



# Mawson Lakes Road Management Plan

## Local Area Plan

March 2024



Government of South Australia

Department for Infrastructure  
and Transport

Build.  
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We acknowledge the Traditional Custodians of the Country throughout South Australia and recognise their continuing connection to land and waters. We pay our respects to the diversity of cultures, significance of contributions and to Elders past, present and emerging.



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# Study Context

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## Introduction

As part of the South Australian Government's election commitments a Road Management Plan (RMP) has been delivered for Mawson Lakes.

This study relates to the suburb of Mawson Lakes and is referred to in this report as the “Local Area Plan”. The Department for Infrastructure and Transport (the Department) investigated opportunities to improve local connectivity and accessibility within Mawson Lakes, including multi-modal transport to and from the Mawson Interchange, in the context of existing road network and land use. The Department has sought input from City of Salisbury (CoS) prior to the report being finalised.

The Mawson Interchange accessibility and convenience forms an important part of the multi-modal transport system and is key in encouraging a reduced reliance on private vehicles within Mawson Lakes, with the aim of creating a more vibrant, sustainable and liveable area.

This Local Area Plan is driven from continued community feedback surrounding parking, local access and traffic congestion within Mawson Lakes. The outcomes include problem definition and analysis to determine potential opportunities for improvement.

The study is supported by a review of interstate and overseas benchmarking case studies of precinct integration with public transport interchanges, that highlight best-practice aligned to the strategic ambitions for the Local Area Plan.

This plan does not include state-maintained roads bounding the suburb of Mawson Lakes and includes review of the local area network only (Council roads). Specifically, Elder Smith Road does not form part of this study. A separate planning study is currently being undertaken by the Department for Elder Smith Road, which includes consideration to future land development, population and traffic growth. Planning is also underway for the Kings Road corridor study and level crossing removal.

## Area Overview

*‘Welcome to Mawson Lakes, part of Salisbury, a progressive, sustainable and connected community’*

The suburb of Mawson Lakes is located within the CoS Local Government Area and is approximately 13km north of the Adelaide CBD. The study area is the local road network within the Mawson Lakes suburb, bounded by sections of state-maintained roads, Port Wakefield Road, Salisbury Highway, Elder Smith Road, Main North Road, Montague Road and Parafield Airport land area.

The development and original vision for Mawson Lakes aimed to integrate transport and land use planning to support mixed-use, multimodal transport options, with public transport connectivity and an integrated active transport network.

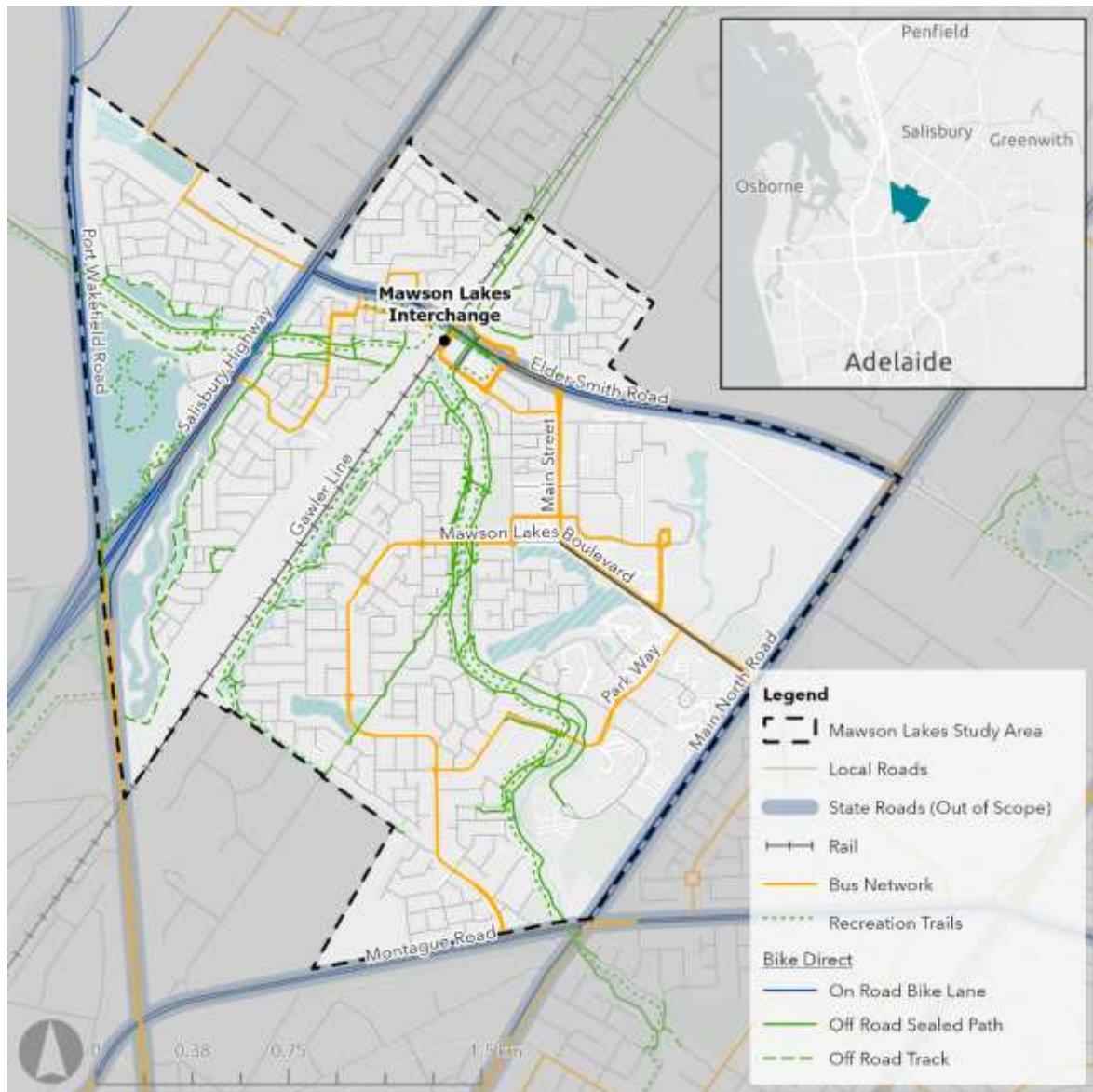
The Mawson Lakes area features a number of precincts supporting the wider region, community and surrounding residential area. A mixed-use retail, business and commercial area in Mawson Central and

along Main Street, and adjacent University of South Australia Mawson Lakes campus and Endeavour College to the east, Mawson Lakes Primary School to the west and the Technology Park area to the south-east with a range of production, technology, and manufacturing industry.

The Mawson Rail and Bus Interchange is located to the north of the suburb, on electrified (2022) Adelaide-Gawler rail line. The Mawson Interchange connects several Adelaide Metro bus feeder services to the rail network. The Interchange is located under and with access from the Elder Smith Road overpass bridge.

The CoS has a network of recreational walking and cycling trails, the Dry Creek River recreational trails extend through the Mawson Lakes area and link to playgrounds, reserves and wetland areas, with footpath connections to the surrounding precincts and residential areas.

Figure 1: Mawson Lakes Study Area and inset, Mawson Lakes within the context of Greater Adelaide





Mawson Central - Mawson Lakes Boulevard and The Peninsula residential area

## The Original Vision for Mawson Lakes

Mawson Lakes was developed in the late 1990s and early 2000s, with the vision of being a 'Transit Oriented Development' as defined in the first 30 Year Plan for Greater Adelaide (2010).

At the time, Transit Oriented Development was (and still is), a planning and design approach to urban development with the aim of creating high density, mixed-use, liveable and sustainable communities, centred around public transit interchanges and a movement network that encourages active transport and reduced private vehicle ownership and reliance.

The key principles of Transit-Oriented Development are:

- **Transit-oriented:** As the name suggests, the development should be centred around high-quality and efficient public transport – in this case the Mawson Interchange, reducing residents' reliance on private vehicles.
- **Mixed-use Development:** Encourage high density development with a mix of residential, retail, commercial and community facilities and recreational land use – providing vibrant precincts and allowing the community to live, work and play within the suburb and reducing the need for vehicle ownership and subsequent parking demand.
- **Walking and Cycling:** Prioritisation of active travel modes throughout the area to reduce private vehicle reliance and improve integration and accessibility, the environment and amenity of the area.
- **Public Spaces:** Incorporation of attractive green space, parks, reserves and recreational trails throughout the area, as well as places of interest, plazas and communal areas.



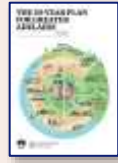
Mawson Central - Mobarra Park

# Policy and Planning

## Relevant State Government Policy and Planning



**20 Year State Infrastructure Strategy** (Infrastructure South Australia)



**30 Year Plan for Greater Adelaide** (Government of South Australia)



**Cycling Strategy for South Australia (2022-2032)**

(Department for Infrastructure and Transport)



**Walking Strategy for South Australia** (Wellbeing SA and the Heart Foundation)



**South Australia's Road Safety Strategy to 2031** (Government of South Australia)

## Relevant City of Salisbury Policy and Planning



**Salisbury City Plan**



**Building City Pride Strategy**



**Urban Development and Transport Policy Direction**



**Partnership Projects 2022**

Key State and CoS policy and planning documents with relevance to Mawson Lakes were reviewed to understand and define the key policy ambitions for the area. Similarly, key stakeholder ambitions and planned projects including University of South Australia, Endeavour College, Mawson Lakes Primary School and Technology Park.

Based on the review of strategic documents and alignment with the CoS City Plan key foundations and urban development and transport directions, a representation of strategic ambitions to guide this Local Area Plan is outlined below.



# Strategic Ambitions

A summary of the six strategic ambitions to guide the Local Area Plan have been distilled from the review of, State and Local Government, and local stakeholder ambitions. These six key ambitions inform the assessment of the area's local movement network and identification of gaps and potential opportunities to bring these ambitions to life.

## Integrated Movement Network



An integrated, smart, safe and efficient local movement network, supporting active transport choices, and providing intuitive connections to key attractors and locations across the suburb. Management of traffic movement and optimise parking capacity and demand.

## High-Quality Public Transport



Public transport at and to and from the Mawson Interchange is attractive, accessible, inclusive and provides a range of multi-modal transport choices. Services are frequent, timely and provide convenient intermodal connections during the day and night.

## Active and Healthy Community



Prioritising an active and healthy community by promoting sustainable transport choices, with a connected active travel network and supporting infrastructure. Improved amenity with less vehicle trips, less congestion and emissions.

## Safety and Activation



Activate public spaces and streets for people by increasing attractiveness, comfort, and safety. Improved provision of safe crossing points, lighting, greening, shade, water, seating. The multi-modal transport system is more attractive, inclusive and accessible for all, with connected safe routes.

## Vibrant Land Use



A liveable suburb with vibrant land use integration, a mix of residential, commercial, education, retail and open space with everyday amenities available locally, supported by development that is ecologically sustainable.

## Thriving Economy



Mawson Lakes has a progressive, thriving economy supported by a mix of businesses, education, commercial and industry precincts, Technology Park, the University of SA, Endeavour College and Mawson Lakes School. Precincts are accessible and connected to other economic hubs.

# Interchange Benchmarking Overview

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Five case studies of precinct integration with public transport interchanges are provided that highlight best-practice aligned to the strategic ambitions of this study for Mawson Lakes.

Each case study details:

- An overview of the public transport interchange and context of the surrounding precinct.
- Benchmarking statistics such as public transport frequency and ridership levels.
- Key success factors that contributed to the success of each example.
- Which Mawson Lakes strategic ambitions the case study is most aligned to.

The following case studies were assessed, sourced from Australia and overseas:

- **Oakleigh Activity Centre Interchange in Melbourne, Australia** is an interchange that has been redeveloped with sustainability and accessibility as key drivers.
- **Leytonstone Interchange in London, United Kingdom** is an excellent example of interchanges in residential low-density neighbourhoods due to a focus on \*Healthy Streets during redevelopment.
- **Coevorden Railway Station in Coevorden, Netherlands** falls within a low-density township, and has focused on improving the safety and vibrancy of the interchange in order to appeal to everyone.
- **Bayswater Interchange in Perth, Australia** is a relatively large interchange in the middle of a redevelopment to improve connectivity within the precinct, particularly to local businesses.
- **Cherrybrook Station in Sydney, Australia** is a new station on the Sydney Metro Northwest line, which has implemented precinct-wide parking controls to reduce overflow from commuter parking.

Key 'success factors' have been extracted from each of the case studies, reflecting infrastructure, policy and operational measures that contributed to the success of these examples. These are presented in-line with the strategic ambitions for the study to inform the assessment of the current situation and development of potential opportunities based on best practice.

\*Healthy Streets - is a human-centred framework for embedding public health in transport, public realm and planning. The 10 Healthy Streets Indicators focus on the human experience needed on all streets, everywhere, for everyone.

Also referred to as "Living Streets" – City of Unley – it is an opportunity to rethink how we value our local streets and how we can design them better to improve their safety, amenity and encourage greater use by all.

# Key success factors from case studies



## Integrated Movement Network

**An integrated, smart, safe, and efficient local movement network, supporting active transport choices and management of traffic and parking.**

### Key success factors across the case studies are:

- Bayswater demonstrated the use of Park 'n' Ride controls in order to balance investment required in parking capacity with the demand for parking, while encouraging access by active travel modes.
- Cherrybrook Station utilised a detailed parking study to inform parking management to manage parking overflow.
- Bayswater also demonstrated the re-conceiving of intersections within the area to prioritise pedestrian movement and safety to and from the public transport interchange.
- Leytonstone demonstrated the use of the "Healthy Streets" approach to balance the needs of private vehicle users, cycling users and pedestrians.

### Relevance to Mawson Lakes:

- The case studies demonstrate how appropriate management and operational interventions can be an effective tool in balancing private vehicle demand. Continual parking capacity expansion is consistently met with 'induced demand', perpetuating existing issues.
- Parking management strategies were evident in the case studies, including for Park 'n' Ride facilities, to balance the investment required in appropriate parking capacity that was evident in some case studies, with the likelihood of induced demand.
- Other case studies demonstrated interventions to re-assess modal priorities on streets to improve overall movement efficiency, such as through re-conceiving some intersections.



## High Quality Public Transport

**Public transport at and to and from the Mawson Interchange is attractive, accessible, inclusive and provides a range of multi-modal transport choices.**

### Key success factors across the case studies are:

- Cherrybrook demonstrated how place strategy coupled with a high-quality, prominent interchange, including large shelter and pedestrianised forecourt area create a seamless integration with the surrounding precinct.
- Leytonstone interchange integrates multiple public transport modes and encourages ease of integration between these modes, reducing dwell times and improving the overall public transport user experience.
- To improve public transport efficiency and reliability, Oakleigh reallocated road space to provide bus priority – adding to the attractiveness of public transport as a mode of choice.

### Relevance to Mawson Lakes:

- Both operational and infrastructure interventions can contribute to a high-quality public transport outcome.
- Investment into placemaking and facilitating prominence of the public transport interchange within the community adds to community perception and customer experience on public transport services.

- Road space reallocation to provide priority for public transport at targeted locations can improve reliability and efficiency of public transport services, particularly in highly trafficked sections of the street network where buses can experience delays.



## Active and Healthy Community

**Prioritising an active and healthy community by promoting sustainable transport choices, with a connected active travel network and supporting infrastructure.**

### Key success factors across the case studies are:

- Leytonstone applied a precinct-wide “Healthy Streets” approach to encourage healthy walking and cycling, which was paired with the provision of cycling storage infrastructure at the public transport interchange to support cycling for last mile access.
- Coevorden invested in 500 bicycle parking spaces to encourage active travel for last mile trips, creating safe and secure bicycle storage to remove this as a barrier to active travel.
- The Bayswater case study demonstrates that upgraded facilities (such as a grade separated share use path) can help encourage cycling to and from the public transport interchange by providing safe access that is separated from rail and private vehicles.

### Relevance to Mawson Lakes:

- The case studies demonstrate how successful multi-modal integration can be achieved through balancing road space for all modes, not just private vehicles.
- High quality walking and cycling infrastructure is essential to encouraging active travel for last mile connections and reduces reliance on private vehicles. This includes separated and on-street cycleways and direct pedestrian connections with adequate priority provided to active modes where appropriate.
- Secure and convenient cycle parking at the public transport interchange and in other locations across the precinct is important to combine with high quality cycling infrastructure to support safe movement and storage – ultimately removing key barriers to active travel for the community.



## Safety and Activation

**Activate public spaces and streets for people by increasing attractiveness, comfort, and safety. The multi-modal transport system is more attractive, inclusive and accessible for all, with connected safe routes.**

### Key success factors across the case studies are:

- The Coevorden case study demonstrates the use of public art and dynamic lighting to both activate public space (contributing to passive surveillance) and increase comfort and safety at night times with increased lighting. By improving safety of the area, the public transport system is more attractive and accessible for all, especially vulnerable users at night.
- Oakleigh implemented environmental design, creating passive surveillance to improve the safety of the area.
- Traffic calming measures were implemented in Leytonstone to not only improve amenity across the precinct but to improve the safety of all road users, particularly vulnerable road users (pedestrians and cyclists).

### Relevance to Mawson Lakes:

- Given the combination of on-street and off-street active travel connections across the area and to/from the Mawson Interchange, both street lighting and adequate lighting for off-street paths should be considered integral in creating a safe environment at night.
- Similar to many of the case studies, Mawson Lakes is a suburb with a variety of land use and dense population clusters. The walkable nature of the area combined with traffic movements suggests traffic calming measures and safe crossings should be considered where potential conflicts are identified. Providing attractive streets for people and activating public places, with greening, shade, water and seating.

## Vibrant Land Use



**A liveable suburb with vibrant land use integration, a mix of residential, commercial, education, retail and open space with everyday amenities available locally, supported by development that is ecologically sustainable.**

### Key success factors across the case studies are:

- Coevordon demonstrated how the natural environment (recreational and reserve areas) can provide high-quality public space around the station interchange that results in the immediately surrounding land use being a place that generates activity and vibrancy.
- Leytonstone demonstrated how the provision of active transport infrastructure and promoting a reduction in car use can underpin infill development and higher densities, without the generation of additional private vehicle traffic and parking issues.
- The Cherrybrook Place Strategy prioritised the activation of streetscapes to improve the overall urban realm – including provision of additional trees to integrate with the surrounding bushland character and shade for pedestrians.

### Relevance to Mawson Lakes:

- Mawson Lakes has a mix of land uses within proximity of the public transport interchange. The case studies have demonstrated the importance of placemaking to support the vibrancy of the urban realm and associated land use. Multiple case studies demonstrated the role the natural environment can play in supporting great place outcomes.
- Creating vibrant precincts is not just about activating streetscapes, but also achieving the right balance between transport modes. A precinct underpinned by active travel allows for the efficient movement of more people with less infrastructure – lending itself to the dense cluster of activity-generating land use located around the Mawson Lakes central (Main Street and surrounds).

## Thriving Economy



**Mawson Lakes has a progressive, thriving economy supported by a mix of businesses, education, commercial and industry precincts. Precincts are accessible and connected to other economic hubs.**

### Key success factors across the case studies are:

- Oakleigh demonstrated the encouragement of urban infill within the station precinct, a high-productivity use of land with high public transport access, combined with improved public spaces for community use.
- Coevorden and Bayswater demonstrate how improved permeability and access to all sides of the interchange can improve connectivity for adjacent businesses and encourage public transport use.

- Connectivity and wayfinding upgrades were applied across the case studies to improve navigation and user-experience, particularly for first time users of the public transport system. This improves the overall user/customer experience.

**Relevance to Mawson Lakes:**

- The case studies have demonstrated how public transport integration can play a key role in providing access to economic travel generators within the mixed-use precinct.
- Mawson Lakes' diverse mix of commercial, education and retail land use (including the University of South Australia campus, clustering of local activity generators around Main Street, college, school and Technology Park) reflect the types of land uses that can thrive when connected to high-quality public transport.
- More broadly, a legible network supported by directness and wayfinding improves the overall experience within the precinct.

# Suburb Demographics & Statistics

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Population, employment, and land use play an important role in shaping transport needs and movement patterns, travel demand and travel mode choice within a community. By examining the existing movement patterns in Mawson Lakes, a movement plan can be established for the suburb to understand the transport needs of the community.

The Australian Bureau of Statistics 2021 Census information for Mawson Lakes suburb identifies a land area of 6.3 square kilometres and an estimated population of 13,794, with an average household size of 2.6 persons per dwelling.

The conceptual understanding of the suburb characteristics and when compared to the greater Adelaide average, provides a framework for assessing the existing movement patterns and travel demand and how this relates to infrastructure supply and policy/operational provisions to determine the adequacy, inform analysis and opportunities for improvement within the Mawson Lakes area and how this aligns with the strategic ambitions for this study.

The following suburb characteristics that influence movement patterns, travel demand and travel mode choice are considered in this section:

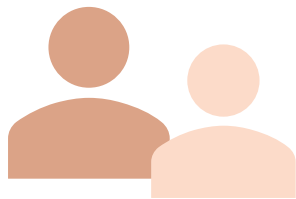
- **Population:** The size and distribution of the Mawson Lakes population, their travel mode of choice, rates of private vehicle ownership and relative economic and social measures.
- **Employment:** Employment status (including student population), share of residents who work from home, locally, and job density across Mawson Lakes.
- **Land Use:** An overview of zoning policy in Mawson Lakes, highlighting the desired outcomes and development potential of the area. The arrangement of residential, commercial, and recreational land use and activity generators in Mawson Lakes.

# Population

## Population Density

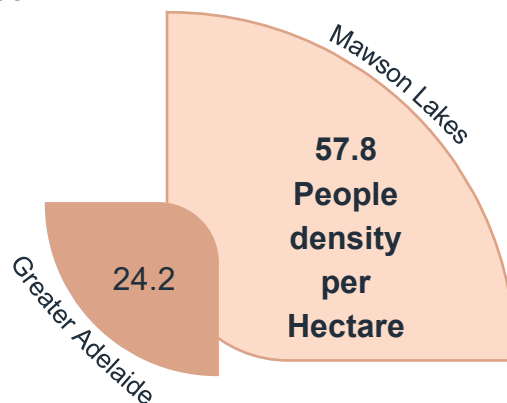
Generally, there is higher population density across Mawson Lakes including residential areas to the north and south. Highest population density is within the centre of Mawson Lakes around Main Street.

- ❖ Mawson Lakes has almost double the population-weighted density of Greater Adelaide (measured as the population density at which the average resident lives).
- ❖ Compared with Greater Adelaide, Mawson Lakes has a higher number of motor vehicles per adult as well as more dwellings with a motor vehicle.
- ❖ There are a higher portion of students in Mawson Lakes than the Greater Adelaide average, with the University of South Australia Mawson Lakes campus being located within the area.



**Median Age is 33 in Mawson Lakes**

compared with 40 for Greater Adelaide



	Greater Adelaide	Mawson Lakes
(%) Dwellings without a motor vehicle	7.0%	5.0%
Motor vehicles per adult	0.70	0.82



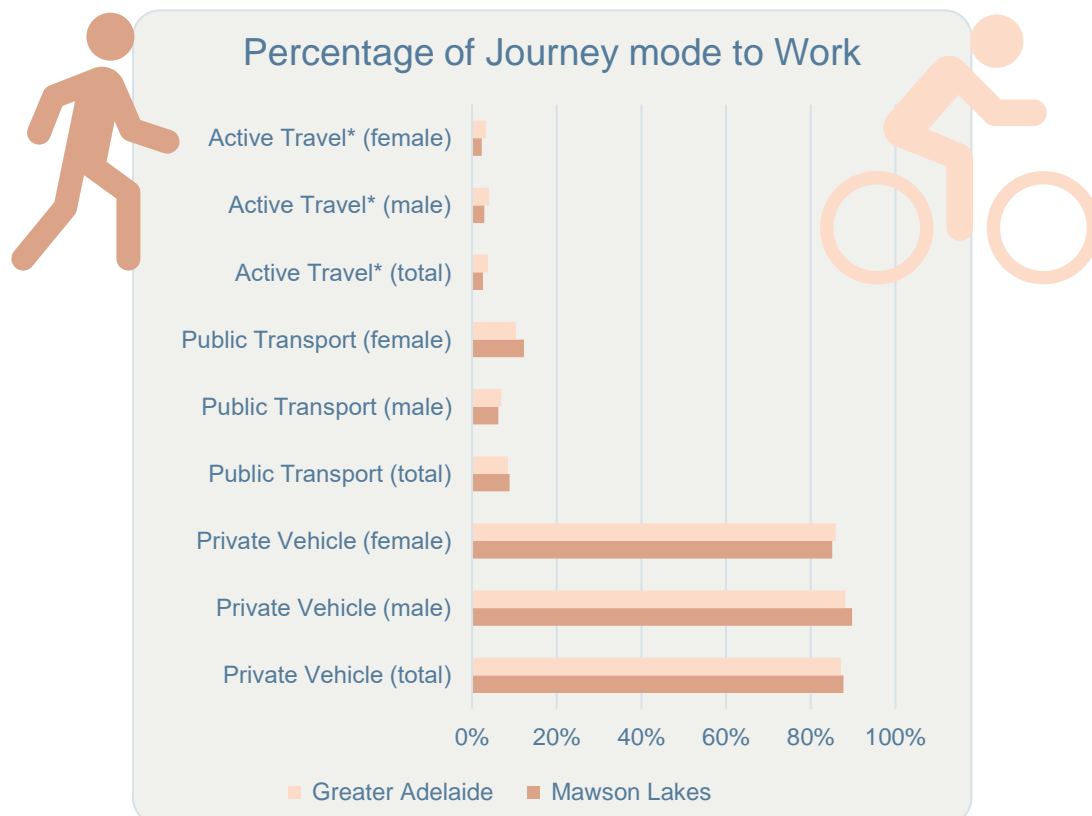
# Journey To Work

In Mawson Lakes there is a proportionately high amount of private vehicle journeys to work made from the southwest of the public transport interchange and a large cluster to the north of Elder Smith Road. There are fewer journeys made by private vehicles from the mixed-use area around Main Street.

## There is a lower percentage of active travel 2.6% in Mawson Lakes compared to 3.7% in Greater Adelaide

Mawson Lakes total journey to work percentages are comparable with Greater Adelaide for both private vehicles and Public Transport, however differences occur when considering gender, as indicated in the infographic.

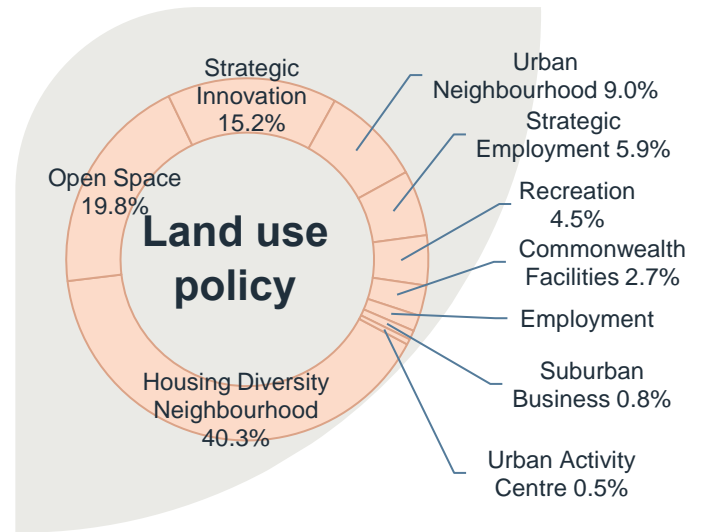
Transport-related statistics such as car ownership and journey to work mode share indicate that Mawson Lakes is evidently car-based for daily transport more than the Greater Adelaide average.



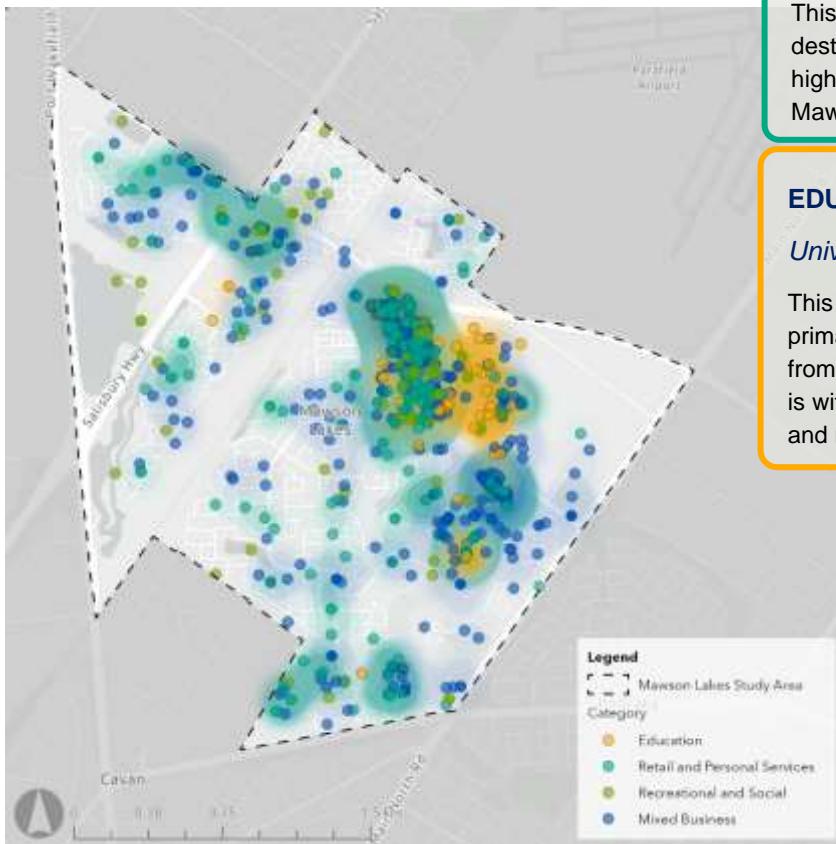
# Land Use

A large portion of the Mawson Lakes area is urban residential, particularly across the south and western sections. Evident from the statistical data, these residential areas are largely reliant on private vehicles for journeys to work which generate movement to and from the area along primarily Mawson Lakes Boulevard and Main Street.

There is a concentration of retail, businesses and commercial surrounding Mawson Central and Main Street (zoned as mixed use). This area attracts a combination of travel from the wider region and local travel. Due to the concentration of facilities and attractors in the central area there is a higher number of pedestrians throughout this area.



## Land Use Activity Generators



### RETAIL AND COMMUNITY SERVICES

#### *Mawson Central and Main Street*

This category of travel attractor includes local retail destinations and services. Evident from the map the highest clustering of these service types is located within Mawson Central and along Main Street.

### EDUCATION

#### *University of South Australia, Mawson Lakes*

This category of travel attractors relates to education – primarily the University of South Australia campus. Evident from the map, the highest clustering of this destination type is within/adjacent the University of South Australia campus and neighbouring Endeavour College.

### EMPLOYMENT

#### *Mawson Lakes Technology Park*

This category of travel attractors combines multiple types of destinations, the majority of these on the eastern side of the area being commercial and industrial businesses. It is evident that the highest clustering of these destination types is within the Mawson Lakes Technology Park.

# Community Consultation

Community and stakeholder engagement was undertaken in March 2023 and is vital to the successful development of this Local Area Plan. Local input has been used to obtain a better understanding of the current challenges and identify potential improvement solutions.

Along with meetings with key stakeholders, members of the community were encouraged to complete an online survey and digitally 'pin' comments to relevant points around Mawson Lakes and categorise their feedback according to the nature of their comment.

The community was also invited to provide feedback directly to the project team at six community drop-in sessions held at the Mawson Centre and the Mawson Central Shopping Centre. Over 50 community members attended these sessions.

While the focus of the engagement was on active travel in Mawson lakes, all feedback related to Mawson Lakes area was collated.



# What you told us

From the 212 survey responses, the main mode of transport within Mawson Lakes was identified as: 61% car, 19% walking, 10% bicycle, 6% public transport (train), 3% public transport (bus) and 1% commercial vehicle.

Congestion across Mawson Lakes, traffic management and access to local streets and car parking availability were the main themes in the feedback.

**Active travel:** The main barrier to the use of active travel was sighted as individuals' journey being too far (greater than a 10-minute walk), and safety including competing road space, traffic volume, traffic speed, on street parking and driver behaviour.

**Public Transport:** The main barrier to the use of public transport was sighted as personal circumstances, followed by frequency of services including late night services and number of carriages per train service. Other public transport issues included the type of facilities available at bus stops and a desire for other destinations to be supported by public transport routes.

**Car parking** was raised as an issue within the central area as well as across the suburb. Lack of parking was sighted as an issue along with current on-street car parking issues with cars parked on both sides of the roads, close to intersections and on yellow lines.

**Local traffic/suburb wide issues:** Themes from the community that have been shared with the CoS include:

- Congestion across Mawson Lakes, central business area and at entry/exit points of suburb.
- Speeding, rat running and driver behaviour.
- Speed limit on Main Street near cafes.
- Narrow congested roads.
- Poor connectivity for pocket areas of Mawson Lakes.
- Concerns future infrastructure will add to existing congestion.
- Congestion at school peaks.
- Suggestions of lower speed limits and more speed signs.
- High planting at roundabouts, in centre medians and on roadside, cause line of sight issues.

**Elder Smith Road:** While not the focus of this study, the congestion on Elder Smith Road and the associated congestion on local roads was consistently raised. The feedback been provided to the planning team investigating the Planning Study for Elder Smith Road.

# Movement Network

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Mawson Lakes has developed into a mixed-use urban suburb with activity generators of local and regional significance, attracting students, workers, and visitors from outside of the area. There are a range of local attractors in Mawson Central, including civic and education facilities, restaurants and retail and recreational areas that serve the local community and visitors and generate travel through the area.

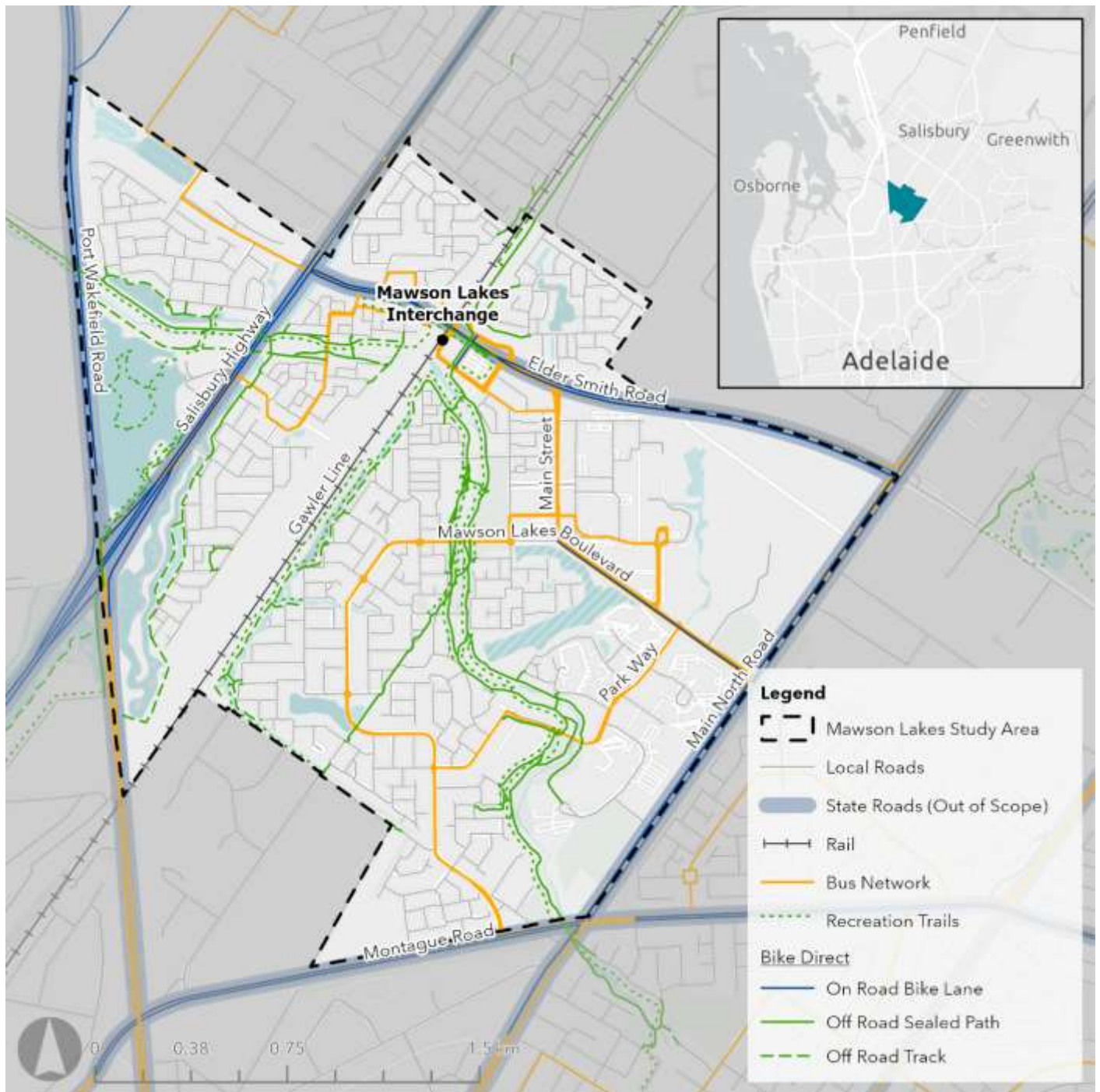
Movement patterns centre around key generators, Technology Park, University of South Australia, Endeavour College, Mawson Lakes Primary School and the combination of local business and retail attractors clustered around Mawson Central and Main Street in the mixed-use precinct and access to the Mawson Interchange.

The movement network should connect people and places, providing an interconnected network of roads and paths that manages traffic and parking and supports walking and cycling access to Mawson Central, surrounding precincts and residential and recreational areas and to the Mawson Interchange.

How the movement network operates and affects people's mobility and travel choice is important to enabling the community to be more physically active and healthy and to encourage reduced reliance on private vehicle use. Providing a safe and well-connected network that supports increases in active and multi-modal travel is a focus of this study.

A network review and site investigations have been undertaken for walking, cycling, public transport and the road network, including traffic volumes, speed and road crashes. The summary of observations assists to determine 'gaps' across the area and to identify the outcomes of the study where potential opportunities are to improve road safety and travel mode connections across the area.

Figure 2: Mawson Lakes Area – Movement Network



# Site Investigations

Site investigations were undertaken during daytime and night-time hours to examine the local network conditions in Mawson Lakes and identify key issues across the area for all transport modes, including walking, cycling, public transport and private vehicles. The figure below highlights the locations of recorded issues identified across the study area.

Figure 3: Site Investigations – mode issues identified



# Road Network



Mawson Lakes Boulevard and Main Street

The road network within Mawson Lakes has key functional routes across the area with Mawson Lakes Boulevard and Main Street being the primary connections to the state road network. The roads in Mawson Central provide for access to retail, business and educational facilities and parking. The area is divided by the Adelaide-Gawler railway line with the only vehicle access being across the over bridge on Elder Smith Road. The urban residential areas are divided by the Dry Creek alignment and recreational areas, with bridge access across Mawson Lakes Boulevard, The Strand, Park Way, The Drive and Elder Drive. This segregation results in obvious primary vehicle routes from the local residential street network. The primary access to the Mawson Interchange is from Elder Smith Road and Metro Parade.

## Traffic Volume

State roads providing key transport corridors across the wider region and facilitating access for the Mawson Lakes area are Elder Smith Road, Main North Road, Salisbury Highway and Montague Road. These state roads have the highest traffic volumes surrounding the Mawson Lakes area and are shown in Table 1 below.

Table 1: State Road Estimated Traffic Volumes

STATE ROAD (Source: Location SA data)	Traffic Volume Estimate (AADT)	Commercial Vehicles %
<b>Elder Smith Road</b> (between Main North Road and Main Street)	24,700	6%
<b>Elder Smith Road</b> (between Main Street and Salisbury Highway)	35,400	5.5%
<b>Salisbury Highway</b> (between Elder Smith Road and Kings Road)	39,900	6%
<b>Salisbury Highway</b> (between Elder Smith Road and Port Wakefield Road interchange)	53,500	8.5%
<b>Main North Road</b> (between Montague Road and Elder Smith Road)	44,300	6%
<b>Montague Road</b> (between Port Wakefield Road and Main North Road)	26,100	9%

\*AADT Average Annual Daily Traffic in both directions



The Annual Average Daily Traffic (AADT) is only available for the state-maintained roads surrounding Mawson Lakes. Council have recorded traffic volumes for some of the local road network, with key roads shown in Table 2 below.

Table 2: Council Roads Estimated Traffic Volumes

<b>COUNCIL ROAD</b> (Provided by City of Salisbury)	<b>Traffic Volume Estimate (daily average)</b>
<b>Mawson Lakes Boulevard</b> (between Main North Road and Park Way, year 2020)	9,065
<b>Mawson Lakes Boulevard</b> (between Park Way and Main Street, year 2020)	9,594
<b>Mawson Lakes Boulevard</b> (The Promenade, year 2020)	3,387
<b>Mawson Lakes Boulevard</b> (between Park Way and The Avenue, year 2020)	5,594
<b>Main Street</b> (near Light Common, year 2019)	11,681
<b>Park Way</b> (near Mawson Lakes Boulevard, year 2020)	4,383
<b>Metro Parade</b> (year 2019)	5,604
<b>Garden Terrace</b> (near Goodall Parade, year 2020)	4,983
<b>Garden Terrace</b> (near Mawson Lakes Primary, year 2020)	5,473

\*Daily Average in both directions – recorded typically over a 7-day period

Mawson Lakes Boulevard to Main Street have the highest traffic volumes of all local roads in the area. This is directly related to the road network layout, as these roads are the key connections for the area to the state road network. The traffic volumes and movement patterns show that the residential areas, various precinct areas, Mawson Central and the Mawson Interchange contribute to higher volumes from within the area and into and out of the area to these facilities along these roads.

There are higher traffic volumes in and around Mawson Central and along Metro Parade to the Mawson Interchange. Mawson Lakes Boulevard, Elder Drive and Park Way are primary routes through and for access to the urban residential areas and related to Technology Park and public bus routes.

An indicative sample size from \*TomTom data has been used to provide a graphical indication of movement density patterns across the Mawson Lakes area, this is shown in Figure 4 below.

(\*TomTom Traffic Stats is a self-service product that provides direct access to the industry’s largest historical traffic database, including road speeds, travel times and traffic density).

Figure 4: Indicative movement density patterns based on TomTom Data



## Traffic Speed

The speed limit within Mawson Lakes area is the urban speed limit of 50km/h, with exception sections shown in Table 3 below.

Table 3: Council Roads Speed Limits

Location	Speed Limit
<b>Mawson Lakes Boulevard</b> (between Main North Road and Main Street, approximately 900 metres)	60 km/h
<b>Mawson Lakes Boulevard (the Promenade)</b> (150 metre section adjacent Mawson Lake between Main Street and Garden Terrace)	40 km/h
<b>Garden Terrace and The Strand</b> Mawson Lakes Primary School	25 km/h school zones
<b>Garden Terrace to The Strand</b> Mawson Lakes Primary School kiss and drop	10 km/h shared zone
<b>Mawson Interchange</b> One way access road to interchange and kiss and drop	20 km/h
<b>University of South Australia, University Boulevard roads</b>	40 km/h and 25km/h school zones for Endeavour College

The indicative sample size from \*TomTom data has been used to provide a graphical indication to visualise average speed and average speed as a percentage of the posted speed limit, typically the urban speed limit 50km/h. The Figures below show the average weekday morning AM peak between 8-9am and average weekend peak travel speeds.



Figure 5: Average traffic speed during weekday morning AM peak (8-9am)



Figure 6: Average weekend traffic speed (9am-3pm)



Figure 7: Average speed as percentage of posted speed limit during weekday AM Peak (8-9am)



Figure 8: Average traffic speed as percentage of posted speed limit (9am-3pm weekend)

#### Traffic Speed Morning AM Peak (8-9am) summary:

- Roads around the shopping and business district have an average speed of about 50% of the posted speed, particularly Mawson Lakes Boulevard between Garden Terrace and Main Street, Hurtle Parade and parts of Main Street and University Boulevard.
- This indicates congestion occurring in Mawson Lakes during the AM peak period, for both residents (leaving the precinct during the AM peak) and visitors, students, workers (entering the precinct during the AM peak). This data aligns with the observations during the site investigations with queuing observed along Main Street and Metro Parade.
- Light Common which provides primary access to car parking areas has an even lower average speed, at 40% of the posted speed limit.
- All figures highlight that there are relatively fast vehicle movements (~100% of speed limit, or between 40-50kph) around the local connections that interface with the Mawson Interchange. This data aligns with the observations during the site investigations – where vehicles were observed travelling at higher speeds past the Interchange in areas with high numbers of pedestrians (public transport passengers).

#### Weekend (9am-3pm) summary:

- During the day on the weekend the average speeds are similar to the weekday morning peak, suggesting a generally slow movement of traffic through the precinct.
- Comparison of the average speeds to the posted speed limit shows there are less roads with drivers exceeding the speed limit compared to the weekday morning peak.
- There are also more roads with average traffic speeds closer to the posted speed limit over the weekend, indicating more free flowing traffic.

The traffic data indicates there is a high private vehicle reliance for residents and visitors in Mawson Lakes, and the car-oriented nature of the area and for parking (with vehicles circulating to find a parking space also likely contributing to the slower speeds) reduce the overall efficiency of the local transport network.

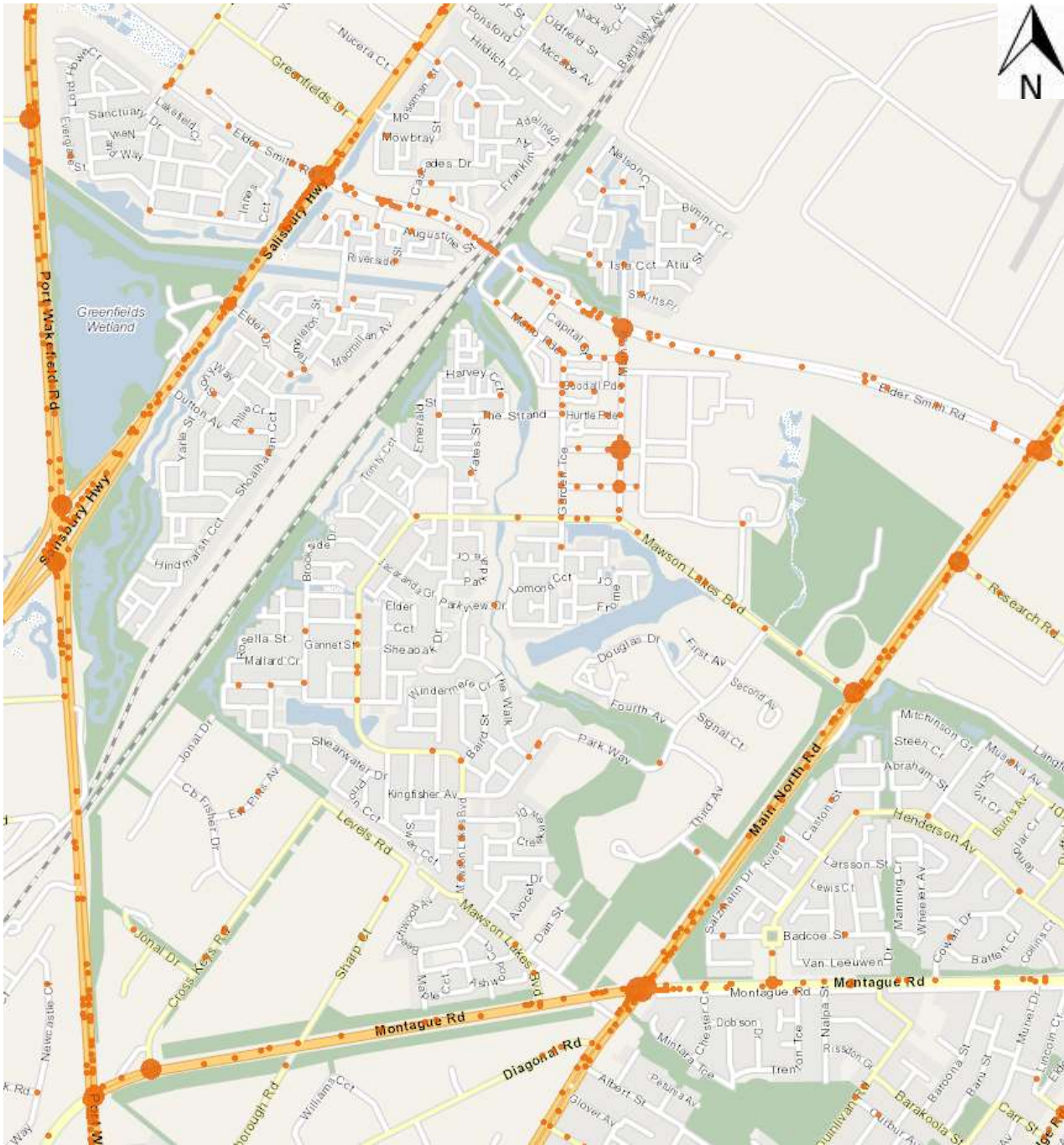
The speed data indicates that sections of Mawson Lakes Boulevard have higher travel speeds and that there are higher incidences of speeding along Park Way. Importantly, the traffic data indicates that Mawson Central is conducive to an area wide speed limit reduction to improve safety for all road users.

## Road Safety

The reported road crash data for the available 5-year period 2018-2022 is shown in Figure 9 below. The data is sourced from the State Government Location SA Map Viewer. Indicatively the larger clusters represent a higher concentration of crashes and the smaller a reported crash (typically property damage only).

- The crash data clusters within Mawson Lakes correlate generally at intersections with state roads and along Main Street and within Mawson Central with higher traffic circulation and pedestrian movements.
- Predominant crash type is right angle and hit parked vehicle, rear end and side swipe.
- Main Street and Light Common has the highest crash cluster, which is likely attributed to the road layout and resulting driver apprehension and high demand for parking.

Figure 9: Crash Data 2018-2022



The road crash casualty heat map distribution across Mawson Lakes for the 5-year period 2017-2021, is shown in Figure 10 below.

- Main Street has the highest clusters of casualty crashes and highest concentration of crashes involving pedestrians at the signalised intersection with University Parade. This is indicative of the road function as a key access route and connection between precincts and higher pedestrian movements in this area.
- Crashes involving vulnerable road users – pedestrians and cyclists are also evident within Mawson Central and along Metro Parade which acts as a key pedestrian connection between Mawson Interchange, Main Street and the University of South Australia.

Figure 10: Road Crash Casualty Heat Map and vulnerable user crash locations



# Public Transport Network



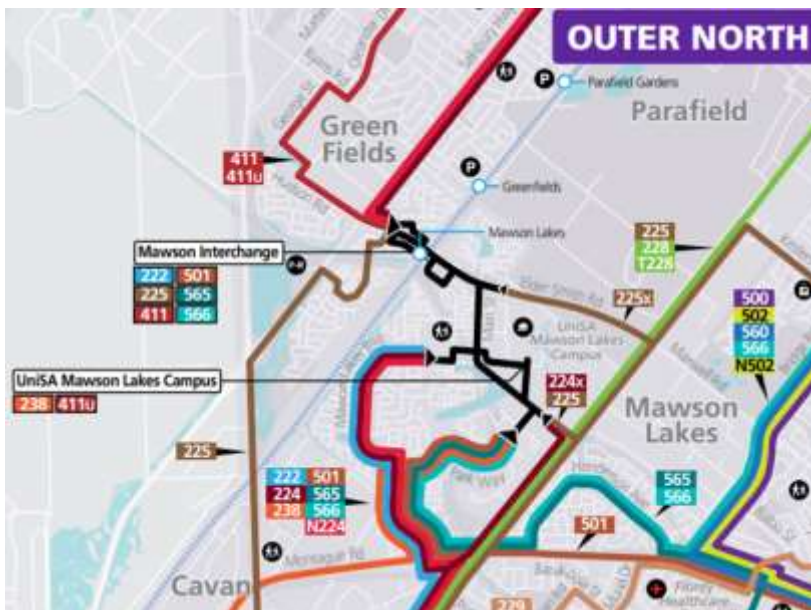
Mawson Interchange

Public transport is essential to the economic and social quality of communities. It provides access for those who do not have private vehicles and for those who choose to use public transport or multi-modal transport options.

The Mawson Interchange is one of the busiest transport hubs in metropolitan Adelaide. The Interchange provides connection to train services on the Adelaide to Gawler railway line and adjacent bus stops for public bus services. The Interchange is on the high frequency station service, during the day there is 15-minute train service frequency and an average travel time of 17 minutes to Adelaide station. The Interchange has real-time arrivals display, bike lockers, bike racks, accessible parking, MetroCARD machine, accessible toilet, food kiosk, accessible elevator and stairs to the Elder Smith Road overpass bridge. There is a separated Kiss & Ride and taxi, ride share area and a Park 'n' Ride car park.

There are six bus routes that connect at the Interchange, shown in Figure 11 below, which provide connection through Mawson Lakes along Main Street to Elder Smith Road, Elder Drive between Salisbury Highway and Elder Smith Road, Mawson Lakes Boulevard to Main North Road, Mawson Lakes Boulevard (north-south) and Parkway to Montague Road. There are two services to the University SA campus.

Figure 11: Public Bus Map (Source: Adelaide Metro)



A review of the State Government public transport data was undertaken and the following observations made:

- There is a clear 'peak' public transport demand profile which is common for Adelaide, with the highest level of demand during the morning AM peak, and reduced demand during the middle of the day. This is generally reflective of public transport timetabling – being more frequent and useful during peak periods.
- There are more overall boardings during the morning peak than the evening peak, likely representative of Mawson Lakes commuters (who board their trip home during the evening peak in the Adelaide or elsewhere).
- There is also a notable evening PM peak observed– suggesting that workers who work in Mawson Lakes travel to the precinct by public transport (and thus board public transport again in the evening for their return trips).
- A higher proportion of weekday morning boardings are train boardings, while a greater proportion of evening boardings are bus boardings.
- Combined with the insights from the initial versus transfer boarding data this indicates that feeder buses are important to and from the CBD-oriented rail service in the morning and evening peaks respectively.
- There is significantly reduced public transport demand on the weekends at all times of day. Combined with the interpeak decrease in weekday boardings – this suggests that the public transport service is most useful during the weekday peak periods, but less at other times.

## Active Transport Network



Active Transport in Mawson Lakes

*Cycling and walking can increase stamina and physical fitness, improve cardiovascular health and contribute to having a healthy weight. Cycling and walking helps the environment by reducing pollution and is a low-cost way to travel. It's also a great social activity to participate in with family, friends or a group.*

The CoS has partnered with Bike SA to encourage cycling and joining local rides and the Heart Foundation to encourage joining your local walking group.

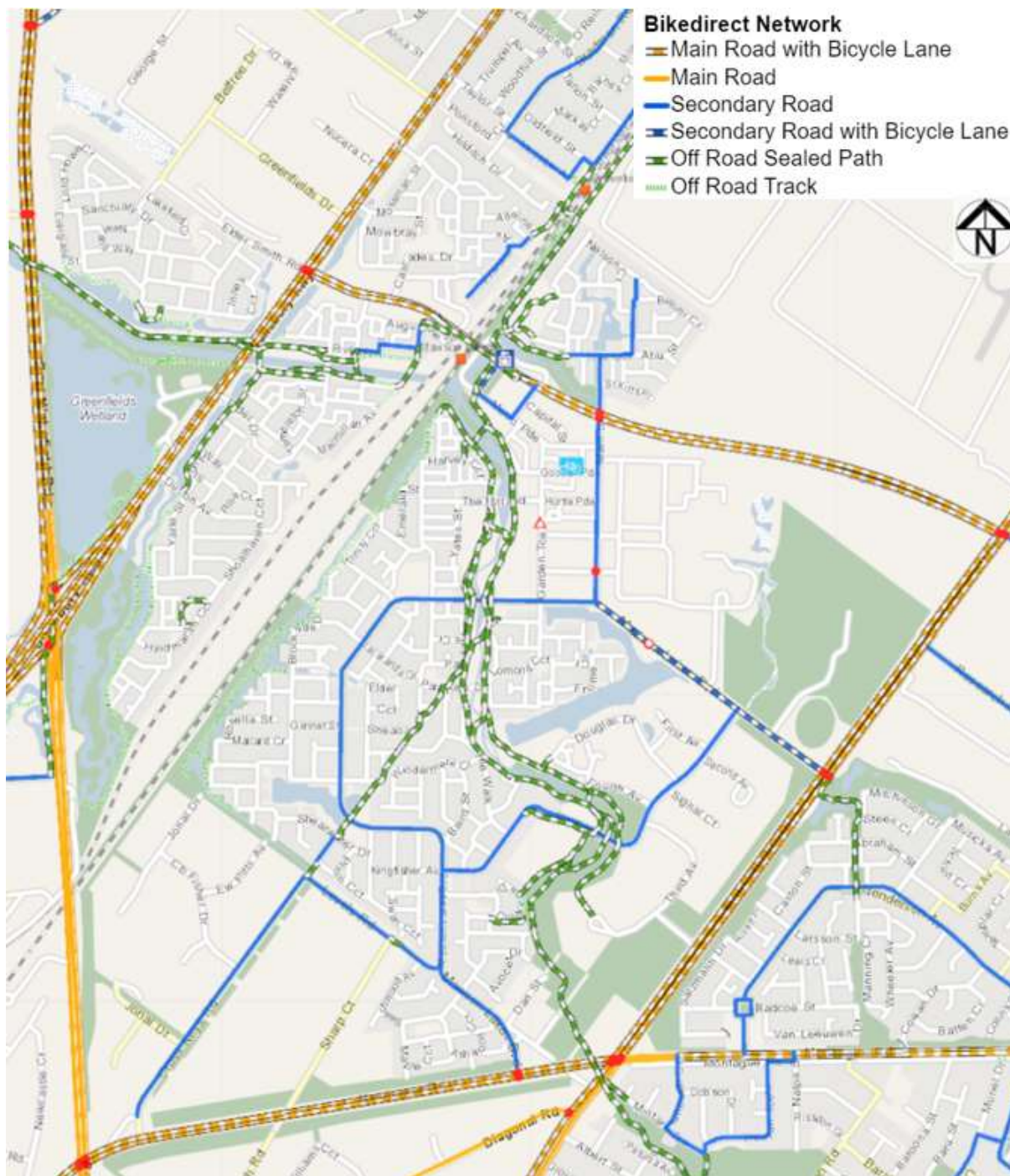
Footpaths through the central area are generally wide with street trees, however many road crossing points are unsafe, with wide intersections. The majority of residential streets have standard footpath provision on one or both sides of the road.

The on and off-road designated cycling network is shown in Figure 12 below. Along the local road network, secondary cycling routes are identified as part of the Bikedirect network. Only a section of Mawson Lakes Boulevard has on road cycle lanes, and part of University Boulevard.



The Dry Creek River recreational trails extend (north-south) through the Mawson Lakes and link to playgrounds, reserves and wetland areas, with footpath connections to the surrounding precincts and residential areas. In Mawson Central the trail links with Mobarra Park and the Mawson Interchange. The rail corridor severs trail access and users are required to use the overpass on Elder Smith Drive, or the at grade crossing at Greenfields Railway Station to the north. Salisbury Highway also creates a barrier, with a culvert underpass that is subject to water inundation. There is limited lighting and wayfinding signage along the trail. There is a popular path around Mawson Lake and Shearwater Lake.

Figure 12: Cycling Network (Source: Cycle Instead)



# Car Parking

Demand for car parking in Mawson Lakes is contributed to by (A) a large number of trips to the many destinations within Mawson Lakes being made by private vehicle; and (B) the Mawson Interchange Park 'n' Ride location.

In 2022, Council engaged a consultant to undertake the "Mawson Lakes Town Centre – Parking Review and Review of the Usability & Suitability of Timed Parking". This included a review of parking controls and occupancy within Mawson Central and provided a framework for prioritising how on-street parking space is used. (Note: the review excluded the Park 'n' Ride)

Parking occupancy describes the percentage of spaces that are occupied at any given time. The occupancy of on-street parking spaces within Mawson Central should be high enough to ensure that they are occupied at a level that justifies the supply but not so high that it is unreasonably difficult to find a space. The Parking Review recommended an occupancy target of 85% to balance supply and demand.

## Mawson Central Parking

The central area has a high number of on street parking spaces and additional off-street parking in locations such as the Mawson Central Shopping Centre. Parking space provision overview:

- 588 on-street spaces (Source: Mawson Lakes Town Centre – Parking Review, 2022)
- 580 public off-street spaces in locations such as the Mawson Central Shopping Centre (Source: Parkopedia)
- 685 public off-street spaces within the neighbouring University SA campus (Source: Parkopedia)
- Additional off-street spaces reserved for staff or visitors to particular businesses or residences.

The Mawson Lakes Town Centre – Parking Review in 2022 found:

- A range of parking space occupancy rates, with a pattern of higher occupancy around the northern end and main shopping precinct, and gradually lower occupancy moving towards the south (shown in Figure 13).
- A mix of parking controls throughout the area, with potential relationships between lower occupancy and shorter time limits (Figure 13)
- That there is sufficient parking supply in the town centre, but it could potentially be simplified or optimised to achieve higher occupancy and turnover.

The Parking Review found that there is sufficient on-street parking supply across Mawson Lakes town centre and surrounds and this was validated by on site observations as part of this study. Improved parking management is the optimal solution and not increasing the number of parking spaces, this can also assist to develop more integrated solutions to encourage active travel for short trips.

Figure 13: Occupancy rate (high - low) vs parking controls (longer - shorter)

(Image Reference: Figure 7: Mawson Lakes Town Centre – Parking Review, 2022)



### On-Street parking near Mawson Interchange

There are approximately 150 additional uncontrolled on-street parking spaces within five-minutes walking distance to the Interchange. Approximately 37 spaces are south-east of the Interchange along Euston Walk and Capital Street. The Mawson Lakes Town Centre – Parking Review found an average peak-period occupancy of 85% (32 spaces).

Generally, it can be assumed that public transport users will park closer to the Interchange to reduce walking distance and time, rather than further south-east outside of the Park ‘n’ Ride. This is observed in the Park ‘n’ Ride data – where there is highest use parking spaces closest to the Interchange.

The June 2023 survey covered 113 on-street parking spaces to the north-west of the railway line – specifically Riverside Street, Augustine Street (south of Elder Smith Road) and Ridley Street and found an average occupancy of 55% (maximum 70%) during weekday peak periods.

On-street parking was occupied more consistently in the Park ‘n’ Ride, peaking at 70% on both weekdays and weekends. On weekdays, occupancy is at its lowest at 9:00am (42%), with peaks at 6:00am and 6:00pm. Similar trends were true for the weekend survey, with occupancy lowest towards the middle of the

day. This significantly different occupancy profile suggests that the on-street parking in this area is largely used by residents, rather than as an alternative to the Park 'n' Ride.

### Parking at Mawson Lakes Interchange



#### Mawson Interchange Park 'n' Ride

The Mawson Interchange Park 'n' Ride provides 423 unrestricted off-street parking spaces. Although the intent is that these parking spaces are provided for public transport commuter use, the proximity to nearby residences and businesses results in the car park being used in some part for other purposes.

The Park 'n' Ride does not have any specific signs designating its use, or related directional signs on approach roads. The Mawson Interchange access road does not have information signs related to facilities at the Interchange, bus stops, kiss & ride, accessible parking, toilets etc.







The Park 'n' Ride is not directly accessible and is separated from the Interchange by a large detention area which requires commuters to walk around. The route between has no shelter or shade provision.

A parking survey for the Park 'n' Ride in June 2023 found:

- Occupancy was significantly higher on the representative weekday than weekend day, peaking at 80% and 13% respectively.
- Weekday occupancy is highest between 9:00am and 5:00pm and drops significantly outside of these hours.
- The Park 'n' Ride did not reach capacity during the surveys. At its maximum occupancy (80% occupied at 3:00pm on a weekday), 83 parking spaces were still available.
- During the weekday survey, 251 spaces (out of 423 total) were occupied by the same vehicle during both the AM and PM peak, indicating that the Park 'n' Ride is likely used for a combination of all-day commuter trips and shorter-stay or inter-peak use. Visitors to the town centre may account for some of the shorter-stay use.
- 12 spaces were occupied by the same vehicle from at least 6am-6pm, four of which were still present during the weekend survey three days later. This suggests some vehicles may be stored in the Park 'n' Ride for excessive periods of time.

# Study Outcomes

The main outcomes emerging from the community consultation, site investigations and movement and access analysis are summarised below under the six key ambitions for this Local Area Plan. These outcomes will inform the potential opportunities to improve the local movement network to bring these ambitions to life.

 Integrated Movement Network	 High-Quality Public Transport	 Active and Healthy Community
 Safety and Activation	 Vibrant Land Use	 Thriving Economy

**Mawson Central and Main Street do not provide a well-functioning and integrated movement network, between different modes of transport and does not provide optimal and safe walking and cycling connectivity to destinations**

Community consultation



Site Investigations








Analysis



The design and layout of the local movement network in Mawson Lakes affects people's mobility and travel options as well as impacting vulnerable user safety. The centre should provide equitable access for all users to facilities, services and public transport. The higher traffic volumes result in generally lower traffic speeds during busy periods through the central area, however the roads are primarily designed for traffic movement and parking.

## Impact on policy ambitions:

	The local road network through the central area does not provide an integrated and balanced movement network. There are many wide streets and intersections, high provision of on-street parking and indirect and wide pedestrian crossing facilities and minimal cycling facilities, which increases the risks for all road users, particular vulnerable users.
	There is no modal priority through the central area to create 'healthy streets' and increase active travel choice.
	Higher traffic volumes, congestion and higher concentrations of pedestrians, combined with wide streets and intersections and on-street parking results in increased crash risk.
	Mawson Lakes design intent was to create places for people and activity, the road environments are not specifically designed based on modal priority, or movement significance to provide quality public spaces that are convenient, safe and appealing.
	Mawson Central has the foundations to improving public space and liveability. The movement network is not integrated and inviting for all road users to adjacent land uses and key destinations. Creating inviting and safe places for people can increase economic growth.

## Elder Smith Road local road network impact

Community consultation



Site Investigations







Analysis



Elder Smith Road has significant traffic volumes for the section with one traffic lane in each direction over the bridge. This results in congestion which subsequently impacts the local road network, specifically Main Street and Metro Parade and access to the Mawson Interchange. The adjoining intersections to

residential areas and access across the road for walking and cycling are restricted by the road configuration and environment.

**Impact on policy ambitions:**






	The efficiency of the local road network, particularly along Main Street and access to and from Mawson Interchange is compromised by the function and under capacity of Elder Smith Road.
	Public bus services and timing are impacted by congestion on the local road network and access to and from Elder Smith Road.
	Crash risk is increased due to the volume of traffic and road configuration.
	Congestion time delays have cost impacts to the economy.

**Inadequate parking management and controls contributes to congestion, circulating traffic and reduced safety through activity centres and along local streets**

<i>Community consultation</i>	✓	<i>Site Investigations</i>	✓	<i>Analysis</i>	✓
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Evident across Mawson Lakes, the residential streets have a high demand for on-street parking which along some streets creates hazards and reduced road width and accessibility problems. Through the central area the streets are dominated by on-street parking provision that is not adequately controlled, related to adjacent land use and supply and demand.

**Impact on policy ambitions:**


	The current on-street parking arrangement and controls do not effectively manage parking supply, turnover and demand related to adjacent facilities.
	The Mawson Interchange Park 'n' Ride is not designated for public transport commuters only and is available for any driver to park in for any length of time.
	Vehicles parked on both sides of local streets can lead to difficulties observing hazards and for vehicles to pass one another, reducing safety through residential areas.
	Heavy reliance throughout the area for private vehicle use and associated car parking can result in cluttered streets and inactive land use that detracts from vibrancy in the area.
	While parking does not necessarily assist the economic activity of town centre areas, a lack of parking can potentially be a deterrent for potential customers.



**Pedestrian network does not specifically prioritise pedestrian movement and safety through areas of high pedestrian demand and to key destinations**

<i>Community consultation</i>	✓	<i>Site Investigations</i>	✓	<i>Analysis</i>	✓
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Through Mawson Central many footpaths have wider provision, however pedestrian crossing points across intersections and roads are wide and at some locations not direct. There is minimal way finding signage to assist with improving walkability across the area.

**Impact on policy ambitions:**



	The connectivity and integration of the pedestrian network is impacted by wide streets and intersections and the demand for more safe crossing locations, which are direct and have
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	reduced crossing widths. At the signalised intersection with University Parade pedestrians have long crossing distances and compete with left turning traffic.
	Active travel choice over driving a vehicle and increasing daily journeys by walking are not conducive if there is not a safe, connected, and convenient network that is easy to navigate to key destinations and or from linear trails.
	Where there is high pedestrian activity and particularly across Main Street and around the Mawson Interchange area, the road environment results in pedestrians taking risks in crossing the roads.

### Cycling network does not have consistent connectivity and wayfinding or sufficient end of trip facilities

<i>Community consultation</i>	✓	<i>Site Investigations</i>	✓	<i>Analysis</i>	✓
There is limited on road dedicated cycling infrastructure across Mawson Lakes and there is not consistent and clear wayfinding to key destinations across the area, or convenient end of trip parking provision.					
<b>Impact on policy ambitions:</b>					
	The cycling network is primarily recreationally focussed along the Dry Creek linear trails. Cycling for commuting and on-road is primarily along the existing road network with traffic and minimal designated or separated cycling facilities. The layout of Mawson Lakes is conducive to linking linear trails, shared use paths with on-road provision to create a connected cycling network to key destinations.				
	At the Mawson Interchange there are bicycle lockers and a small number of rails. The provision does not support increases in multi-modal travel and convenient and secure bicycle parking, such as a large bicycle cage.				
	Active travel choice over driving a vehicle and increasing daily journeys by cycling are not conducive if there is not a safe, connected, and convenient network that is easy to navigate to key destinations and or from linear trails.				
	When on-road cycling infrastructure is not provided, cyclists are required to ride in traffic lanes, compete with turning vehicles, travel adjacent parking, with risk to car doors opening and cross at non-preferred locations.				

### Level of public transport amenity reduces the attractiveness of public transport

<i>Community consultation</i>	✓	<i>Site Investigations</i>	✓	<i>Analysis</i>	✓
Public bus stop infrastructure across Mawson Lakes is generally at a minimum standard. Most bus stops do not have adequate shelter, seating, timetabling to attract users to use public transport. The Mawson Interchange area and connectivity to Mawson Central does not provide an appealing environment, particularly at night. There is a disconnect between the Interchange and the Park 'n' Ride requiring people to walk or cycle further distance around to access services.					
<b>Impact on policy ambitions:</b>					
	The Mawson Interchange is not well integrated to Mawson Central, the road network around the interchange is conducive to higher traffic speeds and wide intersections are not preferred for pedestrians and cyclists to cross.				
	Potential public transport commuters can be deterred from using services when the public space environment, particularly at night, is not adequately lit and is not appealing.				



The amenity of the Mawson Interchange does not contribute to vibrant public space and provide appealing and attractive routes, with shelter, shade or seating.

### Wayfinding signage for active travel is limited across the area

Community consultation



Site Investigations



Analysis



The limited wayfinding across Mawson Lakes for walking and cycling does not encourage short trips to local destinations or increases in active or multi-modal travel. Direct and logical signed connections need to be established between key travel attractors, such as the Mawson Interchange and University of SA and around Mawson Central to make it easier and more convenient for people to get to where they want to go.

#### Impact on policy ambitions:



Without clarity of route, the connectivity of pedestrian paths can be misunderstood, resulting in difficulty navigating to the correct location.



When routes are not clearly defined, there may be a perception that active travel is not achievable, thereby decreasing the number of pedestrians and cyclists.



Poorly identified routes can lead to safety risks in less desirable areas, where a safer alternative might exist and could be better communicated.

### Night-time safety and amenity are impacted by lighting provision

Community consultation



Site Investigations



Analysis



Site investigations highlighted that walking and cycling links and along linear trail connections near Mawson Central have inadequate lighting to support safe travel at night. Poorly lit connections at Mawson Interchange to the surrounding residential areas may discourage active travel and multi-modal choice at night.

#### Impact on policy ambitions:



When lighting is poor, resulting in personal safety concerns, there is a preference for using private vehicles over commuting on public transport and which also discourages multi-modal choice.



Walking distances to public transport are significant increased if existing well-lit paths are taken at night.



Security and safety can be at risk for pedestrians and cyclists using paths at night with poor lighting. This can lead to a reduced uptake in active travel when considering mode choice.



A feeling of security is enhanced in localities with good lighting. Poor lighting is associated with increased incidence of crime.



# Potential Opportunities

## Overview

The study outcomes identified a range of core issues against the strategic ambitions for Mawson Lakes. Based on the identification of these issues, a range of potential opportunities across all relevant transport modes have been developed.

For further planning consideration the following tables of potential opportunities are categorised into five key themes. Within the tables the opportunity listed is identified as addressing the core issue areas and how it aligns with strategic policy intent for the area, community priorities and if it achieves an integrated solution to address multiple issues or if there is only one solution available.

THEMES	CORE ISSUES	ALIGNMENT
<ul style="list-style-type: none"><li>• Road Network</li><li>• Pedestrians and Amenity</li><li>• Cycling</li><li>• Public Transport</li><li>• Parking</li></ul>	<ul style="list-style-type: none"><li>• Parking</li><li>• Speed</li><li>• Pedestrian</li><li>• Cycling</li><li>• Public Transport</li><li>• Wayfinding</li><li>• Lighting</li><li>• Road Safety</li><li>• Traffic Control</li></ul>	<ul style="list-style-type: none"><li>• Strategic</li><li>• Community Priority</li><li>• Integrated Transport</li><li>• Multiple Issues</li><li>• Only Solution</li></ul>

# Road Network

ROAD NETWORK POTENTIAL OPPORTUNITIES																						
Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed								Responsibility	Project Type	Est. Cost \$-\$-\$-\$	Alignment							
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting	Road Safety				Traffic Control	Strategic Alignment	Community Priority	Integrated Transport	Multiple Issues	Only Solution		
Elder Smith Road	1	Elder Smith Road	Review road marking and signage to support the increased efficiency of merging vehicles on Elder Smith Road - eastbound from Salisbury Highway and westbound from Main Street approaching the bridge and review requirement for 'queued traffic ahead' to reduce crash risk over bridge.									x	x	DIT	Construction Project	\$	Y	Y		Y		
Opportunity: EV Charging	2	Precinct Wide	Consider electric vehicle charging partnerships or approve independent supply	x										City of Salisbury	Construction Project	-	Y				Y	
Treatments / Upgrades	3	Town Centre	Consider upgrades at the intersection of Mawson Lakes Boulevard and Main Street to provide a continuous cycling connection linking to new bicycle lanes along Main Street. Consider raised intersection to encourage slow speeds through the intersection. The pedestrian refuge on the northern of the intersection should be widened to allow for adequate storage for crossing pedestrians.		x	x	x						x	x	City of Salisbury	Construction Project	\$\$\$	Y	Y	Y	Y	
	4	Interchange & Surrounds	Redesign intersection geometry to remove wide corners and reduce crossing width, improve pedestrian crossing safety near the Interchange		x	x	x	x					x	x	City of Salisbury	Construction Project	\$\$\$	Y	Y	Y	Y	

**ROAD NETWORK POTENTIAL OPPORTUNITIES**

Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed								Responsibility	Project Type	Est. Cost \$-\$-\$-\$	Alignment						
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting	Road Safety				Traffic Control	Strategic Alignment	Community Priority	Integrated Transport	Multiple Issues	Only Solution	
Treatments / Upgrades			(N-S connections between Park n Ride and Interchange; and Central Link) implemented with additional Give Way signage to reduce traffic speed.																		
	5	Precinct Wide	Implement traffic control measures to reduce speeds and road crossing widths and improve pedestrian priority. (between the Interchange and the University Campus; at the Mawson Lakes Boulevard Promenade area; near schools, within the town centre interchange precinct, particularly the straight road under the bridge, where pedestrians and cyclists cross).		x	x	x					x	x	City of Salisbury	Construction Project	\$	Y	Y	Y	Y	N
	6	Wider Neighbourhood	Mawson Lakes Boulevard southern approach to Main North Road intersection. Bicycle lane is between through and narrow left turn lane. Consider separating cyclists to off road shared use path and providing connection at signals.				x					x	x	City of Salisbury / DIT	Construction Project	\$\$	Y		Y	Y	
Treatments / Upgrades	7	Wider Neighbourhood	Consider minor treatments at intersection of Salisbury Highway and Cascades Drive- such as distinctive coloured bicycle lanes through the intersection in addition to signage upgrades.				x					x	DIT	Construction Project	\$\$	Y		Y	Y		
	8	Wider Neighbourhood	Consider minor treatments at intersection of Salisbury Highway and Elder Drive – such as distinctive coloured bicycle lane through the				x					x	DIT	Construction Project	\$\$	Y		Y	Y		

**ROAD NETWORK POTENTIAL OPPORTUNITIES**

Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed								Responsibility	Project Type	Est. Cost \$-\$-\$-\$	Alignment						
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting	Road Safety				Traffic Control	Strategic Alignment	Community Priority	Integrated Transport	Multiple Issues	Only Solution	
			intersection and extending the 60km/h speed limit further southwest to cover the intersection extent.																		
Speed Limit	9	Town Centre	Consider installing lower speed shared use zone on Mawson Lakes Boulevard Promenade between Main Street and Garden Terrace between the town centre and Mawson Lake.		x	x	x						x	City of Salisbury	Construction Project	\$	Y	Y	Y	Y	
	10	Mawson Central area	Consider area wide speed limit reduction in Mawson Central. Bounded and including Main Street, Metro Parade, Central Link, Euston Walk, Garden Terrace, including road in between.		x	x	x						x	City of Salisbury	Not Construction	\$\$	Y		Y	Y	
	11	Mawson Lakes Boulevard	Consider change in 60km/h speed limit along Mawson Lakes Boulevard to 50km/h west of Park Way roundabout to Main Street		x	x	x						x	City of Salisbury	Not Construction	\$	Y		Y	Y	

# Parking Management

PARKING MANAGEMENT POTENTIAL OPPORTUNITES																						
Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed								Responsibility	Project Type	Est. Cost \$-\$\$\$	Alignment							
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting	Road Safety				Traffic Control	Strategic Response	Community Priority	Integrated Transport	Multiple Issues	Only Solution		
Evaluate and Enforce Parking Regulations	1	Mawson Central	Undertake a site evaluation of parking practices (particularly within Mawson Central and along Mawson Lakes Boulevard) that may be causing poor visibility, lack of space on the roads or other hazards and restrict parking to improve safety	x		x	x						x	x	City of Salisbury	Not Construction	\$	Y	Y	Y	Y	
	2	Area Wide	Undertake periodic enforcement related to illegal parking at intersections and along local roads restricting access to ensure hazards are not being created by illegal parking practices	x											City of Salisbury	Not Construction	\$	Y	Y	Y		
Parking Controls	3	Town Centre	Adopt precinct-wide parking controls, including time restrictions (as considered by the Mawson Lakes - Parking Review)	x										City of Salisbury	Not Construction	\$	Y	Y				
	4	Precinct Wide	Investigate an electronic parking initiative that allows available parking spaces to be viewed in real time using dynamic sensor signage	x										City of Salisbury	Construction Project	\$	Y	Y				
	5	Precinct Wide	Improve signage to indicate locations of parking and associated controls (as part of parking control review)	x					x					City of Salisbury	Construction Project	\$	Y	Y		Y		
	6	Interchange & Surrounds	Install signage at and to the Mawson Interchange to clearly designate the Park n Ride for commuter use and signs for facilitates at the Interchange	x					x	x				DIT	Construction Project	\$	Y	Y	Y	Y		

**PARKING MANAGEMENT POTENTIAL OPPORTUNITES**

Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed								Responsibility	Project Type	Est. Cost \$-\$\$\$	Alignment					
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting	Road Safety				Traffic Control	Strategic Response	Community Priority	Integrated Transport	Multiple Issues	Only Solution
	7	Interchange & Surrounds	Develop dynamic parking controls measures at the interchange Park 'n' Ride to prioritise commuter parking at key commuter periods and local town centre parking during off-peak/evening/weekends.	x				x					DIT	Not Construction	\$	Y	Y	Y	Y	

# Pedestrians

PEDESTRIAN & AMENITY POTENTIAL OPPORTUNITES																					
Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed								Responsibility	Project Type	Est. Cost \$-\$\$\$	Alignment						
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting	Road Safety				Traffic Control	Strategic Response	Community Priority	Integrated Transport	Multiple Issues	Only Solution	
Pedestrian Priority	1	Primary School	Encourage Mawson Lakes Primary School to partner with Way2Go and City of Salisbury's Living Well program to develop options for children to undertake more active travel to school, increasing safety of school drop off and pick up and reduce parking demand	x		x	x						x	City of Salisbury	Not Construction	-	Y	Y	Y	Y	
	2	Town Centre	Introduce zebra crossings at the Garden Terrace / Goodall Parade intersection			x							x	City of Salisbury	Construction Project	\$	Y	Y	Y		Y
	3	Main Street	Increase pedestrian crossing provision across Main Street along its length, aligned with pedestrian desire lines and bus stop locations. Improve pedestrian crossing safety at University Parade traffic signals.			x							x	City of Salisbury	Construction Project	\$\$	Y	Y	Y		Y
	4	Interchange & Surrounds	Provide a pedestrian crossing on Metro Parade to assist with priority of pedestrian travel to the interchange			x							x	City of Salisbury	Construction Project	\$\$	Y	Y	Y		Y
Pedestrian Improvements	5	Interchange & Surrounds	Relocate the pedestrian crossing beneath the Elder Smith Road bridge to improve visibility from oncoming traffic			x						x	City of Salisbury	Construction Project (Small)	\$	Y	Y	Y		Y	
	6	Primary School	Widen the culvert crossing of Dry Creek at The Strand to implement pedestrian safety measures (including wider footpaths and			x	x					x	City of Salisbury	Construction Project (Large)	\$\$\$	Y	Y	Y	Y	Y	

**PEDESTRIAN & AMENITY POTENTIAL OPPORTUNITIES**

Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed								Responsibility	Project Type	Est. Cost \$-\$-\$-\$	Alignment					
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting	Road Safety				Traffic Control	Strategic Response	Community Priority	Integrated Transport	Multiple Issues	Only Solution
			fencing) to improve pedestrian travel to the primary school																	
	7	Wider Neighbourhood	Opportunity: Develop a Mawson Lakes walking plan and deliver targeted infrastructure improvements to support identified desire lines.			x						City of Salisbury	Construction Project (Small)	\$	Y	Y	Y			
Improve Wayfinding	8	Precinct Wide	Develop a clear and legible mode-specific set of wayfinding elements that differentiates key routes and destinations, safe routes at night, and implement signage upgrades within the precinct, especially at key junctions within 200m of Mawson Lakes Interchange, along Dry Creek and within the town centre (Indicative locations mapped)			x	x		x			City of Salisbury	Construction Project (Small)	\$	Y	Y	Y	Y	Y	
	9	Precinct Wide	Update <i>Cycle Instead</i> to show the existing shared path along Park Way, the correct location of the existing bike lockers at the interchange and any new routes within the precinct				x		x			DIT	Not Construction	-	Y	N	Y	Y	Y	
	10	Endeavour College / University	Work with UniSA to update the campus plan to include more prominent display of bike parking facilities and bike route mapping, along with an update to the Mawson Lakes Hike and Bike Guide			x	x		x			City of Salisbury	Not Construction	-	Y	N	Y	Y	Y	
Lighting Improvements	11	Primary School	Across The Strand culvert to connect Dry Creek paths on both sides						x		x	City of Salisbury		\$	Y		Y		Y	



**PEDESTRIAN & AMENITY POTENTIAL OPPORTUNITES**

Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed								Responsibility	Project Type	Est. Cost \$-\$\$\$	Alignment						
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting	Road Safety				Traffic Control	Strategic Response	Community Priority	Integrated Transport	Multiple Issues	Only Solution	
Lighting Improvements	12	Wider Neighbourhood	Along Elder Smith Road from Salisbury Highway to St Elias Street (particularly for the pedestrian path)								x			DIT	Construction Project	\$	Y		Y		Y
	13	Town Centre	Along Garden Terrace and Metro Parade between Light Common and Central Link								x			City of Salisbury	Construction Project (Small)	\$	Y		Y		Y
	14	Town Centre	Along Light Common, connecting Garden Terrace and Main Street								x			City of Salisbury	Construction Project (Small)	\$	Y		Y		Y
	15	Technology Park	Along Park Way between Mawson Lakes Boulevard (west) and Mawson Lakes Boulevard (east)								x			City of Salisbury	Construction Project (Small)	\$	Y		Y		Y
	16	Interchange & Surrounds	Along the Dry Creek path (eastern side) between the interchange and Mawson Lakes Boulevard								x			City of Salisbury	Construction Project (Small)	\$	Y		Y		Y
	17	Wider Neighbourhood	From the first pedestrian bridge crossing of Dry Creek (North West of railway line) to Salisbury Highway								x			City of Salisbury	Construction Project (Small)	\$	Y		Y		Y
	18	Town Centre	Between Dry Creek and Main Street along Goodall Parade								x			City of Salisbury	Construction Project	\$	Y		Y		Y
	19	Interchange & Surrounds	Between the interchange and the Bridges residential area, across the pedestrian bridge								x			City of Salisbury	Construction Project	\$	Y		Y		Y

**PEDESTRIAN & AMENITY POTENTIAL OPPORTUNITES**

Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed								Responsibility	Project Type	Est. Cost \$-\$-\$	Alignment						
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting	Road Safety				Traffic Control	Strategic Response	Community Priority	Integrated Transport	Multiple Issues	Only Solution	
Pedestrian / Cyclist accessibility	20	Wider Neighbourhood	Investigate the feasibility of a grade separated active transport crossing of the rail lines to the south of the Elder Smith Road bridge to support pedestrian and cyclist travel from west of the rail line to the town centre and interchange, noting the particular requirements and safety issues associated with the ARTC rail line			x	x	x				x	x	DIT	Construction Project	\$\$\$	Y	Y	Y	Y	Y

# Cycling

## CYCLING POTENTIAL OPPORTUNITIES

Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed							Responsibility	Project Type	Est. Cost \$-\$-\$-\$	Alignment							
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting				Road Safety	Traffic Control	Strategic Response	Community Priority	Integrated Transport	Multiple Issues	Only Solution	
Pedestrian / Cyclist Connectivity	1	Wider Neighbourhood	Investigate the feasibility of a grade separated active transport crossing of the rail lines to the south of the Elder Smith Road bridge to support pedestrian and cyclist travel from west of the rail line to the town centre and interchange, noting the particular requirements and safety issues associated with the ARTC rail line	x		x	x					x		DIT	Construction Project	\$\$\$	Y	Y	Y	Y	Y
Cycling Improvements	2	Wider Neighbourhood	A connection from the Cascades along Augustine Street under the Elder Smith Road bridge to connect to the Shoalhaven cycle path and ramp to Elder Smith Road				x					x		City of Salisbury	Construction Project (Small)	\$	Y	Y	Y		Y
	3	Town Centre	A separated bike lane along Mawson Lakes Boulevard (between Main Street and The Strand)				x					x		City of Salisbury	Construction Project (Large)	\$\$	Y	Y	Y		Y
	4	Town Centre	A separated bike lane along the full length of Main Street, to support connectivity between residential areas and the town centre, University and the interchange				x					x		City of Salisbury	Construction Project (Large)	\$\$	Y	Y	Y		Y
	5	Town Centre	A separated on-road bike lane along Goodall Parade between Dry Creek and				x					x		City of Salisbury	Construction Project (Large)	\$\$	Y	Y	Y		Y

**CYCLING POTENTIAL OPPORTUNITIES**

Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed								Responsibility	Project Type	Est. Cost \$-\$-\$-\$	Alignment					
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting	Road Safety				Traffic Control	Strategic Response	Community Priority	Integrated Transport	Multiple Issues	Only Solution
			Main Street, connected with a new pedestrian crossing over Main Street																	
	6	Wider Neighbourhood	An extension of the on-road cycle lane on Elder Smith Road from Salisbury Highway to St Elias Street				x					x	DIT	Construction Project	\$	Y	Y	Y		Y
	7	Town Centre	An on-road bike lane on Garden Terrace and Metro Parade between Light Common and the interchange				x					x	City of Salisbury	Construction Project (Large)	\$\$	Y	Y	Y		Y
	8	Town Centre	An on-road bike lane along Light Common (potentially within the median), connecting Garden Terrace and Main Street with the town centre shopping facilities				x					x	City of Salisbury	Construction Project (Large)	\$\$	Y	Y	Y		Y
Cycling Improvements	9	Primary School	A widened bike lane across The Strand culvert to connect the school campuses and Dry Creek paths on both sides to the town centre			x	x					x	City of Salisbury	Construction Project (Large)	\$\$	Y	Y	Y	Y	Y
	10	Interchange & Surrounds	Provide a large-scale secure cycling cage facility at the interchange with plentiful spaces, high quality facilities and shelter in a highly visible location with easy access to the station and connected to cycle paths that is easy to access and with signage to indicate how to access the facility	x			x	x					DIT	Construction Project	\$\$	Y	Y	Y	Y	Y

# Public Transport

PUBLIC TRANSPORT POTENTIAL IMPROVEMENTS																				
Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed							Responsibility	Project Type	Est. Cost \$-\$-\$-\$	Alignment						
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting				Road Safety	Traffic Control	Strategic Response	Community Priority	Integrated Transport	Multiple Issues	Only Solution
Improve Public Transport Amenity	1	Precinct Wide	Invest in bus stop upgrades across Mawson Lakes, including adequate all-weather shelters, customer information and bins. Prioritise key patronage generating stops such as Main Street.					x					City of Salisbury (DIT manage stop only)	Construction Project	\$\$	Y	Y	Y		Y
	2	Interchange & Surrounds	Improve the amenity of the interchange area to reduce the perceived or actual safety concerns, including regular maintenance of vegetation and graffiti removal and finishing treatments, landscaping elements, to improve the uptake of active travel to the interchange and use of public transport.			x	x	x				x		City of Salisbury	Not Construction	\$	Y	Y	Y	Y
Improve Public Transport Connectivity	3	Interchange & Surrounds	Review train and bus connections when all electric trains are in service					x					DIT	Not Construction	-	Y	Y	Y		Y
	4	Interchange & Surrounds	Improve cross-suburban public transport level of service to connect Mawson Lakes with key destinations across Adelaide, not just the CBD.					x			x		DIT	Operational Improvement	\$\$	Y	Y	Y	Y	Y
Bus Priority	5	Elder Smith Road	Invest in bus priority lane to the Interchange					x			x		DIT	Construction Project	\$\$	Y	Y	Y	Y	

**PUBLIC TRANSPORT POTENTIAL IMPROVEMENTS**

Strategic Response	ID	Location	Opportunity	Core Issue(s) Addressed								Responsibility	Project Type	Est. Cost \$-\$-\$-\$	Alignment					
				Parking	Speed	Pedestrian	Cycling	Public Transport	Wayfinding	Lighting	Road Safety				Traffic Control	Strategic Response	Community Priority	Integrated Transport	Multiple Issues	Only Solution
Improve Wayfinding	59	Interchange & Surrounds	Improve wayfinding signage related Mawson Interchange					x	x				DIT	Construction Project (Small)	\$	Y	Y	Y	Y	Y

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