel. Safe Systems is compatible with Movement and Place and we will implement it on road design projects through the Safe System Assessment Framework. The ACT Government will implement the Safe System Assessment Framework alongside Movement and Place. The Framework measures how well a design minimises risk of severe injury, with a view to achieving designs that achieve the Safe System objectives.

### Safe Systems Approach



## Getting the most out of existing infrastructure

We will work to continuously improve the capability of Canberra's already excellent transport infrastructure. We will assess the performance of roads and paths and look for new solutions to maximise their use efficiently, sustainably and safely. We will embrace the opportunities created through new technology to better manage our network and increase capacity to accommodate future demand and emerging transport modes.

Getting the most out of our existing infrastructure recognises that we cannot 'build' our way out of congestion. Continuously expanding the road network will create

future operational, maintenance and renewal burdens. Delivering the right infrastructure at the right time requires our infrastructure planning process to respond strategically to challenge and prioritise low cost, non-infrastructure solutions over large capital investments where possible.

To optimise the use of these networks, we need to consider the relationship with Canberra's parking supply. Managing parking supply and demand effectively encourages efficient use of available parking resources and avoids parking shortfalls during busy periods. Managing parking demand also encourages those with viable alternatives to switch from driving, particularly in locations well serviced by public and active transport, such as the city centre.

## Making our transport system resilient and flexible

In the first three months of 2020, Canberra faced a trio of events that altered the way people travelled almost overnight. These events – bushfires, a sudden hailstorm and the COVID-19 pandemic – each affected travel differently and highlighted the need to make our transport system resilient and flexible. Persistent smoke haze from bushfires prevented cycling and walking, the hailstorm left thousands of Canberrans without the use of their personal cars and the COVID-19 pandemic prompted Government to advise against non-essential travel. These events serve as a reminder of the need for a flexible and thus resilient transport system, able to effectively adapt to outside events.

A flexible transport system gives people a range of choices over how they travel by allowing people to seamlessly connect between transport types. Flexible responses include reallocating road space to public transport, walking, cycling or deliveries, or taking advantage of emerging car share or micro-mobility trends. For example, car share allows people to use public transport more flexibly in Canberra, combining the two modes unlocks more journey options than would be otherwise available. A 2018 survey of customers from one Canberra car share provider found that since joining car share many members had started using public transport, cycling and walking more, and over a third stated they had used public transport and car share as part of an integrated trip.

A flexible and resilient transport system also includes anticipating and preparing for future trends, such as the uptake of electric vehicles and connected autonomous vehicles, as well as adopting management practices that are flexible and demand responsive to enable rapid change should conditions require it. For this reason, this strategy designates transport links based on the outcome they should achieve for the network as a whole while allowing flexibility in how this is managed.

## Flexible street and kerbside management

COVID-19 has seen a shift in business practices towards retail innovations such as click and collect, kerbside pick-up, parcel lockers, and personal deliveries. Additionally, we can expect the upward trend of micro-mobility, car share and on-demand transport seen in other cities to become increasingly part of Canberra's lifestyle. Autonomous transport such as small delivery vehicles and drones may also change the way our footpaths and residential and commercial driveways are used.

Getting the most out of our existing infrastructure will require a more flexible approach to how we manage our streets and kerbside environments. In our town and local centres, this could mean more short-term parking to pick up takeaway food or shopping ordered online and designated drop-off and pick-up areas. It may also mean expanding kerbside access for small commercial vehicles and time-of-day time management practices. In our central corridors, this could mean more space allocated to bus lanes and bus stops, cycling and walking, deliveries, bike-share, car-share or e-scooter stations.

## ACT Transport Recovery Plan

This strategy provides the direction for travel and transport in Canberra over coming years and decades. In the immediate future however, transport will play an important role in enabling Canberrans to return to daily life in a way that is safe, healthy and sustainable. The *ACT Transport Recovery Plan* will identify the operational actions at each stage of Canberra's recovery from the impacts of COVID-19.

Recognising that some elements of travel and transport will be forever changed by COVID-19, the transport transition we must now make is not about returning to the past or to the way we did things before. It is about harnessing this opportunity to adapt, improve and innovate, so that we can make the most of the lessons and opportunities of this period, for the benefit of all Canberrans, now and in the future. The *ACT Transport Recovery Plan* will lead this work to set transport once again on a healthy sustainable path as we move beyond COVID-19.

## Towards the future network

To achieve the strategic vision, development of guiding frameworks including the Movement and Place, Safe Systems Assessment, and Strategic Investment will be the key. Based upon these foundational frameworks, a program of work will be developed to translate the Strategy into action. This will encompass complementary plans and initiatives including but not limited to the ones indicated here.











### Complementary Plans and Initiatives

ACT TRANSPORT STRATEGY 2020	SAFE SYSTEMS FRAMEWORK	ACT Transport Recovery Plan
		Walking and cycling infrastructure and promotion plan
	MOVEMENT AND PLACE FRAMEWORK	Light rail masterplan
		Zero emission public transport plan
		Customer experience strategy
	INVESTMENT FRAMEWORK	Canberra region rail plan
		Mobility as a service
STRATEGY	SUPPORTING FRAMEWORKS	COMPLEMENTARY PLAN

# Measuring success

## Towards world class transport for Canberra

### A WORLD CLASS TRANSPORT SYSTEM THAT SUPPORTS A COMPACT SUSTAINABLE VIBRANT CITY

	PRINCIPLES	PATHWAYS	IMPLEMENTATION
	PEOPLE FOCUSED	1. Providing greater transport choice	Complementary policies, strategies and plans
	SAFE	2. Building a network that focuses on efficient movement according to place	
	CITY SHAPING	3. Rebalancing investment	
	FUTURE FOCUSED	4. Growing public transport, cycling and walking	
	CONNECTED	5. Maintaining safe, efficient roads	
	FLEXIBLE	6. Reducing carbon emissions	
	RELIABLE	7. Managing a sustainable and healthy COVID-19 transport transition	
	EFFICIENT		
	SUSTAINABLE		
	HEALTHY		

We will monitor and report on success by using whole-of-Territory indicators to measure the impact of our investment and policy decisions. To effectively monitor our progress, ongoing data collection will be needed including future Household Travel Surveys, data on emissions reductions and transport movements.



## Mode share

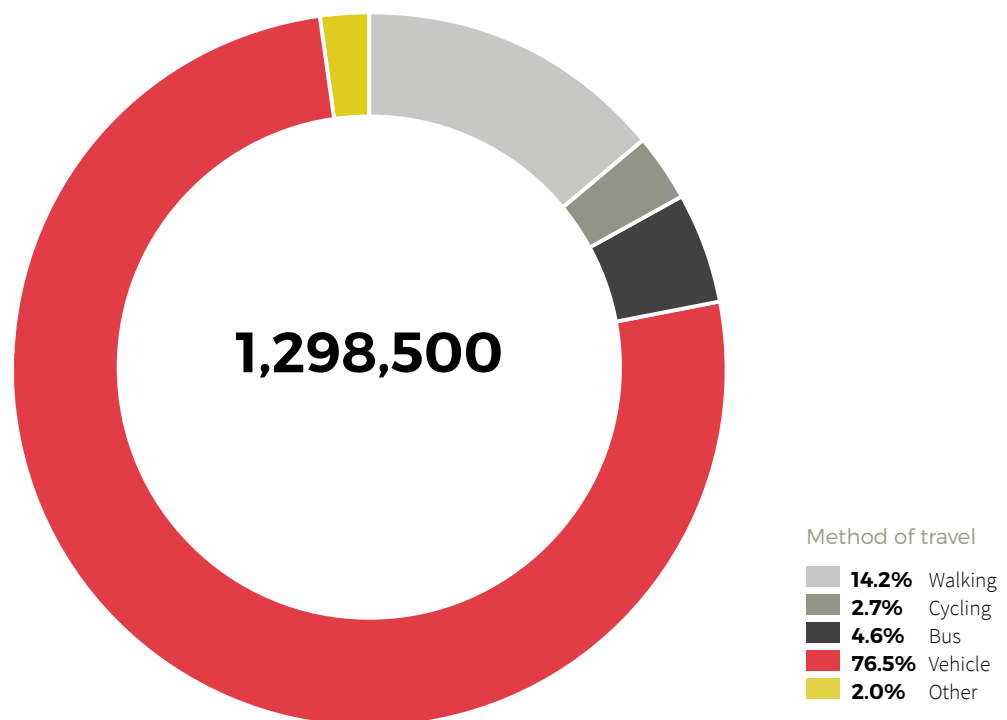
Mode share compares the usages of different types of transport within a network. It measures change in travel behaviour; as travel behaviour changes slowly, mode share is most meaningful when trends are measured over time. Mode share complements and serves as a guide to ambition for transport sector specific targets – such as patronage targets and customer satisfaction ratings. While sector specific targets show how we are performing in areas of our network, mode share gives us a picture of how our network is performing across all modes.

Modal share for journeys to work is measured through the Australian Census, whereas modal share for all trips is measured through a survey of all households in a city or region, namely a Household Travel Survey. The *Australian Journey to Work Census* data tends to give a picture only of employed people at peak times on weekdays, whereas the Household Travel Survey gives a picture of the travel behaviour of all Canberrans for all

purposes, including education and leisure, through the day and week. In other words, it is a 'transport census'. For this reason, it is the more relevant data for understanding behaviour change, modal shift and progress towards zero emissions travel within Canberra, whereas journey to work is useful for benchmarking commuting behaviour between Australian cities.

This strategy retains the aspiration to see increased modal share for walking, cycling and public transport as a guide to our ambition for travel in Canberra, both now and as we transition beyond COVID-19. Experience from other Australian cities shows that consistent investment, combined with a move towards more compact urban form, achieves modal shift over time. Updated modal share data will be in the Australia Census 2021 and the next available survey of travel in the ACT. This data will provide further information to evaluate transport policies and inform future decision making.

### Travel by mode for all trips – ACT



Source: ACT and Queanbeyan-Palerang Household Travel Survey, 2017

**This strategy will be subject to regular review as significant infrastructure developments come online, such as future stages of light rail, and as we reach milestones in key areas, such as the 2025 interim emission reduction target.**

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# ACT TRANSPORT STRATEGY 2020



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