CHAPTER 9 GROUND TRANSPORT PLAN



"For high-speed rail, the Eastern Broadacre Planning Study includes an indicative alignment for a future corridor through the Majura Valley and makes provision for an alternative alignment to the Canberra Airport."

PUBLIC INFRASTRUCTURE, PRODUCTIVITY COMMISSION, MAY 2014



9 Ground Transport Plan

Canberra Airport has been a strong public supporter for more than 20 years of a fast, efficient, and comfortable transport system with easy access to air, rail, and coach services. Initially, in the first Master Plan approved in August 1999, and then the release in September 1999 of a plan outlining the ambition to be a 'World Class Travelport' - a major transport terminal where fast air, rail, light rail, and coach services will converge, to provide seamless travel for business and leisure passengers.





Indeed, the continued objective of Canberra Airport is to work with surrounding jurisdictions in fully integrating all ground transport services with the terminal and retail and business parks. A fully integrated ground transport network will:

- Service a growing population within Canberra to provide an opportunity to greatly increase Canberra's public ground transport commuter modal split; and
- Provide a seamless modern, efficient transit ground and air interchange of passengers to benefit tourism, trade and commerce within the region; and
- Drive the benefits of decentralisation opportunities to the Canberra region plus two hours.

The Majura Parkway has been completed since the last Canberra Airport 2014 Master Plan was approved, including a slip road from the Majura Parkway to Majura Road -Meddhung Road - as well as an off-road cycling connection to Majura Park.

On time arrival to the terminal is of great importance to arriving and departing passengers and freight companies. Providing for on time arrival to destinations within Canberra and the region is also important to fostering Canberra's international recognition of having a business-friendly environment and offering an enviable lifestyle.

Traffic demand on the Airport is also driven by the on airport workforce across business precincts and shoppers visiting Majura Park retail stores.

INFRASTRUCTURE AUSTRALIA

In 2017, Infrastructure Australia released *Corridor Protection: Planning and Investing for the Long Term* which adopts the timeframes in the Phase 2 HSR Report, as per Figure 9.2, including completion of an HSR link from Sydney to Canberra by 2032.

Figure 9.2 - Construction Start Dates for East Coast Australia High Speed Rail 3

Table 21: Assumed start date for construction of stages of the East Coast High Speed Rail

Constant	Assumed Start Assumed		
Corridor/Stages	Date	Completion Date	
High Speed Rail –Brisbane to Sydney			
Sydney – Newcastle	1 July 2033	30 June 2042	
Newcastle to Gold Coast	1 July 2046	30 June 2056	
Gold Coast to Brisbane	1 July 2039	30 June 2049	
High Speed Rall – Sydney to Melbourne			
Sydney to Canberra	1 July 2024	30 June 2032	
Canberra to Melbourne	1 July 2027	30 June 2037	

Source: High Speed Rail Study Phase 2 Report (2013)

Note: Construction completion dates differ to operational dates in the High Speed Rail Phase 2 study due to testing and commissioning phases.

The Infrastructure Australia 2017 Corridor Report also makes the case that postponing the reservation and protection of a corridor alignment for HSR to Canberra Urban would increase the tunnelling requirement by 5.8 kilometres. The Infrastructure Priority List released by Infrastructure Australia in March 2019 lists nominating a corridor for east coast HSR a high priority.

NSW GOVERNMENT: FUTURE TRANSPORT STRATEGY 2056

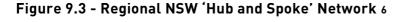
In 2018, the NSW Government released *Future Transport Strategy 2056*, nominating Canberra as a "global gateway city" for NSW.

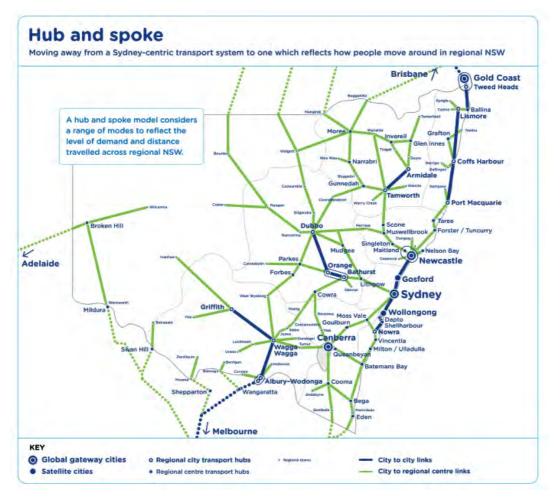
³ Infrastructure Australia [2017] *Corridor Protection: Planning and Investing for the Long Term, Detailed Appendices*, page 32.

"By 2056, economic and housing growth around Greater Sydney will …establish … Newcastle, Canberra and the Gold Coast as 'global gateway cities' – the key entry points to NSW. Population and economic growth in these areas will require fast transit connections to Greater Sydney."4

The NSW Transport Strategy also outlines a shift to a "hub-and-spoke" approach to transport planning, identifying Canberra as a transport hub for NSW.

"Regional cities and centres will be connected to outlying towns and centres by a 'hub and spoke' network. They will be centres for health, education, and justice services as well as providing access to employment opportunities and air transport connections." 5





The NSW Transport Strategy also provides for the development of east-coast high speed rail, including from Sydney to Canberra.

⁴ NSW Government [2018] *Future Transport Strategy 2056*, page 22.

⁵ Stet.

⁶ Stet, page 130.





ACT GOVERNMENT: MOVING CANBERRA 2019-2045

In December 2018, the ACT Government released *Moving Canberra 2019-2045*, *Integrated Transport Strategy* for comment. Similar to the NSW Transport Strategy, the ACT Draft Transport Strategy outlines a shift away from point-to-point transport systems to hub-and-spoke systems across the City with rapid services. In particular, the Strategy's short and medium-term infrastructure priorities within the vicinity of the Airport are listed as follows:

Short term (0-5 years)

- > Pialligo Avenue duplication, Brindabella Circuit to NSW border; and
- > Preliminary planning for east-west light rail connection.

⁷ Stet, page 132.

Medium term (5-10 years)

- > Deliver east-west light rail to the Airport;
- Additional lane on Fairbairn Avenue between Majura Parkway and Majura Road; and
- > Grade separation of the intersection of Fairbairn Avenue and Pialligo Avenue

ACT GOVERNMENT: ROAD INFRASTRUCTURE INVESTMENT PRIORITISATION

In late 2018, the ACT Government shared its Road Infrastructure Investment Prioritisation report (AECOM) with the Airport. The duplication of Pialligo Avenue from the NSW border to the Airport was listed in the top five priority projects, including an examination of alternative options for connections to Pialligo, Fyshwick and Symonston. The report states "This project is important for increasing regional access and safety from Queanbeyan and Kings Highway."

The report further details options to provide an alternate access to Pialligo via a connection to Kallaroo Road at the Brindabella Circuit roundabout, and an overpass in both directions at the Fairbairn Avenue intersection, however these projects are not ranked highly.

9.1 TRANSPORT HUB

"In the past decade, the rate of average annual growth of public transport patronage (2.4 per cent) surpassed the rate of population growth in capital cities (1.8 per cent)."

State of Australian Cities 2014-2015

Public transport hubs through the Canberra Airport terminal currently include local and interstate buses, taxis, as well as ride share and hire car services. Approximately 24 percent of all arriving passengers at Canberra Airport choose to connect with a ranked taxi service, and in the order of 6 percent of arriving passengers use a rideshare or hire car service.

The ACT Government's Transport Canberra and the private Qcity Transit bus services mean the Airport business parks are well connected by public transport, with services linking with both the Canberra and Queanbeyan networks. The 2019 Transport Canberra bus timetable has further increased services to the Airport terminal and Brindabella Business Park (Figure 9.5).

Taxi ranks at the terminal are available to arriving passengers.

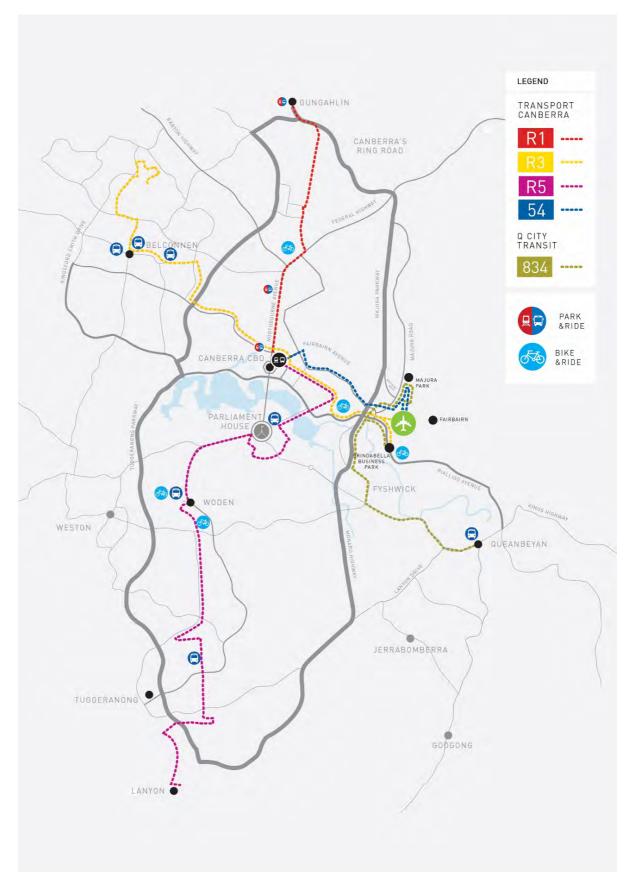
9.1.1 ACTIVE TRAVEL

Canberra Airport promotes active travel, mainly cycling. Projects completed over the past five years, in co-operation with the ACT Government, include on road cycle lanes to Fairbairn on Scherger Drive, off road shared pathways between the Terminal and the Pialligo Avenue/Beltana Road/Kallaroo Road intersection as well as between George Tyson Drive and the Majura Office Park.

Other initiatives include support for National Ride to Work Day and journey end facilities such as secure bike storage and shower/change facilities.

Regional bus services at the Airport terminal provide connectivity to the South Coast, Snowy Mountains, and Yass. Negotiations continue to connect to Wagga Wagga and the region north of Canberra [Goulburn and Southern Highlands], providing more regional communities with greater access to affordable air routes.





9.2 INTEGRATING HIGH SPEED RAIL (HSR) AT THE CANBERRA AIRPORT TERMINAL

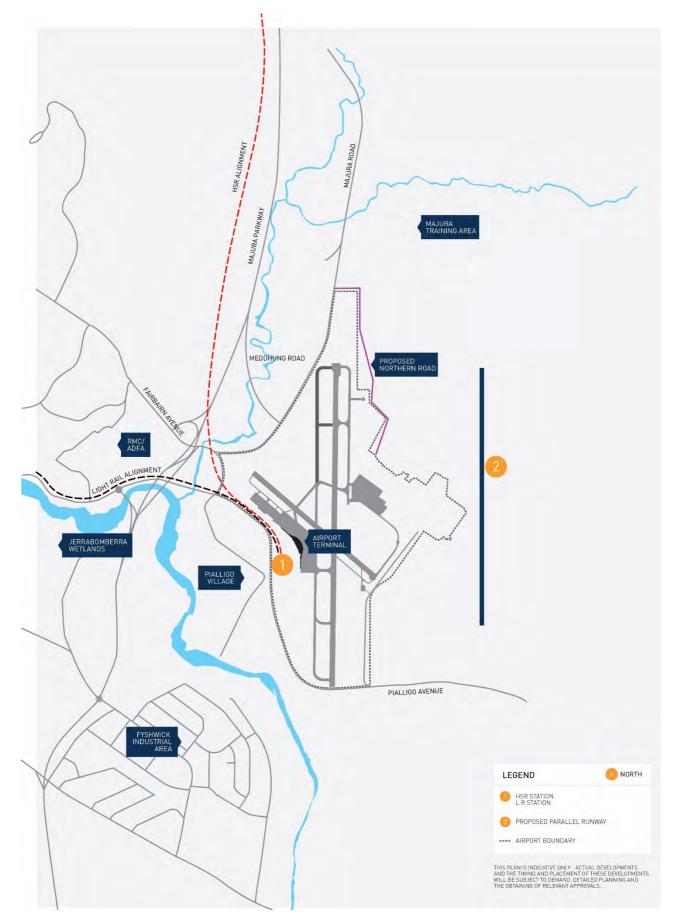
In June 2012, Canberra Airport unveiled plans for a \$140 million HSR station facility to be constructed adjacent to and within 215 metres of the Airport terminal. With HSR from Canberra Airport, passengers will reach the Sydney Central Business District in 57 minutes - faster than from Badgerys Creek and even KSA given the ground transport forecasts.

Canberra Airport remains committed to the development of this facility as required.



Figure 9.6 - Future High Speed Rail (HSR) Station Facility

Figure 9.7 - Future High Speed Rail (HSR) and Light Rail (LR) Alignments



The Australian Government's HSR Study forecasts passenger numbers for the HSR of more than seven million in the nominal first year of operation in 2036. The HSR Study Phase 1 did not take into account any impact on passenger demand as a result of Sydney Kingsford Smith Airport reaching capacity; or a second Sydney airport being built; or a second Sydney airport not being built, noting a second airport for Sydney and a high speed rail line are not mutually exclusive.

9.3 CAPITAL METRO - CANBERRA'S LIGHT RAIL

In 2013, Canberra Airport expressed its support for Light Rail to link the City and Airport, as the second stage, following the completion of the first phase Gungahlin to the City. Since this time the ACT Government has announced its intention to move forward with a link from the City to Woden as the second stage, followed by an east-west link from the City to the Airport due for completion by 2030.

9.4 OFF AIRPORT ROADS 2020

The road network within the vicinity of Canberra Airport is recognised as facilitating an array of local through traffic flows travelling north-south and east-west, using diverse modes ranging from cyclists to heavy freight vehicles.

The Majura Parkway and Monaro Highway are planned to carry metropolitan commuter through traffic as a rapid bypass of North and South Canberra, Woden, and Tuggeranong. Metropolitan heavy traffic also uses the Majura Parkway to connect with the industrial suburbs of Hume, Fyshwick and Mitchell. The Majura Parkway is also used by interstate heavy and light vehicles bypassing the urban areas of Canberra travelling between Sydney, the Snowy Mountains and the NSW far South Coast as well as Canberra, Yass and the Riverina.

Local east-west connections are made to the Majura Parkway at the Fairbairn Avenue and Morshead Drive intersections, known collectively as the "Airport Interchange", for travel to the Kings Highway. East-west traffic travelling from the City to Queanbeyan also passes through the Majura Interchange onto Pialligo Avenue around the southwestern boundary of the airport site.

Canberra Airport and the ACT Government have worked co-operatively since 1998 on the delivery of ground transport solutions for the entire Majura Valley so metropolitan and regional through traffic can be better managed without constraining local traffic flows. In addition to regular consultation and partnering in updating traffic studies and work programs, the development of previous Airport Master Plans, and the ACT Government Roads Roundtables have provided an ongoing robust process for identifying traffic demand and solutions. The Airport has paid in full, or significantly contributed to, new or upgraded intersections as follows:

Intersection	Project	Funding
Pialligo Avenue and Scherger Drive	Traffic signalled intersection with additional lane capacity	Joint venture with ACT
Molonglo Drive and Pialligo Avenue	Roundabout	Airport paid in full
Brindabella Circuit and Pialligo Avenue	Roundabout	Airport paid in full
Terminal Avenue (south bound slip lane)	Left in, left out	Airport paid in full
Pialligo Avenue from Beltana Road to Brindabella Circuit	Multi-lane realignment and upgrade	Joint venture with ACT
Fairbairn Avenue and Nomad Drive	Left in, left out	Airport paid in full
Fairbairn Avenue and the aviation fuel farm	Left in, left out	Airport paid in full
Majura Road and Spitfire Avenue	Roundabout	Airport paid in full
Majura Road and Mustang Avenue	Roundabout	Airport paid in full
Majura Road and NRMA	Left in, left out	Airport paid in full

Table 9.1 represents the current linkages between the on and off airport road network.

Table 9.1 - On and off Airport linkages

Precinct	Intersection(s)	Description
Pialligo Precinct	George Tyson Drive and Fairbairn Avenue	Left in left out
Brindabella Business Park	Molonglo Drive, Brindabella Circuit and Pialligo Avenue	Dual lane roundabouts
Fairbairn	Scherger Drive and Pialligo Avenue	Traffic light T-intersection
Majura Park	Spitfire Avenue, Mustang Avenue and Majura Road	Dual lane roundabouts
Terminal Precinct	Pialligo Avenue, Terminal Avenue and McCann Way	Grade separated and slip lane

Intersections at Terminal Avenue, Brindabella Circuit, Molonglo Drive and George Tyson Drive together provide four entrances and exits for the terminal precinct, Pialligo precinct and the Brindabella Business Park.

McCann Way provides a fifth entrance. These traffic arrangements and the overall road network layout provide for flexibility and choice of routes for commuters and visitors to the Brindabella Business Park; distribution of traffic throughout the network to assist in managing traffic volumes. Should one intersection be out of use the other intersections can be used by drivers.

Similarly, at Majura Park, Mustang Avenue and Spitfire Avenue provide two entrances and exits to the precinct, with an additional left-in at NRMA MotorServe in the north, and a left out to Majura Road from the car park at Bunnings.

Fairbairn is currently only able to be accessed and exited via one intersection where Scherger Drive meets Pialligo Avenue.

POSSIBLE OFF AIRPORT ROAD UPGRADES

A number of studies commissioned by the ACT Government of the Majura Interchange have identified network improvement priorities as metropolitan and regional demand grows:

- 1. Additional lanes on Fairbairn Avenue in both directions from Pialligo Avenue through to the Majura Parkway northbound on ramp;
- 2. Partial grade separation of the Pialligo Avenue/Fairbairn Avenue intersection; and
- 3. Staged duplication of Fairbairn Avenue to the War Memorial.

Of the above, Canberra Airport notes planned infrastructure investments as outlined in the ACT Government's Moving Canberra 2019-2045 list only an additional lane on Fairbairn Avenue from the Majura Parkway to Majura Road and the grade separation of the intersection at Pialligo Avenue and Fairbairn Avenue in the medium term.

Moving Canberra 2019-2045 lists the duplication of Pialligo Avenue from Brindabella Business Park to Yass Road as an infrastructure priority in the short term (0-5 years).

Long term mooted projects within the Airport's vicinity include:

- > A link to Kowen between Majura Road and Fairbairn Avenue.
- An extension of Hindmarsh Drive to Pialligo Avenue at either the Scherger Drive or Molonglo Drive intersections. This concept would provide a northern by-pass of Queanbeyan with an opportunity to link to the future Kowen Parkway via Pialligo Avenue and Sutton Road.

9.5 ON AIRPORT ROADS 2020

Table 9.2 outlines the main roads currently on the site and includes information about the access each road provides.

Road Name	Orientation	Access	Current Lanes
Beaufighter Street	North-south service road from McDonalds to ToysRus	Provides service and delivery access to the rear of stores in Majura Park	One lane each way
Brindabella Circuit	A ring road through the Brindabella Business Park	Access throughout the Brindabella Business Park from Pialligo Avenue	One lane each way
Catalina Drive	North-south road from NRMA in the north to office and recreational space in the south	Access through Majura Park in parallel to Majura Road	One lane each way
George Tyson Drive	North-south road from Fairbairn Avenue to Brindabella Circuit	Access to Pialligo precinct, the terminal precinct and Brindabella Business Park	One lane each way
McCann Way	East-west road linking Pialligo with George Tyson Drive	Access to Pialligo precinct and the terminal precinct	One lane into Airport
Molonglo Drive	East-west road linking Pialligo Avenue and Brindabella Circuit	Access to the southern end of the Brindabella Business Park	One lane each way
Mustang Avenue	East-west road linking to Majura Road	Access to Masters, NRMA, Dan Murphy, Caltex, and Costco from Majura Road	Duplicated
Richmond and Amberley Avenues	East-west roads connecting Scherger Drive to proposed second Fairbairn access	Access to emergency services and VIP hangar	One lane each way
Scherger Drive	North-south road linking Pialligo Avenue to Fairbairn	Access to Fairbairn from Pialligo Avenue	One lane each way

Table 9.2 - 2020 road network on Canberra Airport

Spitfire Avenue	East-west road linking to Majura Road	Access to the Majura Park Shopping Centre and Costco from Majura Road	Duplicated
Terminal Avenue	East-west road and elevated road linking Pialligo Avenue to the terminal	Access to the terminal precinct from Pialligo Avenue	Duplicated

With the exception of Terminal Avenue, all of these roads are designed as preferred routes for onsite freight movements and deliveries; in particular Beaufighter Street in Majura Park provides access to 11 loading docks at the rear of retail stores separating deliveries from customer parking and pedestrians.

Preferred routes for air freight traffic movements are designated on McCann Way, George Tyson Drive and Scherger Drive providing heavy vehicle access to both current and future air freight facilities from Pialligo Avenue to the Pialligo precinct and Fairbairn.

All Airport roads are currently performing well with significant capacity. Growth in passenger number and employment levels forecast in this Master Plan can be accommodated on the current road network with all on airport intersections as well as those intersections linking to the major regional roads handling this growth and maintaining high levels of service.

Each precinct across the site is serviced by multiple car parks with a range of car parking facilities available. Notwithstanding all car parking facilities are performing ahead of demand, Airport management has identified, designed and sited future car parking expansion opportunities, including at the terminal, beyond the next eight years.

The number of current car parking spaces across the site is indicated in Table 9.3.

 Table 9.3 - 2020 car parking spaces on Canberra Airport

Precinct	Current Availability
Brindabella Business Park	6,000 car spaces
Fairbairn	1,800 car spaces
Majura Park	3,000 car spaces
Terminal and Pialligo	3,700 car spaces

All car parking across the Airport is designed and sited off-street and every workplace and retail centre is serviced with short stay visitor parking in close proximity. Disabled parking is widely provided across the Airport and pram parking is also available at the Majura Park Shopping Centre. The terminal precinct offers both short and long stay [overnight] parking options which are mostly undercover at various price points. Kerb-side drop-off is available at the terminal departure level, office buildings and the Majura Park Shopping Centre. Terminal pick-up zones are incorporated within nearby car parks a short distance from the arrivals hall.

POSSIBLE ROAD UPGRADES ON AIRPORT

Within the next eight years the existing ground transport infrastructure has generous capacity to accommodate peak demand without the need for major upgrades. There are however various opportunities to improve capacity across the site as outlined in initiatives listed below.

Terminal Precinct

The main access to the terminal building is from Pialligo Avenue, via Terminal Avenue. Access to the terminal is also available via McCann Way – a slip lane off Pialligo Avenue – and a left in left out intersection of Nomad Drive with Fairbairn Avenue.

It is anticipated the number of Airport passengers and associated demand for onground transport infrastructure will increase by up to 164 percent over the next 20 years. Airport landside road and parking facilities have built in capacity and flexibility to ensure safe and easy access to the terminal roads and car parks.

Current planning allows for an HSR station to be located south-west of, and directly adjacent to the Airport terminal. However, fine design planning will be undertaken when plans for any potential HSR are known in more detail in co-operation with the Australian and ACT Governments and other major stakeholders.

Planning also currently allows for light rail access and station adjoining the arrivals hall of the terminal. The final design will be in co-operation with the ACT Government and other major stakeholders.

Car parking is provided in structured and on-grade car parks to cater for peak demand periods during the next 20 years.

The terminal precinct road system, public transport network, and car parking supply has been designed to cater for and be flexible to service longer term demand past the 20-year horizon of this 2020 Master Plan.

Ground transport initiatives - next eight years:

- Expanding connectivity with regional bus network;
- Controls on kerb side drop-off zones car park pick-up facilities;
- > Expanding on and off-road cycling connectivity; and

> Maintaining offer to develop an HSR terminal.

Brindabella Business Park

The long-term road layout within Brindabella Business Park and connections with Pialligo Avenue and the terminal precinct have now been constructed. These roads and the roundabout intersections on Pialligo Avenue have the capacity for the growth of the precinct over the next eight and 20 years as outlined in this Master Plan. Ground transport initiative - next eight years:

> Develop a multi-storey car parking structure at Car Park 9.

Pialligo Precinct

Ground transport initiatives - next eight years:

- > Consolidate rental car compounds; and
- > Extend George Tyson Drive to connect directly with Fairbairn Avenue.

Majura Park

The long-term road layout within Majura Park and connections with Majura Road, have generally been constructed. These internal roads have the capacity to accommodate the growth forecast in this Master Plan. Some minor internal road links are likely to be designed and constructed in response to future development.

The Majura Road roundabouts have the capacity to accommodate the growth forecast in this Master Plan. Further, the opportunity for one or more future left out connections with Majura Road has been explored and approved by Roads ACT and would likely be developed within the next eight years in response to demand.

Ground transport initiative - next eight years:

Left turn lane to Majura Road from the office car park at the rear of Lancaster Place. Currently accessed only from Catalina Drive.

Fairbairn

Any future road-widening and new roads developed in Fairbairn will respect the axial road alignment existing at Fairbairn. Scherger Drive, as the sole access to Fairbairn, can accommodate the growth forecast in this Master Plan, however for security and operational flexibility reasons, a second egress to Fairbairn is required. The Airport is expecting to develop a northern road connection between Fairbairn and Majura Road via the existing Malcolm Vale Road alignment.

Ground transport initiative - next eight years:

Extend Ewart Street to connect with Majura Road including on-road cycling.