



**ACT**  
Government

Environment and  
Sustainable Development



# Transport for Canberra

Transport for a sustainable city

2012–2031



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## FOREWORD

### Minister for the Environment and Sustainable Development

Since 2001, the ACT Government has invested over \$1 billion in transport infrastructure, programs and services to support a cleaner, more sustainable Canberra. We have delivered on our visionary 2004 Sustainable Transport Plan by designing, building and maintaining transport infrastructure like the Belconnen Bus Stations, bus lanes, and over 800km of on-road cycle lanes and off-road shared paths.

We have introduced fast, convenient public transport with the Red Rapid, Blue Rapid and Parliamentary Zone Frequent Network. We have delivered important arterial road connections like Gungahlin Drive; and we are continuing to increase the number of Park and Ride and Bike and Ride facilities to make it even easier to catch a bus in Canberra.

Transport for Canberra will further build on our strong record of delivering transport for Canberra by creating a transport system that puts people first.

Public transport will look markedly different in the future as we implement Transport for Canberra.

Complemented by a new ACT Planning Strategy, Transport for Canberra and the new public transport corridors it establishes will help us plan transport and land use together. New transport oriented developments will be located along the Frequent Network, and walkable and cycleable local communities will be designed with easy access to goods and services.



Transport for Canberra will contribute to the ACT's greenhouse gas emissions reduction targets by increasing the efficiency of our public and private vehicles, and encouraging more people to choose sustainable transport like walking, cycling and public transport. It will build on our commitment to active travel, highlighted by the ACT's signature to the International Charter for Walking in 2010.

Transport for Canberra will make our city a better place to live, work and do business, and a more accessible place where it is easy for everyone to get around.

*...a transport system that  
puts people first...*

A handwritten signature in black ink, appearing to read "S. Corbell".

Simon Corbell MLA

Minister for the Environment and Sustainable Development  
March 2012



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# EXECUTIVE SUMMARY

Transport for Canberra will be the foundation for transport planning for the next 20 years. It updates and replaces the 2004 Sustainable Transport Plan and will sit alongside an updated and refreshed Canberra Spatial Plan, now known as the ACT Planning Strategy.

Transport for Canberra has been prepared in conjunction with the ACT Planning Strategy so important relationships between land use and transport can be used to support a shift to more sustainable transport and a more sustainable Canberra.

Transport for Canberra sets a new policy direction for transport from now to 2031 around:

- an action plan detailing the 34 policy actions (Chapter 7).
- Transport planning is linked to health and active travel, wellbeing and social inclusion. These links are highlighted in the strategies on public transport, active travel, roads, parking, fleet and freight, and transport infrastructure.
- In forums like *Time to Talk: Canberra 2030*, Canberrans discussed their 2030 vision for this city—the need to support its economic, social and environmental objectives by creating an active, healthy, sustainable, safe, accessible, efficient and cost-effective transport system that is integrated with land use planning.
- Transport for Canberra is the government's vision for a smarter transport system for Canberra.
- Public transport will look markedly different in the future as we implement Transport for Canberra.
- The following six principles guide the new transport policies and the 34 action items required to implement them, creating a transport system that:
1. is **integrated** with land use planning
  2. makes **active** travel like walking and cycling the easy way to get around
  3. provides **sustainable** travel options and reduces transport emissions
  4. is **safe** for moving people however they get around
  5. is **accessible** for everybody whatever their level of mobility at any time or place
  6. is **efficient and cost effective**, providing value for money for the government, business and the community by managing travel demand across the whole transport system.



Chapter 1 looks at the changed policy context and our progress in transport since 2004.

Chapter 2 focuses on public transport, including:

- a Frequent Network to guide land use planning and achieve economic and environmental goals (i.e. build patronage and reduce emissions); future mass rapid transit such as bus rapid transit or light rail will be located on the Frequent Network
- linking public transport with other types of travel (e.g. Park and Ride, Bike and Ride)
- modernising the public transport system through fleet, ticketing, real time passenger information, efficient and accessible network planning, bus stations and other public transport infrastructure
- a new transport accessibility policy to address transport disadvantage identified in a 2011 Coverage Service Delivery study, including new minimum public transport service standards such as frequency and distance from households
- demand responsive and community transport including community buses, taxis and public transport for new greenfield developments.

Chapter 3 looks at active travel including:

- connecting people and places with a network of community paths, segregated cycleways, shared spaces, on-road cycle lanes, excellent signage and well-lit, safe and convenient connections
- land use changes (through the planning strategy) to encourage more people to live, work and play within their local community, and make active travel an easier choice

- links to public transport through Bike and Ride and good connections to bus stops.

Chapter 4 focuses on roads, parking, motorised vehicles and freight, including:

- supporting a strong ACT economy with a road network that encourages the efficient movement of goods and people
- freight and regional connections (including rail, high speed rail, cross border transport services)
- parking management and operations, including a parking offset fund
- safe, fuel efficient and low carbon vehicles, including electric vehicles and the ACT Government fleet.

Chapter 5 draws all this together to manage travel demand across the transport system, including pricing, infrastructure, travel planning and behaviour change programs to make sustainable transport an easy choice for any trip.

Chapter 6 establishes a new monitoring and reporting system to support the delivery of Transport for Canberra. It includes updated targets for shifting away from car-based transport—vital to achieving the Territory's greenhouse gas emissions reduction targets and creating a more efficient and sustainable Canberra.

Chapter 7 and appendices include:

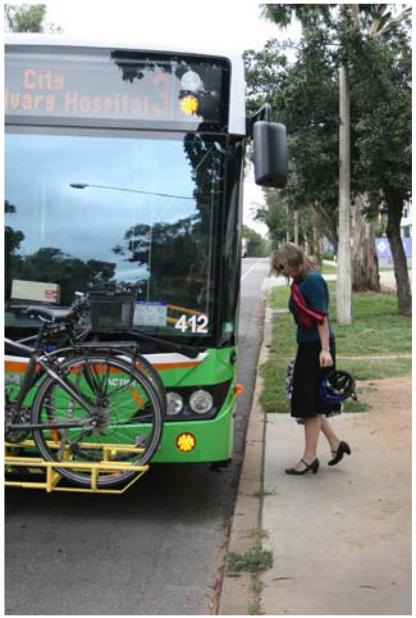
- an integrated action program for all modes of transport
- maps showing short (2013), medium (2016-21) and long term (2031) transport infrastructure and service plans
- references and documents of interest.

# 1.

## INTRODUCTION



# 1. INTRODUCTION



Improving Canberra's transport system is crucial to the city's development. The world's best and most liveable cities all have excellent transport systems, designed and planned in tandem with land use to create walkable, people-friendly communities with a range of transport options.

Transport is also a vital component of responding to the challenges facing all major Australian cities: air quality, traffic volumes and congestion, ambient noise, greenhouse gas emissions, social exclusion, urban sprawl and infrastructure that is reaching capacity.

The ACT Government's vision for Canberra is:

*Canberra will be recognised throughout the world as a truly sustainable and creative city; as a community that is socially inclusive—acknowledging and supporting those who are vulnerable and in need and enabling all to reach their full potential; as a centre of economic growth and innovation; as the proud capital of the nation and home of its pre-eminent cultural institutions; as a place of great natural beauty.<sup>1</sup>*

Transport is critical to achieving this vision. Transport is a way to: provide access to goods and services; support a strong economy and more productive workforce; support a more inclusive community; create a cleaner, more liveable, more active and safer environment; and create a more sustainable Canberra. Transport for Canberra extends and replaces the 2004 Sustainable Transport Plan, setting new policy direction to 2031 around:

- transport and land use integration through the Frequent Network of public transport corridors (Chapter 2)
- social inclusion and transport disadvantage, including a draft minimum coverage standard to ensure public transport services reach those with the highest social

need for transport (Chapter 2)

- active travel policy to make walking and cycling easy travel options (Chapter 3)
- strategic management of the road network, parking, motorised vehicles and freight to create a more efficient transport system (Chapter 4)
- travel demand management across all modes (pedestrians, cyclists, motorcyclists, cars, public transport, freight) including transport pricing (Chapter 5)
- transport system performance measurement and reporting, including new targets for different modes of travel (mode share targets) for 2016 and an annual transport report card (Chapter 6)
- an action plan detailing policy actions (Chapter 7).

## 1.1 Policy context

The ACT Government's Sustainable Transport Plan established mode share targets and framed a new integrated transport and land use approach to create a cleaner, more sustainable Canberra. It detailed transport options to help us move around the bush capital quickly and conveniently and create the sustainable Canberra envisaged in the Canberra Plan. Transport for Canberra updates and replaces the Sustainable Transport Plan and will serve as the foundation for transport planning for the next 20 years.

Transport for Canberra sits alongside the ACT Planning Strategy. Both documents highlight important relationships between land use and transport that are critical to transforming our city. The new ACT Planning Strategy will support and be supported by the delivery of Transport for Canberra; it will focus on new development along the rapid

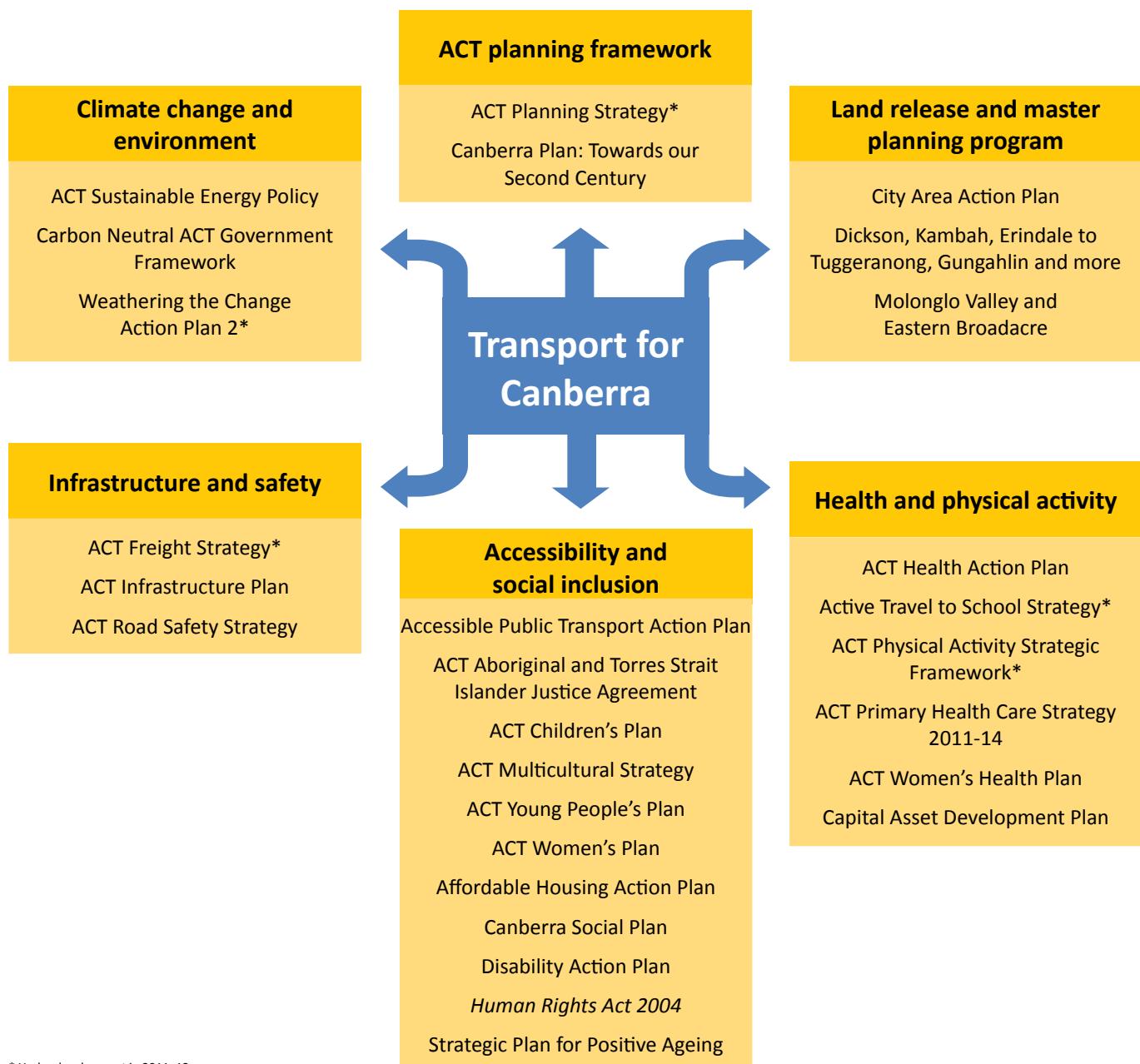
corridors identified in this plan, and the creation of a sustainable city where communities are designed with people-friendly infrastructure and networks to make active travel the obvious way to get around.

Transport for Canberra offers a whole-of-government response to the transport issues raised in ACT Government strategies on climate change and environment, planning, infrastructure and safety, health and

physical activity, accessibility and social inclusion, and land release and master planning programs. Responsibility for implementing Transport for Canberra's actions is shared across the directorates that form the ACT Public Service.

Transport for Canberra draws on a broad range of research and studies. These are listed at Appendix D and available at [www.transport.act.gov.au/references.html](http://www.transport.act.gov.au/references.html)

**FIGURE 1: TRANSPORT FOR CANBERRA POLICY LINKAGES**



\* Under development in 2011–12



*40% of Canberrans  
travel less than  
10 kilometres to work,  
a distance easily cycled.*

## 1.2 A city designed to reduce the need to travel

Canberra is a multi-centred city made up of the districts of Belconnen, Central Canberra, Gungahlin, Tuggeranong, Woden Valley, Weston Creek and Molonglo Valley, each separated by hills and natural open areas. To our east, Queanbeyan has a population equivalent to a Canberra district and is an increasingly important part of planning for Canberra and the region.

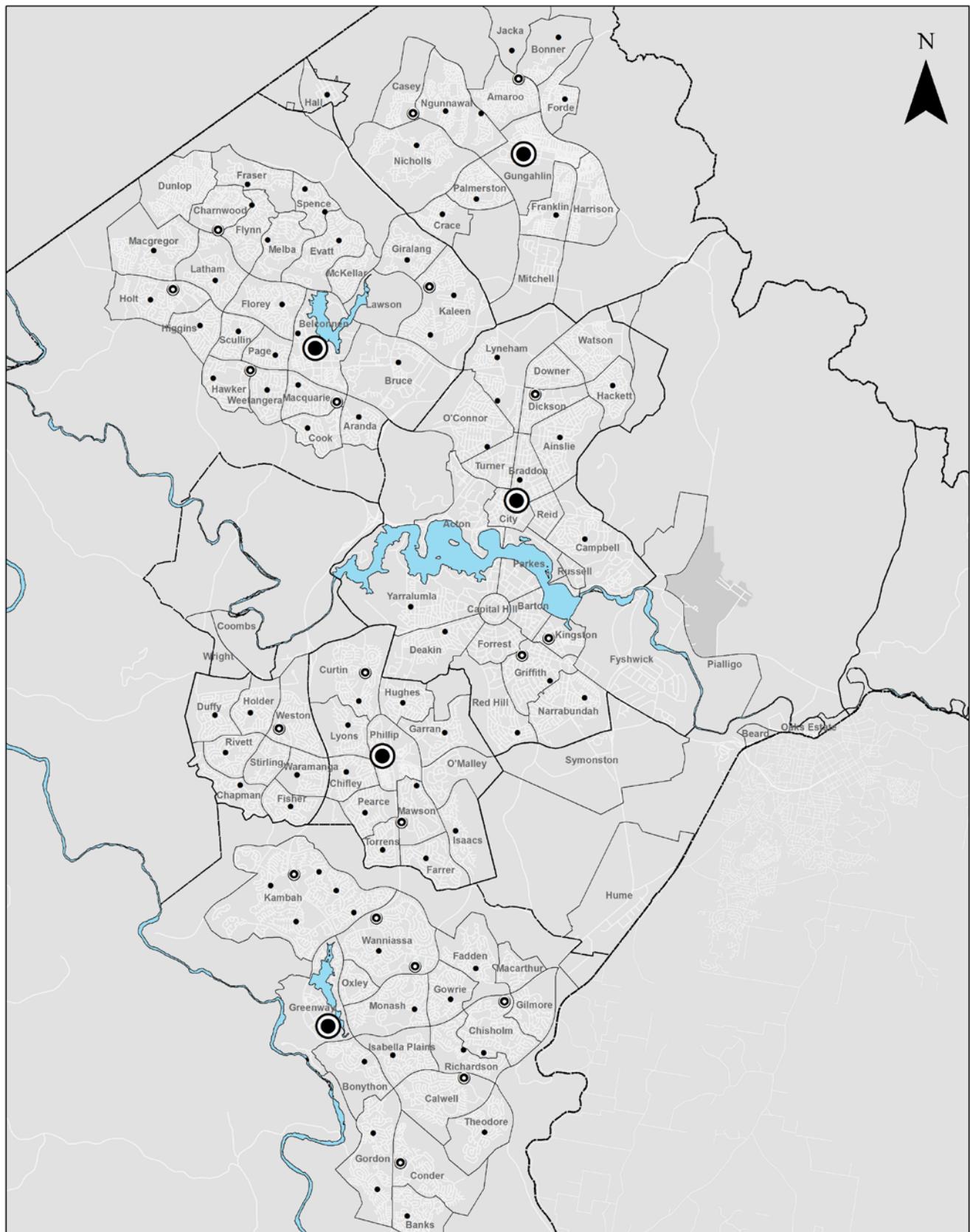
The ACT districts were designed with a range of activity centres to have a high degree of self-containment and reduce travel distances.<sup>2</sup> Each district is made up of residential suburbs clustered around local, group and town centres (see Map 1).

- Local centres host shops and services capable of meeting daily needs. They are designed to be within walking distance of all houses in a neighbourhood. Low population density around some local centres, and modern retail trends, means some centres are struggling to remain financially viable.

- Group centres serve groups of 3-5 suburbs and offer a fairly wide range of goods and services, including a large supermarket.
- Town centres are centrally located and intended to enable many residents to work, shop, socialise and access health, recreational and cultural facilities within the district. A wide range of goods and services are offered through specialised shops and large department stores. Locating employment outside town centres has resulted in more people travelling between districts than originally intended. Even so, 40% of people travel less than 10 kilometres to work, a distance easily cycled. The ease of pedestrian and cyclist access to town centres from adjacent residential neighbourhoods varies due to barriers such as arterial roads or large open spaces.

- The city centre of Civic serves the whole metropolitan area with its large number of specialised shops and major commercial offices.

Transport for Canberra and the ACT Planning Strategy build on Canberra's multi-centred structure. They plan for more compact development around the centres, where residential, commercial, retail and recreational land uses mix together sensitively. Enhanced pedestrian, cycling and public transport infrastructure connect the suburbs to each other and the centres. They also prioritise development along, and adjacent to, major transport corridors that connect the town centres. Together these strategies will bring us closer to achieving our goal of more self-contained districts, while maintaining the ease of travel between them.



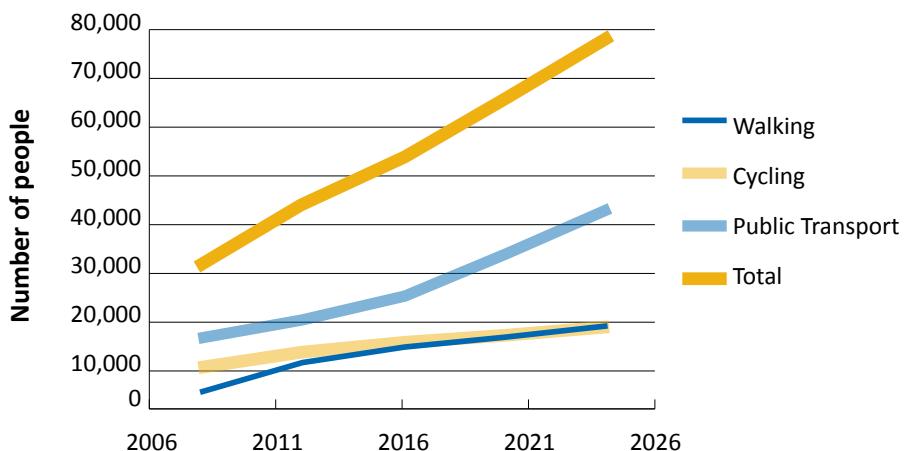
**Map 1: Location of Centres within Canberra**

- Town Centre      □ ACT Divisions
- Group Centre      □ ACT Districts
- Local Centre



All places zoned as centres in the Territory Plan are shown on the map.  
In some instances they may not operate as zoned at present,  
nevertheless the land is set aside for possible future use as a centre.

**FIGURE 2: BY 2026, NEARLY 80,000 CANBERRANS WILL CATCH PUBLIC TRANSPORT, WALK OR CYCLE TO WORK**



### 1.3 The case for a change in how we travel

Like all major Australian cities, car use climbed in Canberra in the latter part of the 20th century. This has led to growing congestion, transport disadvantage, greenhouse gas emissions, air and noise pollution and sedentary lifestyle diseases like heart disease and diabetes. The 2004 Sustainable Transport Plan established targets for each mode of transport (mode share targets) to help address these challenges; Transport for Canberra confirms the importance of these targets to manage transport demand for a growing city.

Figure 2 shows the size of the transport task we face to change the way we travel in Canberra. With over 277,000 jobs expected in 2026, nearly 80,000

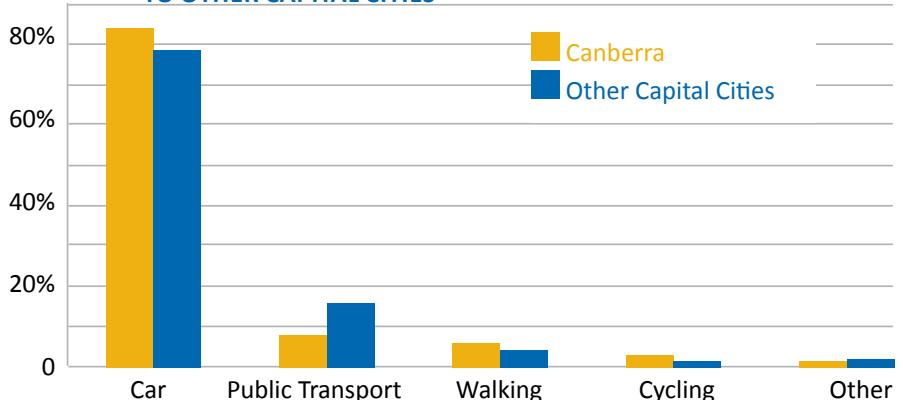
people will need to walk, cycle or take public transport to work to meet our mode share targets.

#### Transport trends

The 2006 Australian Bureau of Statistics census data showed 81% of Canberrans travelled to work by car (either as drivers or passengers) compared to the Australian average of 69.7%. Nationally, Canberra has the second lowest usage of public transport (after Hobart), but the highest cycling rate and second highest walking rate (with Sydney, after Hobart). Figure 3 compares Canberra's journey to work trips with other capital cities.

While car ownership is increasing in the ACT, from 541 cars per 1000 people in 1998 to 596 per 1000 people in 2010, there appears to be a decline over the last decade in the number of kilometres people are travelling.<sup>3</sup>

**FIGURE 3: CANBERRA JOURNEY TO WORK COMPARED TO OTHER CAPITAL CITIES**



At the same time, the emissions intensity of our passenger vehicles is improving, with the ACT mirroring national trends towards smaller, more fuel efficient vehicles.<sup>4</sup> The average age of the ACT motor vehicle fleet is eight years.<sup>5</sup> If current trends continue, around 50% of the fleet will be replaced by 2020, which gives us the opportunity to help people choose the lowest emission new car that meets their needs.

The way we work (and the distance we need to travel to work) may change as technology like high speed internet makes telecommuting more common. The strategies in Transport for Canberra and the ACT Planning Strategy will help manage these trends by improving local access to services and facilities at town and group centres.

### Rising transport emissions

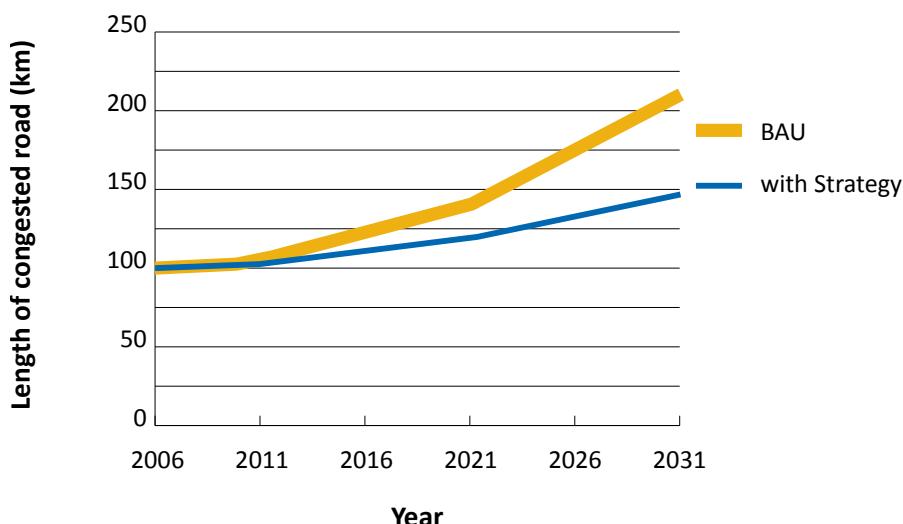
Canberra is leading the nation by setting a target of being a carbon neutral city by 2060. As a first step, we have legislated to reduce greenhouse gas emissions by 40% of 1990 levels and achieve carbon neutrality in ACT Government operations by 2020. The new Weathering the Change Action Plan 2 will help the government and community find a pathway to this ambitious target. The two key ways we

can reduce greenhouse gas emissions in the transport sector are related to actions in Transport for Canberra, and have community benefits beyond emissions reductions: to reduce our travel by private passenger car (i.e. increasing sustainable travel through increased walking, cycling, public transport and carpooling); and to make our vehicles (public and private) less emissions intensive. See more detail in chapters 4 and 6.

### Rising congestion

Canberra has the highest average travel speeds and lowest level of congestion of any major Australian city. The population and traffic congestion are both growing, with congestion growing at a faster rate. Under a business as usual scenario, by 2031 it is estimated more than 200km of our roads will have a volume versus capacity ratio of more than 0.9, meaning greater traffic congestion, longer travel times, less productive work hours and health risks associated with less physical activity and the stress of commuting. Figure 4 — generated from the Territory's transport model—shows the length of congested ACT roads by 2031 if we continue business as usual. The lower line shows the positive impact of a shift to walking, cycling and public transport.

**FIGURE 4: CONGESTION IMPACTS WILL BE REDUCED BY IMPLEMENTING TRANSPORT FOR CANBERRA<sup>8</sup>**



## An ageing population and housing affordability

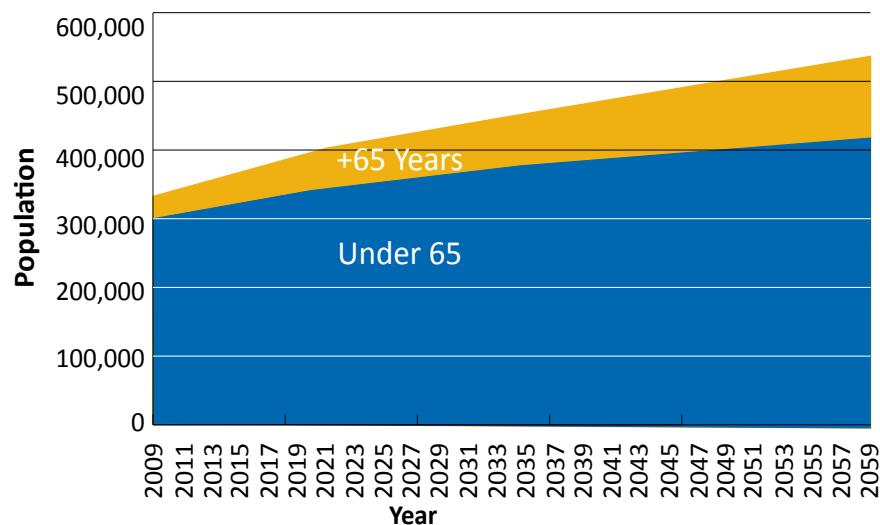
Canberra's population is ageing, as figures 5 and 6 show. Senior citizens who can no longer drive need alternative modes of transport. Although our transport system needs to provide options for everyone, we need to design our city so people can live where the best public transport is. This is the core aim of the new Frequent Network, which will help guide our decisions about the location of social and affordable housing to ensure people with the highest need for public transport have access to the best public transport. The coverage service and

community transport will enable people to age in the community. Improvements to walking infrastructure, including lighting and path maintenance, will also improve safety and local accessibility.

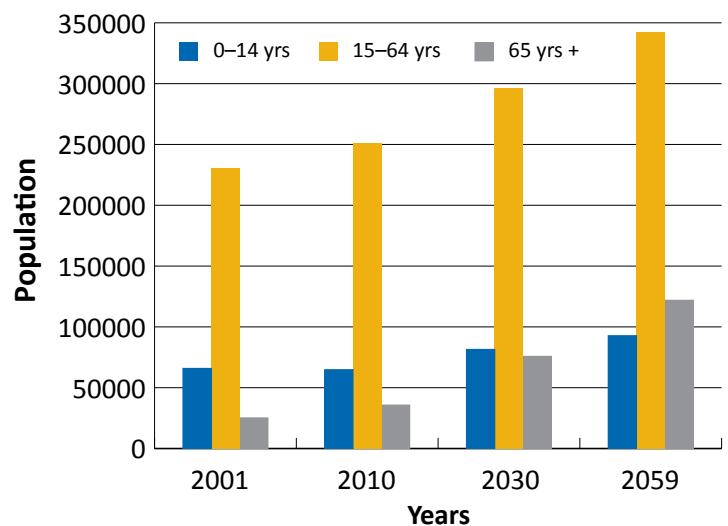
## Social inclusion

An accessible, integrated transport system, where it is as easy and safe to walk, cycle and catch public transport as it is to drive, is particularly important for some members of Aboriginal, Torres Strait Islander and culturally and linguistically diverse communities, young people, people with disabilities, women, older people and other socially isolated or disadvantaged Canberrans.

**FIGURE 5: DEMOGRAPHIC PROJECTIONS:  
AGE TRENDS OF CANBERRA RESIDENTS 2001–2059.<sup>6</sup>**



**FIGURE 6: DEMOGRAPHIC PROJECTIONS:  
AGE STRUCTURE OF CANBERRA RESIDENTS 2001–2059.<sup>7</sup>**



A more accessible and integrated transport system will help:

- promote individuals' independence and autonomy
- decrease isolation and increase social inclusion
- enable access to services such as health care and shopping facilities
- enable participation in employment and education opportunities
- provide opportunities for enjoyment of entertainment and recreation
- enhance community spirit and diversity
- contribute to the local economy.

### Declining physical activity

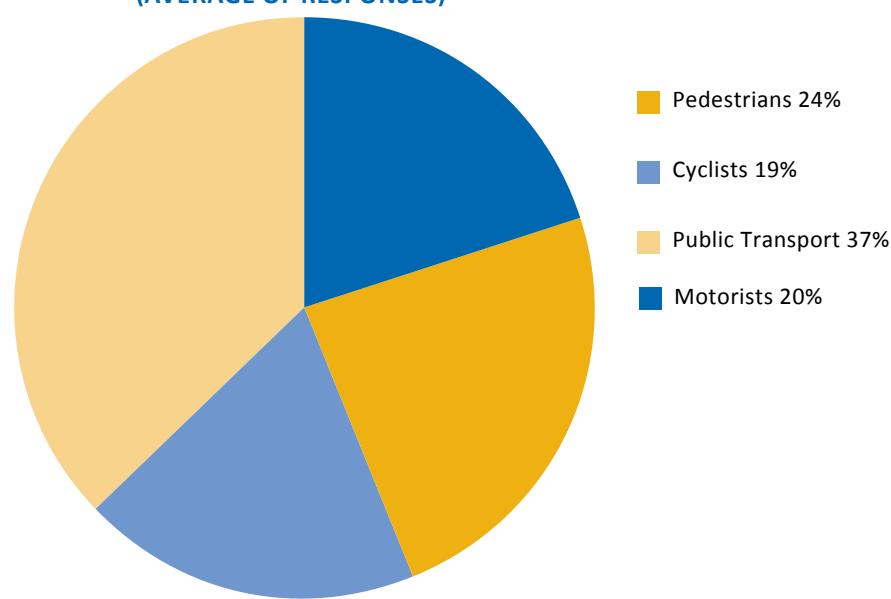
The decline in physical activity across all demographics has coincided with the increase in private car travel. Physical inactivity has contributed to increases in preventable diseases such as heart disease, stroke, diabetes and obesity,

and is the fourth leading contributor to the overall burden of disease in Australia.<sup>9</sup> Active travel is a key way to incorporate physical activity into our daily lives, helping us maintain a healthy weight and obtain other health benefits, and is supported through Transport for Canberra.

### Balancing transport investments

In the Make Walking Count international walk benchmarking survey conducted in Canberra in late 2010, we asked Canberrans how they would allocate \$1m on transport in their local neighbourhood. They told us active travel (walking and cycling) should receive 43% of the funds, public transport a further 37% and maintaining a safe road network, 20% (see Figure 7).<sup>10</sup> The ACT Government will continue to balance investments across all modes of transport, supporting and promoting travel behaviour change and introducing pricing and programs to manage transport demand and create a more sustainable city.

**FIGURE 7: PERCENTAGE OF \$1 MILLION CANBERRANS WOULD SPEND PER MODE IN THEIR LOCAL NEIGHBOURHOOD (AVERAGE OF RESPONSES)<sup>10</sup>**



## 1.4 Transport for Canberra strategic goals



Integrated transport system	Active travel
<p>Canberra's transport system is built upon our well-planned urban structure. Canberra's town centre nodes and well-developed arterial road network provide a solid base for expansion of the public transport corridors detailed in Transport for Canberra. Transport for Canberra establishes:</p> <ul style="list-style-type: none"><li>• a Frequent Network of rapid corridors and frequent local lines with fast, frequent public transport that guides land use planning and investments</li><li>• the rapid corridors will be adopted into the Territory Plan as part of the new ACT Planning Strategy</li><li>• active communities where walking and cycling are the easy choice for local trips, with public transport options supported by Park and Ride and Bike and Ride facilities for quick cross-city travel</li><li>• ring road options for car and freight traffic that integrate with central corridors designed for public transport.</li></ul>	<p>Active travel (walking and cycling) is increasingly recognised as a key feature of the world's best cities. The exercise from a walk to the shops, the social benefits from meeting people on the streets and the economic benefits from active travel have been demonstrated in other Australian cities. Transport for Canberra will encourage active travel by:</p> <ul style="list-style-type: none"><li>• integrating transport and land use planning to develop urban environments that encourage walking and cycling</li><li>• encouraging active travel through bike racks on buses and parking for bikes at bus stops</li><li>• continuing to expand the on- and off-road cycle and pedestrian networks and improving active travel infrastructure like lighting, seating and drinking fountains, to make walking easier and safer.</li><li>• improving public transport to be more convenient, thereby encouraging people to walk or cycle to it</li><li>• encouraging behaviour change, particularly for travel to school, to establish sustainable travel habits for life.</li></ul>

## **Efficient and cost-effective**

An efficient transport system requires a road network that supports all modes of transport, with priority for public transport on the rapid spines. It must provide value for money and have performance measures. Transport for Canberra will make our transport system more efficient and cost-effective and help manage congestion by:

- managing the road network for all users
- integrating transport and land use planning, particularly by investing in the Frequent Network and supportive infrastructure like Park and Ride, transitways and information systems
- developing a new freight strategy
- promoting safe, fuel efficient and low emission vehicles
- applying new technologies and information systems to allow users to make informed choices about travel
- designing our transport system to support socio-economic growth.

## **Accessible and socially inclusive**

Recent transport disadvantage mapping identified areas where people who were disadvantaged were faced with low public transport services, resulting in transport disadvantage. Transport disadvantage can affect the ability of people to engage with their community. This can lead to social isolation and correlates with social disadvantage.

Our response:

- create an urban form that encourages active travel (see ACT Planning Strategy)
- continue implementing the ACT Accessible Public Transport Action Plan
- implement minimum coverage standards to ensure services provide good access across the city within a reasonable walking distance of households
- continue to deliver community transport for people who can't walk to a regular route, including community buses, taxis and other demand responsive and accessible transport.

## **Sustainable**

Transport accounts for 22% of the Territory's greenhouse gas emissions. Two ways to reduce emissions in the transport sector will be progressed through Transport for Canberra:

- change the balance of travel towards low-emission transport through mode shift to public transport, walking and cycling and providing associated infrastructure, programs, pricing, policy and promotion
- increase the efficiency of transport through encouraging use of 'greener' passenger vehicles (including electric vehicles and best in class purchase incentives), encouraging higher numbers of people per vehicle through carpooling and 3-for-free, and optimising the road network to enable the efficient movement of people and goods.

## **Safe**

Encouraging more people to ride bikes or walk is very important. The ACT Road Safety Strategy 2011–2020 and ACT Road Safety Action Plan 2011–2013 recognise the need to strengthen connections between road safety and sustainable and active travel policy and planning. Efforts under the action plan include:

- speed management and traffic management measures to support more active streets
- education and awareness programs to encourage better behaviour by all road users
- a safe systems approach to designing and delivering transport infrastructure for all modes of transport.

Transport for Canberra responds to these drivers for change. At the heart of the new vision are detailed policies for public transport, active transport, roads, freight and parking, and strategic transport infrastructure. Transport for Canberra aims to create a transport system that:

- is **integrated** with land use planning
- makes **active** travel like walking and cycling the easy way to get around
- provides **sustainable** travel options and reduces transport emissions
- is **safe** for moving people however they get around
- is **accessible** for everybody whatever their level of mobility at any time or place
- is **efficient** and **cost effective**, providing value for money for the government, business and the community by managing travel demand across the whole transport system, and driving business growth and socio-economic development through an efficient transport system.

## 1.5 Community input to Transport for Canberra

Transport for Canberra has been developed over the past three years with input from the Canberra community at forums like *Time to Talk: Canberra 2030* and Sustainable future. Discussion involved students, youth, families, seniors, peak bodies, industry and government partners within the

ACT, state and Commonwealth, and ACT Government directorates.

The draft Transport for Canberra had a six-week public comment period, with many comments incorporated in the final policy, including better weekend services, increased focus on transport and land use planning interaction, and more information on emissions reductions. (See the Transport for Canberra: Time to Talk Transport Outcomes Report at [transport.act.gov.au](http://transport.act.gov.au))

As we implement Transport for Canberra we will continue to work with the community, peak bodies, businesses, the public sector, schools and tertiary institutions, community councils, vulnerable groups and others with an interest in transport. The detail of many of the actions in this policy will need local knowledge and input to help us deliver services, programs and initiatives. To help facilitate these ongoing conversations, we will add transport as a standing agenda item to the Planning and Development Forum.

## 1.6 Highlights of transport achievements

Since 2001, the government has invested over \$1 billion in improving the ACT's transport system. Our road, public transport, walking and cycling networks have been expanded and maintained. We have worked in partnership with the private sector and community to construct state-of-the-art public transport facilities like the new Belconnen Bus Stations. See Table 1.

### 1.7 Consultation action

#### ACTION 1

Continue to work with the community, peak bodies, businesses, the public sector, schools and tertiary institutions, community councils, vulnerable groups and others with an interest in transport to deliver Transport for Canberra, including adding transport as a standing agenda item to the Planning and Development Forum.

**TABLE 1: TRANSPORT HIGHLIGHTS 2001–11**

	Highlights	\$\$
<b>Active travel</b>	<ul style="list-style-type: none"> <li>• Directional signage on community paths between town centres and around Lake Burley Griffin.</li> <li>• Woden to Dickson on-road cycle lane.</li> <li>• Cotter Road (Adelaide Avenue to Stromlo Park) on-road cycle lane improvements.</li> <li>• New footpaths and maintenance of existing cycle path and footpath network.</li> <li>• New cycle path facilities as part of the capital upgrade program.</li> <li>• Lake Burley Griffin signage.</li> <li>• Bike and Ride cages, lockers and rails at bus stops.</li> <li>• Bike racks on buses.</li> <li>• Travelsmart Belconnen, delivered during 2006–07 to 11,000 households, showed sustained travel behaviour change, with householders in the target area reducing their car travel by 12.7%.</li> <li>• ACT became a signatory to the International Charter for Walking.</li> <li>• Walking benchmarking survey shows strong support for greater investments in walking.</li> </ul>	\$80m+
<b>Public transport</b>	<ul style="list-style-type: none"> <li>• Transitway feasibility and construction (Northbourne Avenue, Belconnen to City, Canberra Avenue), new stops and bus stations, including the ACT's first transit oriented development at Belconnen Bus Stations.</li> <li>• A growing network of Park and Ride and Bike and Ride facilities.</li> <li>• Introduction of Red Rapid, Blue Rapid and Parliamentary Zone Frequent Network.</li> <li>• MyWay ticketing system and funding committed for real time passenger information.</li> <li>• New and replacement bus fleet with cleaner and wheelchair accessible buses to comprise 55% of the fleet by December 2012.</li> <li>• Light rail proposal submitted to Infrastructure Australia.</li> <li>• Northbourne Avenue corridor study (including Gungahlin to City and light rail options).</li> <li>• Google Transit journey planner.</li> <li>• Free travel on ACTION buses for all Canberrans over 75 and concession travel holders of the ACT Services Access Card for refugees.</li> </ul>	\$300m+
<b>Roads, parking, freight and fleet</b>	<ul style="list-style-type: none"> <li>• Completion of major arterial roads including Gungahlin Drive Extension, Monaro Highway and airport roads upgrades.</li> <li>• Key national freight connection—Majura Parkway—funded.</li> <li>• Parking management in the city and town centres.</li> <li>• Green Vehicles Duty Scheme (revenue neutral).</li> <li>• Better Place announcement to bring electric vehicle options to Canberra.</li> </ul>	\$700m+
		\$1b+

CANBERRA  
2030

## Time to Talk—key messages from the community about transport

*There will be a shift from [Canberra's] current dependency on the motor vehicle to more sustainable options. Electric cars, walking and cycling and the newly built light rail/sustainable public transport system will make Canberra a city less dependent on motor vehicles. By 2030 new development will create a more compact city. ...Increased density will help support more efficient public transport as well as vibrant neighbourhood centres. There will be more opportunity to work close to home and to access community services and amenities.*

*Canberrans recognise the relationship between Canberra evolving as a more compact city and its development as a more accessible city. People value that Canberra is easy to get around and want to keep this in 2030. They understand the convenience of having a car and that a challenge is for Canberrans to reduce their reliance on private vehicles. ...A general preference is a shift to more sustainable transport options including bus shuttle services, transport corridors, light rail, and building on safe walking and cycling options. People indicated support for infill development along transport corridors and around centres to achieve this shift to more sustainable transport options, and more convenient, affordable public transport.*

### Population growth

An ageing population means transport planning should consider how to provide the best transport options to meet social inclusion goals and help people age in the community. The community buses and the fixed route bus network provide some of this access already, and will need to grow and change in the future to respond to changing demographics. Ageing in the community will also be supported by enhancing the walkability and

cycleability of our neighbourhoods and strengthening the Frequent Network through integrated transport and land use planning.

### Management of energy

Managing energy use in transport, particularly around fuel supply and greenhouse gas emissions, is an important part of creating a sustainable transport system. Transport accounts for 22% of the Territory's greenhouse gas emissions. The two main ways to reduce emissions in the transport sector are: to change the balance of travel towards low-emission transport through mode shift to public transport, walking and cycling, by supportive infrastructure, programs, pricing, policy and promotion; and to increase the efficiency of private vehicles through: pricing policy to increase the uptake of more fuel efficient passenger vehicles; encouraging higher numbers of people per vehicle through carpooling and 3-for-free; and optimising the road network to facilitate the efficient movement of people and goods.

### Housing diversity

Increased density around public transport corridors will help create a community where people don't have to rely on the car for every trip. The Belconnen Bus Stations on the Blue Rapid corridor and new developments on Flemington Road are examples of Transit Oriented Development, integrating bus stations into the shopping mall, community precinct, and current and future higher density apartments, terraces and town houses. Rapid transport corridors and transformative projects like Northbourne Avenue will create further opportunities for high quality Transit Oriented Development in Canberra, maximising transport access and encouraging high quality urban design outcomes.

### Integrating transport and land use

Canberra's town centre nodes and well-developed arterial road network provide a solid base for the existing public transport corridors (the Blue Rapid and Red Rapid) and their future expansion. Active travel is increasingly recognised as a key feature of the world's best cities. The community has identified the need to develop more permeable urban environments that encourage walking and cycling, and this will be progressed through Transport for Canberra and the ACT Planning Strategy.

### A compact city

A low density urban form combined with lack of access to good transport options can lead to social isolation. There are parts of our city where high frequency public transport may be desirable, but can be difficult to deliver at high frequencies due to circuitous road networks and very low density. A compact city supported by quality urban development will both support mass public transport on major corridors (e.g. existing Red and Blue Rapid services, or future light rail/bus rapid transit), and help make active travel the obvious choice for local trips.

### Canberra's role in the region

The government recognises the importance of strong public transport links between Queanbeyan and Canberra, and continues to work towards more effective cross-border transport services through the Eastern Regional Transport Taskforce. The regional population immediately adjacent to Canberra is projected to grow to over 500,000 by 2030, and transport planning needs to plan for Canberra's role as a major regional centre.

# 2.

## PUBLIC TRANSPORT



## 2. PUBLIC TRANSPORT

### Public transport objectives:

- A frequent public transport network supported by services, planning, infrastructure, land supply and location of facilities.
- A public transport system that provides accessible mobility for everyone.
- A public transport network that maximises choice, with excellent options like Park and Ride and Bike and Ride.
- A public transport system that is ready for the future, with smart systems (real time passenger information, journey planners and accessible information) and smart fleet, including clean buses and active consideration of light rail.

An effective public transport system needs to be fast, frequent, reliable, comfortable and safe for passengers. It must be integrated with and supported by urban planning and design.

The government has committed to increasing the public transport share of all work trips to 10.5% by 2016 and 16% by 2026 (see Chapter 6 for detail). These goals have been set at a time of increasing demand on our public transport system to:

- support strong growth in the city and town centres
- respond to the climate change challenge and economic pressures from rising fuel prices
- address the social inclusion and access needs of a growing number of Canberrans.

The 2004 Sustainable Transport Plan identified the need for further planning around the shape of the long-term public transport network for the ACT. In 2009, the ACT Government released the Draft Strategic Public Transport Network Plan to set a transport direction for the next 20 years. It proposed a Frequent Network to establish transport corridors; an express network for commuter demands during peak periods; and a coverage service to meet social goals and general mobility needs.

The draft plan received many positive comments during community engagement in 2009 and 2010, particularly regarding its ambition to better integrate public transport with land use and use the Frequent Network as a key tool for that purpose. The main themes identified by the public, community and business stakeholders informed the content of Transport for Canberra, and included:

- a role for light rail or other mass public transport
- the extent, frequency and duration of services and the need for weekend routes to mirror weekday routes
- interchanging—the balance between direct services and the greater efficiencies that can be achieved through interchanging
- land use planning policy impact
- integration of cross border planning, particularly to the east (Queanbeyan)
- Frequent Network alignments
- location of cultural, recreational, and educational facilities
- road infrastructure and public transport priority
- the importance of real-time information and online journey planning.<sup>11</sup>

### 2.1 The Frequent Network

Canberra already has some of the most heavily patronised public transport corridors in Australia, with the existing Blue Rapid and Red Rapid services providing good frequency and reliability and attracting strong patronage and demand throughout the day. This is a solid base on which to build the new efficient Frequent Network, the backbone of an integrated transport system where the key message is ‘for access to fast, frequent and reliable public transport services, locate on the Frequent Network’ (see Map 2).

The Frequent Network builds on the success of the Blue Rapid 300-series (previously known as the ‘intertown’ service), which has provided rapid, frequent connections between town centres since the 1970s.

The long-term (2031) Frequent Network<sup>12</sup> establishes permanent public transport corridors with 15 minute or better frequency for people travelling across and within the city, with consolidation of some suburban routes to build efficiency into the system and shorten travel times.

Four types of service make up the public transport network: rapid, frequent local, peak express and coverage (see Table 2).

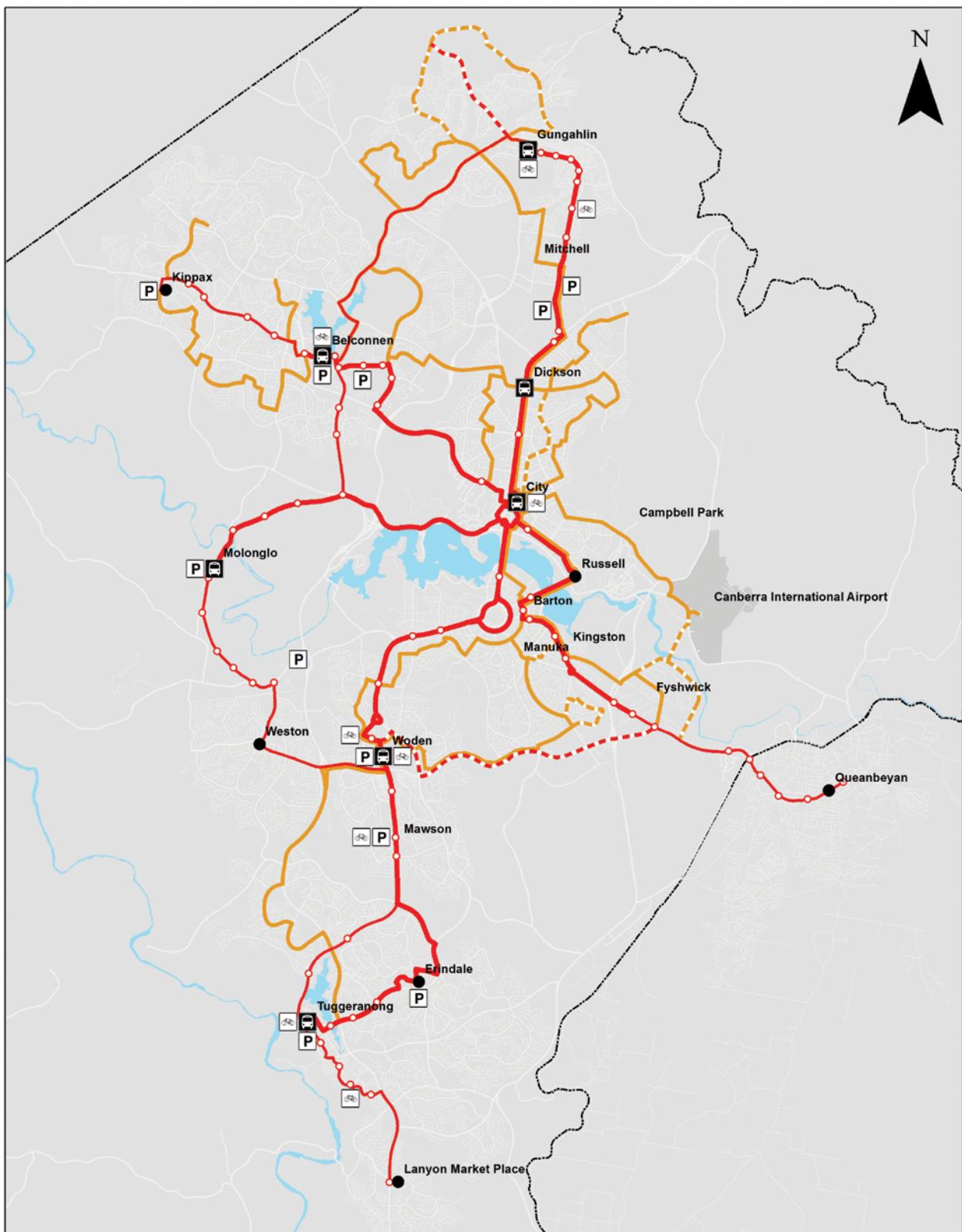
The ACT Government has already started planning and delivering infrastructure and services to support this significant network growth. The maps at Appendix A show the current extent of the Frequent Network in the existing public transport network, and indicative networks for 2016 and 2031 showing how the network may grow over time, subject to investment decisions and community input.

**TABLE 2: SERVICE TYPES IN THE PUBLIC TRANSPORT NETWORK**

Service type	Frequency	Service span	Stopping pattern, catchment and speed standard	Purpose	Example in existing system
Rapid	15 minutes or better	All day and evening, 7 days a week	Widely spaced stations or major stops (500 – 2000m apart)  ~ 40km/hr (including stops)  Catchment: 750m –1km from each stop/station	Public transport corridors for all day, high speed travel across the city along dense corridors. Analogous to a metro or rapid public transport system, and location for future light rail or bus rapid transit. Rapid services carry the majority of passengers, and can help achieve mode shift goals for work trips and associated emissions reductions.	Blue Rapid  Red Rapid
Frequent Local	15 minutes or better	All day and evening, 7 days a week	Local stops every 400 – 500m  ~ 20km/hr (including stops)  Catchment: up to 500m (5-7 min walk) from each stop/station	Local services in areas of current or future denser development, including some group centres. A frequent local service can help create more active streets and further develop employment and residential density. This type of service will connect to rapid services at bus stations and town centre nodes for longer trips. Can drive patronage and help achieve mode shift goals.	Parliamentary Zone Frequent Network: the Gold line and Green line layer routes to create efficient frequency.
Peak Express	Depends on demand in the peak between work/ suburbs	Peak period only, peak direction only weekdays only	Long, non-stop segment to/from major employment destinations at peak. Speed is route specific, but routes will use regular arterial roads outside the normal bus network (e.g. Gungahlin Drive, Monaro Highway).	Direct service from residential or Park and Ride facility to major employment destinations. Supplements but does not compete with rapid services. Can help achieve mode shift goals.	Xpresso routes from suburbs to City and Parliamentary Zone.
Coverage	30 minutes or better by 2021 (see minimum coverage standard in 2.9)	All day, with less frequent service at evenings and weekends	Local stops every 400 – 500m  No speed standard  Catchment: up to 500m (5-7 min walk) from each stop/station	Local and feeder services in lower density areas away from the Frequent Network. Provides local access and is provided for reasons of inclusion rather than patronage.	Local routes across suburban areas.

### Rapid + Frequent Local = Frequent Network

The rapid and frequent local services together are called the Frequent Network.  
This is the back-bone of the public transport network, now and into the future.



**Map 2: 2031 Frequent Network**

	Station		Rapid Service: every 2-10 min or better all day
	Major Stop		Rapid Service: every 15 min or better all day
	Rapid Stops		Potential Rapid Service
	Park and Ride		Frequent Local Service: every 15 min or better all day
	Bike and Ride		Potential Frequent Local

Distance travelled in 10 minutes by mode  
Scale

0 800 m  
Walking 4.8 km/h  
2.5km 3.3km  
Cycling 15 km/h 20 km/h  
6.6km  
Rapid Service 40 km/h

#### MAP 2: THE 2031 FREQUENT NETWORK

Coverage and peak express services are not shown on this map as they are subject to short term decisions based on population and employment locations at the time. See Appendix B for an indication of how the network might grow 2012–16 and then to 2031.

## 2.2 Public transport and land use

The key message of the Frequent Network is that future developments—whether by the government, private or community sector—will need to be on or near the Frequent Network service to benefit from the frequent and reliable public transport service it will provide. This is consistent with the ACT Government’s new planning strategy, which outlines an approach to creating a more compact and sustainable city by concentrating new development along transport corridors defined in the Frequent Network.

The draft ACT Planning Strategy guides urban intensification—increased residential density and new commercial uses—to our town centres and along the Frequent Network. This will emphasise Canberra’s metropolitan structure and help make Canberra more accessible. It will help facilitate more cost effective, sustainable travel for individuals and the community by matching public transport, walking and cycling to people’s daily travel patterns.

The intensification will take place gradually with detailed master planning and transport studies to:

- address the location and design of public transport facilities
- identify and improve links in the cycling and pedestrian networks
- review and manage parking demand
- manage local traffic issues, including safety for all road users.

This whole of transport approach will help focus on public transport for local and cross-city trips, and help make cycling and walking easier, safer and more pleasant. Direct routes to centres and schools have considerable benefits for our community, increasing people’s physical activity and participation in the community.

### How will the Frequent Network respond to change?

Since it was first released in 2009, the Frequent Network map has been modified and adapted in response to community, private and public sector feedback and land use change opportunities identified through ongoing master planning. It is very important that the network (particularly the rapid corridors) be settled and adopted in policy and planning to give certainty to planners, developers and every Canberran about the location of the most frequent and highest quality public transport. A summary report of community comments on the previous version of the network can be found at [transport.act.gov.au/references.html](http://transport.act.gov.au/references.html)

Modifications have been made in Tuggeranong Valley, where the Tuggeranong to Lanyon line has been upgraded from frequent local to rapid because of its high volume character and widely spaced stops. A possible frequent local has been added connecting Tuggeranong Town Centre with the two Kambah group/local centres via East Greenway, and on to Woden via the Tuggeranong Parkway and Hindmarsh Drive. Changes in north Gungahlin capture new group and local centres. In Belconnen, the frequent local service north of Southern Cross Drive connects Kippax to the Charnwood group centre. The airport frequent local has been modified to show a potential loop public transport service connecting the City – Russell – Airport – Fyshwick – Eastlake/Kingston – Barton – City, which would be possible with construction of an airport to Fyshwick road connection, which is being explored in current planning.

New frequent local lines may also be added where denser, transit-oriented developments are planned. These discussions will occur through implementation of the ACT Planning Strategy, with new transport/land use corridor studies and master planning across the city. The rapid corridors will be confirmed through a Territory Plan variation process.

### Greenfield developments

Molonglo Valley will continue to develop over the next 20-30 years. Designed with a public transport perspective from the outset, Molonglo Valley has a single arterial road (John Gorton Drive) on which the group centres and major centre will be located, and a simple and easy to navigate set of roads designed to provide an effective Frequent Network and limited coverage service.

Similarly, East Lake is being designed as a sustainable development with public and active transport being considered from the beginning of the planning process.

Transport infrastructure for East Lake will include excellent pedestrian and cyclist facilities. There will be links with the rapid corridor on Canberra Avenue, and a frequent local service in a straight line through the centre of





the development linking Fyshwick to Barton and the city. Because all residents would be within 500m of a frequent service, no additional coverage routes will be required. East Lake could also be considered as an alternative through-route to Queanbeyan for rapid services between the two cities. The East Lake development is also within a cycleable distance to major employment areas and will be a priority location on the new commuter cycling master plan.

Future developments to the east of the Territory, including Eastern Broadacre, Tralee and Googong will benefit from aligning their highest density land uses to the rapid network. Industrial land, like warehouses or storage, is usually motor vehicle oriented because of its low-density employment and time of demand. However, high-density employment in industrial areas (e.g. call centres) should be located on the Frequent Network if all day good public transport access is expected. Limited fixed route or flexible transport options may also be considered for industrial developments where demand is unlikely to justify a fixed route service.

Many sporting and recreational facilities are already located on the current or proposed Frequent Network routes, meaning the Frequent Network should be able to provide much of the transport needs for major events. In the planning for areas around bus routes, consideration will be given to identifying land for community facilities. Land next to bus routes can have a higher value which sometimes reduces the availability of land for community facilities and the like.

### 2.3 Costs and benefits of the Frequent Network

Economic analysis of the 2031 Frequent Network resulted in a benefit-to-cost ratio of 3.59—a return of \$3.59 for every \$1 invested in the Frequent Network. Analysis also found the required capital investment (a 48% increase in investment per capita by 2031, or around 2% increase per

annum) is economically justified, based on the community benefits resulting from the projected patronage and mode share increases.<sup>13</sup>

### 2.4 Mass public transport and bus fleet

Mass public transport options can be more actively considered given Canberra's environment of separate districts and town centres well-connected by public transport corridors, and the new ACT Planning Strategy's vision to encourage land use development along these corridors. The 2031 network has been designed for the current bus-based fleet, but will be adaptable to, and supportive of, mass public transport technology like light rail, bus rapid transit or other technology. To help plan for mass public transport, we will focus on defining the Frequent Network in policy and planning so other city-building activities can respond to it.

All our infrastructure feasibility studies include assessments of alternative public transport technology. For example, the City to Gungahlin transit corridor study will see the ACT Government work in partnership with the National Capital Authority and the Canberra community and business sector to create a vision for a transit-oriented corridor. Mass public transport will make the most of the development opportunities from existing land use settings and highlight the national significance of this entry to Canberra. The ACT Government will continue to explore funding opportunities for light rail and bus rapid transport with the Australian Government and private sector, and planning for light rail (or bus rapid transit designed for later conversion to light rail) is at the centre of planning for this corridor.

#### A role for buses

Whatever mass public transport we choose for the city, there will always be a place for an efficient and effective bus network. ACTION and the government

will continue to purchase the most fuel-efficient bus fleet that meets operational needs. The current fleet purchasing program includes 'Euro 5' clean diesel buses, which are significantly more environmentally friendly than the older diesel buses they replace.

While we commonly hear that lower patronised services should be provided by smaller, more fuel efficient vehicles, there are a number of reasons why large buses continue to be used to provide these services:

- Large buses are already available as they are purchased to provide for the very busy services during peak periods. To maximise their use, these vehicles continue to be used during the rest of the day.
- The most expensive part of a bus service is not the bus itself, but the operating costs including drivers, fuel and maintenance. These costs are fixed, whatever the size of the bus.
- Most transport companies limit themselves to a reduced range of vehicles in the fleet so as to minimise maintenance costs and reduce the need to carry a wide variety of spare parts.

These operational reasons for retaining larger vehicles make it even more important to look at ways to reduce the emissions of our bus fleet.

ACTION has been investigating alternative fuel sources to reduce its fleet emissions as part of the ACT Government's commitment to carbon neutrality in government operations by 2020. In 2010 ACTION piloted a small trial of bio-fuel alternatives with positive results. The low emission vehicle strategy (Action 25) will include initiatives to help create a lower emission public vehicle fleet to help meet our emissions reduction targets.

Based on ACTION's average fuel consumption figures, a transition to bio-fuels has the potential to see an

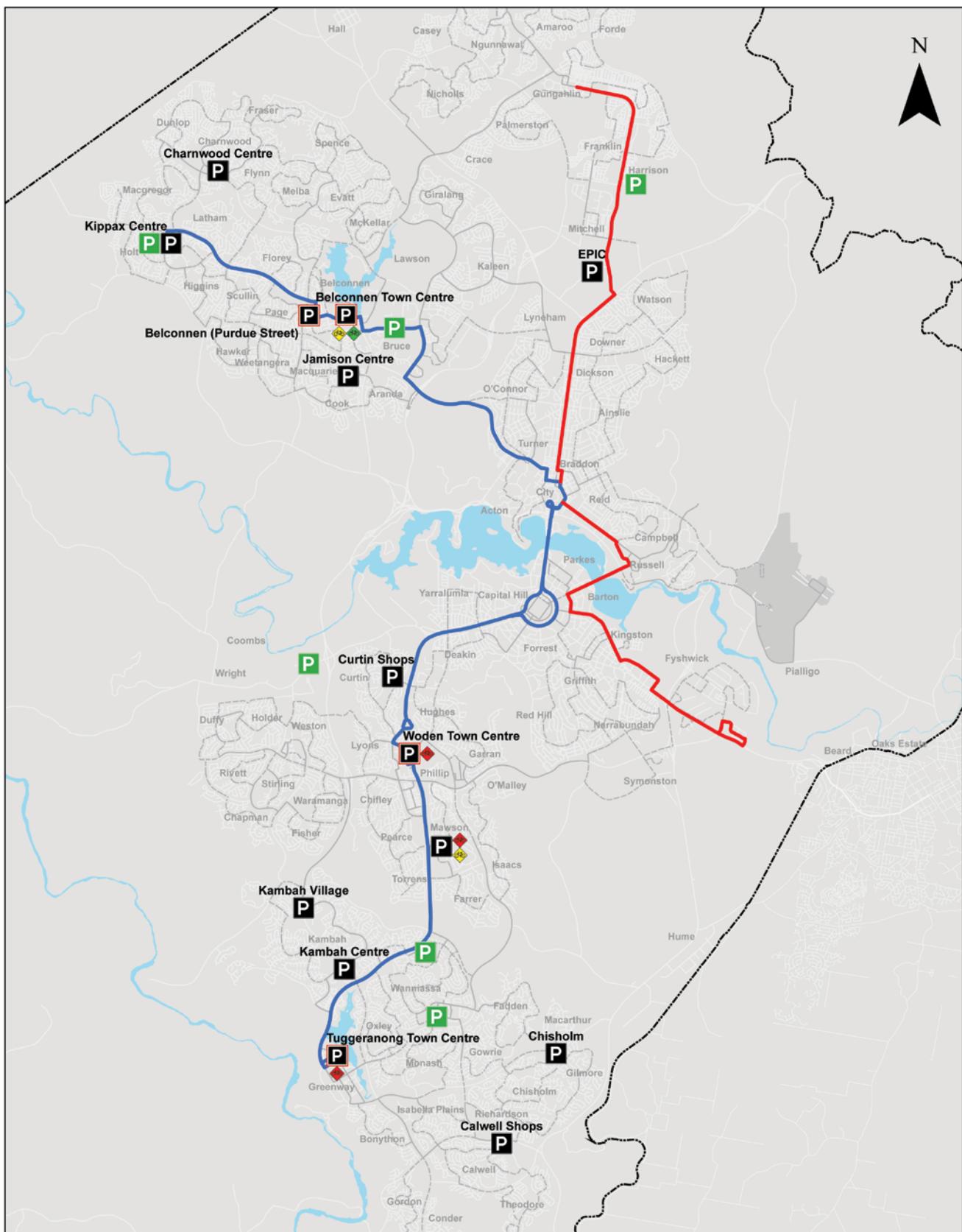


annual offset of nearly 4000 tonnes of CO<sub>2</sub>, reducing the ACT Government carbon output by approximately 2% in 2011 terms.

The government is aware of limitations on long-term fuel supply and will continue to closely monitor advances in sustainable transport technology options for the bus fleet, including trials of diesel/electric hybrid buses in Melbourne and Brisbane, and the national heavy vehicle emissions tool being developed by Victoria.

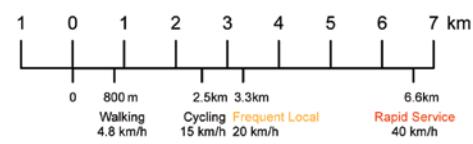
## 2.5 Park and Ride

A network of Park and Ride and Bike and Ride facilities will be built along the Rapid service routes, enroute to town centres rather than within them (see Map 3).<sup>14</sup> These facilities will allow people more flexibility in designing a journey that suits their needs, and provide better access to the rapid service already in place. Making Park and Ride more attractive and reducing car only trips will reduce the need for additional road capacity and reduce the demand for parking in the city and major employment centres where the demand for land and parking, and the level of congestion, is increasing. Some existing Park and Ride facilities will continue to be served by peak express services (Xpressos), but most new facilities will service the Frequent Network.



**Map 3: Park and Ride Facilities**

- P** Existing Park and Ride - Permit Required
- P** Existing Park and Ride
- P** Future Park and Ride
- P** Park and Ride under Construction
- ◆** Bike Locker
- ◆** Bike Cage
- ◆** Bike Rail
- Blue Rapid Route**
- Red Rapid Route**



Distance travelled in 10 minutes by mode

When planning a Park and Ride facility, the government will consider:

- location of the site relative to the Frequent Network (priority areas will be on the corridors, but away from pay parking sites to eliminate the need for a permit system)
- costs and value for money for the Territory
- impact on the surrounding environment
- selection of appropriate locations for suburban Park and Ride facilities, including availability of existing under-utilised surface parking areas
- appropriate capacities for such facilities based on projected demand
- design, landscaping and aesthetics
- vehicle security, passive surveillance, lighting and personal safety.

## 2.6 Bike and Ride

The government will continue to roll out new Bike and Ride facilities to encourage healthier and more active travel choices for Canberra commuters by allowing users to ride part of their journey by bicycle and travel the remainder of their journey by public transport (see Map 4). As well as continuing to install the popular free bike racks on ACTION buses, free bike cages, lockers and rails are being provided at bus stops, bus stations and Park and Rides on the Frequent Network.<sup>15</sup>

The government's policy on bike racks on buses was introduced in 2007 to allow passengers to cycle for part of their journey. Bike racks have been progressively fitted to buses on high frequency routes; the continued focus will be to provide bike racks for rapid and frequent local services, subject to safety and operational requirements. For example, some large capacity buses running during peak periods are not able to be fitted with bike racks because

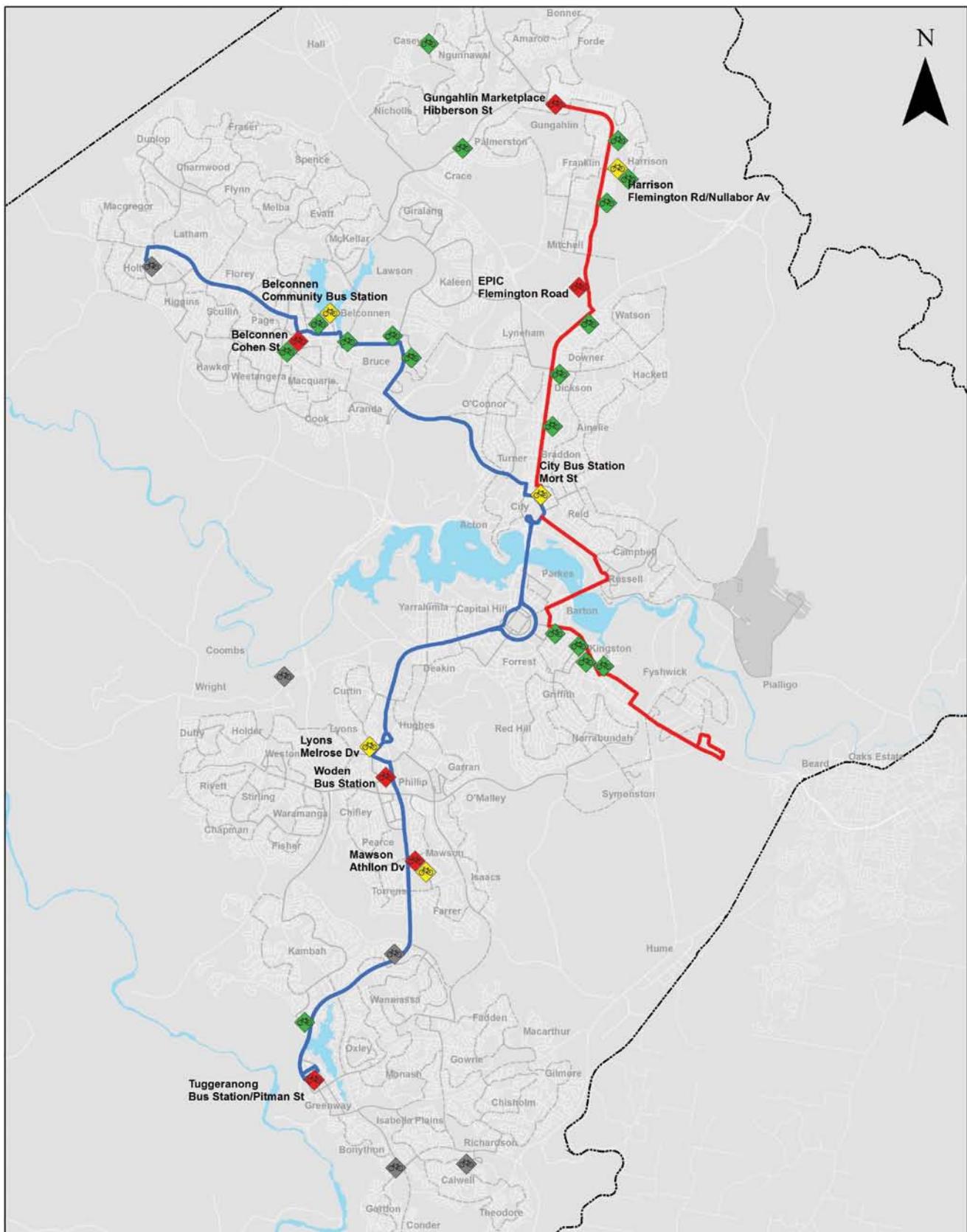
of safety assessments, impacts on suburban infrastructure, and national vehicle standards. However, because these high capacity buses run only on the rapid services, a bike rider will generally be able to get on a bus with a rack within five minutes during peak periods, and within ten minutes during off peak periods.<sup>16</sup> By 2012, 80% of the ACTION fleet will be fitted with bike racks. Future fleet purchases will include consideration of ability to fit bike racks.

## 2.7 Public transport infrastructure and systems

The bus fleet will grow so we can implement the Frequent Network. This will deliver greater frequency and improved service quality with each bus network change from now until 2016. By 2016, the current Blue Rapid service will extend from Kippax in the north-west to Lanyon in the south. The existing Red Rapid service will extend from Gungahlin to the Direct Factory Outlet in Fyshwick via the City, Russell, Barton, Kingston and Fyshwick (including East Lake). Rapid services between Queanbeyan and the ACT will be established. Rapid services will be introduced into Molonglo Valley as it develops. Appendix A shows the projected development of the Frequent Network from 2012 to 2016 to 2031.

Northbourne Avenue and the Gungahlin to City corridor will be the government's priority corridor for new infrastructure investments in the short to medium term, with mass rapid transit to be considered following the results of the 2011–12 study. The Belconnen to City transport corridor is used by more bus passengers than any other corridor, and is one of the most congested parts of the road network. The construction of a transitway along this corridor by 2020 will significantly improve commuting on this corridor. By 2031, a network of transitways will link Gungahlin to the City, Woden to the City, Woden to Tuggeranong, Molonglo





**Map 4: Bike and Ride Facilities**

- ◆ Bike Locker
- ◆ Bike Cage
- ◆ Bike Rail
- ◆ Future Infrastructure
- Blue Rapid Route
- Red Rapid Route
- - Network 10 Routes



Distance travelled in 10 minutes by mode

Valley to Belconnen, and Queanbeyan to Canberra. The transitways will accommodate the rapid services and ensure more reliable services and faster commute times, particularly in peak periods, through measures such as:

- segregated, high speed, mass public transport infrastructure (e.g. light rail or bus rapid transit)
- bus priority and separate right-of-way on some parts of the routes
- traffic signal priority measures, giving buses or mass rapid transit priority over other traffic
- T2/T3<sup>17</sup> arrangements for some freeway-style roads without intersections to help peak express buses and high occupancy vehicles avoid congestion during peak periods (generally not on the rapid corridors — refer map at Appendix B)
- new, innovative and upgraded stations and stops
- real time information systems for public transport.

Transport for Canberra will deliver more Park and Ride and Bike and Ride facilities to encourage multi-mode commuting and boost patronage of the Frequent Network. Increasing Park and Ride facilities will be critical to boosting bus patronage in the first years of the new Frequent Network while the planning strategy begins to deliver increased residential densities along the Frequent Network corridors.

Providing a comfortable and safe environment for waiting passengers will make public transport more attractive. By 2016, new bus stations will be located at Gungahlin, Dickson, Erindale, Barton and City West. A major stops program will be accompanied by the roll-out of new bus shelters—including bike rails—across the entire Frequent Network, extending to major suburban bus stops.

Existing interchanges will be audited to ensure they are accessible and safe.

Real time passenger information will be delivered by 2013 to complement the new MyWay ticketing system. Real time systems deliver instant information about bus locations via dynamic displays at interchanges, major stations and other stop locations as well as via an SMS capability and an integrated ACTION website. This can co-ordinate and optimise the operation of the public transport system, speeding up travel times. There is evidence from other cities that real time passenger information can increase patronage by between 10 and 20%.

A good transport system is accessible by everyone, however they choose to travel. As a part of Transport for Canberra, the ACT Government will continue to deliver on its Accessible Public Transport Action Plan and will pursue accessible parking, public transport, cycling and walking infrastructure for all Canberrans. Priorities will include new wheelchair-accessible buses, better and more useable transport information, the implementation of mobility access plans in the City and town centres, and better information to support transport choices.



## 2.8 Transport for mobility and social inclusion

Transport is vital to creating a connected, inclusive, liveable community. The *ACT Human Rights Act 2004* promotes the rights of people to live in a safe and cohesive community, and champions equity of opportunity, access and participation. Transport is critical to enabling access to, and participation in, services such as health and education, which are critical in ensuring people can reach their potential and ensuring their wellbeing.

Transport for Canberra and the ACT Planning Strategy work together to locate and design new developments, and upgrade existing urban areas, so:

- there is less need to travel to access services and activities as they are mixed in with residential development rather than separate from them, and areas are developed so public transport, walking and cycling through the area are easy
- when there is a need to travel, journeys are shorter as services and activities are closer together
- transport has less of an impact on communities and it is safer and easier to travel
- goods and services can be efficiently distributed to business and community
- there is a variety of ways to travel.

### Accessible public transport

To enable people with disabilities to participate in social, health, education, employment and recreation activities, the public transport network must be accessible. The ACT Accessible Public Transport Action Plan 2009–2012 identifies areas in public transport service and infrastructure provision that need to be addressed by public and private providers to improve access to public transport and achieve compliance with the disability standards. These are:

- improve access to, and within, vehicles
- improve access to public transport buildings and infrastructure
- establish communication networks to promote cooperation and collaboration
- provide information in a wider range of accessible and alternative formats
- increase awareness of feedback mechanisms

- public transport service and infrastructure provider development of customised action plans setting out the steps they will take to meet their legal obligations
- improve drivers, customer service staff and community attitudes to people with disabilities
- public transport service affordability.

The ACT Government will continue to implement the plan.

### Coverage service

Public transport serves community needs for both commuting and non-work travel.

The coverage service travels through local suburbs, connecting with the Frequent Network and providing access within the local area. Transport operators need to find the right balance between people's walking distance to public transport, the number of routes and the frequency of service.

Figure 8 shows that frequency can be increased by providing fewer bus routes, but the trade-off is that some people might need to walk a little further. If this is to a more frequent route, the trade-off of a little extra distance can be worth it in travel time savings.

The transport disadvantage map (Map 5) shows that some parts of Canberra have relatively high need for public transport due to socially disadvantaged populations but have relatively low transport supply.<sup>20</sup> For some areas on the fringes of suburbs (e.g. Kaleen, Chapman, Chisholm) the circuitous street layout and hilly topography can make it difficult to provide public transport within a reasonable walking distance of some households, and make the car an easier travel option. Housing near transport corridors such as Northbourne Avenue have access to high frequency public transport. In these areas, transport disadvantage is reduced as people have easy access to

services without needing a car (though barriers such as lack of information may still reduce accessibility).

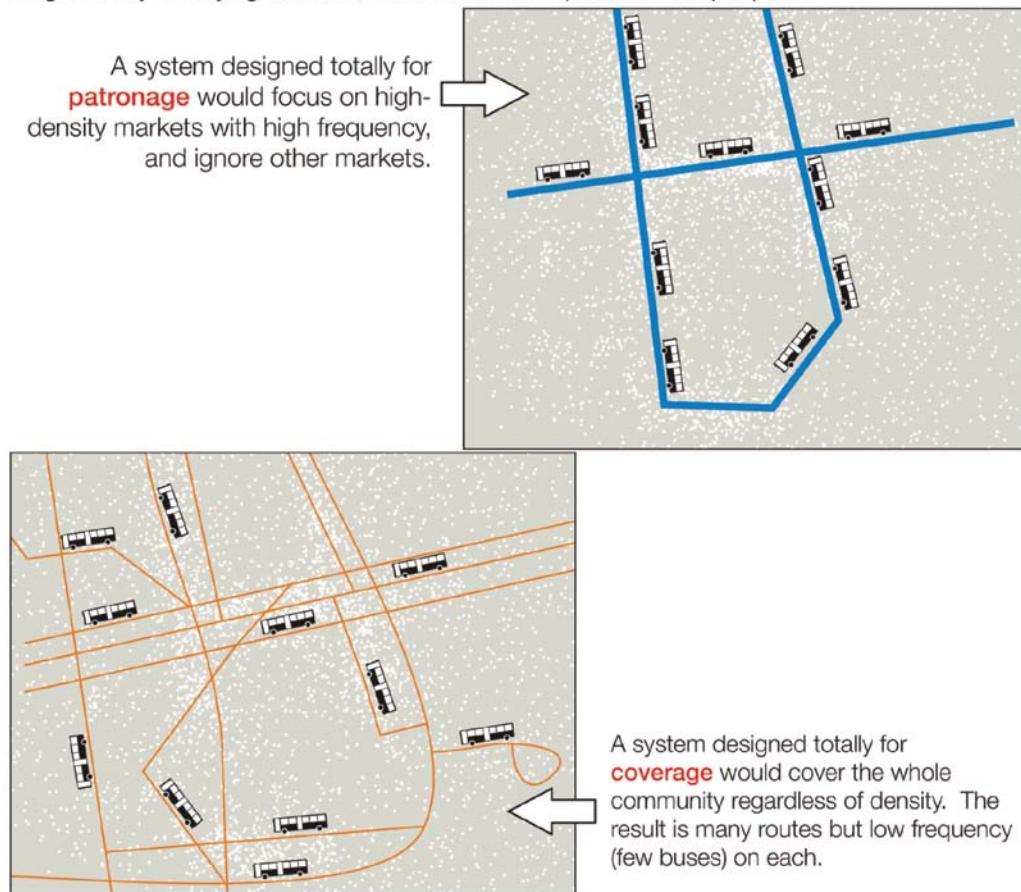
The Strategic Public Transport Network Plan talks about two ways to address this transport disadvantage and ensure public transport provides mobility and access for everyone while still creating fast, frequent connections to maximise use of buses: a coverage cap, where a maximum percentage of public transport monies will be dedicated to lower patronage services; or a minimum coverage standard. The former approach, tested with the community in 2009 during consultation around the Frequent Network, attracted very low levels of support. The government will therefore respond to this socially-driven transport demand by adopting minimum coverage standards for the public transport network.<sup>21</sup>

Most public transport operators set minimum coverage standards based on distances 'as the crow flies'. Because of pedestrian networks and street layouts, this might mean a much longer walk than the standard implies. Before adopting final minimum coverage standards, the government will undertake walkability mapping for the bus network. The draft standards will be finalised in 2013 following this mapping exercise. The current 2012 bus network meets the draft minimum (outlined in Table 3, page 30) of 95% of residences being within 500m of the bus service 'as the crow flies'.

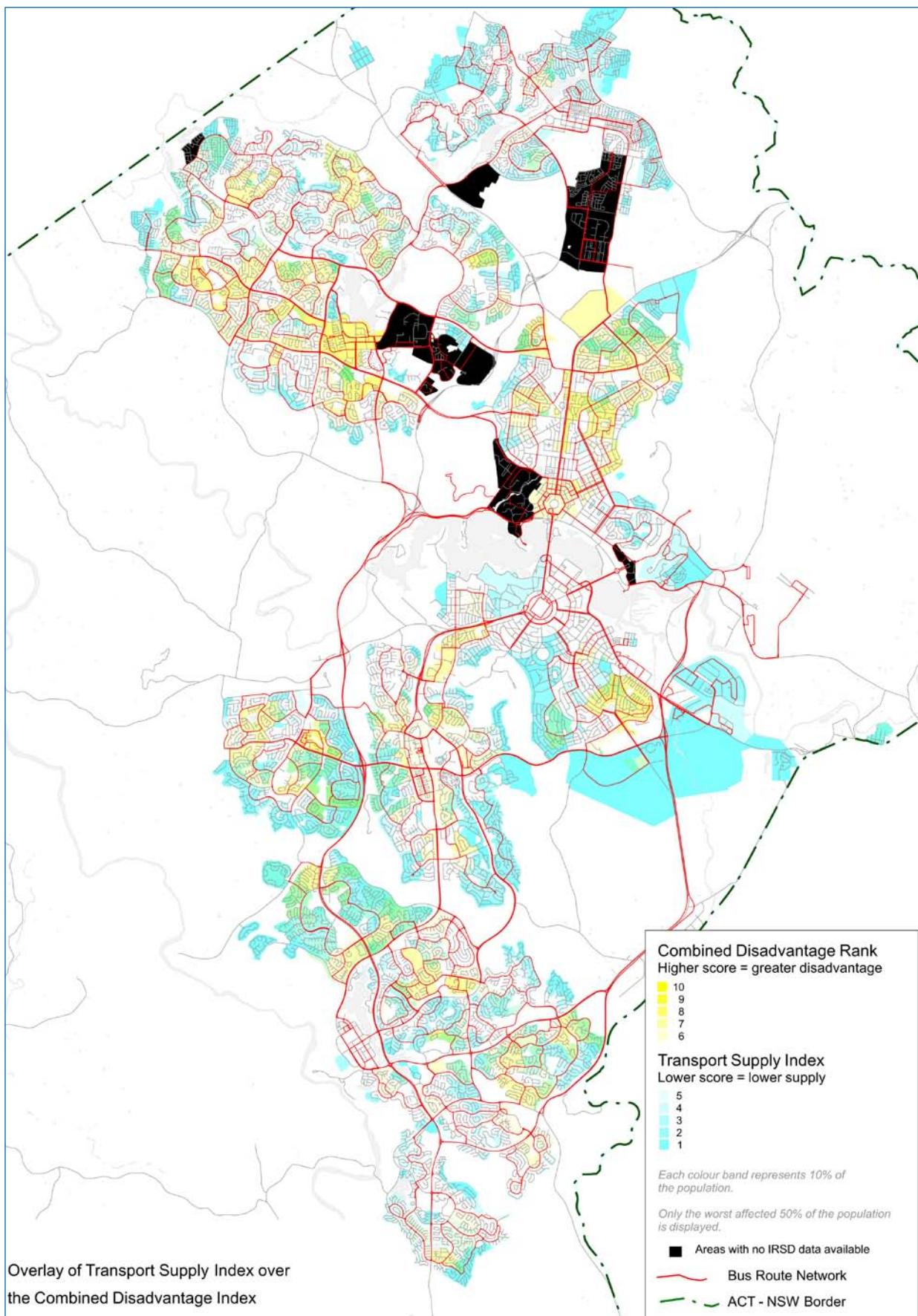
The government will increase the frequency of the coverage service in stages so, in 10 years, all metropolitan suburbs will have a public transport service running every 30 minutes on weekdays (see Table 3).

#### FIGURE 8: PATRONAGE AND COVERAGE GOALS IMPACT ON TRANSIT FREQUENCY

Imagine a city of varying densities, where each dot represents 100 people ...



The ACT public transport system meets both patronage goals and coverage goals, providing the appropriate level of service to the type of urban development it serves.



#### MAP 5: TRANSPORT DISADVANTAGE IN CANBERRA

This map shows a combination of 2006 Census data on social disadvantage (yellow), and transport supply based on the 2011 bus network (blue) to highlight areas of transport disadvantage in shades of green, relative to the ACT average. Updated maps will be created once the 2011 Census data is available.

**TABLE 3: DRAFT MINIMUM COVERAGE STANDARDS**

	Urban form	Weekdays Peak	Off peak	Weekends	Distance to bus stop
By 2016	Between group centres, medium density development and employment locations	30 minutes or better	30 minutes or better	60 minutes or better. Routes same as weekdays.*	500m (5-7 minutes walk) of 95% of households
	Low density, outer suburbs	30 minutes or better	60 minutes or better*		
By 2021	Between group centres, medium density development and employment locations	30 minutes or better		30 minutes or better	500m (5-7 minutes walk) of 95% of households
	Low density, outer suburbs			60 minutes or better*	
By 2031	Everywhere	30 minutes or better			500m (5-7 minutes walk) of 95% of households

\*Flexible transport will be considered for areas and times of low demand

**TABLE 4: WAIT TIME FOR COVERAGE SERVICES**

Station transfer direction	Average wait time 7am to 7pm (2013)	Average wait time 7am to 7pm (2016)
Coverage service to frequent network	7.5 minutes	5 minutes
Frequent network to coverage service	15 minutes	10 minutes



Weekend bus routes will be changed so buses travel the same routes as weekday services. This will create a coherent, easily understood network. This will be a key consideration in the development of the next ACTION enterprise bargaining agreement in 2013.

To achieve these short and medium term goals, coverage service operations, network structure and walking distances will change from what we see today to create a more efficient and accessible public transport service for the community.

### Connectivity

Simple and timely connections are a critical way to improve the public transport service for passengers. Networks that attempt to reduce transfers become complex and inefficient to operate, and can actually add to travel times significantly. Connecting at stations will be an important part of implementing the Frequent Network, and will help us

deliver more frequent services with shorter travel times and faster travel speeds. Supporting these fast, easy transfers will be excellent passenger amenities, real time passenger information systems with accurate departure times, and minimum wait times. ‘Pulse timetabling’ and service coordination will make sure coverage services connect with the Frequent Network and will be part of the new public transport network design guidelines.

The government will adopt new targets to ensure that by 2016, average wait times at stations for connections between coverage and Frequent Network services are between 5–10 minutes, with interim targets of 7.5–15 minutes by 2013 (see Table 4).

## Public transport network design guidelines

The focus on both the Frequent Network and coverage service will guide the planning and design of the public transport network. The design of the network will aim to achieve the following objectives from 2012:

- Progressively implement the Frequent Network.
- Introduce services for newly developing greenfield areas (e.g. Molonglo Valley, remainder of Gungahlin). The timing of initial services to greenfield areas will depend on the type of service the suburbs will have at build-out. Areas where the Frequent Network will ultimately be extended will have higher levels of initial public transport service.
- Implement the minimum coverage standards, with a focus on addressing transport disadvantage.
- Connect major destinations not on the Frequent Network.
- Meet wait time targets.
- Maximise infrastructure investments.
- Use a strong evidence base (MyWay data, census, journey to work surveys, market research) to identify and create efficiencies in the network.
- Create a more customer oriented public transport service.

The study indicates a low threshold at which general public transport services become more effective (for both passenger waiting times and operator costs) to run as a fixed route service instead of a flexible service. In many parts of Canberra, a fixed route may be the best way of providing coverage service because demand is too high for flexible transport. In other places, flexible transport may have a role to play in replacing or supplementing the coverage service where demand is low. This will be explored by the government in future network planning based on MyWay ticketing data and projected transport demand.

The study identified a possible role for flexible transport in the ACT as a means of introducing services into newly developed greenfield suburbs. This will be explored in future network planning.

The study identified the role played by community organisations in providing high care/high value transport services. For 20 years community transport services have been provided in the ACT by Regional Community Services and Ngunnawal Community Care as well as some community and government services that transport clients. The ACT Government will work with the community in 2012–13 to explore opportunities to enhance and optimise provision of these services to address the identified transport disadvantage. A separate study into Aboriginal and Torres Strait Islander transport disadvantage will also be completed by 2012.

## Flexible transport

The Coverage Service Study examined the potential role for flexible transport in the ACT. Flexible transport can vary in a number of ways: the routes can change even while the vehicle is underway; a variety of vehicle types may be used; and a variety of operators may participate in delivering services. Flexible transport can include:

- general public transport services to replace or supplement fixed route services where or when demand is low, or where low density design and circuitous street pattern are unsuited to fixed routes
- high care/high value services to provide community, school or patient transport for people who need particular care and cannot for whatever reason use regular public transport
- premium value services, such as taxis or airport shuttles.<sup>22</sup>

## 2.9 School and tertiary transport

The government focus for future public transport for tertiary institutions will be on more frequent and accessible services, and better promotion of—and access to—existing services.

The education sector accounts for a significant proportion of public transport use. Increasing numbers of primary, secondary and higher education students rely on, or choose to use, sustainable transport modes.

The higher education sector offers an excellent opportunity to increase public transport patronage. Higher education students generate all day demand and all tertiary institutions (Australian National University, University of Canberra, Canberra Institute of Technology campuses at Bruce, Woden and Reid, Australian Catholic University and the Australian Defence Force Academy) are located on current or future Frequent Network alignments. The ACT Government will continue to work with tertiary institutions to investigate the most effective means of promoting even greater use of public transport by their students.

The ACT Government has researched the key public transport needs of the University of Canberra and the Australian National University, both of which are on the current Blue Rapid route. Students and teachers of large tertiary institutions make up a significant part of the public transport market and, with their often more flexible travel patterns, can contribute to significant mode shift. They demand a cost effective and time efficient service, may not necessarily travel in the peak, and are likely to be supportive of efforts to improve sustainability.

For primary and secondary schools, ACTION and the ACT Government will continue to work with school communities to provide public transport services on a demand basis. The active travel to school program (see Chapter 3) will also help schools make active travel the easy travel option.

## 2.10 Taxis

Taxis are another important layer of the public transport network, providing door-to-door 'demand responsive' service at full cost. The government will continue to implement the 2010 review of the ACT taxi industry to create a more responsive and flexible taxi service. Additional Wheelchair Accessible Taxi (WAT) licences will be issued on an annual basis according to need.

## 2.11 Cross border services, regional transport and passenger rail

The ACT Planning Strategy has a strong focus on the ACT's role as a regional centre. Public transport connections to and from the region are part of this role. At present, the major regional public transport services are provided by private bus operators and rail services, with some regional bus connections by Countrylink. The government will work with councils in surrounding regional towns and the NSW Government to discuss transport connectivity between Canberra and the region.

The ACT Government recognises in particular the importance of strong public transport links between Queanbeyan and Canberra. The transport demand is already significant as over 70% of Queanbeyan residents commute to the ACT according to the 2006 Census. The regional transport demand is projected to double as our regional population grows to over 500,000 by 2030. The ACT will continue to work towards more effective cross-border transport services to achieve a seamless connection between jurisdictions—seamless fares, seamless service, seamless timetables and seamless public transport planning. The Eastern Regional Transport Taskforce was established in 2010 to progress this important goal. The NSW/ACT Memorandum of Understanding on Regional Cooperation, signed in 2011, will provide a mechanism to address regional transport issues, and will be an important context for the future work of the taskforce.

### Existing passenger rail

The Canberra Railway Station is connected by a single track spur line from Queanbeyan in NSW. The line runs through Queanbeyan and provides a link via Bungendore and Goulburn to Sydney and other places on the NSW network. Two to three trains travel each day between Sydney and Canberra by CountryLink (NSW Government).





CountryLink service connections to Melbourne and regional NSW operate by coach. In 2010 the frequency of passenger rail services increased to 36 services per week, with an increase in passenger numbers. The future location of the railway station will be part of East Lake development planning: integrated into the fabric of the local area, co-ordinating with the frequent public transport network (particularly the rapid service along Canberra and Wentworth Avenues) and ensuring excellent connections for pedestrians and cyclists.

The future use of the heavy rail lines that used to link Canberra with regional centres will be considered as part of the ACT/NSW Government Memorandum of Understanding on Regional Cooperation (2011).

### High speed rail

The Australian Government's phase one study into high speed rail for passenger transport has identified a corridor following the Federal Highway

as the most suitable access corridor to Canberra, with relatively low environmental impacts, lower costs and a good strategic fit with planning frameworks.<sup>18</sup>

The Canberra Spatial Plan identified a notional route for high speed rail, generally running parallel to the future Majura Parkway. The Eastern Broadacre Planning Study includes an indicative alignment for a high speed rail corridor along the Majura Road corridor, with a slight diversion to the Canberra Airport.<sup>19</sup> The federal government's new report shortlists two stations for further investigation for Canberra. The ACT has undertaken some planning for an airport alignment, but further significant investigations will be required for a Civic station (this will be examined by the Commonwealth in phase 2). The ACT will continue to work with the federal government to support the development of this important piece of national infrastructure, and consider its implications in our own planning.

## 2.12 Public transport actions

### ACTION 2

Adopt the Frequent Network of public transport services to guide planning and design of public transport services, public transport and active travel infrastructure, land supply programs, urban development and location of facilities. This includes:

- a) embedding the rapid corridors in the Territory Plan
- b) working with the Commonwealth to include the rapid corridors in the National Capital Plan
- c) progressively developing the public transport network to implement the Frequent Network corridors and routes in annual reviews (refer maps at Appendix A)
- d) through the implementation of the ACT Planning Strategy, identifying and delivering transit oriented developments on the Frequent Network, and expanding the frequent local network if supported by appropriate land use change
- e) planning the road network of new areas to facilitate the operation of the Frequent Network, including straight and direct collector roads, and roads connecting adjacent suburbs
- f) including queue jumps, coordinated traffic signals, and public transport priority measures in all upgrades, redesigns or new works on rapid corridors
- g) constructing new bus stations and major stops and auditing existing interchanges.

### **ACTION 3**

Actively plan for mass public transport like light rail or bus rapid transit in all new public transport infrastructure planning and design.

### **ACTION 4**

Grow the bus fleet to respond to patronage growth and deliver the Frequent Network, and ensure the new bus fleet minimises greenhouse gas emissions, maximises patronage potential and obtains value for money for the Territory.

### **ACTION 5**

Continue to expand Park and Ride and Bike and Ride facilities.

### **ACTION 6**

Continue to provide and promote bike racks on buses, with 80% of the bus fleet to be fitted with racks by December 2012.

### **ACTION 7**

Continue to work with Queanbeyan City Council and the NSW Government with the aim of creating a seamless public transport corridor between the ACT and Queanbeyan via Canberra Avenue, and work with the NSW Government and regional councils to progress better transport connections to existing and planned developments.

### **ACTION 8**

Adopt interim minimum coverage standards for public transport services, and finalise the standards by 2013 following an analysis of MyWay data and an audit of walking and cycling connections to the public transport network.

### **ACTION 9**

Include seven day network in ACTION enterprise bargaining agreement in 2013.

### **ACTION 10**

Implement the bus network design guidelines based on international best practice for service design, including meeting the average wait time targets identified in Transport for Canberra.

### **ACTION 11**

Complete a review of community transport and Aboriginal and Torres Strait Islander transport disadvantage in the ACT by 2012.

### **ACTION 12**

Use MyWay data to explore the feasibility of trialling flexible transport services by 2013.

### **ACTION 13**

Work with primary, secondary and tertiary schools to promote and provide effective, accessible and convenient public transport options.

### **ACTION 14**

Continue to progress the recommendations from the ACT taxi review.

**ACTION 15**

Design the public transport network to be genuinely competitive with car travel, and continue to invest in infrastructure to support the delivery of the Frequent Network, including smart technology such as real time passenger information and the MyWay ticketing system, stations, stops, transitways and other infrastructure.

**ACTION 16**

Continue to monitor the implementation of the recommendations of the ACT Accessible Public Transport Action Plan.

**ACTION 17**

Adopt an operating speed standard of 40km/hr for the Rapid Service to guide the infrastructure investment program.

# 3.

## ACTIVE TRAVEL



### 3. ACTIVE TRAVEL

#### Active travel objectives

We will create a city where active travel is the easy choice, with:

- more people of all ages cycling and walking for work and other trips
- bike riders and pedestrians interacting safely
- increased physical activity and health
- a strong economy
- reduced spending on health care.



Active travel is travel that involves physical activity—walking or cycling. The ACT Government has long recognised the importance of increasing the uptake of active travel in the Territory and is exploring the establishment of a taskforce to promote and develop physical activity and its associated health, wellbeing, economic, environmental and transport benefits.

Cycling and walking are healthy forms of transport that use energy, land, financial and material resources wisely, with minimal impact on neighbourhoods, city and town centres, urban bushland, air and water quality. They offer a low-cost form of transport and improve access to services and activities for people with otherwise limited transport choices. Both walking and cycling are low-impact ways to be physically active and obtain health benefits, including a healthy weight.

For most people, the easiest and most acceptable forms of physical activity are those that can be incorporated into everyday life. Of the ACT community, 43% of citizens over the age of 18,<sup>23</sup> 19% of Year 6 children<sup>24</sup> and 16% of high school children<sup>25</sup> did not participate in sufficient physical activity to meet the National Physical Activity Guidelines, which recommend adults put together at least 30 minutes of moderate-intensity physical activity on most, preferably all, days of the week and children and young people be moderately to vigorously active for

at least 60 minutes every day. 58% of ACT adults and 22% of children were overweight or obese in 2008.<sup>26</sup> Physical inactivity is the fourth leading contributor to the overall burden of disease in Australia.<sup>27</sup> The direct health care costs of the contribution of physical inactivity to coronary heart disease, breast and colon cancer, stroke, depression, type 2 diabetes and falls is \$1.5 billion in Australia each year. Under the National Partnership Agreement on Preventative Health the ACT has a target that by 2015, 60% of adults and 20% of children meet the National Physical Activity Guidelines (from 50% and 15% in 2009).<sup>28</sup>

#### 3.1 Where we are now

The ACT has significantly higher cycling participation rates than the national average with around 22% of the ACT population riding a bike in a typical week. 46% of children under 10 and 43% of 1–17 year olds ride each week.<sup>29</sup> 40% of Canberrans work less than 10km from home, a distance easily cycled, meaning there is potential for these cycling trips to become more regular.

Canberra has an extensive network of off-road shared paths and on-road cycle lanes, where people can cycle in comfort and safety.<sup>30</sup>

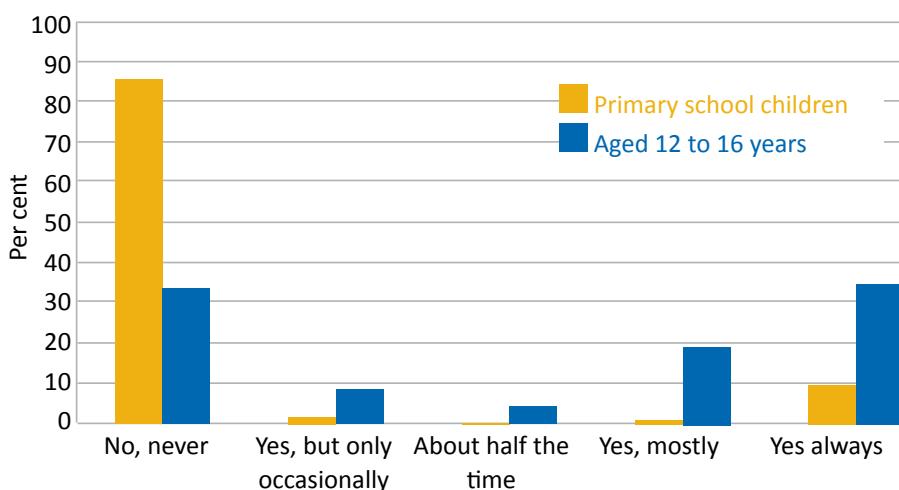
The findings of a walking benchmarking survey conducted in late 2010 in partnership with international non-government organisation Walk21 identified current levels of walking and physical, social and institutional barriers that limit walking in Canberra. Survey respondents said they walked to stay fit or for pleasure rather than as a form of transport.<sup>31</sup> Key findings were:

- people are generally very happy with the open spaces in their own neighbourhoods
- Canberrans walk an average of 26 minutes a day

**TABLE 5: BENEFITS OF ACTIVE TRAVEL**

<b>Offers cheap transport option</b>	20% 22% 2.2% 22% 65%	of Canberrans live less than 5km/15 minutes bike ride from their workplace of Canberrans live between 5 – 10km/15 – 30 minutes bike ride from their workplace (ABS, 2006) of Canberra households are without a motor vehicle of Canberra households have one car and more than one person (ABS, 2006) of Canberrans have a bicycle (Australian Bicycle Council, 2004)
<b>Increases public transport's financial viability</b>	0.8km 3.2km 1500%	Distance easily walked to bus stop within 10 minutes Distance easily cycled to bus stop within 10 minutes Increase in catchment when bike riders catch bus
<b>Reduces parking costs</b>	\$92,820 \$17,707 \$489 10 \$121 million \$1.9 million	Land value on-surface car parking space, Civic (@\$2600 x 35.7m <sup>2</sup> ) Land value on-surface car parking space, town centres (@\$496 x 35.7m <sup>2</sup> ) Annual cost to maintain one on-surface car parking space Bikes able to be parked in one car parking space Car spaces (cost of land and construction for surface car park) not required by 3957 bike rider commuters (676 Civic) Annual operating costs saved by commuter bike riders (including lighting, repairs to pavement and equipment, sweeping). <sup>32</sup>
<b>Health benefits</b>		Reduced health system costs  Reduced risk of obesity, cardiovascular disease, stroke, type 2 diabetes and some types of cancers  Improved mental health and wellbeing
<b>Environmental benefits</b>		Minimal greenhouse gases emitted  Reduced dependence on imported oil
<b>City vitality</b>		Increased economic vitality of town centres
<b>Economic benefits</b>		Increased employee productivity  Reduced congestion  Reduced noise levels  Reduction in road space consumed
<b>Social inclusion</b>		Community cohesion  Reduced isolation  Increased safety

**FIGURE 9: PROPORTION OF CHILDREN AND YOUNG PEOPLE WALKING TO SCHOOL UNACCOMPANIED BY AN ADULT**



- more Canberrans consider walking as a form of leisure or exercise than a form of transport
- key barriers to walking more include safety fears, conflict between cyclists and pedestrians, lack of lighting and uneven paths; these barriers are particularly important to women, people with mobility restrictions and older Canberrans.

The survey also found that over 85% of ACT school children under the age of 12, and over 30% of young people aged between 12 and 16, never walk to school unaccompanied by an adult (see Figure 9).

### 3.2 Active travel policy context

The ACT Government has undertaken a broad range of initiatives to encourage more people to walk and cycle and to support those who already do. By building a better city which fosters the integration of active travel options into everyday life, more Canberrans will lead fitter, healthier lives and our city will become more vibrant.

The ACT Government is a signatory to two key active travel documents: the International Charter for Walking and the National Bicycle Strategy. On 1 November 2010, the ACT Government became the first government in Australia to sign up to the International Charter for Walking.

The charter was developed by the international non-government organisation Walk21. It incorporates eight principles for action to encourage walking in cities and foster healthier communities.

1. Increased inclusive mobility.
2. Well-designed and managed spaces and places for people.
3. Improved integration of networks.
4. Supportive land use and spatial planning.
5. Reduced road danger.
6. Less crime and fear of crime.
7. More supportive authorities.
8. A culture of walking.

The National Bicycle Strategy 2011–2016 aims to double cycling use in Australia by 2016 and sets out six priorities for action:

1. **Cycling promotion:** promote cycling as both a viable and safe mode of transport and an enjoyable recreational activity.
2. **Infrastructure and facilities:** create a comprehensive network of safe and attractive cycle routes and end-of-trip facilities.
3. **Integrated planning:** consider and address cycling needs in all relevant transport and land use planning activities.
4. **Safety:** enable people to cycle safely.
5. **Monitoring and evaluation:** improve monitoring and evaluation of cycling programs and develop a national decision-making process for investment in cycling.
6. **Guidance and best practice:** develop nationally consistent technical guidance for stakeholders to use and share best practice across jurisdictions.

These national and internationally recognised walking and cycling strategies have already been incorporated into ACT planning documents and will continue to guide our design and delivery of programs and projects.

### **3.3 A compact city to connect people and places**

The ACT Government is committed to integrated transport and land use planning. It is working to create a more compact city with apartments, offices and retail spaces close together and a vibrant public realm with plazas, paths and streets that encourage relaxing, walking and cycling—and use of public transport. A compact city generates fewer vehicle trips, creates economic efficiencies by reducing the need for expenditure on roads and car parks and is more socially inclusive, healthy and sustainable.

The government has incorporated the principles of the International Charter for Walking into the Estate Development Code to: create streets suitable for public transport; locate bus stops alongside the shared path network; connect the shared path network with the open space network and community facilities; and light the shared path network. The ACT Planning Strategy contains strategies to create a more compact city that connects people and places.

### **3.4 A safe environment to support active travel**

Cycling and pedestrian infrastructure design standards are constantly amended and updated to take account of national and international best practice in infrastructure design. The ACT applies 40 km/hr speed limits in school zones, work sites and areas such as hospitals and universities. Trials of 40 km/hr zones have begun in some town centres and may expand to other areas from 2012 once the trial has been evaluated. Transport planning studies and group centre and corridor master

planning will explore opportunities to increase pedestrian and cyclist safety through initiatives such as separating cyclists and pedestrians and lower speed zones in areas of high pedestrian volumes. We will deliver safety awareness programs for all transport users.

### **3.5 Infrastructure**

A sustainable, compact city incorporates good quality walking and cycling infrastructure that is well-maintained, safe, accessible, well-lit and signposted. The infrastructure should offer direct routes to destinations, including public transport, and have end-of-trip facilities such as bike parking, showers and change rooms. Amenities like drinking fountains, lighting and seating can make walking and cycling routes more attractive and accessible.

Canberra has one of the most extensive walking and cycling networks in Australia, comprising off-road shared paths, on-road cycle lanes and roads. All ACT footpaths are available for use by pedestrians and cyclists. The network has been significantly expanded over the past 10 years. A walking and cycling master plan was completed for Gungahlin in 2005 and is being constructed as new areas are developed. In 2011–12, the government will develop a commuter cycle master plan to identify priority commuter routes connecting people to employment, schools and other key destinations.

Cycle parking and end of trip facilities are mandatory requirements for any new development in the ACT. Developers can reduce the number of car parking spaces in their development by providing bike parking above the standard minimum. The government will continue to work with businesses to improve cycling end-of-trip facilities, and investigate the potential role of government and the private sector in supplementing end-of-trip facilities at major destinations.

*A sustainable, compact city incorporates good quality walking and cycling infrastructure that is well maintained, safe, accessible, well lit and signposted.*



Electric bikes and mobility scooters are going to become an increasing part of the transport mix in Canberra as our population ages and we look at healthier, more active ways to travel. The government will consider parking and charging points for mobility scooters and electric bikes at group centres as part of the ongoing master planning program.

Infrastructure priorities to support active travel include:

- Expand and improve the network, particularly to encourage cycling as a genuine choice for travel to work, school and any other trip.
- Develop a master plan for a commuter cycling network to guide infrastructure investments and right of way improvements both on- and off-road between suburbs and major work destinations. Priority investments will include higher quality infrastructure, lighting, signage and segregation where appropriate.
- Consider infrastructure implications of a growing number of electric bikes.
- Complete walking and cycling networks in the town centres and major employment areas.
- Trial a shared space (a place where all road users share a low speed street space) in a location identified in a master plan or transport planning study by 2013.
- Complete the Centenary Trail to guide walkers and cyclists through urban and nearby rural areas of Canberra.
- Explore opportunities for private sector involvement in the development of public end-of-trip facilities such as the King George Station centre in Brisbane.
- Work with NGO partners like Pedal Power to audit the current provision of bicycle parking facilities and develop a program to enhance them.

- Continue the shared paths construction, lighting and maintenance program and the footpath lighting program.
- Continue the graffiti management program.

### 3.6 Partnerships and promotion

The ACT Government will pool expertise and resources with government, business and community organisations to achieve greater efficiency and capacity to plan and develop active travel. This will include working closely with our government and non-governmental partners to embed principles to support active travel in our policies, programs and activities, continuing to support the City Centre Marketing and Improvements Levy, and supporting walking groups, community initiatives and other programs aimed at increasing active travel.

The ACT Government has provided funding to community organisations to promote and support active travel projects in schools and workplaces. Two recent successful partnerships are:

- ACT Government funding for the Heart Foundation's Walking Group Program and 'Come and Try' physical activities program
- the Find Thirty every day® campaign, which encourages people to be sufficiently active for good health by doing 30 minutes of moderate-intensity physical activity on most days of the week. Joint social marketing activities are underway to promote the shared benefits of active travel, such as Bike and Ride/Find Thirty every day®.

### 3.7 Active travel to school

The Active Travel to School project has been developed through the ACT Government's Healthy Futures, Healthy Children Program, and the National Partnership Agreement for Preventive Health (NPAPH). The project will work

across government and the community sector over the next four years to increase safe walking and cycling and support programs that promote walking and cycling to school to the school community. The pilot program will commence in 2011–2012.

### **3.8 Monitoring, evaluation and reporting**

The annual Transport for Canberra report card will be supported by new data on pedestrian and cyclist travel in Canberra, including:

- pedestrian interception surveys at key destinations on an annual basis to identify distances travelled and routes used
- regular benchmarking in partnership with the international pedestrian network Walk21
- monitoring shared paths to identify areas where improvement is required
- review of transport modelling capability.

**TABLE 6: HOW TRANSPORT FOR CANBERRA WILL HELP YOU WALK AND CYCLE**

<b>I don't walk or cycle because</b>	<b>How Transport for Canberra will help you walk or cycle</b>
<b>It's too dangerous</b>	Continue building shared paths and on-road cycle lanes. Investigate extending the 40km/hr zones. Skills training for school children and adults as part of Active Travel to School. Enhanced lighting for community paths. Enhanced maintenance program.
<b>It's too hot and I get sweaty</b>	Encourage increased provision of end-of-trip facilities with lockers, showers, irons and hairdryers. Continue tree planting to shade paths.
<b>It's too cold and dark</b>	Compared to many European cities where cycling rates are high even in winter, Canberra's weather compares favourably. A wide range of quality warm cycling clothing and bicycle lights are now available. Enhanced lighting program.
<b>It's too hilly</b>	Bicycle paths are selected to travel on the least steep routes. As your fitness improves, you will find the hills get smaller!
<b>There's nowhere to park my bike</b>	The bike parking program will provide more bike rails. Government will encourage the development of end-of-trip facilities.
<b>It's too far</b>	Over 80% of Canberra's houses are within easy cycling distance of local shops. The Bike and Ride program will increase opportunities to park bikes at bus stops and complete the journey by bus. The commuter cycle master plan will help create more direct routes between major destinations.
<b>I'm too old</b>	Canberra's shared paths offer gentle alternatives to cycling on the road. Cycling is a low-impact form of exercise, recommended for all ages.
<b>I'm not fit enough</b>	Canberra's shared paths give you the chance to start out slowly and build up your fitness level. Bicycle user groups offer a range of cycle rides to help you gain confidence.
<b>I don't have enough time/ it's inconvenient</b>	Cycling and walking, or using Bike and Ride to catch the bus, offer great value-for-time by providing an opportunity to fit physical activity into your day.



### 3.9 Active travel actions

#### ACTION 18

Complete shared paths in the town centres and major employment areas and develop a master plan for a commuter cycle network with high-quality cycling infrastructure that is safe and well signposted, offering direct routes to destinations and integrated with public transport.

#### ACTION 19

Investigate new types of transport infrastructure and services including shared spaces, segregated lanes, priority at intersections, electric bikes and public cycle parking facilities in the city.

#### ACTION 20

Release an Active Travel to School Strategy in 2012 to support students, teachers and school communities to increase active travel to school by 2016.

#### ACTION 21

Amend design guides and update standards to prioritise active travel by updating minimum standards and engineering drawings to facilitate the development of accessible bicycle and pedestrian focused infrastructure (including end-of-trip facilities), shared spaces and active streets.

#### ACTION 22

Deliver road safety awareness programs for motorists, motorcyclists, cyclists and pedestrians to reduce crashes and crash rates and engender a culture of sharing the road system with others.

#### ACTION 23

Explore the establishment of a taskforce of government and external stakeholders to promote, and develop programs to support, physical activity and its associated health, wellbeing, economic, social inclusion, environmental and transport benefits and establish a whole-of-government working group to implement active travel projects that support physical activity.

# 4.

## ROADS, PARKING, VEHICLES AND FREIGHT



## 4. ROADS, PARKING, VEHICLES AND FREIGHT

### Road transport objectives

- Create efficient ring road options for car and freight traffic that integrate with central road corridors designed for public transport.
- Create a safer transport system that minimises the risk of crashes through smart traffic management systems, traveller information and safer transport infrastructure, with a focus on people.
- Strategically manage parking demand to encourage sustainable transport choices while ensuring equity and efficiency in supply.
- Reduce emissions from road transport through more efficient vehicles and infrastructure.

A transport system can only function effectively and efficiently if it is supported by a strategically designed road network designed for all modes of public and private transport. Our road network needs to continue to connect people, goods and services efficiently.

The Territory's excellent road network comprises efficient ring road and arterial options for motorcycle, car and freight traffic, with corridors like Northbourne Avenue allowing for direct and rapid bus travel along central spines.

Transport for Canberra will involve ongoing investments in genuinely sustainable transport infrastructure projects, delivering improvements right across the system—for pedestrians, bike riders, bus users, motorcyclists and drivers. Improved data collection and modelling and analysis capability will ensure future transport planning is based on robust and accurate information and sound analysis.

#### 4.1 Congestion and the ACT's road network

Traffic congestion occurs when travel demand is greater than the capacity, or supply, of available road space. In other words, too many people try to drive on a specific section of road at the same time. Congestion results in slow driving speeds, longer trip times, reduced travel time reliability and increased queueing and delays.

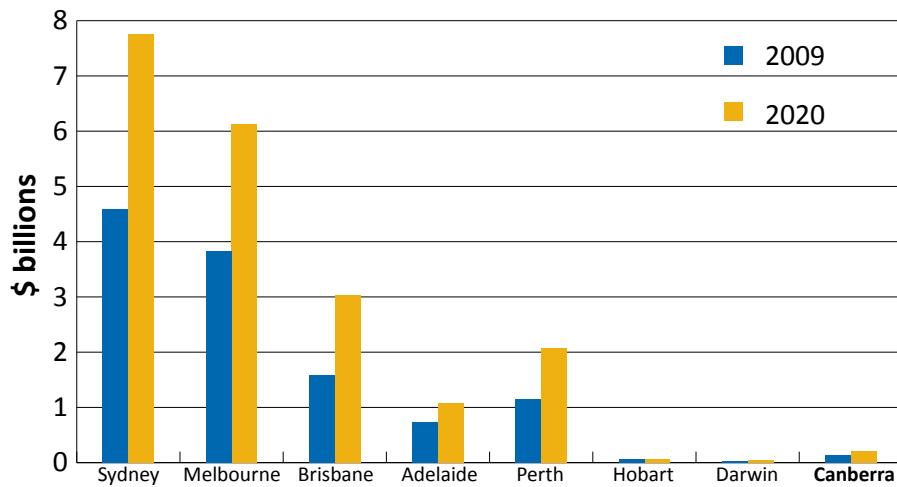
Canberra is still one of the most highly car accessible cities in Australia, with the highest average travel speeds and lowest level of congestion of major Australian cities. Population growth and traffic congestion are closely correlated, with congestion growing at a faster rate. Each household owns a car, or two, even though household size is declining. By 2030 it is estimated that nearly 200km of our roads will have a volume versus capacity ratio of more than 0.9, meaning greater traffic congestion, longer travel times, less productive work hours and health risks associated with less physical activity and the stress of commuting.

The Bureau of Infrastructure, Transport and Regional Economics estimated the social costs of congestion in Canberra in 2007 to be about \$0.11 billion, potentially rising to \$0.2 billion by 2020 (see Figure 10). These social costs comprised private time costs, business time costs, extra vehicle operating costs and extra air pollution costs.<sup>33</sup> Reducing traffic on congested roads by as little as 5% frees up capacity enough to enable more car movements along the road.<sup>34</sup>

To meet our mode shift targets and manage congestion, we need to manage our roads in the context of the whole transport system—by maintaining a safe, accessible and efficient road network while also managing parking and reducing emissions from private and public vehicles.

The ACT has road assets of more than 6300 lane kilometres. The average age of our road pavements is 28 years. Many roads are now reaching an age where increased frequency of maintenance is required. As vehicle volumes increase in the future (particularly the projected increases in heavy vehicles), the pressure on our road pavements will also increase.

**FIGURE 10: ESTIMATED GROWTH IN AVOIDABLE COSTS OF CONGESTION<sup>35</sup>**



Over the next 20 years there are several developments planned, or under discussion, that will increase the demand on Canberra's road network. A significant proportion of these developments are located close to the metropolitan area. They will impact on the major transport corridors between the proposed district of Molonglo Valley and the Canberra airport/New South Wales border. Traffic modelling has identified consistent growth in traffic on Parkes Way, Morshead Drive, Pialligo Avenue, Monaro–Majura Road corridor and Cotter Road west of Tuggeranong Parkway. The construction of the Majura Parkway and new developments in Gungahlin, the Majura Valley and Queanbeyan will generate additional traffic on Monaro Highway, Morshead Drive and Pialligo Avenue. The travel demand management approach of Transport for Canberra means we will consider all transport modes as we respond to and manage this congestion.

Priorities for managing the road network include:

- completing key road infrastructure, improving capacity and maintaining our road assets
- incident management through upgrading our technology platforms including monitoring cameras and an ACT traffic control centre

- further development of traffic signals coordination, including exploring pedestrian and cyclist wait times
- providing better information to the travelling public including measurement of travel times and an integrated journey planner
- road safety programs including developing safe roads and roadsides
- ongoing road maintenance funding.

## 4.2 Parking

Managing parking is part of planning for and delivering a sustainable and integrated transport system for Canberra. Parking demand in Canberra can be managed to achieve a better balance between the various modes of transport.

The ACT Government's new parking policy approach will include:

- regular release and implementation of parking plans for the city and each town centre to manage parking demand in relation to the land release program and changing developments in the major centres
- implementation of a parking pricing and management regime to encourage greater use of sustainable modes of transport

**TABLE 7: STRATEGIC PARKING FRAMEWORK FOR CANBERRA**

	<b>Strategic approach</b>	<b>In practice</b>
<b>Supply</b>	<ul style="list-style-type: none"> <li>• A conscious shift from predicting growth and providing for it to managing demand and improving the efficiency of the existing transport system.</li> <li>• Reduce provision rates for some motor vehicle parking uses in line with land use and transport planning.</li> <li>• Improve level of motor vehicle parking for people with disabilities.</li> <li>• Improve parking supply for two wheeled vehicles – bicycles, motorcycles and scooters.</li> </ul>	<p>Motor vehicle parking provision rates will be reduced in areas of higher density where other transport options (public transport, walking and cycling) are available.</p> <p>The Parking and Vehicular Access General Code will be amended to allow developers of residential development in the City and town centres the discretion to provide parking in accordance with market demand including the option to reduce parking or provide no parking.</p> <p>Parking for people with disabilities will be improved to ensure people with mobility restrictions are able to park easily and ensure priority parking and drop off points are safe, sufficient and conveniently located.</p>
<b>Parliamentary Zone</b>	<ul style="list-style-type: none"> <li>• Work with the NCA and Commonwealth departments to progress pay parking in the Parliamentary Zone.</li> </ul>	<p>The ACT will continue to participate on the intergovernmental working group on parking in the Parliamentary Triangle zone.</p> <p>Promotion of alternative transport options in the zone will also help manage motor vehicle parking demand.</p>
<b>Pricing</b>	<ul style="list-style-type: none"> <li>• Manage and monitor motor vehicle parking pricing to encourage greater private sector involvement in parking provision, and to influence transport mode choice in line with the City Area Plan and Transport for Canberra.</li> </ul>	<p>Install new parking meters that accept credit cards and other payment methods in ACT Government carparks and on-street parking areas.</p> <p>Pricing of government provided motor vehicle parking will, over time, increase to a level that encourages private sector investment in parking facilities.</p>
<b>Management</b>	<ul style="list-style-type: none"> <li>• Provide more flexible motor vehicle parking options for parents and carers.</li> <li>• Investigate and introduce parking information and guidance systems.</li> <li>• Prioritise short stay over long stay motor vehicle parking to encourage high parking turnover to support businesses.</li> </ul>	<p>Approximately 9% of drivers drive children to school.<sup>36</sup> Parking spaces will be reserved in the city and town centres after 9.30am to provide more flexible options for working parents and carers.</p> <p>Smart parking guidance systems will be introduced progressively to improve access to motor vehicle parking.</p> <p>Open up opportunities for multi use of car parks.</p>
<b>Offset fund</b>	<ul style="list-style-type: none"> <li>• Introduce a parking offset fund for the city area into which developers can contribute when parking cannot be provided at the required rate.</li> </ul>	<p>The offset fund may be used to construct new motor vehicle car parks, improve access and amenity of car parks (e.g. lighting and paths) or provide alternative transport options (e.g. public transport). The offset fund will be introduced by 2013 following industry and community consultation.</p>
<b>Locational planning</b>	<ul style="list-style-type: none"> <li>• Manage motor vehicle parking demand in line with land supply, planning and policy objectives.</li> </ul>	<p>Parking plans for the City and each town centre will identify government owned car parks and set out policies for the replacement of parking when they are sold for development. This may involve full, partial or increased provision of publicly available parking depending on the circumstance.</p>

- a parking offset fund that will allow developers who are unable to provide parking at the required rate due to geotechnical or other site constraints, to pay into a fund instead; the fund may be used to construct alternative parking near the development or, if this is not viable, to otherwise address the transport demand arising from the development. Details of the parking offset fund will be released for industry and community comment before its finalisation in 2013

- continuing to maintain at least a 30% level of Territory ownership or management of public parking
- review parking requirements for people with disabilities to ensure people with mobility restrictions are able to park easily
- increasing the provision of parking for motorcycles in appropriate locations.

As government policies and actions in Transport for Canberra provide viable alternatives for an increasing proportion of travellers, the government will slow the rate at which it provides parking in major work destinations like Canberra City. Table 7 sets out the Strategic Parking Framework for Canberra.

### **4.3 Safe, fuel efficient and low carbon vehicles**

Private vehicles (including motorcycles, freight transport and public and private fleets) need to be safe, fuel efficient and low carbon to meet our social, economic and environmental needs as we respond to our emissions reduction targets and plan for future pressure on fossil fuel supplies. The Commonwealth Government has committed to mandatory greenhouse gas emissions standards for the light vehicle fleet by 2014, which will lower the overall emissions impact of the fleet.



#### **Low emission vehicles**

Emissions from passenger vehicles make up a significant proportion of the ACT's transport sector greenhouse gas emissions. Modelling to support the ACT's new climate change action plan suggests that reducing the emissions from our private and public vehicles fleets has potential to be a cost effective way to help meet our short term (2020) emissions reductions targets (in addition to meeting our mode share goals).<sup>37</sup>

The ACT remains the only jurisdiction to have a motor vehicle stamp duty based on environmental performance—the Green Vehicles Duty Scheme. The scheme prices stamp duty according to a combination of greenhouse gas and particulate emissions, recorded objectively on the Commonwealth Green Vehicle Guide. The scheme is revenue neutral, with the best environmentally performing vehicles attracting a discount (or paying no duty) and the worst environmentally performing vehicles paying higher duty rates. A review of the duty scheme will be completed in 2013 and will consider amendments to the scheme to increase the incentives towards 'best in class' green vehicle purchasing.

The government will explore ways to encourage a faster transition to a lower emission vehicle fleet and release a low emission vehicle strategy by June 2013. This will include possible incentives such as low emission vehicle priority parking, pricing and promotion.



It will consider the implications of the market growth for electric and other emerging vehicle technologies, national developments in reducing vehicle emissions, vehicle safety, and emissions from ACT public transport vehicles.

Another positive development in coming years is the advent of commercially produced electric vehicles and the ACT Government is considering the adoption of electric vehicles into its own fleet to lead by example.

### ACT Government fleet

Greener fleet management policies are already in place in the ACT, supported by electronic log books, the rollout of carpooling software across the ACT public service and the start of a rolling workplace travel plan program in the ACT public service under the Carbon Neutral ACT Government Framework.

The government is also updating its fleet purchasing policy to require the purchase of the lowest emitting, most efficient, safest and most cost effective vehicle that meets organisational needs.

## 4.4 Freight

A 2007 BITRE report estimates total interstate freight from NSW to the ACT was 720 million tkm in 2007, forecast to rise to 1014 million tkm in 2017.<sup>38</sup> Most of the ACT heavy vehicle fleet (about 3,000 in total, including 484 ACTION buses) is made up of smaller heavy vehicles performing local tasks on local roads.

National freight is projected to double by 2020. The completion of Majura Parkway will be an important link to the national freight network and will support more efficient freight movement within the Territory and to and from the surrounding region. Majura Parkway is a key link in the national freight network and, importantly, will also divert heavy traffic away from the inner north of Canberra.

The ACT will partner with the Commonwealth to develop freight

infrastructure that ensures productivity in the national freight industry for international competitiveness.

The ACT is a signatory to a number of national transport reforms that will require the adoption of, or adaptation of, infrastructure to new technological requirements such as bridge upgrades, intersection and road design and modification to street lights, traffic lights and signs. The road and bridge network will also need to be able to accommodate higher mass limited vehicles and performance based vehicles (i.e. larger trucks).

The Canberra Airport plays a major role in facilitating interstate and international passenger and freight movement. The Canberra Airport Master Plan indicates there will be a significant investment in aviation infrastructure, including a new integrated domestic and international terminal, runway, apron and taxiway upgrades, and improvements to the airport's aircraft navigation aids over the next ten years.

The Eastern Regional Transport Taskforce, comprising officials from both sides of the ACT/NSW (Queanbeyan) border, is considering the impacts of urban development and cross border transport demand on infrastructure and services with the aim of providing a seamless connection for freight and passenger movement.

The movement patterns of heavy vehicles within the ACT will be subject to further analysis in 2011–12 as the ACT develops its first freight strategy. The strategy will include infrastructure, modelling of freight patterns and growth, and links to the national freight network.

## 4.5 Road, parking, fleet and freight infrastructure

Canberra's arterial road network is very well developed, with only a few new connections planned for passenger vehicles. Majura Parkway is a major freight corridor that will help divert

freight traffic directly to the industrial areas of Fyshwick and the airport. It will also provide an important link from Gungahlin to employment destinations to the city's east. Majura Parkway is unlikely to have a role as a public transport corridor (other than High Speed Rail) because the destinations it serves are either heavy-vehicle focussed or have largely peak passenger demand that can be served by peak express (Xpresso) services or the coverage service.

The main strategic areas for development between now and 2016 include the east–west corridor between Molonglo Valley in the west and Queanbeyan in the east, the two north–south peripheral arterials of Gungahlin Drive and Majura Parkway, and the trunk road, public transport and cycle and pedestrian routes through new developments at Gungahlin, Molonglo Valley and East Lake.

The north–east public transport corridor from Northbourne Avenue to Queanbeyan via Canberra Avenue, which was the subject of feasibility studies in 2010–11, will be a core transport partnership opportunity for the Commonwealth and ACT Government in the coming years. As the new development front moves to Molonglo Valley, east–west movement between Molonglo Valley and Queanbeyan via mass public transport and road connections will be strengthened to ensure efficient and effective passenger movement between growth areas, employment locations and other destinations.

The Government will install new parking meters that accept credit cards and other payment methods in ACT government carparks and on-street parking areas, providing more flexible payment options and allowing better management of parking through more accurate data collection.

The map at Appendix B shows the public transport corridors and the main arterial and parkway road network. It highlights the Transport for Canberra

approach to managing travel demand: ring road options for car and freight traffic, and central rapid corridors for public transport priority. The maps at Appendix C show the possible growth of transport infrastructure across the city to 2031, subject to annual budget decision making.

## 4.6 Safety

The ACT has a good road safety record in comparison to other parts of Australia. The ACT has the benefit of an established and well designed road system. While 2011 had the lowest number of road fatalities (six) for 50 years, there is no room for complacency. Each year an average of 14 people are killed and 565 injured on ACT roads.<sup>39</sup>

A new ACT Road Safety Strategy 2011–2020 and ACT Road Safety Action Plan 2011–2013 were released in November 2011. The strategy is influenced by the Swedish Government's 'Vision Zero' policy, which ultimately aims for no deaths or serious injuries within the road transport system. These documents also acknowledge the important linkages between road safety and sustainable and active travel policy and planning.

A greater focus on road safety will be needed with a greater number of vulnerable road users, such as more people riding bicycles or walking. This includes powered two wheel vehicle riders, who face a fatal crash risk about 30 times higher than car occupants.<sup>40</sup>

A range of measures will be progressed under the strategy and action plan to address road safety issues, including those related to vulnerable road users. These will include implementation of best practice road safety engineering programs, development of an ACT Road Safety Education Strategy, targeted awareness campaigns, and best practice traffic enforcement measures.<sup>41</sup>



*...Transport for Canberra will invest in genuinely sustainable transport infrastructure, delivering improvements right across the system—for pedestrians, bike riders, bus users, motorcyclists and drivers.*

## **4.7 Road transport and fleet actions**

### **ACTION 24**

Complete Majura Parkway and road connections for new developments, manage capacity on the road network, and maintain and upgrade the Territory's road assets.

### **ACTION 25**

Implement the Strategic Parking Framework in Transport for Canberra.

### **ACTION 26**

Release a low emission vehicle strategy by June 2013, including an evaluation of the Green Vehicles Duty Scheme to identify how it could better encourage the purchase of lower emissions vehicles including electric vehicles.

### **ACTION 27**

Develop and release an ACT freight strategy.

### **ACTION 28**

Complete an ACT Government sustainable fleet strategy by 2013.

# 5.

## MANAGING TRAVEL DEMAND



## 5. MANAGING TRAVEL DEMAND

### Objectives

- Manage travel demand to create a safer, more efficient and more sustainable transport system.
- Price transport equitably, efficiently and sustainably.
- Promote sustainable transport options.
- Reduce transport emissions by increasing vehicle occupancy rates and creating a more compact city through integrated transport and land use planning.



The government takes an integrated approach to transport planning and infrastructure development, known as travel demand management. This means we determine the total transport demand, explore opportunities to create alternatives to driving, price transport efficiently to encourage those alternatives (including parking pricing), encourage multi-occupancy trips through the 3-for-free scheme and the ACT's car pooling pilot, and identify the transport infrastructure needed to make the integrated transport system work safely and efficiently.

### 5.1 Land use/transport planning

The land use planning approach in Transport for Canberra and the ACT Planning Strategy focuses on encouraging population growth around transport corridors and nodes and positioning employment and services closer to people (and public transport) to reduce average trip lengths and promote alternative travel options. Combined with transport options like Park and Ride and Bike and Ride, this is an important way to reduce transport emissions and introduce sustainable transport options early into new developments.

### 5.2 Vehicle occupancy rates

The ACT has very low vehicle occupancy rates. Increasing the number of passengers in vehicles, while increasing sustainable transport options and improving the efficiency of the vehicles, will help meet emissions targets.

We will focus on incentives to increase the number of people per vehicle. This will include:

- continuing the 3-for-free parking scheme in the City and town centres
- expanding carpooling across the ACT public service by 2013 and investigating the expansion of the program to include Australian Government departments
- considering high occupancy vehicle lanes (T2/T3/bus lanes) in line with high occupancy vehicle guidelines that will be finalised by May 2012, taking account of safety, congestion, public transport corridors, travel demand and sustainability goals
- combining carpooling with workplace travel planning for ACT Government facilities, and providing support and templates for community, public and private sector workplace travel planning.

### 5.3 Infrastructure and demand management

The ACT Government has invested over \$120 million in sustainable transport infrastructure in 2010–15. The entire program—including bus priority on the Frequent Network, new stops and stations, cycling and walking infrastructure, a real time passenger information system and more frequent and rapid public transport services—is targeted at improving the efficiency of the transport system, thus creating mode shift through providing better travel options. Major investments on the Frequent Network such as Northbourne Avenue, Canberra Avenue and the Belconnen to City route will be strengthened through better management of existing roads via the road initiatives detailed in the government's annual Infrastructure Plan.

## 5.4 Promotion and behaviour change programs

For Canberrans to change their behaviour and start using—or using more often—the most sustainable forms of transport for each trip, they need to be able to make informed choices based on comprehensive and accessible information. Education, training and promotion equip people and organisations with skills and knowledge to change travel habits.

The NSW Household Travel Survey data reveals that 13% of peak hour travel in Sydney is discretionary.<sup>42</sup> Urban ACT travel habits are likely to be similar to NSW patterns. This suggests a portion of this travel has the potential to be shifted to off peak hours through pricing or educational mechanisms. The TravelSmart project in Belconnen, delivered in 2006–07 to 4500 households, reduced vehicle kilometres travelled by 13%, some of which was peak hour travel.<sup>43</sup>

The government will support workplaces and institutions such as universities, sporting venues and health and community facilities to:

- develop travel plans
- provide better information via personalised travel planning
- promote active travel options through more accessible and clear public transport information and travel awareness and travel training programs.
- promote and support new ways of organising activities (e.g. telecommuting, video-conferencing and car pooling).

While Google Transit now enables easy trip planning by public transport, ultimately a multi-modal trip planner will provide information on the different ways to travel to a destination, showing shared paths, Park and Ride and Bike and Ride facilities, parking areas and bus routes.

As a first step, ACTION's passenger information will be upgraded in anticipation of real time passenger information. New access guides will be rolled out for major destinations (e.g. Parliamentary Zone, Canberra Hospital, ANU, University of Canberra) and campaigns will focus on promoting public transport as the preferred travel choice for Canberrans.

The government will also explore options for eco-driving programs to reduce the emissions from private vehicle travel.



## 5.5 Pricing

Pricing transport efficiently and equitably encourages more sustainable travel behaviour and achieves economic and social benefits for Canberra. Pricing policies need to be considered as part of an integrated policy approach alongside infrastructure, planning, promotion and incentives.

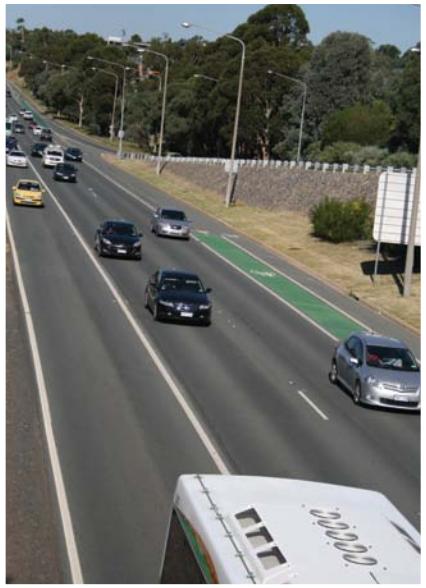
The government's transport pricing objectives (to be expanded in the new transport pricing policy) will:

- create an equitable transport pricing system
- create an efficient transport pricing system
- create a transport pricing system that supports sustainable travel choices including vehicle purchase.

### Transport pricing and the Henry Review

In 2010, the ACT Treasurer announced a broad review of Territory revenue streams to assess the overall efficacy and equity of the ACT taxation system.

The review complements the recent Commonwealth review of taxation (the Henry Review) and will place the ACT in a stronger position to respond to potential reforms in this area. The government will respond to the transport outcomes of the ACT Taxation Review through development of a new ACT pricing study to update elasticities,



engage with the community about transport pricing and set fare and fee models for public transport and parking respectively.

### Public transport pricing

The new MyWay ticketing system has already introduced a fare policy that better reflects trip patterns in the ACT, with reduced travel prices for trips during off peak times, evenings and weekends. Fares will be considered as part of the new pricing study, which will produce a new public transport fare model for the ACT. The needs of disadvantaged groups will form part of the study.

### Parking pricing

An appropriate parking price regime can result in:

- more efficient use of existing parking facilities
- reduced total parking requirements
- commercial viability of the parking industry

- reduced adverse impacts of traffic, including congestion
- a more attractive, people-focused environment
- accessibility which supports economic development.

Parking fees in ACT Government car parks have been adjusted for price index movements in the past, but the base costs and adjustments have not reflected the cost to the community of providing parking. Parking fees in ACT Government car parks will continue to be revised annually to encourage the private sector to continue to supply some parking infrastructure, and to discourage private vehicle travel. The system of prepayment for long-stay parking tickets will be reviewed to achieve a system which retains the convenience of advance purchase ticketing while not discouraging use of alternative means of transport to the major centres.

## 5.6 Travel demand management actions

### ACTION 29

Deliver travel behaviour change programs to promote and encourage greater take-up of sustainable transport for work trips in line with sustainable transport goals.

### ACTION 30

Develop and implement travel information and marketing for target groups, supported by market research and community based social marketing approaches.

### ACTION 31

Develop workplace travel plan templates and a cycle facilities guide.

### ACTION 32

Develop and release an ACT Government Transport Pricing policy by June 2013.

# 6.

## TRANSPORT MONITORING AND REPORTING FRAMEWORK



## 6. TRANSPORT MONITORING AND REPORTING FRAMEWORK



The Sustainable Transport Plan established a number of long-term goals for the ACT. These included development of a more accessible transport system, improving efficiency through better pricing and resource allocation, and changing community attitudes towards non-car based transport.

Transport for Canberra establishes a new 2016 mode share goal, with the ambition of moving steadily closer to our long-term mode share targets.

Between now and 2026 balanced investments in policies, urban planning, programs and infrastructure will encourage an additional 48,000 Canberrans at least to opt for a sustainable mode of transport for their daily commute, find new ways to work like telecommuting, or find work closer to home to make active travel an easier choice. The goals in Table 8 will act as a guide to help government, the private sector and the community measure our progress towards the long-term 2026 mode share targets.

### 6.1 Reducing greenhouse gas emissions from transport

Achieving the 2026 target would reduce transport emissions by 14% relative to 2026 business as usual estimates.

These targets are an important part of reducing transport greenhouse gas emissions in line with the 2020 and longer term emissions reduction targets, as the 2026 mode share goals would reduce emissions by an estimated 65 to 100kt per annum by 2020.

Creating a more efficient vehicle fleet will also reduce emissions. Initiatives like the Green Vehicle Duty Scheme and support for electric cars have good short term emissions reduction potential in the transport sector. Further detail, including modelling, is included in the ACT Government's draft Weathering the Change Action Plan 2.

### 6.2 Transport report card

A program to monitor, evaluate and report will enable the ACT Government to effectively assess the success of investments, measure progress and improve project performance. Improvements to the ACT's travel data and modelling and analysis capability will ensure future transport planning can be undertaken based on accurate information and sound analysis.

Transport for Canberra will also establish additional ways to measure and report annually our progress in the transport system. These measures—and the outcomes for each policy below—will be included as a Transport for Canberra report card to be released each year from 2012–13. Progress on achieving a safe transport system will be measured through the ACT Road Safety Strategy and Action Plan Framework. Progress on transport and land use integration will be reported as part of the new ACT Planning Strategy, and transport emissions reductions will be reported through Weathering the Change and legislated emissions-related reporting.

TABLE 8: NEW 2016 MODE SHARE TARGET (JOURNEY TO WORK)

Mode	2006 actual	2011 target	NEW 2016 target	2026 target
Walking	5%	6%	6.5%	7%
Cycling	2.5%	5%	6%	7%
Public transport	7.9%	9%	10.5%	16%
<b>Total</b>	<b>15.4%</b>	<b>20%</b>	<b>23%</b>	<b>30%</b>

### 6.3 Delivering Transport for Canberra

The Government has committed over \$200m to transport infrastructure, programs and services in 2010-11 and 2011-12 to begin the transition to the transport system envisaged in Transport for Canberra. The actions and targets in Transport for Canberra will be an important guide to the Government's continued delivery of programs, development of policy, and Budget decision making.

We will examine the most cost effective ways to meet the targets and

deliver the actions within Transport for Canberra. This will mean some changes in the way our transport services operate (particularly in public transport), and a change in the balance of funding for transport to focus on more sustainable ways to manage travel demand. We will also consider the financial and economic costs and benefits of infrastructure and recurrent initiatives to deliver the Transport for Canberra actions, and progressively deliver transport improvements each year in the context of demand for services and infrastructure across all sectors.

**TABLE 9: TRANSPORT FOR CANBERRA PROGRESS REPORTING**

Transport performance measure	Target	How it will be measured
1. Journey to work mode share for: <ul style="list-style-type: none"> <li>• walking</li> <li>• cycling</li> <li>• public transport</li> </ul>	By 2016, increase work trips for: <ul style="list-style-type: none"> <li>Walking to 6.5%</li> <li>Cycling to 6%</li> <li>Public transport to 10.5%</li> <li>By 2016, 60% of ACT adults and 20% of ACT children meet National Physical Activity Guidelines.</li> </ul>	Combination of ABS Census data, public transport ticketing data, cycle counts, Walk21.  General Health Survey, ACT Year 6 Physical Activity and Nutrition Survey, Australia and Secondary School Alcohol and Drug Survey.
2. Sustainable travel for all trips in the ACT: <ul style="list-style-type: none"> <li>• average number of trips per person per weekday/weekend</li> <li>• purpose of different trips</li> <li>• distance of different trips</li> <li>• percentage of trips by public transport</li> <li>• percentage of trips by cycling</li> <li>• percentage of trips by walking</li> </ul>	Establish a baseline and methodology for average number of trips per person per day in the ACT.  Increase percentage of all trips by sustainable transport each year.  Establish a baseline (2012) and increase percentage of children travelling to school by active travel (walking, cycling, scooting) by 2016.	Travel survey to establish baseline average number of trips per person per day.  From 2012–13, report on percentage of sustainable transport trips relative to baseline.  ACT Year 6 Physical Activity and Nutrition Survey and surveys conducted at schools participating in active travel programs.
3. Accessibility of the transport system: <ul style="list-style-type: none"> <li>• percentage of population within 500m of a regular bus stop</li> <li>• percentage of population within 750m of a Rapid service bus stop</li> <li>• percentage of population within 5 km of a Park and Ride facility</li> </ul>	Minimum coverage standards are set in 2013, and targets are met for 2016 and 2021.  New suburbs are more supportive of active travel.  Implement the ACT Accessible Public Transport Action Plan.	Combination of NetBI software and mapping.  Establish an ACT methodology to measure suburb accessibility for pedestrians and cyclists in 2012.  Accessible Public Transport Action Plan reporting.

**TABLE 9: TRANSPORT FOR CANBERRA PROGRESS REPORTING (CONTD)**

Transport performance measure	Target	How it will be measured
5. Transport network performance: <ul style="list-style-type: none"><li>• travel time by mode (public transport, cars, cycling and walking)</li><li>• wait time for connections at stations</li><li>• number of tonne-kilometres by mode</li></ul>	Improve freight, public transport, cycling and maintain passenger vehicle travel times. Average wait time for connections to the Frequent Network at stations: <ul style="list-style-type: none"><li>• By 2013, average wait time for connections from coverage to frequent service – 7.5 minutes; from frequent service to coverage service – 15 minutes.</li><li>• By 2016, average wait time for connections from coverage to frequent service – 5 minutes; from frequent service to coverage service – 10 minutes.</li></ul>	Annual travel time analysis for all modes, with benchmarking in 2012. Average wait times to be measured through real time passenger information.
6. Safe transport system	See ACT Road Safety Strategy.	Through ACT Road Safety Strategy and Action Plan.
7. Integrated transport and land use planning	See ACT Planning Strategy.	Through ACT Planning Strategy.
8. Transport emissions	Reduce vehicle kilometres travelled by private passenger car through mode shift. Increase the efficiency of travel by decreasing the emissions intensity of the ACT passenger vehicle fleet, and increasing efficiency of the ACT public transport fleet.	Mode share targets (measure 1) and legislated emissions reporting. National Transport Commission: Annual Report on Emissions of Australian Vehicle Fleet. ACTION annual report: emissions per vehicle decreases annually.
9. Progress of Transport for Canberra actions	Release an annual progress report on implementation of Transport for Canberra.	Report on Transport for Canberra released by December each year.

## 6.4 Monitoring and reporting action

### ACTION 33

Release an annual Transport for Canberra update report from 2012–13, and review and update Transport for Canberra in five years.

### ACTION 34

Progressively improve transport policies, programs, infrastructure and services each year, taking into account the benefits and costs of initiatives to deliver Transport for Canberra actions and meet targets.

# 7.

## SUMMARY OF ACTIONS



## 7. SUMMARY OF ACTIONS

The actions in Transport for Canberra will help create a more sustainable city. We will support their implementation through:

- Provision of a variety of transportation choices: the Canberra community needs safe, comfortable frequent and reliable public transport, which connects with high quality walking and cycling networks.
- Encouraging mixed land uses: developments work best if they include a mix of retail, commerce and residential. Single-use districts make life less convenient, thereby forcing people to drive more frequently.
- Fostering walkable, compact and close knit neighbourhoods: these places offer not just the opportunity for walking and cycling

(i.e. a convenient network of paths), but something to walk or cycle to, whether it be the shops, transport, work or school. A compact, walkable neighbourhood benefits both business and safety and will help tip the choice towards active travel, particularly for shorter journeys.

- Promotion and education to encourage healthy and sustainable mode choices where possible.
- Continued improvements to the safety of all transport modes to reduce the number of crashes and associated trauma.
- Building on our existing community assets: investment will focus on getting the most out of, and building on, the transport system we have already.

Action	2 years	5 years	10 years
1. Continue to work with the community, peak bodies, businesses, the public sector, schools and tertiary institutions, community councils, vulnerable groups and others with an interest in transport to deliver Transport for Canberra, including adding transport as a standing agenda item to the Planning and Development Forum.	•	•	•
<b>Public transport</b>			
2. Adopt the Frequent Network of public transport services to guide planning and design of public transport services, public transport and active travel infrastructure, land supply programs, urban development and location of facilities.	•	•	•
This includes:			
a) embedding the rapid corridors in the Territory Plan			
b) working with the Commonwealth to include the rapid corridors in the National Capital Plan			
c) progressively developing the public transport network to implement the Frequent Network corridors and routes in annual reviews (refer maps at Appendix A)			
d) through the implementation of the ACT Planning Strategy, identifying and delivering transit oriented developments on the Frequent Network, and expanding the frequent local network if supported by appropriate land use change			
e) planning the road network of new areas to facilitate the operation of the Frequent Network, including straight and direct collector roads, and roads connecting adjacent suburbs			
f) including queue jumps, coordinated traffic signals, and public transport priority measures in all upgrades, redesigns or new works on rapid corridors			
g) constructing new bus stations and major stops and auditing existing interchanges.			
3. Actively plan for mass public transport like light rail or bus rapid transit in all new public transport infrastructure planning and design.	•	•	•

Action	2 years	5 years	10 years
4. Grow the bus fleet to respond to patronage growth and deliver the Frequent Network, and ensure the new bus fleet minimises greenhouse gas emissions, maximises patronage potential and obtains value for money for the Territory.	•	•	•
5. Continue to expand Park and Ride and Bike and Ride facilities.	•	•	•
6. Continue to provide and promote bike racks on buses, with 80% of the bus fleet to be fitted with racks by December 2012.	•		
7. Continue to work with Queanbeyan City Council and the NSW Government with the aim of creating a seamless public transport corridor between the ACT and Queanbeyan via Canberra Avenue, and work with the NSW Government and regional councils to progress better transport connections to existing and planned developments.	•	•	
8. Adopt interim minimum coverage standards for public transport services, and finalise the standards by 2013 following an analysis of MyWay data and an audit of walking and cycling connections to the public transport network.	•	•	•
9. Include seven day network in ACTION enterprise bargaining agreement in 2013.	•		
10. Implement the bus network design guidelines based on international best practice for service design, including meeting the wait time targets identified in Transport for Canberra.	•	•	
11. Complete a review of community transport and Aboriginal and Torres Strait Islander transport disadvantage in the ACT by 2012.	•		
12. Use MyWay data to explore the feasibility of trialling flexible transport services by 2013.	•		
13. Work with primary, secondary and tertiary schools to promote and provide effective, accessible and convenient public transport options.	•	•	•
14. Continue to progress the recommendations from the ACT taxi review.	•		
15. Design the public transport network to be genuinely competitive with car travel, and continue to invest in infrastructure to support the delivery of the Frequent Network, including smart technology such as real time passenger information and the MyWay ticketing system, stations, stops, transitways and other infrastructure.	•	•	•
16. Continue to monitor the implementation of the recommendations of the ACT Accessible Public Transport Action Plan.	•	•	•
17. Adopt an operating speed standard of 40km/hr for the rapid service to guide the infrastructure investment program.	•		
<b>Active travel</b>			
18. Complete shared paths in the town centres and major employment areas and develop a commuter cycle network with high-quality cycling infrastructure that is safe and well signposted, offering direct routes to destinations and integrated with public transport.	•		
19. Investigate new types of transport infrastructure and services including shared spaces, segregated lanes, priority at intersections, electric bikes and public cycle parking facilities in the city.	•		
20. Release an Active Travel to School Strategy in 2012 to support students, teachers and school communities to increase active travel to school by 2016.	•		
21. Amend design guides and update standards to prioritise active travel by updating minimum standards and engineering drawings to facilitate the development of accessible bicycle and pedestrian focused infrastructure (including end-of-trip facilities), shared spaces and active streets.	•		

Action	2 years	5 years	10 years
22. Deliver road safety awareness programs for motorists, motorcyclists, cyclists and pedestrians to reduce crashes and crash rates and engender a culture of sharing the road system with others.	•	•	•
23. Explore the establishment of a taskforce of government and external stakeholders to promote and develop programs to support, physical activity and its associated health, wellbeing, economic, social inclusion, environmental and transport benefits and establish a whole-of-government working group to implement active travel projects that support physical activity.	•		
<b>Roads, parking, vehicles and freight</b>			
24. Complete Majura Parkway and road connections for new developments, manage capacity on the road network, and maintain and upgrade the Territory's road assets.	•	•	•
25. Implement the Strategic Parking Framework in Transport for Canberra.	•		
26. Release a low emission vehicle strategy by June 2013, including an evaluation of the Green Vehicles Duty Scheme to identify how it could better encourage the purchase of lower emissions vehicles including electric vehicles.	•		
27. Develop and release an ACT freight strategy.	•		
28. Complete an ACT Government sustainable fleet strategy by 2013.	•		
<b>Managing travel demand</b>			
29. Deliver travel behaviour change programs to promote and encourage greater take-up of sustainable transport for work trips in line with sustainable transport goals.	•	•	•
30. Develop and implement travel information and marketing for target groups, supported by market research and community based social marketing approaches.	•	•	•
30. Develop workplace travel plan templates and a cycle facilities guide.	•		
32. Develop and release an ACT Government transport pricing policy by June 2013.	•		
<b>Monitoring and reporting</b>			
33. Release an annual Transport for Canberra update report from 2012–13, and review and update Transport for Canberra in five years.	•	•	•
34. Progressively improve transport policies, programs, infrastructure and services each year, taking into account the benefits and costs of initiatives to deliver Transport for Canberra actions and meet targets.	•	•	•