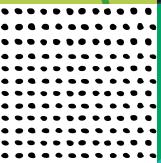
## CITY OF SOUTH PERTH INTEGRATED TRANSPORT PLAN 2021-2031

io in City of South Perth







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Kaartdjinin Nidja Nyungar Whadjuk Boodjar Koora Nidja Djining Noonakoort kaartdijin wangkiny, maam, gnarnk and boordier Nidja Whadjul kura kura.

We acknowledge and pay our respects to the traditional custodians of this land, the Whadjuk people of the Noongar nation and their Elders past and present.

## EXECUTIVE SUMMARY

MI

The City's inaugural Integrated Transport Plan 2021 – 2031 (ITP) will guide transport planning, programs, operations and advocacy in the City of South Perth over the next decade.

The actions proposed in the ITP will be carried out in unison with other key State and local transport related strategies, policies and projects developed to support the delivery of a safe, efficient and reliable transport network for the City. The ITP outlines current travel patterns and the most pressing transport challenges for the City, and provides a centralised framework designed to respond to these issues and the community's aspirations regarding transport and accessibility.

The ITP forms part of the City's Thriving Neighbourhoods suite of projects, along with the Economic Development Plan and Local Planning Scheme 7. These projects will work together to manage the City's growth over the next 10-15 years and align with the aspirations of the Strategic Community Plan 2020-2030 and the City's Corporate Business Plan 2020-2024. The implementation plan for the ITP comprises 'City Wide' and 'Activity Node' actions. Activity Nodes have been categorised as key destinations or places with transport infrastructure, and include: South Perth Peninsula, Canning Highway, Angelo Street Neighbourhood Centre, Preston Street Neighbourhood Centre, Canning Bridge Activity Centre, Karawara and Waterford/Salter Point. The actions have multiple functions including research and data collection, provision of services and infrastructure, engagement and behaviour change programs, advocacy and partnerships, and preparation of supplementary frameworks.

All actions address five transport focus areas identified from a review of feedback from previous stakeholder engagement on recent City projects, and a review of City data and strategies. The transport focus areas include:

• Public realm

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- Active transport (walking and cycling)
- Public transport
- Road transport
- Parking management.

## INTRODUCTION

The transport network plays an integral role in the liveability of a city and its ability to be resilient to challenges including population growth, an ageing population, changing urban form and climate change. A safe, efficient and reliable transport network has wide reaching benefits and not only ensures access to employment, education and goods and services, but can enhance the health and wellbeing of the community by supporting residents to live an active lifestyle.

The City is serviced by a range of public transport options including two high frequency bus routes, ten standard bus routes, the Perth to Mandurah train line and the only public ferry service in Perth. The City also has an extensive road network that services our transport needs including the Kwinana Freeway, Canning Highway and Manning Road as key arterial linkages through the City. The City has an extensive cyclist and pedestrian network, including major recreation thoroughfares along South Perth Foreshore and a regional cycle route along the Kwinana Freeway.

The population of the City of South Perth is projected to grow to 65,842 by 2041. As the capacity of the road network and the ability to increase this capacity is limited, there is an increasing need to reduce reliance on private vehicles and focus on shifting travel behaviours to active (pedestrian and cyclist) and public transport modes. The 2016 Census showed that on average Perth commuters travelled an average of over 16 km to commute to and from work. There are many opportunities for these trips to be undertaken using other modes, other than by car. The ITP prioritises the need to create more walkable neighbourhoods, a well-connected cycling network, and integrated public transport through a coordinated approach to transport planning.

## STRATEGIC DIRECTION

The ITP has been designed to align with and support the transport related strategies identified in the City's Strategic Community Plan 2020-2030 as identified below:

## 1. Facilitate a safe, efficient and reliable transport network.

The ITP aims to make our transport network more efficient. It seeks to improve the experience of active and public transport modes to reduce private vehicle travel for local trips by visitors and residents. As more trips are made by active and public transport, journeys will become more reliable for those that need to use the road network, including buses.

2. Develop and implement integrated transport and infrastructure plans.

The ITP is a direct response to this strategy and will support future infrastructure projects.

### 3. Facilitate and foster a healthy, connected and safe community.

The ITP prioritises investment in active transport (walking and cycling) which provides everyday opportunities for physical activity and connection to nature. The actions of the ITP aim to improve transport safety and connections within the City such as street calming devices, improved lighting and connectivity of paths.

4. Advocate for public infrastructure improvements including a South Perth train station and ferry services.

The ITP identifies the City's position on State Government transport infrastructure and provides advocacy actions for regional improvements.

## PURPOSE

The purpose of the ITP is to:

- Articulate a long-term vision for the development of an integrated transport system within the City
- Guide the City's planning, programs, investment, advocacy, and decision making, as well as its operational plans, policies, processes and projects with respect to transport
- Guide implementation by presenting key actions, outlining roles and responsibilities, and establishing accountable monitoring and evaluation processes.

\*Sustainable Transport in this Plan refers to public transport, walking and cycling.

## The City's **Vision** for transport is:

A safe, easily accessible and convenient transport network that meets the needs of the community and enables sustainable transport choices.

## **OBJECTIVES**

The ITP comprises five focus areas with objectives and strategic direction to support them:



#### PARKING MANAGEMENT

Manage the provision and operation of on-street and off-street parking to service the community and local businesses whilst managing travel demand to encourage a shift towards trips being made using public transport, cycling and walking.



### PUBLIC REALM

Manage streets and public spaces to become safe, attractive environments to encourage walking and cycling.



#### PUBLIC TRANSPORT

Work with State Government and public transport providers to improve public transport frequency and connectivity to and within the City.

## ACTIVE TRANSPORT

Promote walking and cycling as an attractive transport choice for local trips by improving connections and infrastructure across the City.



### **ROAD TRANSPORT**

Slow growth in traffic congestion across the local government area and improve safety of the road network for the benefit of the whole community.

## **KEY DRIVERS AND TRENDS**

The City of South Perth faces challenges both now and in the future that have implications for transport. Population growth, an ageing population, climate change and the health and wellbeing of the community will all affect the way we move around South Perth. Population Growth

By 2041 the City's population is forecast to reach 65,842. Population growth will increase travel demand within the City and wider Perth Metropolitan Area. Managing additional travel demand associated with land use change and population growth will be a challenge for the City.

#### FORECASTED CONGESTION

It has been forecast that vehicle congestion will cost the WA economy \$2.1 billion by 2020, rising to \$16 billion by 2031. By 2031, without action, four of Australia's ten most congested roads will be within the Perth Metropolitan Area. Increasing road capacity does not eliminate vehicle congestion with evidence showing it increases the number of cars on the road (generated demand). The most effective way to reduce vehicle congestion is to manage travel demand by encouraging people to change how and when they travel. The City will seek to raise awareness of sustainable transport options, including public transport, walking and cycling as more convenient alternatives to vehicle trips in the community and support initiatives that increase transport choice.

### PARKING

Parking supply and demand varies across the City with some areas of surplus parking and others with strong demand. On-street parking is permitted in many locations across the City, however this can add further vehicle congestion to local streets during peak times. In addition, underused parking detracts from the vibrancy of streets. The management and provision of parking is therefore a key component of the ITP. The city will also look to improve parking availability for hail and ride and taxi services which are now becoming more popular.

### ACTIVE TRANSPORT AND SAFETY

Active transport includes walking, cycling and other e-mobility devices (e.g. e-scooters, e-wheels, e-skateboards, hoverboards, e-unicycles and e-skates). This type of transport is recognised by the World Health Organisation as being critical towards reducing deaths related to physical inactivity. Often walking is avoided because of environments which may be perceived as unsafe or inaccessible, inadequate conveniences on the journey, or lengthy distances to cover. Without action, our transport networks and travel patterns will remain poorly integrated and sustainability improvements will be limited. Improvements to the connectivity of the network and the actual and perceived safety of this type of travel will encourage behaviour change and complement broader road safety initiatives.

### EQUITY AND ACCESSIBILITY

Transport provides people with access to jobs, services and leisure facilities. Providing a transport network that does not accommodate people of varying income, ability and age across a wide range of travel modes results in parts of the community becoming isolated, impacting on health and social wellbeing. With a growing ageing population there will be an increasing number of City residents relying on non-car travel modes and hail and ride services to maintain their mobility and social wellbeing.

#### EMISSIONS

The transport sector is Australia's second largest generator of carbon emissions, accounting for 19%. Transport has had the most rapid growth in greenhouse gas emissions since 1990, growing by 62.9% and is forecast to grow by a further 12% by 2030. Private cars are a significant contributor to emissions and currently account for a high percentage of trips in the City.

### **TECHNOLOGY INNOVATION**

There is a high degree of uncertainty about how changing technologies will affect how we travel and receive goods and services in the future. Emerging transport models and technologies (such as autonomous vehicles, electric cars, shared mobility systems and drone delivery services) provide opportunities to alter patterns of transport accessibility and efficiencies. The integration of technology into workspaces and the increasing trend of remote working arrangements will result in changes to traditional peak time travel behaviour.

The rise in use of electric scooters, bikes and skateboards is a growing trend local and state government are currently responding to. The Department of Transport is working with a range of stakeholders, including e-scooter companies, local governments and the Road Safety Commission as well as the National Transport Commission and other States and Territories, to develop a regulatory framework which could allow for the safe and convenient use of e-scooters on our transport network.

#### PLANNED INFRASTRUCTURE

Large investments in active and public transport infrastructure can encourage the community to make significantly fewer trips by car, alleviating pressure on the local road network. There are a number of projects within the City that are either planned, or are seen as a strategically important project to pursue, including:

- South Perth Railway Station
- Canning Bridge Bus Interchange
- Improvements to the Canning Highway corridor including future expansion, a bus corridor and cycle paths
- A light rail network for Perth's central subregion.

Advocacy actions related to these projects are discussed further under the Implementation Plan section of the ITP.

## TRANSPORT NETWORK HISTORY

The evolution of our local transport system has played a significant role in shaping the structure of our City. Over time, the establishment of key transport routes and nodes have supported the development of neighbourhood activity centres and influenced the way people move between places.





## **PRE-SETTLEMENT**

South Perth has been home to the Whadjuk Noongar/Bibbulmun people for over 45,000 years. These people were hunter gatherers who moved along definite routes determined by seasonal supplies of food and water.



## FERRY

In 1833 the City had its first ferry service at Point Belches. Mends Street Jetty was then constructed in the 1890's for patrons to the Zoo. By 1900 there were ferry services running from Canning Bridge, Como, Coode Street and Mends Street.



## TRAM

From 1922 to 1951 several tram routes serviced South Perth. Routes serviced Angelo Street, Labouchere Road, Mary Street and Mends Street connecting to the Ferry. Buses replaced the Tram in 1950.



## **ROAD INFRASTRUCTURE**

Important links for the City were established in:

- 1849 construction of Canning Bridge
- 1873 Canning Road announced
- 1958 construction of Narrows Bridge
- 1982 construction of Mount Henry Bridge.





# COMMUNITY PROFILE

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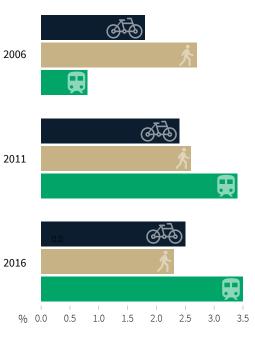
The City of South Perth has a population of 43,773 people and comprises the suburbs of South Perth, Kensington, Como, Karawara, Waterford, Salter Point and Manning, covering an area of 19.9km2. The City is located approximately 4km south of the Perth CBD and is bordered by four other local governments, being Town of Victoria Park and City of Canning, with City of Perth and City of Melville separated by the Canning and Swan Rivers. The City's population is forecast to reach 65,842 by 2041, with the suburbs of Como and South Perth projected to experience the strongest growth. Key transport infrastructure and popular destinations within the City are shown in Figure 1.



Local Context (Pracsys 2021)



### A SNAPSHOT OF THE CITY'S TRANSPORT TRENDS



#### **RESIDENTS WORK TRANSPORT MODE\***



The proportion of residents travelling by bicycle has steadily increased since 2006, compared to walking which has slightly decreased over the same period.\*Total employed persons aged 15+

## **64%**

of residents commute to work by car as driver or a passenger

## 9%

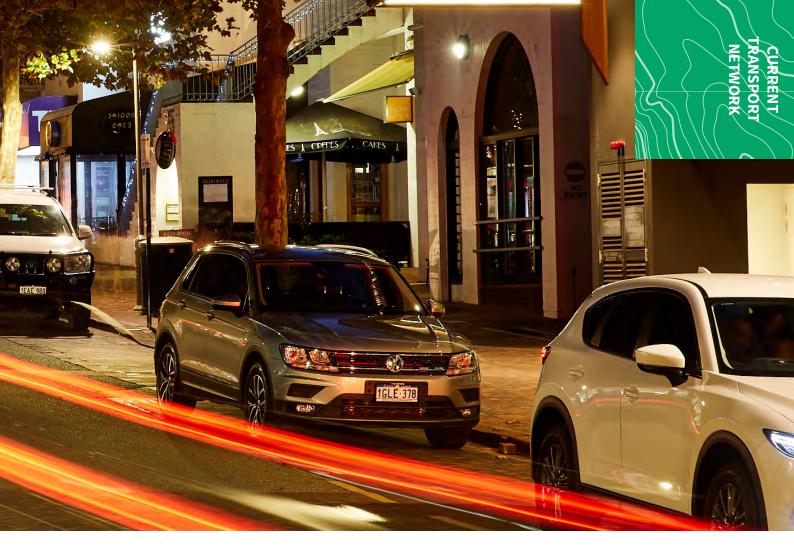
in 2016 of people travelled by bus compared to 4.1% for Greater Perth

28.7%

of people who worked in the City of South Perth in 2016 also lived in the area

Since 2006 there has been a **36%** decline in the number of residents commuting to work

by ferry



Whilst the figures suggest that local bus patronage has decreased, increases in patronage on bus and train services regionally have occurred over the last two to three years. This suggests growing demand for alternative transport modes, which is also needed within the City of South Perth.

It is further anticipated that the percentage of people working from home is likely to increase due to technology advancements, flexible working arrangements as well as the influence of the COVID-19 pandemic. Moving into the future this trend will need to be closely monitored to determine the impact on the transport network.

In relation to travel to employment, in 2016 71.3% of the City's working residents were employed outside the Local Government area, with the largest number being employed within the City of Perth. The City of South Perth local government area employs the second highest number of residents, highlighting the opportunity to encourage active transport for local journeys.

The City has an ageing population with a higher proportion of people aged over 55 years than the average for Greater Perth. There is also a higher proportion of people aged between 15 to 34 years.

There is a significantly higher percentage of medium to high density dwellings within the City, accounting for 52.9% of all dwellings, compared to 25% for Greater Perth. This can be attributed to a number of existing areas of higher density within the City including the South Perth Peninsula, areas surrounding the Preston Street and Angelo Street local centres, and areas adjacent to Canning Highway.

With regard to travel behaviours, half of all households within the City have access to two or more motor vehicles - slightly less than the 57% identified for Greater Perth. The predominant method of travel to work is by private car (64.9%), with public transport and active travel modes accounting for 12.7% and 5% respectively.

Compared to Greater Perth, a much higher proportion of people in the City commute to work by bus. However, between 2011 and 2016, there was a notable increase in the number of people commuting to work by private car and a decrease in those who commute by bus. Similar to most other areas of Perth, this demonstrates the high car dependency for residents of the City.



## CURRENT TRANSPORT NETWORK



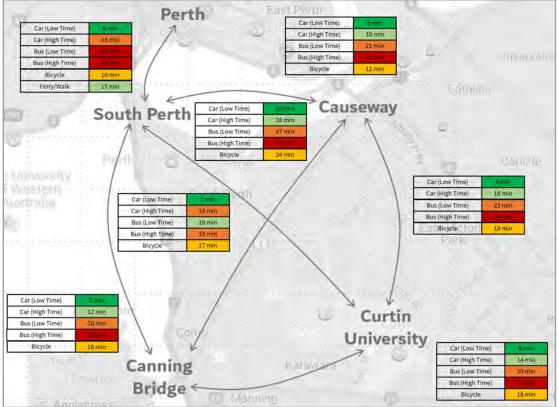


Figure 3 - Journey times by travel mode (Flyt 2018)

## **TRAVEL MODES**

The Movement Network Report 2018, prepared by Flyt for the draft South Perth Activity Centre Plan (ACP) compared travel times by different transport modes between major activity centres and key destinations either within or near to the City. The travel and route tool within Google Maps compared travel times for different travel modes in the morning peak period (8.10am on a Thursday). The study compared travel times between Perth CBD, South Perth Activity Centre, the Causeway, Curtin University and Canning Bridge.

The results of the study, illustrated in Figure 3, show the following patterns in peak hour travel times:

- Travel times by car are the fastest
- Bus travel times are generally slowest, reflecting the impact of stops, winding suburban based routes and lack of bus priority lanes
- Bicycle trip times are competitive, however, that is qualified by potential lack of attractive infrastructure along these routes such as Canning Highway
- Where there were fast, direct and frequent bus services (such as those along Canning Highway), buses were very competitive in travel times during the morning peak
- The ferry and walk trip from Mends Street is highly competitive for trips to Perth CBD.

The study highlights opportunities to promote particular types of transport modes for travel between specific centres within the City. It also identifies where improvements in travel times for transport modes are needed between major destinations and transport nodes. In particular, travel by ferry is demonstrated to be a competitive method of travel from South Perth to Perth CBD, compared to travel by car and bus. Public transport times from South Perth to Canning Bridge and Curtin University are identified for improvement.

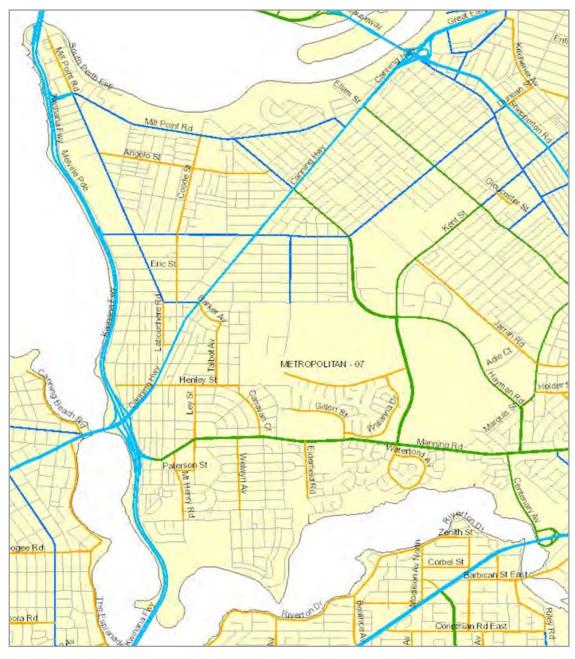
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## **ROAD NETWORK**

The existing road network provides very few opportunities for expansion or alteration without major intervention or design solutions. The Distributor Road network plays a vital role in moving traffic, public transport, cyclists, and pedestrians around. The existing road hierarchy is summarised in Table 1 - Road Hierarchy for the City's Network and Figure 3 below. The different road types are set out in accordance with the Main Roads WA (MRWA) Road Classification criteria.





-Regional Distributor

Primary Distributor

- -Distributor A
- -Distributor B
- -Local Distributor
- Access Road



Canning Highway is an important transport link connecting the Kwinana Freeway to Great Eastern Highway, the Causeway, Albany Highway and Shepperton Road. Canning Highway is affected by a Metropolitan Region Scheme 'Primary Regional Road' Reservation to achieve future road widening.

The Road Reservation is approximately 18m wider than the existing roadway and has a significant impact on properties with frontage to Canning Highway, particularly for properties on the southern side of the road. The Road Reservation provides an opportunity for widening in addition to improvements to pedestrian and cyclist connections across the corridor, and additional landscaping.

ROAD TYPE	ROAD NAME
Primary Distributor	Kwinana Freeway and Canning Highway
Distributor A	Centenary Avenue, Manning Road, Kent Street
Distributor A & B	Douglas Avenue - Hayman Road
Distributor B	South Terrace - George Street, Labouchere Road, Murray Street, Thelma Street, Mill Point Road - Way Road
Local Distributor	Mill Point Road, Angelo Street, Coode Street, Labouchere Road - Sounders Street, Barker Avenue - Talbot Avenue, Henley Street, Ley Street, Canavan Crescent - Bruce Street, Mt Henry Road - Clydesdale Street, Welwyn Avenue, Elderfield Road, Waterford Avenue, Gillon Street, Jackson Road, Walanna Drive.
Access Road	All other streets

Table 1 - Road Hierarchy for the City's Network

## CONGESTION AND ROAD NETWORK CAPACITY

Flyt was commissioned by the City as part of the ITP to undertake a traffic and congestion forecast, refer Appendix A. The forecast was informed by an analysis of the road network's performance, crash information, and the City's public transport and active transport networks. The forecast also analysed outputs from MRWA's road network (ROM24) model and provided a capacity assessment and modelling outputs to inform recommended actions specific to road transport. Other sources of data included real time travel time surveys (online and recorded timings) and SCATS (Sydney Coordinated Adaptive Traffic System) intersection vehicle and signal timing data.

### NETWORK PERFORMANCE

The overall Distributor Road network within the City is considered to operate as intended to function given the volume of traffic moving into and through the City. There are noticeable fluctuations in volumes and speeds associated with peak periods that would be common place throughout the Perth Metropolitan Area. Some of the key attributes for the network's performance include:

The current performance of the Distributor Road network within the City of South Perth was observed to have no significant traffic congestion issues. Key traffic observations include:

- In the suburb of South Perth, Mill Point Road and Labouchere Road carry the largest volumes of traffic to and from the Kwinana Freeway. Douglas Avenue between Canning Highway, and Mill Point Road carries higher volumes of traffic than other approaches
- In Kensington, Douglas Avenue, south of Canning Highway was also shown to carry higher traffic volumes. Some schools around Como (such as on Thelma Street), also recorded higher than average volumes
- Manning Road has the highest traffic volumes. The intersections of Manning Road with Kent Street and Centenary Avenue in Waterford forms the busiest part of the overall distributor network in the City. Overall, the corridor was seen to perform well and within capacity

Key Distributor Road approaches to Canning Highway were also observed for intermittent traffic conditions, including Barker Avenue, South Terrace westbound, and Thelma Street Eastbound. It was noted that at all three intersections, multiple signal cycles are required to cross the Highway corridor. This is largely a result of the prioritisation of Canning Highway traffic, and the capacity of the local distributor road intersections.

The morning peak period is characterised by employment and education trips, whilst commuting patterns on weekday afternoons fluctuate over a longer period. Linked trips to multiple destinations and trips being taken for non-employment reasons such as recreation trips or entertainment trips contribute to these patterns.

Local issues during peak afternoon periods include:

- Reduced traffic flows surrounding schools in the City at 3pm
- Early evening 'congested' conditions along key streets in local centres such as Preston Street and Angelo Street from 5pm onwards when retail and food and beverage outlets experience high turnover
- Reduced traffic speeds on Davilak Street around 5pm which captures pick up activity at Canning Bridge Station.

Whilst there are some obvious congested locations during weekday peak periods, as is common place in many parts of the Perth Metropolitan Area, none of those observed identify failure of the network to cope or limit strategic land use goals of the City.

The speed analysis identified the importance of slower speed zones around local centres and school zones. The City has a relatively high level of compliance in terms of maintaining the posted speed limit on the Distributor Road network, with streets installed with traffic calming measures proven effective in keeping drivers at or below the posted speed limit. There were no Distributor Roads identified with significant issues with speeding which require immediate action.



#### **CRASH INFORMATION**

Based on data obtained from the Department of Infrastructure, Transport, Regional Development and Communications which compared road deaths by local government area between 2008 and 2019, there are no substantial issues identified for the City.

By reducing speeds, improving road user behaviour, and vehicle safety features, providing quality roads and roadsides and ensuring timely post-crash care, injuries and fatalities can be prevented. The mature state of the road network indicates that the majority of crashes will continue to fit the profile of those recorded over the past five years, mainly due to driver inattention in fine, daylight conditions. Pedestrian accidents do not appear to be a specific issue, however the City is fortunate to have a substantial off-street footpath network that provides a safe environment.

The ITP promotes the current vision of the State Road Safety Strategy of zero deaths and serious injuries by 2050. The City will continue to monitor crash locations and address them on an ongoing basis. Above all, reducing speed within activity centre areas will assist in reducing the level of crashes experienced and support safer conditions for pedestrians and other vulnerable road users.

#### TRAFFIC AND CONGESTION FORECAST

Model data from MRWA highlights significant regional traffic that passes through the City without an internal purpose. This through-traffic is largely contained on the Kwinana Freeway and Canning Highway corridors, however its impact is obvious around peak hour congestion and queueing at approaches to these roads.

This situation is unlikely to change and it is an accepted reality of how the transport network of an inner city area functions. The Perth Metropolitan Area has been planned to accommodate and encourage private vehicle movement, which is recognised as a current challenge to achieving a higher proportion of trips through alternative modes.

For the Canning Highway corridor which is managed by MRWA, its operational focus will be to optimise travel times for the higher flows and volumes along the entirety of the corridor between Canning Bridge and the Causeway.

Canning Highway has a range of complexities for a Primary Regional Road. It has a substantial number of intersecting side roads that facilitate turning movements that may not be considered safe and would be contributing to the crash statistics discussed above. It has generally poor pedestrian and cycling amenity along its length and across the corridor. It also provides direct access to individual properties and commercial sites.

The future widening of Canning Highway has a range of complexities and constraints. To facilitate future improvement in both the transport function of the corridor and to deliver improvement to place outcomes, it is intended that the City investigate a range of advocacy options to improve amenity and access. These are discussed under the actions section of this plan.



## PUBLIC TRANSPORT

The City is served by 12 bus routes, a ferry service and Canning Bridge Train Station.

The COVID-19 pandemic dramatically impacted Transperth public transport patronage in 2020. According to the Public Transport Authority (PTA) Annual Report 2019-20, Transperth patronage declined by 17.6% in the 2019/20 period compared with 2018/19. The PTA have reported, however, that at the end of February 2020 before the impact of COVID, patronage exceeded 2018/19 levels, with overall boarding up between 1.9% and 2.3 %.

## FERRY

Transperth operate three ferries over the 1.47km route between the CBD (Elizabeth Quay) and South Perth (Mends Street). The ferry offers a high-frequency summer timetable and lower-frequency winter timetable in reflection of the lower tourism and general usage during winter.

SUMMER TIMETABLE		WINTER TIMETABLE		
Monday - Thursday	122 trips per day	Manday Friday	C0 trips per day	
Friday	134 trips per day	Monday - Friday	60 trips per day	
Saturday	118 trips per day	Weekends and Public		
Sunday/Public Holiday	104 trips per day	Holidays	56 trips per day	

Table 2 identifies the disparity between summer and winter ferry services. Improved frequency of ferry services over the winter period has the potential to increase patronage.

Figures show that at the end of February 2020, ferry boarding were 7.0 % above the corresponding 2018/19 figure. Over the 2019/20 period however, ferry total boarding per service kilometre decreased by 4.6 %, which is likely attributed to the effects of COVID-19. General observations of ferry patronage for journeys to work has indicated that ridership is less than other modes, which could be attributed to connectivity to feeder services. Fluctuations in the tourism market have had a significant impact on ferry boarding, with tourists accounting for approximately half of all ferry patronage.

## BUS

One high frequency bus service is on Canning Highway and forms part of the route running between Elizabeth Quay Bus Station and Fremantle Station. The remainder of the City is spatially well serviced by bus routes as shown in Figure 5, although some routes have been noted to be inefficient. During the City's peak travel times, journeys by bus take longer than all modes including private vehicles and cycling due to winding suburban routes and lack of priority at key intersections and corridors. The South Perth Activity Centre Plan highlights the need for bus priority at the Mill Point Road and Labouchere Road intersections, and a dedicated bus lane on Labouchere Road between Judd Street and Lyall Street. Outside the Activity Centre, the need for bus priority measures have been highlighted along Canning Highway within the Canning Highway Road Reservation Review.

Figure 5 - Transperth Bus Network (Department of Transport 2021)





Curtin University is located outside the City of South Perth local government area but operates a free hail and ride Curtin Access Bus Services through the campus and within surrounding neighbourhoods within the City including Waterford, South Perth and Technology Park. Although purposed for university campus students, visitors and staff, the bus is also accessible to members of the general public along defined routes.



## TRAIN

The Canning Bridge Train Station is currently the only train station servicing the City. Between 2016/17 and 2018/19, patronage on the Mandurah line increased. There was an evident decline in ridership in the 2019/20 period however as a result of the impacts of COVID-19. Canning Bridge Station has no formal park and ride, meaning it is predominantly accessed by walking and bus transfers. Formalised areas for pick up and drop off activity have been created on Robert Street, where four hour parking is also permitted. This excludes peak hour commuting park and ride patterns, but allows leisure trips to be made into central Perth and commuting trips outside of peak times.

The Perth-Mandurah rail line includes land reserved near the end of Richardson Street to construct a future South Perth station. The future development of a train station has been incorporated into strategic planning for the area since the rail line was constructed in 2007. The City supports the delivery of a South Perth Train Station which will establish a vibrant gateway to Perth Zoo and the wider South Perth Activity Centre area.

The City is planning to provide or improve controlled pedestrian at-grade crossings at several intersections along Labouchere Road. This will provide safer crossing points across Labouchere Road for expected movements associated with the station and increased development in the area.

## **CYCLE INFRASTRUCTURE**

The City has a good level of cycle accessibility. In 2016, cycling in the City accounted for approximately 2.5% of trips to work. The City's foreshores in particular accommodate large numbers of recreational cyclists in addition to weekday commuters. The City is served by an extensive network of off-road cycle paths along its western and northern foreshore areas, with on-road paths and small linking sections of off-road path in the remainder of the local government area.

The Kwinana Freeway cycle path was the busiest monitored section of Perth's cycle network in 2017, with approximately 2,100 cyclists recorded per day. The South Perth Esplanade path was also among the busiest, with approximately 1,200 cyclists per day. An audit undertaken by Aurecon in 2018 on the City's cycle path network identified that the City's foreshore paths had a 'good' rating compared with industry standards, however, on-road paths were categorised with mostly an 'average' or 'poor' rating. This reflects a high proportion of the on-road network which is poorly connected and impacted by road conditions such as traffic, parking and bus routes. Upgrades to these average and poor rated paths will promote walking and cycling as an attractive transport choice across the City and between Activity Nodes. Refer to Figure 6.

According to the online heat mapping tool Strava, main cycling routes within the City typically follow the distributor network, with the highest north-south volumes experienced along the Kwinana Freeway Principal Share Path (PSP), Melville Parade, Labouchere Road, Hayman Road/Douglas Avenue and to a lesser extent. Coode Street. The South Perth Esplanade PSP and Mill Point Road east of Coode Street are the only popular routes which accommodate east-west cycling. The Henley Street access path was constructed in 2012/13 to provide direct and safe access between Canning Bridge Station and Curtin University. It has the lowest of all recorded volumes with peaks occurring at 8am and 5pm, being predominantly used to access Curtin University. It is noted that whilst Strava data is useful, it is acknowledged that users may not necessarily be representative of South Perth residents as the program is heavily used by highly confident on-road riders.

In July 2020, Council endorsed the Department of Transport's (DoT) Long Term Cycle Network (LTCN) as it relates to the City of South Perth. The LTCN details a vision for a continuous bicycle network that links parks, schools, community facilities and transport services across the Perth and Peel regions. The State Government will use the routes identified in the LTCN to allocate funding for cycling infrastructure and shared paths (for both people-on-bikes and pedestrians) to local governments.

The City's Joint Bike Plan with the Town of Victoria Park identifies a number of projects to expand the cycle network, to increase safety and to improve connections with direct and efficient routes in order to make cycling a more attractive transport option.





Figure 6 - City of South Perth Cycle Path Audit (Aurecon 2018)

## PEDESTRIAN NETWORK

The City is primarily responsible for the establishment and maintenance of an extensive network of footpaths and pedestrian facilities and must ensure that the network caters for a wide range of users of varying abilities and ages. The City has committed to an ongoing program of works to improve existing pedestrian paths which progresses its commitment to increase the proportion of people walking. These improvements will include bench seats for resting, shading and lighting. According to Strava, popular routes for people walking and running are concentrated on local distributor roads including the northern end of Labouchere Road, Coode Street and Henley Avenue.

The management of the Principal Share Paths is by the State Government. The Joint Bike Plan identifies supplementary initiatives including awareness campaigns (e.g. 'Take Care' pavement markings along shared paths within the City of Perth) which can used to improve safety of the network for all users. The City can investigate other safety initiatives with the State including signage and calming devices to improve safety of shared paths across the network.

## PARKING MANAGEMENT

Parking provision in the City comprises a mixture of on and off-street, public and private, short and long stay facilities. There is a high concentration of private and public parking facilities within the South Perth Activity Centre area and along the South Perth Foreshore. The remaining parking facilities are distributed across the City in association with recreation, civic and businesses.

Management of parking is informed by the City's Parking Strategy 2016 (Strategy). The Strategy provides a city wide parking framework with recommendations for the short, medium and long term. The Strategy divides the City into 14 Parking Control Areas (PCA) on the basis of key users and land use types. Each PCA is to be implemented with a tailored Parking Management Plan for on-street and public off-street parking bays. Once prepared, it is intended the Parking Action Management Plans will have a minor review every six months with a major review every 12 months. Figure 7 provides a map of the City's PCAs.

The ITP supports implementation of the Strategy and preparation of the PCA Parking Management Plans to address the management and supply of public parking across the City.

The Strategy supports different forms of sustainable transport and a 'demand management' approach to parking, involving monitoring of available bays to identify issues with supply. The Strategy outlines five parking principles to inform future travel behaviour strategies:

- 1. Focus on people access not vehicle access
- 2. Provide efficient and effective alternatives to car access
- 3. Parking policy and strategy must support sustainable transport
- 4. The appropriate amount of parking for the centre will be well below the unconstrained demand for parking
- 5. The provision of parking requires a demand management, not a demand satisfaction approach.







# STRATEGIC CONTEXT

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Responsibility of the City's transport planning is shared between the Local Government and the State Government. Both levels of government must work together to provide a transport network that caters for the community. High level land use planning policy, public transport and the arterial road network is the responsibility of State Government. The City manages the local road network and the majority of the pedestrian and bicycle networks. The State Government and local strategies and plans that contribute to the planning and provision of the transport network provide the main framework for this Plan.

The ITP will form part of the City's Thriving Neighbourhood Project which includes the Local Planning Scheme No.7 and the Economic Development Plan to facilitate aligned outcomes and clear messages about the City's plans for future growth. An overview of the State and local strategic context is provided in Figure 8.

Precinct level planning will consider a Movement and Place framework being developed by the Department of Transport. This framework will provide further guidance on the priority of efficient journeys, compared to the quality (ambience) experience of a place. This framework is currently in its testing phase, and has been considered in the development of actions within this ITP.



The City has a number of adopted plans and strategies that contribute to the vision and actions of the ITP. At a State Government level, the strategic planning framework also guides the City to respond to key transport and land use challenges. As such, the ITP has considered the following strategies and plans:

Perth and Peel@3.5million - a suite of documents that present a long-term growth strategy for land use and infrastructure provision for the Perth and Peel regions. A number of important transport initiatives are proposed including long-term transport to provide a network of strategic road and public transport linkages (including METRONET) to support a city of 3.5 million people and beyond. There is a focus on the need to integrate urban and employment nodes with transport infrastructure and services, including upgrading and adding new transport infrastructure to the network. The ITP aligns with the mobility networks identified and will support mobility to and from the identified growth areas.

City of South Perth Strategic Community Plan 2020-2030 - identifies a number of transport related actions in the delivery of sustainable urban neighbourhoods. The Plan contains specific strategies relating to the development of integrated transport and infrastructure plans to facilitate a safe, efficient and reliable transport network which has informed the actions of the ITP.

#### City of South Perth Local Planning Strategy

- sets the strategic direction for planning and development in the City over the next 10 to 15 years. It sets out transport and access related strategies which direct the majority of the City's growth towards activity centres and corridors that are well served with efficient transport networks, including more options for walking, cycling and public transport. The ITP will build on the strategies and actions set out in the LPS to inform the preparation and implementation of the City's Local Planning Scheme. Additionally, the managed growth areas identified in the Strategy have been used as a basis for the ITP to determine specific 'Activity Nodes' and related actions to address unique transport issues within each area.

#### **City of South Perth Parking Strategy**

**2016** - provides a plan for the provision and management of parking within the City over the next 15 years. The Strategy seeks to guide the development of Parking Management Plans for 14 Parking Control Areas (PCA) within the City. The ITP is consistent with the principles recommended by the Strategy and supports a demand management approach to encourage the use of alternative modes of transport to key activity centres and destinations within the City. For off-street private parking in new developments, the ITP recommends a review of parking standards as part of the implementation of the City's new planning framework, and to align with best practice parking management principles.

Joint Bike Plan 2018 - sets out the longterm vision for a strategic cycling network covering both South Perth and Victoria Park local government areas. The Bike Plan outlines a five-year action plan for improvements to the cycle network and environment for each local government to further investigate and implement. The ITP supports the realisation of the 7 key infrastructure projects proposed for delivery over a five-year period within the City of South Perth.

These include:

- 1. New and upgraded cycle facilities along South Perth Esplanade
- 2. New cycle infrastructure between Canning Bridge and Curtin University
- 3. New and upgraded shared path facilities between Welwyn and Centenary Avenue on Manning Road
- 4. New and upgraded cycle facilities between Curtin University and South Perth Foreshore
- 5. Investigate new shared path along Thelma Street
- 6. New on-road cycle lanes between Dick Perry Avenue and Jarrah Road and intersection improvements on Kent Street
- 7. New on-road cycle lanes between Thelma Street and South Terrace on Coode Street and intersection upgrades.



Department of Transport draft Long Term Cycle Network (LTCN) - details a vision for a continuous bicycle network that links parks, schools, community facilities and transport services across the Perth and Peel regions. The State government will use the routes identified in the LTCN to allocate funding for cycling infrastructure to local governments. The ITP supports the routes identified by the LTCN as endorsed by Council.

#### **Disability Access Inclusion Plan 2017-**

**2021** - outlines the City's commitment to the access and inclusion outcome areas specified in the Disability Services Act 1993. With regard to transport planning, the Plan supports the upgrade of City assets (footpaths, car parking etc.) to ensure access is maintained for all. To date the Plan has had a number of achievements including improvements to accessible parking bays across the City with the installation of new accessible bays and upgrading of existing bays in accordance with current standards. The ITP supports the ongoing improvement of the public domain to provide universal access.

#### South Perth Activity Centre Plan (ACP) 2019

- sets out the strategic vision and statutory planning requirements for development within the area that stretches from the tip of South Perth Peninsula to Richardson Park and the Zoo. The ACP supports the future development of the South Perth Train Station and identifies a range of other transport and accessibility initiatives that will be implemented over time. The ITP supports the objectives of this Plan.

#### Canning Bridge Activity Centre Plan 2016

- a guide for development in the precinct surrounding the Canning Bridge Station on both sides of the Canning River and comprising land within both the City of Melville and the City of South Perth. A key objective of the ACP is to ensure that there is sufficient development intensity and land use mix to support an increase in high frequency public transport, and that access is maximised through active transport while reducing private vehicle trips. This includes the development of a legible street network and quality public spaces by concentrating certain land uses, particularly those that generate pedestrian activity, within the Centre. The ITP supports the objectives of this Plan.

#### **Bentley-Curtin Specialised Activity**

**Centre Plan 2018** - sets a long-term vision for Bentley-Curtin and is intended to guide planning and development by informing local planning scheme reviews, amendments and further detailed planning. The ACP aims to develop a more integrated street network, coordinated management of parking, additions to pedestrian and cycle networks and expanded public transport services as the area grows. The ITP recognises the important role of this Centre in generating trips across the City and supports ongoing improvements to connections.

#### Dyarigarro Whadjuk Boodjar, Clontarf-Waterford-Salter Point Foreshore Masterplan 2019 - identifies a number of

opportunities to improve access and movement across the precincts for pedestrians, cyclists, vehicles, public transport and wayfinding. The ITP recognises the important recreation function of the foreshore area and supports further improvements to the local path network to strengthen active transport journeys.

#### **South Perth Foreshore Strategy and Management Plan 2015** - identifies a number of transport and access actions and

infrastructure goals including the integration of public transport with ferry services and improvements to bicycle and pedestrian paths and access signage. The ITP supports the ongoing implementation of the document to deliver mobility improvements along the iconic foreshore.

## **KEY THEMES RAISED**

Consultation undertaken for the above projects highlighted opportunities for improvement to the City's transport system.

#### SUMMARY OF THEMES RAISED



#### PARKING MANAGEMENT

- Support for local business parking and metered bays for high demand, on-street car parking
- More kiss and ride facilities near public transport
- Improve management of existing parking bays
- Support for residential parking permits, car share schemes and dedicated commuter parking.



#### PUBLIC REALM

- More connections to existing and future recreation areas for social interaction
- Improvements to support street activity and tourism making it easier to explore.

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#### **PUBLIC TRANSPORT**

- Support for a Central Area Transit (CAT) bus to improve connectivity around the City
- Advocate the delivery of the proposed South Perth Train Station
- Increase frequency of ferry services and number of stops.



#### **ACTIVE TRANSPORT**

- Extend walkable and cycle friendly environments across the City
- Improve the comfort of existing paths through widening, providing drinking fountains, cyclist parking at popular destinations and safety of road crossings.



#### **ROAD TRANSPORT**

- Arterial road congestion is a barrier to mobility
- Labouchere Road and Mill Point Road have congestion issues
- Support for traffic calming measures and signage to reduce speeding of vehicles on local streets.



## **PLANNING FOR YOUTH**

In planning for transport, it is important to cater for the mobility needs of the youth in our community. At a youth event held by the City in 2021, school aged children were asked about how they travel and their thoughts on future transport trends. Here is a snapshot of their responses.

SUMMARY OF THEMES RAISED

What makes it easier for you to go to places without a car...

- "Free Transport"
- "Bike hire"
- "More off-road bike paths, like the ones along the river"

How you think the way you will travel will change by 2031...

- "Travelling will be faster and safer"
- "Driverless cars"
- "More electric cars"
- "More eco-friendly and sustainable ways to travel"
- "More buses and trains"

How you would travel most of the time without a car, to place in your local area...



# IMPLEMENTATION PLAN

IMPLEMENTATION PLAN





An Implementation Plan has been developed to address the key issues from the background research, traffic and congestion forecast and community engagement outcomes. The implementation plan contains City Wide and Activity Node specific actions grouped into the five focus areas of transport priorities being **Public Realm, Active Transport (walking and cycling), Public Transport, Road Transport and Parking Management**.

There are seven Activity Nodes that have been identified as areas of transport infrastructure or key destinations.

The City Wide and Activity Node actions include timeframes, cost, external stakeholders and priority required to enable successful completion of each action within the ITP.

The actions have multiple functions, including:

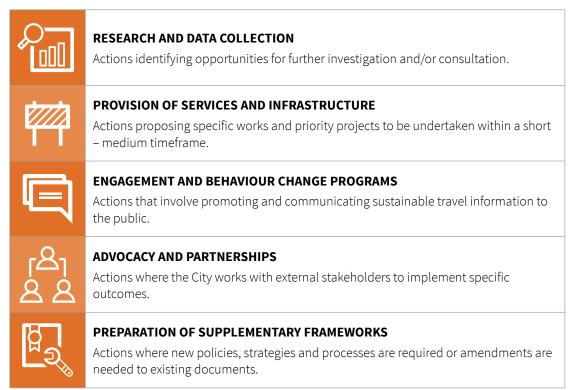


Table 3 - Legend for Actions indicates the timeframe, cost and priority for each of the actions.

TIME FRAME	Short: 1-2 years Medium: 3-5 years Long: 5+ years
COST	\$: < \$100,000 \$\$: \$100,000 - \$500,000 \$\$\$: > \$500,000
PRIORITY	Very High High Moderate Low



## **CITY WIDE ACTIONS**

The following section provides actions across the City which are grouped according to the five Focus Areas including: Public Realm, Active Transport, Public Transport, Road Transport and Parking Management. The purpose of the City Wide actions is to facilitate connections across all areas of the City, including between and within Activity Nodes.



**PARKING MANAGEMENT** | Objective: Manage the provision and operation of on-street and off-street parking to service the community and local businesses whilst managing travel demand to encourage a shift towards more public transport, cycling and walking.

ACTIONS	TIME	COST	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
Demand management				
<b>1</b> . Implement City of South Perth Parking Strategy 2016 and evaluate timeframes for the preparation of Parking Management Plans for identified Parking Control Areas.	Short - Medium	\$	_	High
<b>2</b> . Invest in parking monitoring technologies to assist to inform parking management practices and further reviews of the South Perth Parking Strategy.	Short - Medium	\$\$	-	Mod.
<b>3</b> . Consider provision of priority long-term and short-term on-street parking spaces for rideshare vehicles in proximity to activity nodes.	Medium	\$	DoT	Mod.
<b>4</b> . Investigate options to facilitate charging bays for electric vehicles within City public car parks. Once implemented, promote electric vehicle use by creating an electric vehicle charging map and information page on the City's website.	Short - Medium	\$\$	DoT, RAC	High
<b>5</b> . Undertake a review of parking development standards to align with best practice parking management principles as part of implementation of the City's new planning framework.	Short	\$	WALGA, DoT	Mod.





**PUBLIC REALM** | Objective: Manage streets and public spaces to become safe, attractive environments to encourage walking and cycling.

ACTIONS	TIME	соѕт	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
Safety and amenity				
<b>1</b> . Review crime and accident statistics annually to identify local roads and footpaths that require safety improvements.	Ongoing	\$	WAPOL, MRWA, Road Safety Council	Mod.
<b>2</b> . In accordance with the City's Disability Access and Inclusion Plan, provide universal access improvements as part of the upgrade of City transport infrastructure, including footpaths, pedestrian crossings and bus stop shelters.	Ongoing	\$	Disability Access and Inclusion Group	High
<b>3</b> . Work with Western Power to investigate an LED street light and Principal Shared Path lighting program for the City.	Medium	\$	Western Power	Low
Comfortable and legible				
<b>1</b> . Investigate provision of new street furniture for rest stops along high frequency pedestrian routes within activity nodes.	Short	\$	Local schools/ Curtin University	Mod.
<b>2</b> . Plan future streetscape works within activity and neighbourhood centres to prioritise active and public transport modes.	Ongoing	\$	DoT	Mod.
<b>3</b> . Establish an internal working group to develop a fully accessible Wayfinding Strategy to outline roles and responsibilities for the development of future wayfinding strategies and wayfinding signage across the City.	Short	\$	Tourism WA, DoT, Disability Access and Inclusion Group	High
Resilient to changes in climate				
1. Support the implementation of the City's Water Sensitive Urban Design Policy and apply best practice water sensitive urban design when upgrading streetscapes and public spaces.	Ongoing	\$	Water Corporation and Research Groups	Mod.
<b>2</b> . Identify footpath and cycle routes seasonally affected by flooding provide alternative routes through wayfinding initiatives.	Short - Medium	\$	Water Corporation	Mod.
<b>3</b> . Support implementation of the City's Urban Forest Strategy to improve tree canopies and overall amenity along local and arterial roads.	Ongoing	\$	DPLH	High





**ACTIVE TRANSPORT** | Objective: Promote walking and cycling as an attractive transport choice for local trips by improving connections and infrastructure across the City.

ACT	IONS	TIME	COST	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
Allo	cate City resources				
trar sust beh	roactively source and apply for a range of sport-related funding to support and deliver ainable transport education and travel aviour change programs e.g. Your Move gram, walk to school, ride to work etc.	Short	\$	DoT, DoE	Mod.
imp	dvocate to the State Government for rovements to the regional active transport work:				
а	Surface conditions of the shared pedestrian and cyclist path connecting to Narrows Bridge	Short - Medium	\$	DoT, MRWA, PTA	Mod.
b.	Infrastructure to support use of personal mobility devices (e-scooters, e-skateboards).				
Trar	roactively engage with the Department of nsport in the preparation of a regulatory nework for e- mobility devices.	Short - Medium	\$	DoT	High
to ir infra	nvestigate a new Travel Smart Officer position mplement travel behaviour programs, astructure advocacy and medium term active isport projects for the City.	Medium	\$	DoT	High



ACTIONS	TIME	COST	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
Enhance the active transport experience				
<b>1</b> . Support implementation of Safe Active Streets as identified with the Joint Bike Plan. Ensure funding submissions for grants provided by the Department of Transport are completed and support delivery of the Joint Bike Plan.	Short	\$\$\$	DoT, Adjoining LGAs	Very High
<b>2</b> . Monitor the use of Safe Active Streets to help identify future application and improvements.	Ongoing	\$		Mod.
<b>3</b> . Audit the local pedestrian network to identify missing routes and deficiencies for all user groups. Partnerships with schools to be explored for collection of data and education opportunities.	Short	\$	Local schools/ Curtin University/ DoE	Mod.
<b>4</b> . Audit the local cycle network to identify missing routes, deficiencies and priority infrastructure improvements. Where significant upgrades occur to investigate installation of physical protection.	Short - Medium	\$	DoT, Local schools/ Curtin University	High
<b>5</b> . Improve pedestrian and cycle crossings at intersections along arterial roads, through provision of refuge islands, curb extensions, raised pedestrian crossings and speed bumps, as required.	Medium	\$\$	Local schools/ Curtin University	Mod.
<b>6</b> . Restore bicycle lane markings on existing designated cycle lanes to ensure bicycle paths are clearly visible and enforceable.	Short	\$	MRWA	High
<b>7</b> . Provide public cycle facilities at key destinations, including bicycle parking and charging points for electric bicycles, in accordance with Joint Bike Plan.	Short - Medium	\$\$	DoT, MRWA, Adjoining LGAs	Mod.
8. Install data monitoring devices across different sections of the pedestrian and cyclist network to obtain cyclist and pedestrian data. Investigate phone technologies to capture pedestrian counts.	Short	\$\$	DoT, MRWA, Adjoining LGAs	High





**PUBLIC TRANSPORT** | Objective: Work with State Government and public transport providers to improve public transport frequency and connectivity to and within the City.

ACTIONS	TIME	COST	EXTERNAL PARTNERS/	PRIORITY
	TIME	0.031	STAKEHOLDERS	FRIORITI
Advocate for State Government investment an	d private j	partner	ships	
<b>1</b> . Advocate for immediate elevation of a fully accessible South Perth Train Station delivery into the next stage of METRONET delivery.	Short	\$	PTA, DoT	Very High
2. Support future configuration of the Transperth bus network through the City to improve connections, increase frequencies and attractiveness of buses and support access to and from local centres.	Short	\$	ΡΤΑ	Mod.
<b>3</b> . Advocate State Government to provide bicycle storage/holding facilities on bus, ferry and train services.	Short	\$	PTA	Mod.
<b>4</b> . Partner with State Government and other transport platforms to facilitate sharing of journey planner information that encourage commuters to use public transport.	Short	\$	DoT, PTA	Mod.
<b>5</b> . Develop and implement a coordinated public transport advocacy program.	Short – Medium	\$	DoT, PTA	High
<b>6</b> . Work with the State Government and other stakeholders to improve integration between public transport, walking and cycling.	Short – Medium	\$	PTA, MRWA, DoT	Mod.
<b>7</b> . Advocate State Government for improved bus priority on arterial roads through the provision of bus lanes and queue jump lanes at intersections.	Medium	\$	PTA, MRWA, DoT	Mod.
<b>8</b> . Investigate a fully accessible Central Area Transit (CAT shuttle) bus to connect key activity nodes within the City.	Short	\$	Curtin University, Town of Victoria Park	High
Commuter experience				
1. Support implementation of the City's Bus Shelter Program for the provision of safe and comfortable waiting areas at public transport stops. Bus shelter upgrades to include accessible areas and wayfinding signage.	Short	\$\$	PTA	High
<b>2</b> . Improve aesthetics and interest of public transport arrival points through public art installations.	Medium	\$\$	PTA	Low
<b>3</b> . Investigate installation of bus priority lanes on sections of the City's Distributor Road network.	Medium	\$\$	MRWA, PTA, DoT	Mod.





**ROAD TRANSPORT** | Objective: Slow growth in traffic congestion across the local government area and improve safety of the road network for the benefit of the whole community.

ACTIONS	TIME	COST	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
Data collection and monitoring				
<b>1</b> . Monitor crash statistics on annual basis to support funding of problem areas.	Ongoing	\$	MRWA	Mod.
<b>2</b> . Monitor and review traffic volumes against wider hierarchy framework to determine relevance of road classification and ensure that data is no more than 4 years old.	Short - Medium	\$	MRWA	Mod.
<b>3</b> . Update Intramaps website to provide information on traffic volume, crash statistics and other data as available.	Short	\$	MRWA	High
<b>4</b> . Investigate SMART technologies to monitor and provide accurate updates on local traffic congestion conditions.	Medium - Long	\$\$	MRWA	Mod.
<b>5</b> . Continue trials with the RAC driverless vehicles to support industry development.	Short - Medium	\$	DoT, RAC, MRWA	High
Distributor Road management				
<b>1</b> . Support MRWA to minimise new direct vehicle access points from private properties fronting Manning Road and Canning Highway.	Ongoing	\$	MRWA	Mod.
<b>2</b> . Monitor performance of side-road congestion levels on Distributor Roads connecting with Canning Highway corridor.	Ongoing	\$	MRWA	High
<b>3</b> . Measure average travel times along key Distributor Road network routes to manage congestion points.	Ongoing	\$	MRWA	Mod.
<b>4</b> . Examine potential Main Roads WA management of Manning Road. Undertake access study for properties along the corridor to understand and quantify impact on potential reclassification of the road.	Medium	\$	MRWA, City of Canning, Town of Victoria Park	Mod.
<b>5</b> . For all District Distributor Road intersections, undertake a review of reserve widths and property impacts to understand all locations where capacity increases could be realistically achieved.	Short - Medium	\$	MRWA	Mod.





#### **ACTIVITY NODE ACTIONS**

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This section provide actions for key Activity Nodes in the City, which are locations with significant transport infrastructure and are attractive destinations which generate journeys. These Activity Nodes illustrated in Figure 4, include South Perth Peninsula, Canning Highway, Angelo Street Neighbourhood Centre, Preston Street Neighbourhood Centre, Canning Bridge Activity Centre, Karawara and Waterford/ Salter Point.

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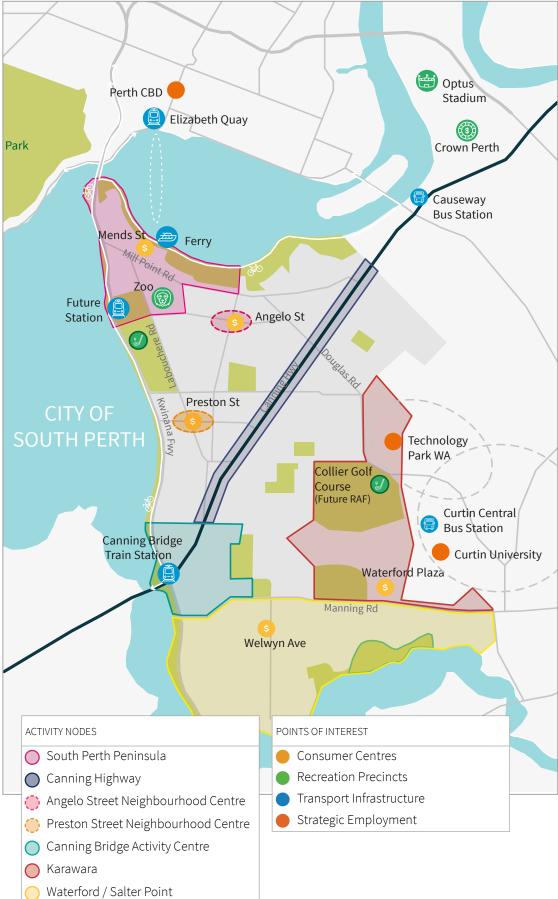
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#### FIGURE 9 - INTEGRATED TRANSPORT PLAN ACTIVITY NODES



## **SOUTH PERTH PENINSULA** (INCLUDING FORESHORE)

#### TRANSPORT INFRASTRUCTURE

#### WALKING

- Regionally significant Principal Shared Paths
- Walkscore: 'somewhat walkable.'

#### CYCLING

• Principal Shared Paths along the foreshore and Narrows Bridge with secondary and local routes on surrounding streets.

#### **PUBLIC TRANSPORT**

- Mends Street Ferry Terminal
- Three local bus routes (32, 35, 34) connecting to Perth CBD, Curtin University and Canning Bridge.



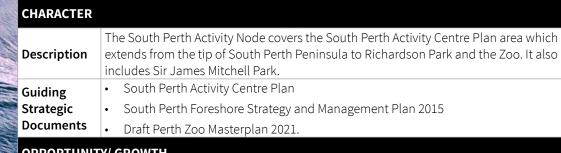
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#### ROAD TRANSPORT

Access point to and from Kwinana Freeway.

MPLEMENTATION PLAN

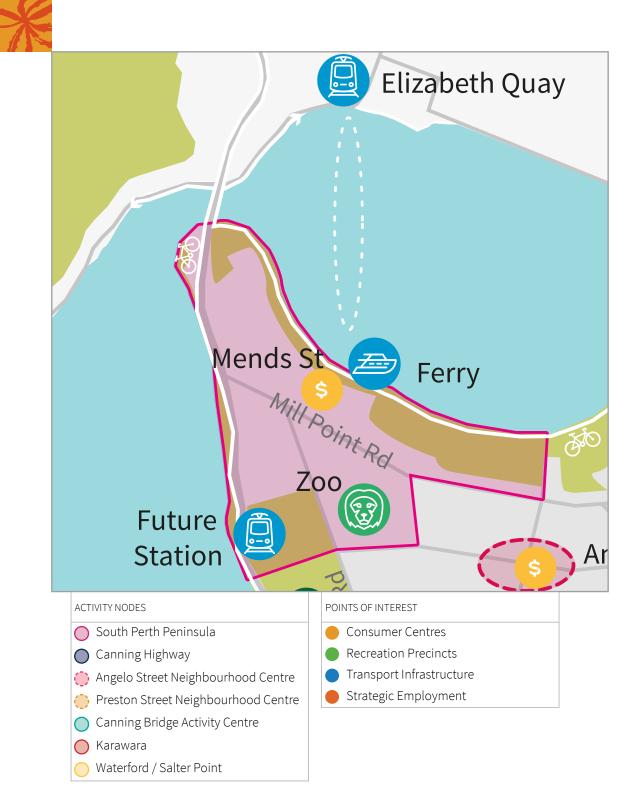


#### **OPPORTUNITY/ GROWTH**

2,309 additional dwellings are planned for the South Perth Activity Centre with 12,184sqms of additional retail space and 47,000sqms of additional office and other commercial space by 2041

Increased link to Perth City by proposed South Perth Railway Station

- Increasing popularity of active transport paths along South Perth Foreshore
- Popularity of Zoo visits.



MPLEMENTATION PLAN



SOUTH PERTH PENINSULA ACTIONS	ТІМЕ	соѕт	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
<b>1</b> . Develop a Wayfinding Strategy for the South Perth Activity Node with a focus to:				
Improve connections from Mends Street Ferry Terminal to the South Perth Zoo. Integrate with future Wayfinding Strategies developed as part of South Perth Foreshore Strategy and Management Plan.	Short	\$	Perth Zoo	High
ACTIVE TRANSPORT				
2. Investigate trial devices that display 'Real-time speed' (similar to roadwork sites) and 'slow down' signage to encourage cyclists to reduce speed in areas of high pedestrian and cyclist demand.	Short	\$	DoT	Mod.
<b>3</b> . Investigate widening of existing shared paths and appropriate line markings and signage.	Short - Medium	\$\$	DoT, Adjoining LGAs.	Mod.
<b>4</b> . Undertake infrastructure audit of the precinct to ensure adequate provision of facilities for walkers/ exercisers and cyclists including drink fountains and bicycle parking, E-bike charging facilities and repair stations.	Short – Medium	\$\$	Local schools/ Curtin University	Mod.
<b>5</b> . Support construction of the Principle Shared Path as identified by the LTCN.	Medium	\$\$	DoT, MRWA	Mod.
PUBLIC TRANSPORT				
<b>6</b> . Support the continued operation and potential future expansion of the RAC Intellibus service.	Ongoing	\$	DoT, PTA, Curtin University, RAC	Mod.
<b>7</b> . Advocate for an increase to the frequency of the Mends Street ferry service.	Short	\$	PTA, DoT	High
ROAD TRANSPORT				
8. Undertake local road network modifications as identified by the South Perth Activity Centre Plan including implementation of a 40km/hr speed limit, upgraded raised plateau intersections, provision of new signalised intersections, optimised traffic signals, horizontal deflection devices and pedestrian crossings.	Short	\$\$\$	MRWA	High
PARKING MANAGEMENT				
<b>9</b> . On-street parking arrangements for the locality to be addressed as part of the implementation of the City's Parking Strategy.	Short – Medium	\$	_	High
<b>10</b> . Partner with Perth Zoo to develop design solutions to manage parking on site to reduce parking demand on local streets.	Short – Medium	\$	Perth Zoo	Mod.

## CANNING HIGHWAY

#### TRANSPORT INFRASTRUCTURE



#### WALKING

- Pedestrian footpaths on road verge on both sides of road
- Walkscore: 'car dominant'.

- CYCLING
- Intersecting street bicycle lane/ sealed shoulders: Douglas Avenue, South Terrace, Thelma Street, Cale Street, Henley Street, Davilak Street.



#### PUBLIC TRANSPORT

• One high frequency bus route (910): Perth CBD to Fremantle Railway Station.

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#### **ROAD TRANSPORT**

• Key arterial road connecting the Causeway in the north, and Canning Bridge at the City's southern boundary.

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IPLEMENTATION PLAN

## CHARACTERDescriptionA Regional Road with high-priority transit, and a key connector of the Canning Bridge<br/>Activity Centre, Victoria Park and Perth CBD. Provides a mix of residential dwellings<br/>and a variety of commercial and retail offerings.Guiding<br/>Strategic<br/>Documents• Canning Highway Road Reservation Review 2012<br/>• Kensington/South Perth Character Study

#### **OPPORTUNITY/ GROWTH**

- The Local Planning Strategy identifies increased density along the Highway. Opportunities to provide improved streets landscaping and amenity for future residents. Future density will provide a critical mass to support further public transport use.
- A 20m wide road reservation runs along the length of this corridor for future road widening works by Main Roads WA. Opportunity to advocate for a preferred design vision.







CANNING HIGHWAY	ТІМЕ	COST	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
PUBLIC REALM				
<b>1</b> . Advocate Main Roads WA for interim landscaping within the road reservation prior to widening works.	Short - Medium	\$	MRWA	High
2. Implement development controls to support pedestrian movement including nil building setbacks with awnings over footpaths and activated frontages where appropriate.	Short - Medium	\$	_	Mod.
ACTIVE TRANSPORT				
<b>3</b> . Advocate Main Roads WA to improve safe pedestrian and cyclist connections across Canning Highway at the following intersections: Banksia Terrace, Douglas Avenue, South Terrace, Bessel Avenue, Thelma Street, Cale Street, Lockhart Street.	Short - Medium	\$	MRWA	High
<b>4</b> . Co-locate bicycle storage with bus stops within areas of high density and activity along the corridor.	Medium	\$\$	DoT, PTA	Mod.
PUBLIC TRANSPORT			·	
<b>5</b> . Deliver new and improved bus shelters within areas of high density and activity along the corridor as the next phase of the City's Bus Stop Program.	Medium	\$\$	PTA	Mod.
ROAD TRANSPORT				
<b>6</b> . Advocate the City's preferred future design for Canning Highway to Main Roads WA, including:				
<ul> <li>Improvements to the public realm, inclusive of more ground cover landscaping, tree canopy, wider footpaths</li> <li>Appropriate vehicle lane widths</li> </ul>	Ongoing	\$	MRWA, PTA	Very High
<ul> <li>Appropriate vehicle lane widths</li> <li>Designated bus corridor lane for high transit priority</li> </ul>				
<ul> <li>Slower traffic speeds on approach to intersections.</li> </ul>				
PARKING MANAGEMENT				
7. Implement development controls which seek to limit direct vehicle access to Canning Highway and facilitate alternate access, including provision of laneways and/or amalgamation opportunities.	Short - Medium	\$	MRWA	High

## ANGELO STREET NEIGHBOURHOOD CENTRE

#### TRANSPORT INFRASTRUCTURE

#### WALKING

- Pedestrian footpaths on both sides of road, pedestrian zebra crossing, and pedestrian intersection lights
- Walkscore: 'very walkable'.

#### CYCLING

6

• On-road marked bicycle lane with connection to Kwinana and bicycle parking at corner of Anstey Street and Angelo Street.

#### PUBLIC TRANSPORT

- One local bus route (32 & 34): Perth CBD and Canning Bridge Station, via Curtin University
- Curtin University community hail-ride service.

#### ROAD TRANSPORT

• Local Distributor Road.

MPLEMENTATION PLAN

AXZ

# CHARACTER Description Neighbourhood centre that provides daily and weekly household shopping needs, community facilities and local professional services. Guiding Strategic Documents • NA OPPORTUNITY/ GROWTH • Additional population and visitors with future planned 2,000-15,000 population growth

Local business growth attracting visitors.

155







ANGELO STREET NEIGHBOURHOOD CENTRE ACTIONS	TIME	соѕт	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
PUBLIC REALM				
<b>1</b> . Increase urban tree canopy and public domain landscaping along street edge to improve shading of pedestrian paths.	Short - Medium	\$\$	Land Owners	Low
<b>2</b> . Develop wayfinding strategy to incentivise cycling and walking trips from South Perth Foreshore to the Centre.	Short	\$	_	
<b>3</b> . Implement development controls to support pedestrian movement throughout the Centre including building setbacks which provide for awnings over footpaths and activated frontages for all new developments.	Short	\$	Land Owners	Mod.
ACTIVE TRANSPORT				
<b>4</b> . Investigate appropriate locations along Angelo Street for the provision of secure bicycle parking and lockers, water fountains and a bicycle repair station.	Short - Medium	\$	Land Owners	Mod.
<b>5</b> . Reduce the speed of Angelo Street to 30km/hr within the Centre to enable shared use of roadways with cyclists.	Medium	\$	MRWA, DoT	Mod.
<b>6</b> . Undertake pedestrian survey count to inform upgrades to pedestrian network including improved disability access and inclusion and crossings/linkages.	Medium	\$	Disability access interest groups, Local schools/ Curtin University	Mod.
PUBLIC TRANSPORT	1	1		
<b>7</b> . Advocate for increased bus connectivity from the Centre to other key destinations within the City.	Medium	\$	PTA	Mod.
ROAD TRANSPORT				
<b>8</b> . Investigate the treatment of the Angelo Street and Anstey Street intersection to prioritise pedestrian movement in east-west and north-south directions.	Medium	\$\$	_	High
<b>9</b> . Investigate planning controls within the new Local Planning Scheme to consolidate vehicle access points and mitigate additional crossovers to Angelo Street.	Medium	\$	-	Mod.
PARKING MANAGEMENT				
<b>10</b> . Incentivise the provision of publicly accessible parking within key redevelopment sites within the Centre through planning bonus provisions.	Short	\$	_	Mod.

## PRESTON STREET NEIGHBOURHOOD CENTRE

#### TRANSPORT INFRASTRUCTURE



#### WALKING

- Pedestrian footpaths on road verge on both side of road
- Walkscore: 'somewhat walkable'.

#### CYCLING

• Bicycle overpass for Kwinana Freeway, Labouchere Road, bicycle lane/sealed shoulders.



#### PUBLIC TRANSPORT

Three local bus routes (30, 31, 32): Causeway, Salter Point, and Neil McDougall Park.

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#### ROAD TRANSPORT

Local access road.





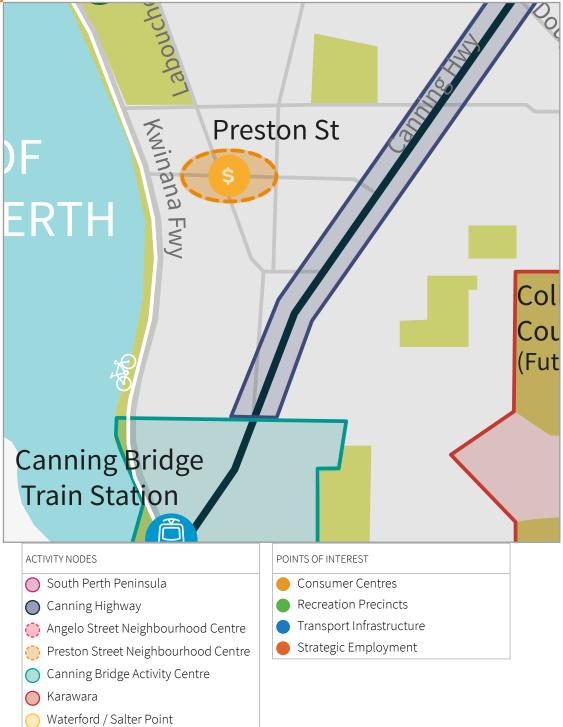
CHARACTER				
Description	Neighbourhood centre that provides for daily and weekly household shopping needs, community facilities and local professional services.			
Guiding Strategic Documents	Amendment 63 - Preston Street Revival			
OPPORTUNITY/ GROWTH				
<ul> <li>Upcoming</li> </ul>	precinct planning for future planned 222 dwellings			

Upcoming precinct planning for future planned 222 dwellings
Amendment 61 to the Local Planning Scheme requesting additional building height for the Cygnet Movie Theatre, and the delivery of public domain works.

GOLDEN

Pizza







ANGELO STREET NEIGHBOURHOOD CENTRE ACTIONS	TIME	COST	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
PUBLIC REALM				
<b>1</b> . Support implementation of the streetscape upgrade and shared space plan for Preston Street proposed as part of Scheme Amendment 63.	Short – Medium	\$\$	_	High
2. Implement development controls to support pedestrian movement throughout the Centre including building setbacks which provide for awnings over footpaths and activated frontages for all new developments.	Short	\$	_	Mod.
ACTIVE TRANSPORT				
<b>3</b> . Investigate appropriate locations along Preston Street for the distribution of secure bicycle parking and lockers, water fountains and a bicycle repair station.	Short - Medium	\$	DoT	Mod.
<b>4</b> . Strengthen pedestrian and cycle links from the Centre to Como beach, the Principal Shared Path network and Canning Bridge.	Short - Medium	\$	DoT	High
<b>5</b> . Improve the safety of pedestrian connections into the Centre, across major roads in the immediate catchment.	Short - Medium	\$	DoT	Mod.
PUBLIC TRANSPORT	1	1		
<b>6</b> . Advocate State Government for opportunities to reroute local bus services to make bus ridership trips to the Centre more convenient.	Short	\$	PTA	Mod.
ROAD TRANSPORT				
<b>7</b> . Investigate planning controls to consolidate vehicle access points and mitigate additional vehicle crossovers to Preston Street.	Short	\$	_	Mod.
PARKING MANAGEMENT				
<b>8</b> . Review demand and supply of public car parking in the Centre as part of preparation of parking management plan for the locality.	Short - Medium	\$	-	Mod.



## CANNING BRIDGE ACTIVITY CENTRE

#### TRANSPORT INFRASTRUCTURE

#### WALKING

- Pedestrian footpaths on one side of the street only for a number of streets. Poor pedestrian connectivity to train station.
- Walkscore: 'car dominant'.

#### CYCLING

- Davilak Street bicycle lane/ sealed shoulder
- Connection to Kwinana Freeway Shared Bicycle and Pedestrian path.

#### PUBLIC TRANSPORT

• Nine bus routes (100, 101, 111, 114, 115, 148, 158, 160, 910): north to Perth CBD, the WACCA, east to Cannington Station and Curtin University, and west to Fremantle and Hamilton Hill Hall.



#### **ROAD TRANSPORT**

• Connections to the Kwinana Freeway. Canning Highway connections over Canning bridge.



#### CHARACTER

Description	Activity Centre located around Canning Bridge Railway Station sharing a boundary with the City of Melville to the west.
Guiding Strategic Documents	Canning Bridge Activity Centre Plan 2015

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#### **OPPORTUNITY/ GROWTH**

Lift

- The Canning Bridge Activity Centre's future planned 12,000 new dwellings, and 7,900 additional jobs by the year 2051
- Future planned Public Transit Authority Bus Interchange.







CANNING BRIDGE ACTIVITY CENTRE ACTIONS	TIME	соѕт	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
PUBLIC REALM				
<b>1</b> . Ensure all streets are provided with footpaths on both sides to encourage walking within the precinct.	Medium	\$\$\$	Local schools/ Curtin University	Mod.
<b>2</b> . Advocate lighting improvements for pedestrian connections to Canning Bridge Station.	Short - Medium	\$	PTA, Western Power, City of Melville	Mod.
ACTIVE TRANSPORT				
<b>3</b> . Advocate for the delivery of End of Trip Facilities at the planned Canning Bridge Bus Interchange including storage lockers, water fountain, bicycle repair station and bicycle parking.	Medium - Long	\$	PTA, City of Melville	Mod.
<b>4</b> . Work with City of Melville, MRWA and PTA to improve safety of cycle and pedestrian paths to Canning Bridge Station on both sides of Canning Bridge. There will be significant opportunity to address connections with the development of the new Canning Bridge Bus Interchange.	Long	\$\$	PTA, MRWA, DoT, City of Melville	Mod.
PUBLIC TRANSPORT				
<b>5</b> . Continue to advocate the delivery of the proposed bus interchange directly above the train station to support integration with Canning Bridge Train Station.	Short	\$	PTA, City of Melville	High
<b>5</b> . Investigate bus network planning alterations with State Government linked to changes associated with Canning Bridge Bus Interchange. Specifically, advocate for improvements to bus services to Curtin University.	Medium - Long	\$\$	PTA, City of Melville	Mod.
<b>6</b> . Advocate for incorporation of art and technology into the bus stops within the Canning Bridge Activity Centre, to improve ridership experience and place-making of Centre.	Medium - Long	\$\$	PTA, MRWA, City of Melville	Low
PARKING MANAGEMENT				
<b>7</b> . Investigate a Kiss & Drop laydown area North of Canning Highway similar to the facility on the southern side near Robert Street.	Short	\$	ΡΤΑ	High
8. Investigate day parking at George Burnett Leisure Centre for users of existing high frequency bus route between Curtin Uni-versity and Canning Bridge.	Medium	\$	As above	Mod.

## KARAWARA

#### TRANSPORT INFRASTRUCTURE

#### WALKING

A variety of pedestrian treatments including signalised crossing at Kent Street to Curtin University. Pedestrian Access Ways in residential areas and zebra crossings to Waterford Plaza.

#### CYCLING

• Bicycle lane/sealed shoulder along Walanna Drive and Kent Street, and separated path between Jackson Road and Henley Street.

#### PUBLIC TRANSPORT

• Six local bus routes (30, 34, 100, 101, 284, 960): Perth CBD and the Causeway in the north, City of Canning and Town of Victoria Park in the East, and Canning Bridge Station in the west.



#### ROAD TRANSPORT

A mix of access roads, local distributor roads (Walanna Drive, Jackson Road, Gillon Street, Waterford Avenue), Distributor A roads (Kent Street, Manning Road).

#### CHARACTER

Description	The residential suburb of Karawara is surrounded by a number of destinations. To the north, the Collier Park Golf Course, and the location of the proposed Recreation and Aquatic Facility. To the east, the Bentley-Curtin Specialised Centre, including Curtin University and Technology Park. To the South, Waterford Plaza shopping centre and the regional attractor George Burnett Park and Leisure Centre.			
Guiding	Bentley-Curtin Specialised Activity Centre Plan			
Strategic	Karawara Public Open Space Masterplan and Collaborative Action Plan 2013			
Documents	Draft George Burnett Park Masterplan.			

#### **OPPORTUNITY/ GROWTH**

• Growth of activity generators in the area including: the proposed Recreation and Aquatic Facility; Collier Park Golf Club; George Burnett Park, Bentley-Curtin Specialised Centre (which is expected to house 9,500 residents and more than 20,000 employees by 2031) and Waterford Plaza Shopping Centre

• Delivery of proposed bus interchange at Canning Bridge railway station and extension of bus network services to the area

• Renewed community interest in Karawara's Pedestrian Access Way design.







KARAWARA ACTIONS	TIME	соѕт	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
<b>1</b> . Develop a wayfinding strategy through the suburb of Karawara to highlight the direction of key destinations at each Pedestrian Access Way junction along the length of the central public open space (Greenway).	Short – Medium	\$	_	High
<b>2</b> . Prepare a pedestrian and cycle access plan for the suburb of Karawara.	Short - Medium	\$\$	DoT	Mod.
<b>3</b> . Advocate the State Government to investigate reconfiguration of State Government land holdings to support improved movement networks through the Karawara suburb.	Short - Medium	S	Department of Communities, DPLH	High
ACTIVE TRANSPORT				
<b>4</b> . Strengthen pedestrian and cycle links in a north- south and east-west axis across the Activity Node and to key destinations including the proposed Recreation and Aquatic Facility, Collier Park Golf Course, student housing (e.g. in Karawara and Waterford Triangle), Curtin University and Waterford Plaza.	Short – Medium	\$\$	Local schools/ Curtin University	Mod.
<b>5</b> . Work with Curtin University to strengthen pedestrian and cycle connections from the campus to student housing and Waterford Plaza.	Short – Medium	\$\$	Curtin University	Mod.
PUBLIC TRANSPORT				
<b>6</b> . Advocate the State Government for new bus routes to service the City's proposed Recreation and Aquatic Facility and Technology Park.	Medium - Long	\$\$	PTA	Mod.
<b>7</b> . Support mass transit (light rail/trackless tram, bus rapid transit) investigations for connections between proposed Recreation and Aquatic Facility, Curtin University and Canning Bridge.	Long	\$	PTA, DoT, Curtin Uni-versity, Adjoining LGAs, MRWA	Mod.
ROAD TRANSPORT				
<b>8</b> . Advocate for transferal of Manning Road corridor to Main Roads WA ownership, including Metropolitan Region Scheme amendment.	Short – Medium	\$	MRWA, Ad-joining LGAs	Mod.
<b>9.</b> Extend the City's traffic modelling to include Curtin University for the purposes of understanding traffic volumes through the City.	Short – Medium	\$	Curtin Uni-versity	Mod.
PARKING MANAGEMENT				
<b>10</b> . Monitor on-street parking and action parking limitations as required.	Short	\$	_	Mod.
<b>11</b> . Implement development controls which seek to limit direct vehicle access to Manning Road and facilitate alternate access, including provision of laneways and/or amalgamation opportunities.	Short	\$\$	_	Mod.



## WATERFORD/ SALTER POINT

#### TRANSPORT INFRASTRUCTURE

#### WALKING

- Pedestrian footpaths on road verges and high quality pedestrian and cycle shared paths along Canning River foreshore.
- Walkscore: 'somewhat walkable'.

#### CYCLING

• Shared pedestrian and cycle path along foreshore, Unwin Crescent and Welwyn Avenue bicycle path/sealed shoulder.



#### PUBLIC TRANSPORT

• Four local bus routes (30, 31, 100, 101): servicing Preston Street to the west and City of Canning to the east.



#### ROAD TRANSPORT

• Access roads and local distributor roads (Welwyn Avenue, Mt Henry Street, Peterson Street, Ley Street, Canavan Crescent, Waterford Avenue, Elderfield Road).

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	P	IMPLEMENTATION
	PLAN	ENTA
1	6	TION

C	HARACTER	
D	escription	Extending from the Canning River north to Manning Road with access to the Canning River and recreation foreshore paths. The area includes the suburbs of Salter Point, Waterford and a southern portion of Manning.
St	uiding trategic ocuments	• Dyarigarro Whadjuk Boodjar, Clontarf-Waterford-Salter Point (CWSP) Foreshore Masterplan 2019
0	PPORTUNIT	Y/ GROWTH

- Nature reserves and nature trails for City residents
- Increased residential density in Canning Bridge Activity Centre.



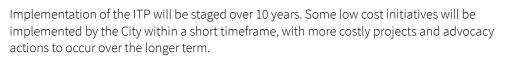




WATERFORD/SALTER POINT ACTIONS	TIME	соѕт	EXTERNAL PARTNERS/ STAKEHOLDERS	PRIORITY
PUBLIC REALM				
1. Review steep sloping areas along Canning River foreshore, and identify measures that can be implemented to make those areas more accessible to different user groups and abilities.	Short – Medium	\$\$	Local schools/ Curtin University	Mod.
<b>2</b> . Review the existing walkability audit for Salter Point suburb, and undertake an extension of the audit across the Activity Node area. Identify measures in the audit that can be implemented to improve wayfinding for visitors to the foreshore area.	Short – Medium	\$\$	Local schools/ Curtin University	Mod.
ACTIVE TRANSPORT				
<b>3.</b> Audit the usability of paths, and identify key destinations through the area (for example, the Canning River foreshore, Welwyn Avenue shops, Manning Hub). Develop a priority project list of the footpaths connecting key destinations to be used by City officers in their programming. Further develop a path hierarchy to be communicated through signage, to help mitigate conflicts between pedestrians and cyclists - based on speed, sight lines, and traffic volumes.	Medium	\$\$	Local schools/ Curtin University	Mod.
<b>4</b> . Improve pedestrian and cyclist crossing points across Manning Road as identified by the Joint Bike Plan which includes at the intersections of Welwyn Avenue, Elderfield Road, Kent Street and the Curtin University south entrance.	Short – Medium	\$\$\$	Local schools/ Curtin University	High
<b>5</b> . Support improved pedestrian and cycle connections to the future Welwyn Safe Active Street.	Short	\$\$	DoT	High
<b>6</b> . Improve pedestrian and cycle connections between Fairview Gardens and Salter Point Parade as identified by Joint Bike Plan.	Short – Medium	\$\$	_	Mod.
7. Extend pedestrian footpath network along Manning Road to connect to existing bus stops, including extensions on the southern side of Manning Road east of Elderfield Road.	Short – Medium	SS	-	Mod.
PUBLIC TRANSPORT				
8. Advocate State Government to identify opportunities to increase the extent of bus network services to strengthen connections between key destinations surrounding the Activity Node including the Canning Bridge Train Station, Curtin – Bentley Specialised Centre, Waterford Plaza, George Burnett Leisure Centre, Welwyn Avenue Neighbourhood Centre and Manning Hub.	Short	\$	PTA	Mod.
ROAD TRANSPORT				
<b>9</b> . Upgrade signage along narrow streets in the suburb of Salter Point to reduce vehicle speed.	Short – Medium	\$\$	_	Mod.
PARKING MANAGEMENT				
<b>10</b> . Identify alternate overflow car parking arrangements surrounding the Canning River foreshore.	Medium	\$\$	_	Mod.



## MONITORING AND REPORTING



Monitoring and reporting are essential to determine whether the actions of the ITP are being achieved. A progress report will be prepared every two years to document the City's activities and progress on actions. In addition, every year relevant actions will be referenced as part of the annual Capital Works budget preparation to ensure they are being considered and budgeted appropriately.

After five years of implementation, the ITP will be reviewed and updated accordingly in response to the progress on the actions and any arising changes to be addressed.

A range of datasets are proposed to be reviewed as part of the preparation of the two year progress report to track the progress of the actions and overall objective of the ITP to reduce car dependence and increase trips made by walking, cycling and public transport. These include but are not limited to:

- Journey to work Census data
- Main Roads SCATS traffic count information on Distributor Road network
- Pedestrian and cyclist counts undertaken by the City at key locations
- Crash statistics per area
- Number of intersections eligible for Black Spot funding
- Travel times during set time of the year for key local distributor network.

Some Actions support the collection of additional data where there are data gaps for the City's transport network.

NITORING REPORTIN

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## BIBLIOGRAPHY

- Australian Automobile Association. 2017. The Cost of Road Trauma in Australia, Australian
- Australian Bureau of Statistics. 2018. Census of Population and Housing: Commuting to Work, Australia, cat. No. 2071.0.55.001
- Australian Bureau of Statistics. 2019. Survey of Motor Vehicle Use, Australia, cat. no. 9208.0
- City of South Perth. May, 2015. South Perth Foreshore Strategy and Management Plan, p. 1-95
- City of South Perth and City of Melville. 2015. Canning Bridge Activity Centre Plan, pp. 1-121
- City of South Perth. 2017. City of South Perth Disability Access and Inclusion Plan, pp. 1-17
- City of South Perth. May, 2017. Vision 2027 Strategic Community Plan Review, pp.1-30
- City of South Perth, Town of Victoria Park and Aurecon. 2018. Joint Bike Plan Appendix. pp. 1-13
- City of South Perth. 2018. Urban Forest Strategy 2018-2023, pp.1-33
- City of South Perth and Shape Urban. November, 2019. South Perth Activity Centre Plan
  Engagement Summary. pp. 1-153
- City of South Perth. April, 2019. Dyarigarro Whadjuk Boodjar, Clontarf-Waterford-Salter Point Foreshore Masterplan, pp 1 – 114
- City of South Perth and Shape Urban. May, 2019. Canning Bridge Activity Centre Plan Review: Preliminary Engagement Summary. pp. 1-69
- City of South Perth. 2020. Scheme Amendment 63: Preston Street Neighbourhood Centre
   Consultation Outcomes Report, pp 1-12
- City of South Perth and Roberts Day. 2020. South Perth Activity Centre Plan, pp. 1-138
- City of South Perth. 2020. City of South Perth Strategic Community Plan 2020 2030
- Climate Council. 2018. Waiting for the Green Light: Transport Solutions for Climate Change
- Department of Transport. 2017. Cycle Count Data, Western Australia
- Department of Transport and Western Australian Planning Commission. March, 2018. Perth and Peel @3.5million, pp. 1-86
- Department of Planning, Lands and Heritage and Western Australian Planning Commission. August, 2018. Bentley-Curtin Specialised Activity Centre Plan, pp. 1-125
- GHD. November, 2010. The City of South Perth Report for Waterford Triangle Urban Design Study and Urban Design Plan, pp. 1-15
- GHD. November, 2010. The City of South Perth Waterford Triangle Urban Design Plan & Design Guidelines, pp. 1-19
- Hughes-Hallett, D. 2010. Indigenous History of the Swan and Canning Rivers
- Infrastructure Australia. 2019. Australian Infrastructure Audit
- Luxmore Parking and Safety. May, 2016. City of South Perth Parking Strategy, pp.1-98
- Main Roads WA. 2021. Road Information Mapping System. Retrieved from: https://mrwebapps. mainroads.wa.gov.au/PublicMaps/RoadInformationMapping
- National Roads and Motorists Association. 2017. Future of Car Ownership, National Roads and Motorists Association
- Palamara. 2016. The incidence and characteristics of illicit drug related driver fatalities in Western Australia, 2000-2012, Proceedings of the 2015 Australasian Road Safety Conference, Australia
- Profile ID. 2016. City of South Perth Community Profile
- RMIT University Centre for Urban Research. 2018. Active Transport: Critical policy brief
- Royal Automobile Club. 2019. State Budget Submission 2019-2020
- UDLA, Codesign Studio and City of South Perth. August, 2015. Karawara Public Open Space Master Plan and Collaborative Action Plan p. 1-112
- Worley Parsons, EcoNomics and Department of Transport. January, 2012. Canning Highway Road Reserve Review: Final Planning Report, pp. 1-152

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Animal Care Facility 9474 0777 199 Thelma St, Como

Ferry Tram 9474 0777 Windsor Park, Cnr Mends St & Mill Point Rd, South Perth enquiries@southperth.wa.gov.au

#### **George Burnett Leisure Centre** 9474 0855

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Manning Library 9474 0822 2 Conochie Cres, Manning manninglib@southperth.wa.gov.au

Old Mill 9367 5788 Melville Pl, South Perth oldmill@southperth.wa.gov.au

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