



LOCAL AREA TRAFFIC MANAGEMENT (LATM) SCHEMES

TORRENSVILLE/UNDERDALE LATM: PRECINCT 9
THEBARTON/MILE END LATM: PRECINCT 10

FEBRUARY 2015

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The vision for the City of West Torrens is:

‘West Torrens, the best place to live, work, invest, grow, learn, play, enjoy and rest.’

1. Introduction

The City of West Torrens is a diverse Council located between the Central Business District (CBD) of Adelaide and the coast. Its proximity to the CBD and the coast results in a range of transport opportunities, in particular for commuting and recreation. This proximity to the CBD also means that the Council road network is subject to intrusion of through traffic and the significant merging of traffic flows from the south, north and west on the approaches to the CBD.

In addition to these road network issues, increasing developments and rejuvenation of existing residential and non-residential zones in the City have further added to the transport demands. One of the largest landowners in the City is Adelaide Airport. It occupies approximately 20% of the total land area in the City, but importantly, the significant developments that have occurred and continuing to occur within the Airport boundaries feed significant new volumes of traffic to the abutting road system.

To meet the future transport needs of the City for the future, in 2009, Council adopted the City of West Torrens' (CWT) Transport Strategy "*Transportation for the next generation 2025*". This is a forward planning document covering all known aspects of transport-related pressures and opportunities that may affect the CWT between now and 2025.

1.1. Local Area Traffic Management Schemes

A key recommendation of the Transport Strategy was for a Local Area Traffic Management (LATM) program to be prioritised so that a new "pro-active" approach to traffic management can be adopted. LATM schemes are undertaken to address traffic and parking issues that are not an isolated issue in a street and/or solutions which may affect traffic or parking within the area.

The purpose of the LATM is best explained by the *Austrroads* definition - *Local Area Traffic Management is concerned with the planning and management of the usage of roads space within a local area, often to modify streets and street networks which were originally designed in ways that are now no longer considered appropriate to the needs of residents and users of the local area. It involves the use of physical devices, street scaping treatments and other measures (including regulations and other non-physical measures) to influence vehicle operation, in order to create safer and more pleasant streets in local areas.*

The LATM study is a formal strategic way of investigating traffic, parking, freight, pedestrian, cycling, public transport and urban design and amenity issues within the study area. The key objectives of this style of study are to:

- improve the safety of the street network; and
- reduce the environmental impact of traffic.

In attempting to achieve these objectives the LATM study must also consider:

- maintaining access through the City; and
- avoiding transferring traffic from one street to another.

These overarching objectives can be achieved through the specific objectives to:

- reduce speed
- reduce volumes
- reduce through traffic
- reduce heavy vehicles.

The following investigative tasks are carried out to better determine the issues and opportunities in the area, which are discussed in more detail in Part 1:

- A review of relevant background documents
- Collecting and reviewing a range of traffic and parking data
- Consultation with the community and relevant stake holders
- Identification of issues and solutions within the study area

The LATM considers local traffic issues raised by the community and stakeholders and:

- Provides a review of the current road conditions.
- Identifies the key local road network issues from site observations, traffic data and community consultation.
- Identifies and recommends feasible and appropriate traffic solutions to improve the safety and management of the local road network.

1.2. LATM Priority

Twenty four (24) LATM precincts and five (5) sub precincts seen in Figure 1 were formed across the Council Area based on land use and natural and artificial traffic barriers. Following a comprehensive literature review and technical analysis that is detailed in the Transport Strategy, a rating system was developed and applied to these LATM precincts. This created a forward program to review all precincts with the highest rated areas forming the first 10 years of the LATM program. Both the rating system and the 7 highest-prioritised projects for implementation were adopted by Council.

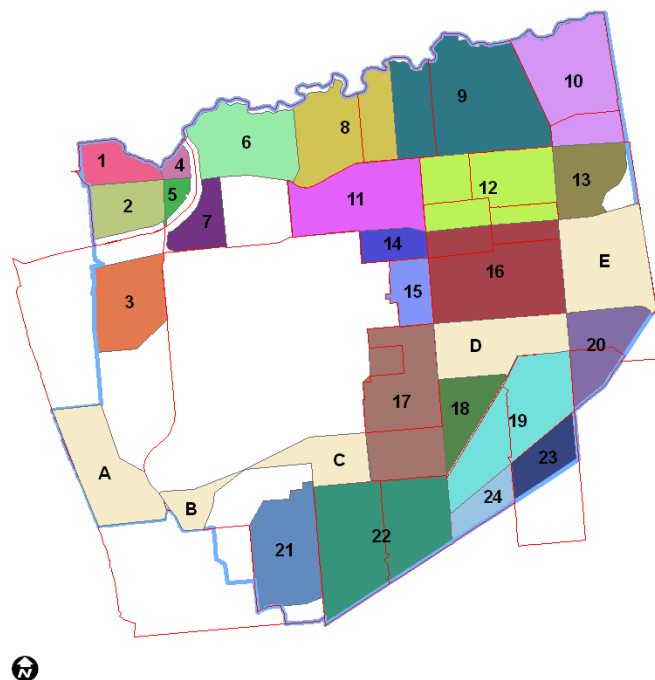


Figure 1 - LATM precincts across the Council area

It is recommended that Council adopt the LATM precinct priorities, as the forward 10 year transportation planning program for the City as follows:

- *Precincts 9/10 combined – Underdale (east of Holbrooks Road), Torrensville (north of Henley Beach Road), Mile End (north of Henley Beach Road) and Thebarton (dependent on progress of the Brickworks proposal)*
- *Precincts 21/22/B/C combined - Camden Park, Plympton (west of Marion Road), Novar Gardens, Glenelg North and North Plympton (west of Deeds Road)*

- *Precinct 16 – Cowandilla (south of Sir Donald Bradman Drive), Hilton (south of Sir Donald Bradman Drive) and Richmond*
- *Precinct D – Marleston*
- *Precinct 12 – Torrensville (south of Henley Beach Road), Cowandilla (north of Sir Donald Bradman Drive), Mile End (west of South Road) and Hilton (north of Sir Donald Bradman Drive)*
- *Precinct 20 - Ashford and Keswick*
- *Precinct 17 - Netley and North Plympton (east of Deeds Road)*

1.3. Detail of LATM Process

The LATM process approved by Council is outlined in Figure 2 and sets the framework of this document.

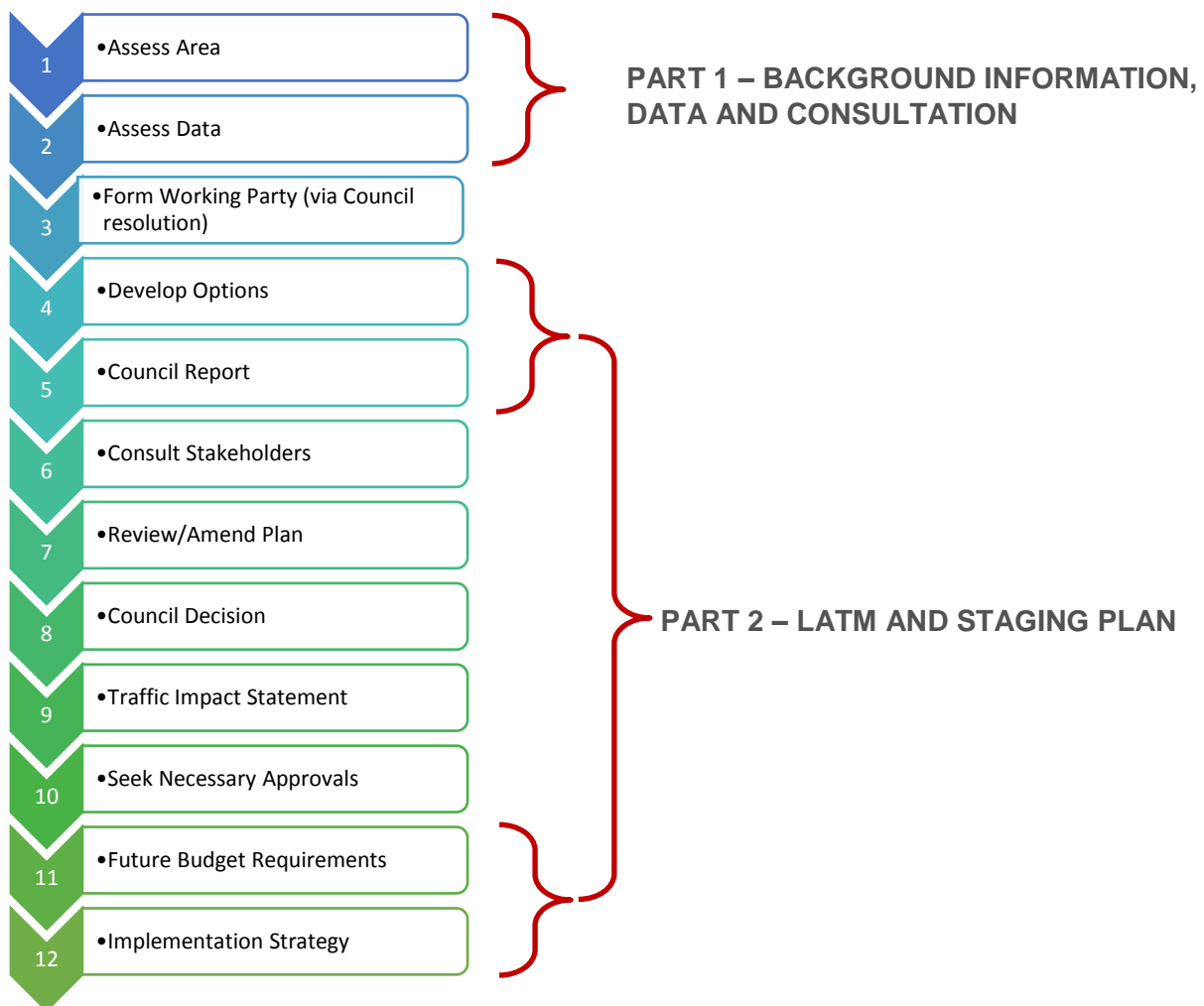


Figure 2 – LATM process

Part 1 provides a summary of the current traffic and parking situation in the LATM area through data collection and community consultation.

Part 2 interprets the data collected in Part 1 and provides a forward plan for the LATM including a staging plan for adoption by Council.

2. The Transport Strategy and the LATM

This document should be read in conjunction with the City of West Torrens' Transport Strategy "*Transportation for the next generation 2025*". This strategy sets out the forward planning for transport within the City and also defines the road hierarchy; freight routes, social access routes and criteria to address traffic issues. Below is the provision of elements of the Strategy that are critical to this LATM study.

2.1. Road Hierarchy and Types

There are a number of ways that a road can be classified. The classical model uses descriptions such as freeways, arterials, distributors, collectors and local streets. The City of West Torrens has previously adopted the following classification of roads.

Local streets - provide essentially local access or access to properties. Generally resident access tends to dominate the characteristics of these streets with lower speed and traffic volume being the desirable aim.

Local collector roads - these are higher order streets which "collect" traffic from local streets and distribute the traffic to other higher order streets such as arterial roads. By their nature and function, they are expected to carry higher volumes of traffic and speeds tend to be higher. They also frequently form part of a public transport route. The desirable aim is to limit traffic volume and speed, while still being able to provide relatively unhindered access. Some through traffic usage can be expected.

Major collector roads - these are higher order streets which generally serves a sub-arterial function, carrying higher volumes than a local collector road but lesser traffic volumes than an arterial road. They generally provide convenient and more direct connection between arterial roads, area generally without traffic control devices and carry more significant volumes of commercial traffic and through traffic.

In addition to these road hierarchies, the Transport Strategy identifies road with key uses as :

Freight routes - Facilitates industry development by linking key industries to major transport routes and contributes to efficient movement of large volumes of heavy freight vehicles. Primary Freight Routes link strategically important economic regions within and external to the State. Secondary Freight Routes link urban and regional freight generators and providing connections to primary freight routes

Social access routes - Provides for community development and equitable access to community facilities whilst minimising the impact of heavy vehicles on the community. Routes that provide a high level of connectivity between areas (through routes), including those that supplement the arterial road network, or that provide immediate access to community spaces or recognised shopping precincts.

Passenger public transport routes - routes that support the use of passenger transport including strategic bus routes as well as routes that provide access to associated facilities (e.g. park-n-ride areas).

Bicycle routes - key cycling routes as identified by Council's Strategic Bicycle Plan or as part of the State Government's *BikeDirect* network.

Pedestrian routes - key pedestrian routes facilitating access to pedestrian generating developments and the surrounding area.

2.2. Data-Based Warrants

The Transport Strategy sets reasonable limits for both vehicle volumes and speeds based on the classification of a road as seen in Table 1.

Table 1 - Traffic Criteria

	Local Street	Local Collector	Major Collector
Daily Volumes	< 2,000 vpd	Up to 3,000 vpd	3,000 to 6,000 vpd
85th Percentile Speed	< 55 kph	< 55 kph	< 55 kph at 50 kph or < 60 kph at 60 kph
Commercial Traffic	Up to 4%	Up to 4%	Up to 10%
Crash Data (intersections) 5-year periods	Less than 1 crash per annum	Less than 3 casualty crashes	Less than 3 casualty crashes

Daily Volumes - The reasonable volume of vehicles along a road depends set by the Transport Strategy is based upon accepted traffic management principles and relates to the classification of the road. The volumes provided by the Strategy should not be considered as rigid standards. For example, major collector roads such as Beckman Street, Ashwin Parade, Morphett Road and Mooringe Avenue carry over 10,000 vehicles per day. Under the classical road hierarchy system for the Council's road network, they would be classed as major collector roads. If they are DTEI roads, they would probably be classified as sub-arterial roads.

Vehicle Speeds - The 85th percentile speed is the commonly used criteria in road design and in assessing speeding problems. It is the speed in which 85% of all traffic in that street would travel at or below. Where the speed limit is 50km/h, a reasonable upper limit for the 85th percentile speed is set at 55km/h.

Commercial Traffic – General access vehicles are allowed unrestricted access unless otherwise signed throughout the State road network. The Transport Strategy sets a reasonable percentage of traffic that heavy vehicles can represent based on the road classification.

Crash Data - Council is annually provided with a crash database and details of locations where the types and numbers of crashes have satisfied the Black Spot Funding criteria (Federal and State Black Spot Program). The City of West Torrens has been very pro-active in addressing Black Spot locations outside of LATM programmes with all of the locations identified as Black Spot sites being investigated and/or addressed by the City in previous years. Sites not identified as Black Spots can be assessed through the LATM program based on the number and types of crashes at an intersection.

2.3. Road Infrastructure and Traffic Control Devices

The Transport Strategy presents the desirable requirements for the provision of infrastructure including road, bike lanes and footpath widths depending on the hierarchy of the road as shown in Table 2.

Table 2 - Road Criteria

	Local Street	Local Collector	Major Collector
Minimum width	7.6m**	11.0m	11.0m
Min width with bike lanes		13.5m*	13.7m*
Footpath		Both Sides	Both Sides

*Can be reduced if parking prohibited ** Compliance with Australia Road Rules

The classification of the street also determines the type of traffic control devices that can be used, as outlined in the Transport Strategy and shown in Table 3. Traffic control devices must

be developed in accordance with the South Australian Code for the Installation of Traffic Control Devices and associated Australian Standards and Guidelines.

Table 3 - Guide on the Use of Traffic Control Devices

	Local Street	Local Collector	Major Collector
Channelization	•	•	•
Roundabouts	•	•	•
Perimeter Thresholds	•	•	•
Road Humps	•	•	
Speed Cushions	•	•	
Road Closures	•		
Slow Points	•	•	
Driveway Links	•		

3. Outcomes of LATM Study

To achieve the objective as listed earlier, where warranted by traffic/parking data or community concerns, the LATM study will result in a series of recommended actions that can be undertaken by Council.

3.1. Installation of Parking Controls

To assist in managing the completing demands, a variety of parking controls are available to be installed by Council. These include:

Time Limits

Time limit parking controls are often a suitable solution to balance the needs of surrounding land uses. Where installed, time limit parking applies to all vehicles and allows residents, visitors and business customers to be able to park on-street for the time indicated. If the time limits were not in place then the street would likely be saturated with vehicles parked there all day and no opportunity for residents, visitors or customers to be able to park on-street. The time limited parking controls also provided turn-over of vehicles in commercial areas. Exceptions to the time limited parking can be obtained for residents under Council's Parking Permit Policy.

No Stopping

No Stopping controls prevent drivers from stopping along the roadway and are installed for the safety of road users or to facilitate traffic movements. These controls are put in place either through signage and/or a continuous yellow line marked on the edge of the road, No stopping controls are often at schools, crossings, intersections and corners.

In addition to No Stopping controls, vehicles are also not allowed to park in the following areas under the Australian Road Rules (Road Traffic Act 1961).

- on any footpath or verge
- on parks or reserves
- across driveways
- within 10/20 metres of any intersection
- in disabled parking zones without a permit
- in bikeways
- in clearways or bus lanes during sign-posted times
- near fire plugs or hydrants

No Parking

A No Parking controls means that a driver is not allowed to park in the zone but can stop to pick up or drop off passengers. These controls are generally installed around schools to designate a pick-up and drop-off zone. These zones allow the immediate pick up and drop off of students. It creates an efficient flow of vehicles being able to pick up or drop off students which reduces the impact of on-street parking generated by the school.

Loading Zone

Loading zones can be provided for businesses where they are unable to provide a loading area on-site. Under the Australian Road Rules, unless loading or unloading, a long or/and heavy vehicle is not permitted to stay parked in a built up area for longer than 1 hour if it is over 7.5 metres in length and/or 4.5 tonnes Gross Vehicle Mass.

Disabled Zone

Disabled zones reserve key parking spaces for vulnerable residents and road users. These zones must meet strict standards in terms of the car park width and length as well as providing access to an adjacent footpath. Many of the disabled zones across the Council area do not

comply with the current standards and it would be beneficial to renew these areas to current standards.

Bus Zone

Bus zones are located throughout the study area for public buses to use. The driver of a private vehicle cannot stop in a bus zone at any time.

Bicycle Lanes

Bicycle lanes provide a dedicated zone for cyclists to ride along a roadway. If there is not sufficient space to accommodate a parking lane as well as a bicycle lane, the bicycle lane acts as a parking control. In these instances, bicycle lanes prohibit stopping or parking. Where times are displayed on the signs, stopping or parking is only permitted outside the times specified or as otherwise signed.

Clearways

Clearways that are typically used along arterial roads are a device that is only installed by State Authorities. For this reason, any creation or modification of a Clearway would need to be referred to the Department of Planning, Transport and Infrastructure.

Enforcement of the parking controls is undertaken by Council's Compliance Department.

At present Council's Transport Strategy does not include criteria for when parking controls (minus parking permits) are installed or not. It is proposed that when the Transport Strategy is reviewed that these criteria are developed to guide Council on their installation.

3.2. Parking Fund for New Developments

As new developments occur, the on-street parking will be reduced further as the developments will create more driveways and increased parking demand. Therefore, for newer developments, the Council has required that developers include provision of off-street parking within their site as part of the development assessment process.

However, in some cases the development maybe unable to provide sufficient on-site parking. In this case under the Development Act 1993, section 50A, Council could set up a car parking fund. The fund would mean developers would contribute to the car parking fund for a designated area if they were unable to provide sufficient spaces for the parking of cars at their site.

Council would then be able to use these funds in the designated area to provide car parking facility; to maintain, operate or improve car parking facilities; or provide funds for the establishment, maintenance or improvements of transport facilities to reduce the need for car parking. For example, the funds could be used to acquire land to set up a car park in the area for the community.

3.3. Police Enforcement

It should be noted that most complaints about speeding related to the minority number of drivers who travel at excessive speeds and complaints about 'hoons'. It is generally considered that such excessive speed issues and 'hoon' driving would be best addressed by police enforcement rather than the installation of physical devices in the street. Traffic control devices are put in place to manage drivers driving to the conditions, which is not the case with this demographic who are likely to also use a traffic control device in an irresponsible and dangerous manner.

Where action is required due to high 85th percentile speeds, police enforcement may be a suitable measure. In other instances, use of signs or line marking to influence driver behaviour

would be used, for example reducing the perception of a wide street by line marking to reduce speeds. If additional and more aggressive measures are warranted, then traffic control devices would be considered which is discussed in the next section.

Council does not have the power to enforce a number of traffic control devices such as turn restriction, load limit, no truck or one-way signs. For this reason, where these controls are already in place and are not performing as intended, a suitable measure would be to request police enforcement of these devices.

3.4. Installation of Traffic Control Devices

Traffic control devices will be the most impactful and long term action that Council can take to meet the outcomes of the study. Devices can be used to address specific issues and these are categorised as:

- Series A – devices for use along a road
- Series B – devices for intersections
- Series C – devices for pedestrians
- Series D – devices for cyclists

Below is a table of these types of devices for reference throughout the LATM study report. These treatments are only indicative of what could be considered and, in some instances, are interchangeable. All the treatments will take into account improving pedestrian, cyclists and public transport facilities.

Whilst the full range of treatments can be typically considered, the available treatment at a location might sometimes be limited due to road widths, driveway crossovers and maintaining on street parking. This will be evaluated in the design and consultation phase. Budget funds will also need to be approved for physical treatments to occur.

Series A – devices for use along a road

PAVEMENT BARS

Reduces Speeds	✓
Reduce Traffic Volume	-
Increase Pedestrian/Cyclist Safety	-
Reduce Crash Risk	-
Reduce Commercial Vehicles	-

PAINTED PARKING AND MEDIAN LINES

Reduces Speeds	-
Reduce Traffic Volume	-
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	-

ONE/TWO LANE SLOW POINT

Reduces Speeds	✓
Reduce Traffic Volume	-
Increase Pedestrian/Cyclist Safety	-
Reduce Crash Risk	-
Reduce Commercial Vehicles	✓

ONE/TWO LANE ANGLED SLOW POINT

Reduces Speeds	✓
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	-
Reduce Crash Risk	-
Reduce Commercial Vehicles	✓

ONE WAY STREET

Reduces Speeds	-
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	-



DRIVEWAY LINK

Reduces Speeds	✓
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	✓

RAISED TABLES

Reduces Speeds	✓
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	-
Reduce Crash Risk	✓
Reduce Commercial Vehicles	✓

ROAD HUMPS/CUSHIONS

Reduces Speeds	✓
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	-
Reduce Crash Risk	✓
Reduce Commercial Vehicles	✓

BLISTER ISLAND

Reduces Speeds	✓
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	-
Reduce Commercial Vehicles	✓

MIDBLOCK ROAD CLOSURE

Reduces Speeds	✓
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	✓



40KM/H SPEED LIMIT (AREA)

Reduces Speeds	✓
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	-



Series B – devices for intersections

FULL/PARTIAL ROAD CLOSURE

Reduces Speeds	✓
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	✓



DRIVEWAY ENTRY (AT INTERSECTION)

Reduces Speeds	✓
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	✓



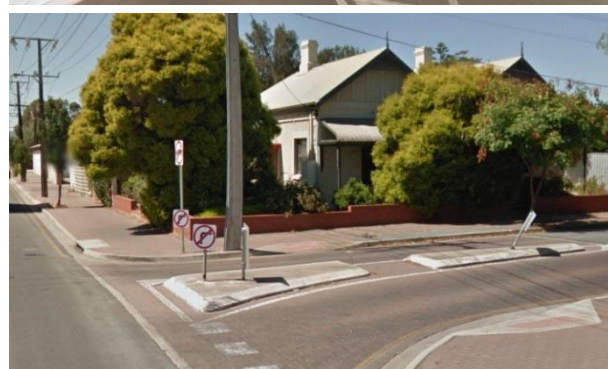
ROUNDBABOUT

Reduces Speeds	✓
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	-
Reduce Crash Risk	✓
Reduce Commercial Vehicles	✓



TURN RESTRICTIONS/LEFT IN AND OUT ONLY

Reduces Speeds	-
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	-
Reduce Crash Risk	✓
Reduce Commercial Vehicles	✓



KERB EXTENSIONS

Reduces Speeds	-
Reduce Traffic Volume	-
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	-

PEDESTRIAN REFUGE WITH CONTRASTING PAVEMENT

Reduces Speeds	-
Reduce Traffic Volume	-
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	-



Series C – Devices for pedestrians

SCHOOL EMU CROSSING

Reduces Speeds	✓
Reduce Traffic Volume	-
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	-

PEDESTRIAN REFUGE

Reduces Speeds	✓
Reduce Traffic Volume	-
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	-

WOMBAT CROSSING

Reduces Speeds	✓
Reduce Traffic Volume	✓
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	✓



PEDESTRIAN TRAFFIC SIGNALS

Reduces Speeds	-
Reduce Traffic Volume	-
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	-



Series D – Devices for cyclists

ON-ROAD BICYCLE LANES

Reduces Speeds	-
Reduce Traffic Volume	-
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	-



SHARED USE PATH

Reduces Speeds	-
Reduce Traffic Volume	-
Increase Pedestrian/Cyclist Safety	✓
Reduce Crash Risk	✓
Reduce Commercial Vehicles	-



PART 1 – BACKGROUND INFORMATION, DATA AND COMMUNITY CONSULTATION

1. The Study Area

This LATM report is for Precincts 9/10 combined and is the first in a series of LATM's to be undertaken by Council. Figure 3 shows the LATM areas. **Appendix A – Current Traffic Controls** shows the traffic control devices currently in place such as speed humps, slow points, give way signs and pedestrian crossings within the LATM area. **Appendix B – Current Parking Controls** shows the existing parking controls within the LATM area.

The LATM area is bounded by the River Torrens and the major arterial roads of Holbrooks Road, Henley Beach Road and Port Road / James Congdon Drive. Through the middle of the study area runs South Road. The area encompasses Underdale east of Holbrooks Road, Torrensville north of Henley Beach Road, Mile End north of Henley Beach Road and Thebarton.

For this study the Torrensville area will be defined as the suburbs of Torrensville, north of Henley Beach Road and Underdale, east of Holbrooks Road. The Thebarton area will be defined as the suburbs of Thebarton and Mile End, north of Henley Beach Road.

1.1. General History

In the 1840's the Thebarton area started to be developed and then the Torrensville area. The character of the Thebarton area is of older houses with limited or no parking and often with narrow streets. The Torrensville area was subdivided in a cohesive manner hence the grid like pattern of the streets.

To the north of Phillips Street, West Thebarton Road and Ashwin Parade was the original industrial area since the 1840's. There were also a number of Brick Pits in the Thebarton and Torrensville area. The industrial area around Hardys Road between Ashwin Parade and Ashley Street was developed prior to the 1980's as the then development act required Councils to have certain industrial areas.

In the Torrensville area, access to the original industrial area north of Ashwin Parade was via River Road which ran alongside the River Torrens from South Road to Jervois Street. Ashwin Parade used to be closed between East Street and South Road. The main local roads in the Torrensville area were therefore River Road, Jervois Street and Ashley Street. In 1979 the section of Ashwin Parade between East Street and South Road was constructed and traffic lights placed at the intersection of South Road and Ashwin Parade. This substantially changed the traffic patterns within the area.

The Thebarton area was originally largely residential, apart from the industrial area along the River Torrens. There was a tram line that ran along Henley Beach Road which was electrified in the early 1900's. This enabled people to conveniently travel to work in the City of Adelaide. The tram line was closed in 1959. In 1968 the Stage Government developed the Metropolitan Adelaide Transport Study (MATS) which had plans for a north-south freeway to be built through the Thebarton area, replacing South Road. Due to this proposed plan, property prices fell and industries and businesses were developed, particularly along and adjacent to Port Road. Major industries such as the SA Brewery and Coca-Cola were constructed in 1886 and 1952 respectively and have grown over time. Businesses have also grown along Henley Beach Road in the Thebarton and Torrensville area.

In the Torrensville and Thebarton area there is often a shortage of on-site parking for businesses, therefore vehicles park on the street. This is because previous development

requirements for on-site parking for businesses required less parking than is currently required. This is slowly being rectified as new developments are being built which should comply with the new development requirements.

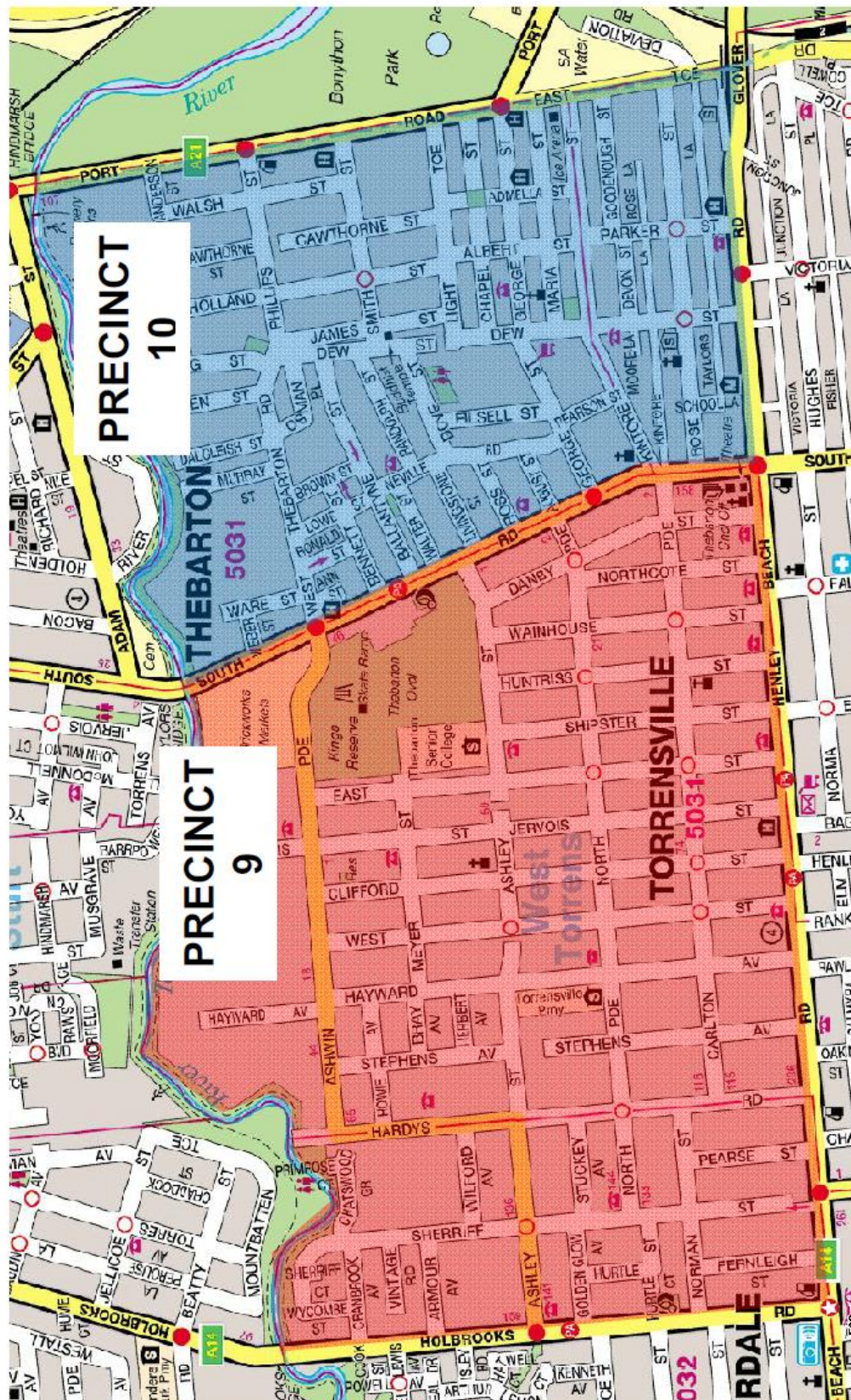


Figure 3 - Torrensville and Thebarton LATM Areas

In the Thebarton area, the Holland Street Bridge was originally built in 1923 as part of the tram route. It was converted and used by vehicles (only) in the 1960's to the 1990's. After this it became a pedestrian bridge and substantially changed traffic patterns in the area. The Holland Street Bridge was closed to pedestrian and cyclists traffic in 2011 due to safety concerns over the structural safety of the bridge. This is currently being assessed by the City of West Torrens and the City of Charles Sturt.

In the 1980's the State Government doubled the capacity of Port Road, increasing it by one lane in each direction. In the 1990's after the closure of the Holland Street Bridge to traffic, West Thebarton Road and Phillips Street were realigned so that these roads now have right of way. Before this, traffic on West Thebarton Road and Phillips Street would have to give way to traffic on Dew Street.

1.2. Recent Changes to Arterial Roads

The arterial roads in the study area are under the care and control of the State Government. These roads are Holbrooks Road, Henley Beach Road, South Road, Port Road and James Congdon Drive.

In 2005 the State Government upgraded James Congdon Drive between Henley Beach Road and Sir Donald Bradman Drive and constructed a new section between Sir Donald Bradman Drive and South Road. These changes on the arterial roads would have affected traffic in the Thebarton area, in particular on James Congdon Drive and Port Road.

The State Government undertook the construction of the Bakewell underpass at the intersection of Henley Beach Road and James Congdon Drive. This involved the demolition of the old Bakewell Bridge in October 2006 and the new Bakewell Underpass was opened to traffic in January 2008. The underpass has improved traffic flow along Henley Beach Road and James Congdon Drive.

When the Bakewell underpass was being constructed, the right turn lane from Port Road into George Street was temporarily closed off at the traffic signals as part of the project. In March 2008 the State Government informed Council that right hand turn would remain in place as it improves overall intersection efficiency.

In 2009 the State Government undertook the Coast to Coast Light Rail Stage 2 (CCLR2) project which extended the tram line from Adelaide City to the Adelaide Entertainment Centre along Port Road. The tram line originally went from Glenelg into the City of Adelaide. The tram line has considerably changed traffic conditions in the Thebarton area, in particular through the installation of traffic lights at Light Terrace, the banning of the right turn movements at Smith Street and B Doubles using Walsh Street.

In addition, the extension of the tram line along Port Road required the removal of parking on the western side of Port Road; eastern side of Walsh Street between Phillips Street and Smith Street (apart from loading zone); southern side of Smith Street between Walsh Street and Cawthorne Street and western side of Albert Street between Light Terrace and George Street.

Along with the removal of the parking it would appear that the tram line along Port Road has increased commuter parking in the Thebarton area. This is due to a Park and Ride being developed as part of the tram project in which vehicles can park within the Adelaide Entertainment Centre and travel on the tram, all at a minimal cost. To facilitate this, the tram between the Adelaide Entertainment Centre and town has been made free. It appears that vehicles are parking in the Thebarton area instead of the Adelaide Entertainment Centre car park and travelling into town on the free tram. The construction of the new Royal Adelaide Hospital and South Australian Medical Research Institute on North Terrace has likely

contributed to the increase in parking in the Thebarton area, along with the re-development of Adelaide Oval with a footbridge over the River Torrens.

1.3. Current Traffic Controls

The Torrensville and Thebarton area was the subject of a detailed LATM traffic study in the 1980s by the Thebarton Council and West Torrens Council. This resulted in many traffic control devices being installed such as the majority of the roundabouts at local intersections; single lane slow points; angled slow points in Hardys Road; the road closures in Ashley Street (buses excepted); road closures in Cawthorne Street south of Phillips Street, road closure in Dew Street at Light Terrace and road closure at the intersection of Chapel Street and Admella Street; and right turn ban at Carlton Parade and South Road.

In more recent times, the area was also the subject of detailed traffic investigations for a number of streets and intersections due to road safety concerns including Golden Glow Avenue and Wilford Avenue where turning restriction were placed and driveway links installed in Sheriff Street and Norman Street.

The existing traffic control devices within the study area are shown on a map in **Appendix A – Current Traffic Controls**.

Speed limits are not shown on the maps in the appendix. Within the study area the speed limit is 50km/h on the local streets and 60km/h on the arterial roads. There are four school zones within the study area being at:

- Torrensville Primary Schools - school zones on Ashley Street, Hayward Avenue and North Parade.
- St George Primary and High School - school zones on Rose Street and Dew Street.
- Temple Christian College - school zone on Henley Beach Road slip lane to James Congdon Drive.
- Lady Gowrie Child Care Centre - school zone on Dew Street between George Street and Light Terrace.

Load Limit and No Truck signs are also not shown on maps in the appendix. In 2008 a review of No Truck and Load Limit signs was undertaken in the Torrensville area. Load Limit signs were previously used to prevent trucks entering a residential street as the No Truck signs were not available. Since the upgrade to the Australian Road Rules (Road Traffic Act 1961) the use of No Truck signs is now specified to prevent trucks using a street and it allows vehicles that are servicing a property to go beyond a No Truck sign, for example a garbage or delivery truck or emergency vehicle.

Hence, the Load Limit signs were replaced with No Truck signs (where applicable) and additional No Truck Signs placed to prevent trucks going into residential zones and instead use roads more suited to their size. A plan of the No Truck signs installed in the Torrensville area is shown in Figure 4.

The Thebarton area has a variety of Load Limit signs which have been installed over time to prevent trucks intruding into the local residential streets. These signs are often inconsistent. A review of the Load Limit signs should be undertaken and No Truck signs installed in a strategic manner to prevent trucks entering residential zones for the Thebarton area.

Warning signs (black on yellow background) such as slippery when wet, corner ahead, intersection ahead or pedestrians crossing are not shown as they are non-regulatory information signs and do not affect the flow of traffic. Parking signs are discussed in the parking data sections.



CITY OF WEST TORRENS
 TRUCKS PROHIBITED SIGN LOCATIONS
TORRENSVILLE & UNDERDALE

SCALE: NOT TO SCALE
 DRAWN:
 DATE: 01/10/2008
 DRAWING No.
 7695-08-1666

Figure 4 – No Truck signs in the Torrensville Area

1.4. Major Traffic Generators

The identification of vehicle trip generators within and adjacent to the LATM area assists in developing an understanding of the likely traffic movements and the traffic and parking issues which may arise. Within the LATM area there are a number of different trip generators, each with different vehicle composition, peak generation times and parking demands.

A number of major trip generators are shown below:

- Residential allotments
- Industrial and commercial premises
- Supermarkets

- Hotels
- Churches
- Henley Beach Road district centre
- Brickworks district centre
- Kings Park Reserve
- Thebarton Oval
- Thebarton Community Centre
- Bioscience / University of Adelaide campus
- Dove Street and Dew Street Reserves
- Child Care Centre - Torrensville Centre (80-84 East Street), Torrensville Preschool Centre (93A Ashley Street), Lady Gowrie (39A Dew Street) and Adelaide Montessori ELC (5 Walter Street)
- Torrensville Primary Schools (35 Hayward Avenue)
- Thebarton Senior College (40 Ashley Street)
- St George Primary and High School (15 Dew St and 104 Henley Beach Rd)
- Temple Christian College (2-8 Henley Beach Road)

Within the study area there is the River Torrens Linear Park which generates large volumes of pedestrian and cycling traffic along the shared use path and with people accessing the path.

1.5. Land Use Zoning

The study area comprises of residential areas alongside major industries, commercial businesses, retail shops, restaurants and cafes. In addition, there are four schools within the study area being Torrensville Primary School, Thebarton Senior College, St George College (Senior and Junior) and Temple Christian College. These land uses have catchments that would be expected to extend far beyond the boundaries of the study area.

Given the high traffic and parking generating characteristics of these land uses, it may be expected to find that traffic volumes and parking demand on many of the streets within the study area are quite high. The industries, business and shops generate a high volume of commercial vehicles which need to access the site via the local road network. In addition customers and staff generate traffic to sites.

The parking demand that is generated by the land uses range from staff, customer, resident, carer and visitor. There is also likely to be commuter parking given the close proximity of the study area to the City of Adelaide with the bus route along Henley Beach Road and tram line along Port Road.

The West Torrens Council Development Plan 2013, details the land use zoning. A map of the current land use zoning for the Torrensville and Thebarton area is shown below and in **Appendix C – Data Maps**. The Development Plan is applicable only when new developments are being designed or assessed. It does not affect existing development.

In the Torrensville area there is a mix of residential and industrial land use to the north. The District Centre Zone is located on Henley Beach Road between Hayward Avenue and South Road and at the Brickworks site. In the Torrensville area there is the Torrensville Primary School, Thebarton College, Kings Park Reserve and Thebarton Oval.

In the Thebarton area there is a mix of residential, commercial and industrial land uses. Along and adjacent to Port Road / James Congdon Drive, West Thebarton Road and Henley Beach Road there is commercial and industrial land use. To the west of the industrial zone along Port Road is a new Urban Corridor zone. St George Senior College is located along Rose Street between South Road and Dew Street. Temple Christian College is located at the intersection with Henley Beach Road / James Congdon Drive.

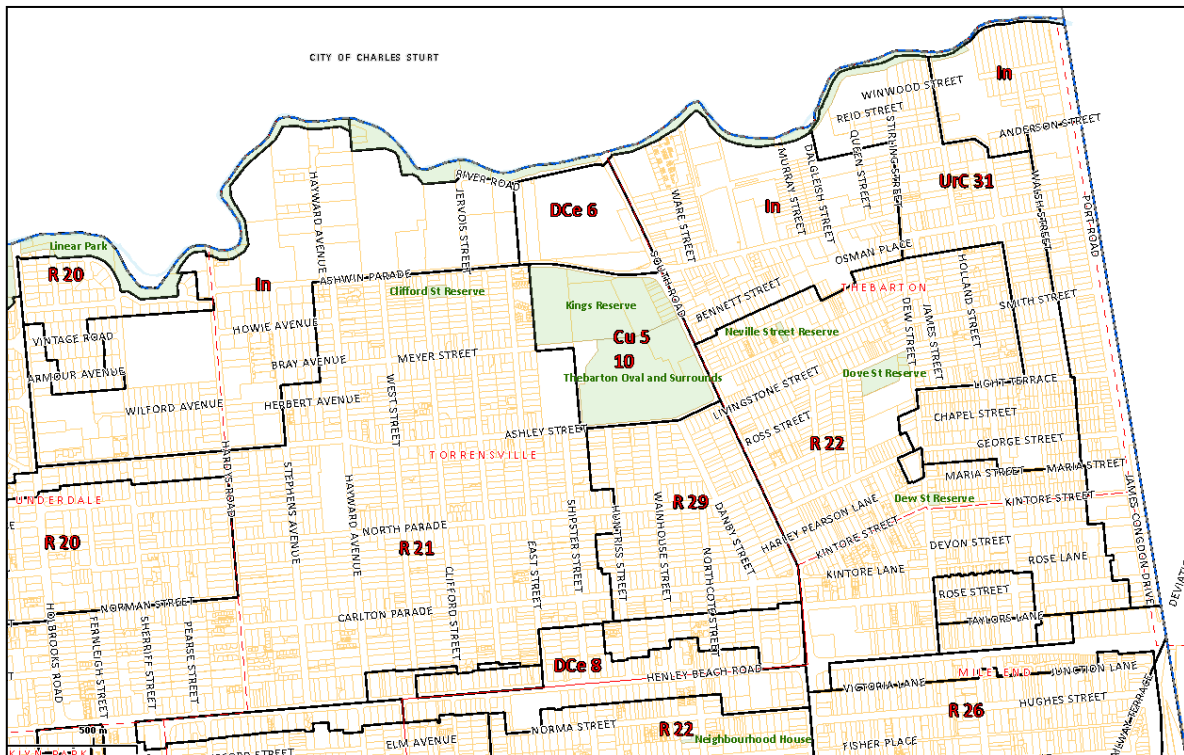


Figure 5 – Current Land Use Zoning

Higher density development is also likely to occur within the study area in the new urban Corridor zone which impacts on the on-street parking and traffic volumes. A Housing Diversity Development Plan Amendments (DPA) was initiated by the State Government. The policy changes to the West Torrens Development Plan proposed in this DPA can be summarised as:

- intensifying residential development in select locations
- protecting areas of historic conservation and residential character significance
- providing shopping, employment and services to support the needs of a growing population.

1.6. Future Developments and Projects

Arterial Road Upgrades

The State Government vision is for South Road to be a non-stop road between Gawler and Old Noarlunga, to link the rapidly expanding industrial and residential growth areas to the north and south. In March 2009 the South Road / ANZAC Highway underpass (the Gallipoli Underpass), was opened and in December 2009 the Glenelg Tram Overpass over South Road was operational. The South Road Superway between the Port River Expressway and Regency Road has recently been completed.

The State Government is currently undertaking a detailed planning study to determine the best solution for the section of South Road between the South Road Superway and the Gallipoli Underpass. When complete, the study will release a Project Assessment Report identifying a preferred option for a free flowing corridor from the north of Anzac Highway to Regency Park.

The next proposed piece of the corridor to be delivered will be a 3.7km section between Torrens Road and the River Torrens, which will end at Ashwin Parade. This upgrade will address delays currently caused by Port and Grange Roads and the Outer Harbor rail line and improve safety along the narrow section between Torrens Road and Port Road. It will include a new lowered road under Port and Grange roads, allowing the local community, commuters and

freight to quickly pass through the area. The works will include changes to the intersection of Ashwin Parade and South Road.

Holbrooks Road and Marion Road provides a valuable north-south connection and the State Government foresee that in the future this intersection is upgraded. However, it is understood that this project is of lower priority due to the South Road project commitments. Port Road also provides a north-south connection, in which major works to the road have recently been undertaken by the State Government with the extension of the tram line from Adelaide City to the Entertainment Centre.

State Government Integrated Transport and Land Use Plans

The State Government in consultation with planning and transport industries and interest groups has drafted the State's first *Integrated Transport and Land Use Plan*.

The *Integrated Transport and Land Use Plan* identifies new ways of connecting people to the places they want to be – from the weekday commute, to weekend sports matches, shopping, entertainment and time with friends and family. It is about connecting businesses too, with their suppliers and with their markets, whether they are around the corner, across town or on the other side of the world. It is a state plan with local, national and international reach.

The plan includes in relation to the Torrensville and Thebarton LATM scheme:

- A new tram network to the airport and Henley Beach via Henley Beach Road with a link to airport via Airport Road
- Modernised bus network such as on-road bus priority systems
- New and upgraded roads in particular South Road, Torrens Road to River Torrens
- New bikeways and walking paths, which include crossings of arterial roads and improved walking and cycling facilities in catchment areas for schools

State Government 30 Year Plan for Adelaide

The 30-Year Plan for Greater Adelaide was launched in February 2010 by the State Government. The Plan is a long-term vision for the future and the growth of SA. The State Government together with inner metropolitan councils has been working on how to accommodate some of this growth. A series of re-zonings is now proposed in targeted locations close to the city. This will:

- reduce Adelaide's spread
- increase the use and efficiency of our roads and public transport
- enable a large number of people to enjoy the benefits offered by inner-city living.

The locations being proposed for this new housing are mostly along main roads and strip shopping areas with good access to buses, trains and trams.

The proposal is to re-zone specific pieces of land close to the city to further encourage a mix of medium density homes, offices and shops. The proposed changes will be introduced through four separate Development Plan Amendments. A new Urban Corridor Zone is proposed to be applied to Port Road, Anzac Highway, and Henley Beach Road.

Thebarton Bioscience Precinct Master Plan

The Thebarton technology hub is bounded by the River Torrens, South Road, West Thebarton Road / Phillips Street and Port Road, as shown in Figure 6. The hub currently supports the SA Government owned Bio-Incubator facility (operated by BioInnovation SA) along with approximately 126 other privately owned companies, 96 of which are technology focused. The

precinct also incorporates the University of Adelaide's Thebarton Campus, which focuses on research and development.



Figure 6 – Thebarton Bioscience Precinct Master Plan Study Area

The Thebarton technology hub area represents one of the largest collections of technology companies and knowledge in Australia within a single consolidated area. JPE Design Studio was engaged by BioInnovation SA to develop a master plan for the evolving area. The primary objective of the Master Plan was to identify a clear planning structure for the precinct as a means of promoting the area, improving amenity and visual credibility of the area and improving pedestrian and vehicle access.

The main key actions from the Master Plan which relate to this LATM are:

1. Improvements to bicycle paths and connections
2. Upgrades to the quality of the footpath along West Thebarton Road/Phillips St
3. Improvements to footpaths in side streets in the precinct
4. Improved connections to the Linear Park Trail
5. Continuation of the linear park trail to South Road
6. Restored or new bridge crossing from Holland St across the River Torrens
7. Future additional pedestrian/cycle bridge connection linking the precinct to Holden Street Arts Precinct and Hindmarsh Stadium
8. Development of Holland street pedestrian/cycle link
9. Create improved East-West pedestrian link through back of site, joining to Anderson St.
10. Closure of Dew St at Phillips St/West Thebarton Rd, to create a safer footpath connection and usable park area.
11. Provision of improved signage at key pedestrian and cycle crossing locations, to alert drivers
12. Paving at the entrance to side streets, to promote a 'pedestrian' environment and calm traffic
13. Allow two way traffic along Reid Street to improve vehicle access around the University Campus
14. Establish a free bike hire service (with multiple pickup/return points) to allow ease of movement throughout the Hub, and to other destinations (eg RAH/ SAHMRI)

15. Provide increased off street car parking capacity for local business at the end of Murray Street, utilising BioSA land.

Residential / Industry Interface Study

The City of West Torrens engaged Connor Holmes in 2013 to undertake a residential and industrial land use interface study report. The study involved a review of existing residential and industrial land use interface areas, with the aim of identifying practical solutions and interface treatment options to minimise the conflict between sensitive residential areas and established industrial areas.

The study identified the Torrensvile/Underdale area (region A) and the Thebarton/Mile End area (region B) to be reviewed. The recommendations for these regions are summarised in Figure 7 and Figure 8.

The parking and traffic recommendations have been taken on board and also show up in the parking and traffic data sections. Consideration to changing the zoning of an area is outside the scope of this study.

OPAL Precinct Audit Report

OPAL (Obesity Prevention and Lifestyle) is a program that supports children, through their families and communities, to be healthy now and stay healthy for life. OPAL is coordinated through local government and works with communities to create opportunities to eat well and be active. The City of West Torrens is part of the OPAL community.

In 2013 OPAL conducted a walking and cycling audit of five shopping centres which was part of an overall promotion of walking and cycling in the community. Two centres within this LATM area were assessed being the Torrensvile Plaza Foodland (Drakes) and Thebarton Foodland (IGA).

The audit recommended that OPAL work with shop owners to improve pedestrian access within the car park and install more bike racks. Poor pedestrian access to the Thebarton Foodland was also raised.

Road Safety Group

The City of West Torrens has formed a community based Road Safety Group. The group has been in operation since September 2004 with the aim of promoting road safety and awareness and responding to the road safety concerns of the local community, for the welfare and benefit of the residents of the City.

The Road Safety Group has undertaken numerous projects such as a bi-annual mock crash event for local high school students in co-operation with the emergency services, a "Keep Your Distance" campaign to remind drivers to maintain a safe following distance to the vehicle in front of them, purchase of two Variable Message Boards that display a road safety message on our local roads, seminars for older drivers and the use of Gopher wheelchairs and the placement of 50km/h speed message stickers on garbage bins in Torrensvile, Lockleys, Kurralta Park, Novar Gardens and Glenelg North.

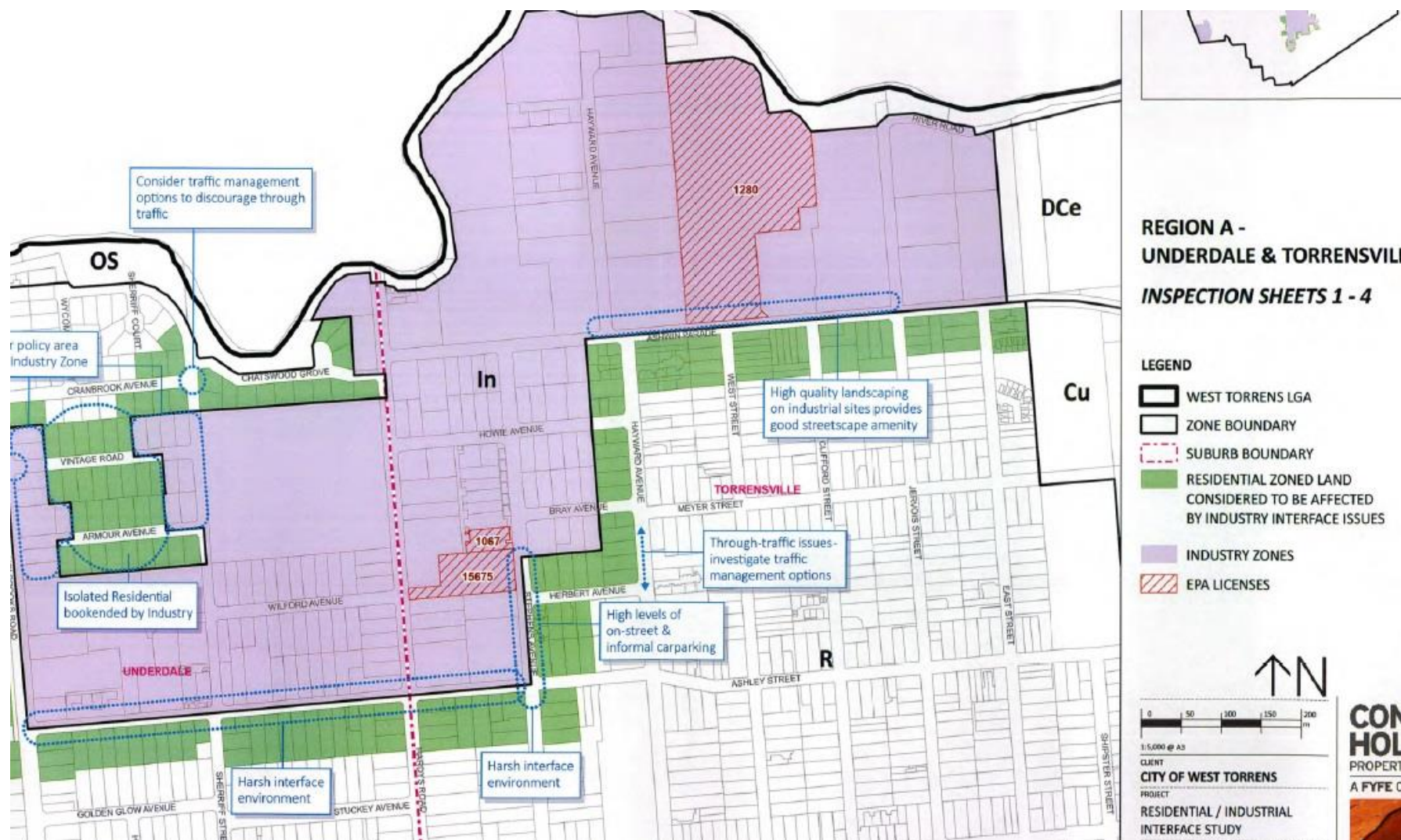


Figure 7 – Region A – Recommendations of the Residential / Industry Interface Study



Figure 8 – Region B – Recommendations of the Residential / Industry Interface Study

Proposed Annual Car Parking Levy (Transport Development Levy)

The State Government has adopted a \$750 annual car parking levy per car parking space from the 1 July 2014. The levy is to apply to on and off street paid parking and will be directly paid by the car park owner, which in most cases is Adelaide City Council. The owner is then likely to pass the cost onto user's thus increasing car parking fees in the City of Adelaide.

The increase in parking fees in the City of Adelaide may deter people from driving into the city. It is hoped that the increase in parking fees will encourage more people to use public transport, cycle or walk. However, it may also create increased commuter parking in the Torrensville and Thebarton area.

As of February 2015, this levy has been abandoned by the State Government.

Adelaide Oval Development

The Adelaide Oval is being redeveloped with a footbridge linking the oval to North Terrace. With the core stages of the redevelopment complete, events have started to occur at the oval again which has had parking impacts in the Thebarton area.

Royal Adelaide Hospital (RAH) and South Australian Medical Research Institute (SAHMRI) Development

The Royal Adelaide Hospital (RAH) and South Australian Medical Research Institute (SAMRI) are currently being built on the north side of the intersection of Port Road / North Terrace / West Terrace. These developments appear to currently be generating commuter parking in the Thebarton area from workers.

Once the RAH and SAMRI are operational, there will be large numbers of staff, visitors and service vehicles accessing the sites. It is viewed that even though parking has been provided on-site that there still may be staff and visitors parking in the Thebarton area to access the hospital and the research institute.

Brickworks Development

The Brickworks development is located between Ashwin Parade and the River Torrens alongside South Road. It will comprise of a number of Woolworths retail stores and a general retail area. The main entry and exit to the development will be via Ashwin Parade.

The development will generate an increase in traffic along Ashwin Parade to access the site and potential other streets in the area. Parking will be provided as part of the development but there could be some parking occurring on streets. The development may also mean a change to the bus route from Ashley Street to Ashwin Parade, thus altering the existing road closures - buses excepted along Ashley Street.

2. Existing Road Network

The Transport Strategy sets classifications based on the existing use of the road network. This is the result of the history of the area including previously installed traffic control devices as well as past developments.

Explanations for the differing road classifications as set by the Transport Strategy are presented earlier on page 4. A number of recommendations are made relating to road classification in this report that should be considered as part of the Transport Strategy review.

2.1. Road Layout and Hierarchy

The study area is bounded by the major arterial roads of Holbrooks Road, Henley Beach Road and Port Road/James Congdon Drive. Through the middle of the study area runs South Road. These roads are under the care, control and management of the State Government, Department of Planning, Transport and Infrastructure.

Henley Beach Road provides the major east-west connection between the city and the outer suburbs. Holbrooks Road, Port Road and South Road provide the north-south connection, with South Road being Adelaide's primary north-south transport Corridor.

The major collector roads in the study area are:

- Ashwin Parade
- Ashley Street between Holbrooks Road and Hardys Road
- Hardys Road
- West Thebarton Road / Phillips Street
- George Street

The local collector roads in the study area are:

- Ashley Street between South Road and East Street
- Parker Street
- Albert Street
- Holland Street between Light Terrace and Phillips Street
- Light Terrace between Port Road and Albert Street – proposed due to changes in the road network from the Coast to Coast tram line along Port Road and the banning of the right turn from Port Road onto George Street

All other roads in the study area are classified as local roads.

Figure 9 is a map of the road hierarchies in the study area.

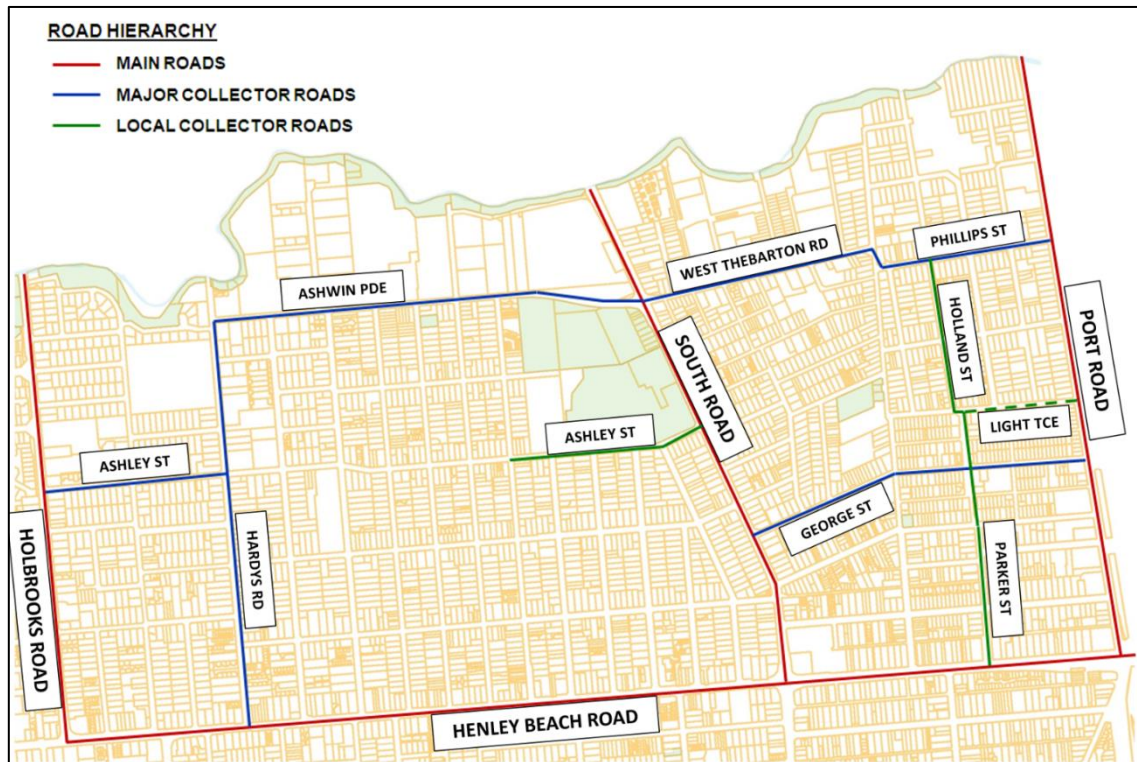


Figure 9 – Road hierarchy in the study area

Freight Routes

The below list as well as Figure 10 identifies the freight routes identified by the Transport Strategy for the study area.

Primary:

- Ashwin Parade between Hardys Road and South Road
- West Thebarton Road / Philips Street

Secondary:

- Ashley Street between Holbrooks Road and Hardys Road
- Hardys Road between Ashley Street and Ashwin Parade
- Hayward Avenue and Jervois Street, north of Ashwin Parade
- George Street
- Streets north of West Thebarton Road / Philips Street being Walsh Street, Anderson Street, Cawthorne Street, Holland Street, Stirling Street, Queens Street and Dalgleish Street
- Smith Street between Walsh Street and Port Road
- Walsh Street between Phillips Street and Smith Street – proposed due to changes in the road network from the tram line along Port Road
- Light Terrace between Port Road and Albert Street – proposed due to changes in the road network from the tram line along Port Road
- Albert Street between Light Terrace and George Street – proposed due to changes in the road network from the tram line along Port Road

The Transport Strategy and thus the road hierarchy and freight routes were undertaken prior to the State Government undertaking the construction of the tram line along Port Road and the right turn from Port Road into George Street not being re-instated. These two items have changed traffic conditions in the area leading to the proposed changes to the road hierarchy and freight routes.

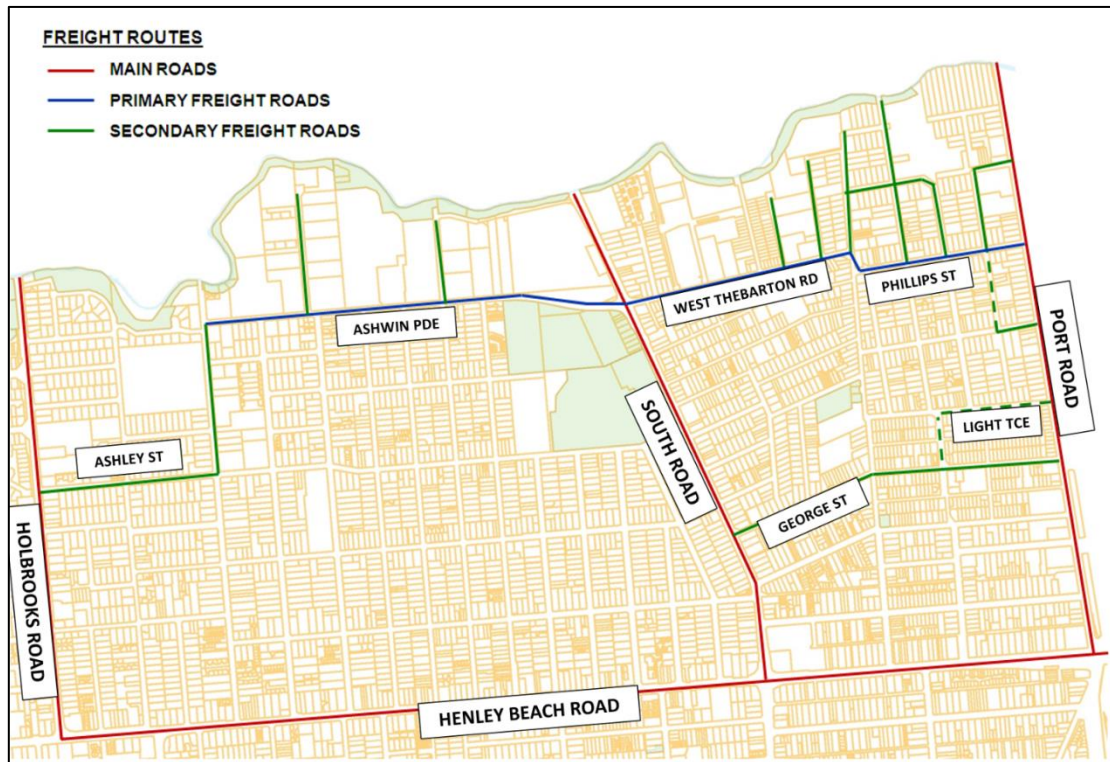


Figure 10 – Freight routes

B-Double Routes

Within the study area there are certain routes which have been approved for B Double use by Council and the State Government, as shown on Figure 11 below. In this instance a B-Double is a vehicle combination consisting of a prime mover towing two semi-trailers where the constructed overall length of the combination does not exceed 26 metres.

These street are:

- Ashwin Parade
- Jervois Street (right turn in and left turn out to Ashwin Parade)
- Smith Street (left turn out only onto Port Road)
- Walsh Street (southerly travel only)
- Phillips Street (right turn in only from Port Road)

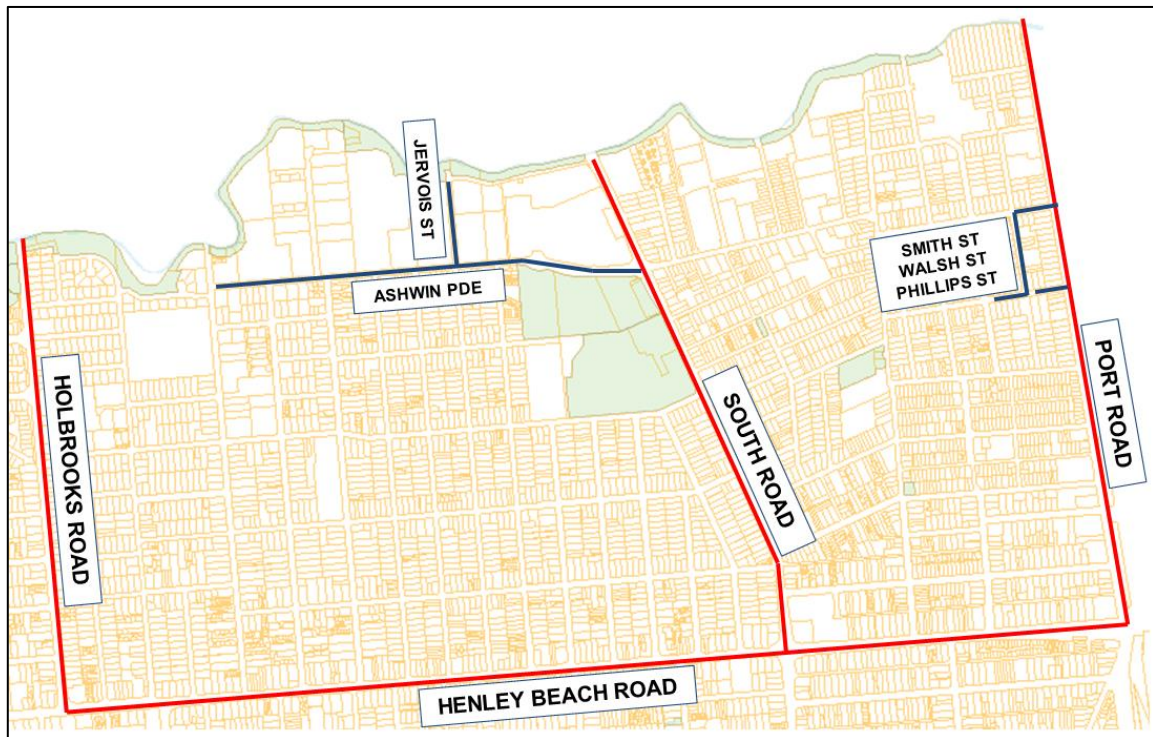


Figure 11 – B Double routes within the Study Area

Social Access Routes

The social access routes within the study area are Ashley Street (Holbrooks to Hardys Road), Hardys Road, Ashwin Parade, West Thebarton Road / Phillips Street and George Street. These are shown on Figure 12 and mirror the major collector roads, as they are the main routes within an area required for people to be able to access facilities.

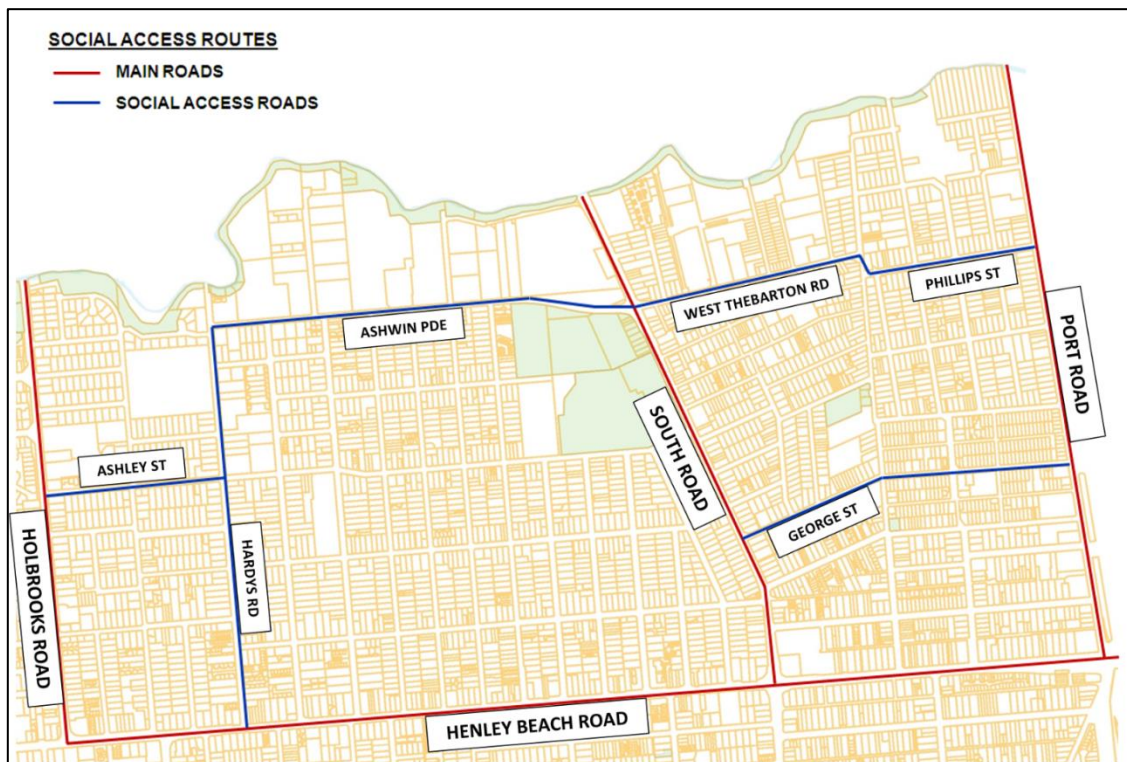


Figure 12 – Social Access Routes

2.2. Future Network

To meet the expected future traffic demands in the area, consideration should be given to whether any key links are able to be improved and made more efficient. These improvements would align with the goals of this LATM to improve safety while reducing traffic impact.

Such future network development could include:

- Improving the connection between Ashwin Parade and Holbrooks Road
- Creating more appropriate access to the Thebarton Oval precinct (potentially in conjunction with the Brickworks upgrade)
- Improving north-south linkage in the Thebarton/Mile End area
- Better facilitating north-south linkage in the Torrensville/Underdale area

Although these development are not to be explicitly explored as part of this LATM they will be factored into proposed solutions.

3. Traffic Data Analysis

With an understanding of the road hierarchies in the study area, the suitability of current traffic use of roadways can now be analysed to determine whether it is reasonable under criteria set by the Transport Strategy (discussed earlier in 2.2 Data-Based Warrants).

3.1. Traffic Volumes

The volume of traffic in the study area is shown in **Appendix C – Data Maps** and in the following table. The volume of traffic is the average daily traffic volume during the weekdays and was recorded by traffic counters over a one week period during late 2012 and early 2013.

These volumes are listed in the below table alongside previous data collected in the Torrensville and Thebarton area in the last 5 years (2008 to 2012). This allows for trends in traffic patterns over time to be analysed along a particular street.

Along with this data is an evaluation of whether the data meets or does not meet relevant criteria as set by the Transport Strategy. This identifies existing problem areas and helps identify where treatment is needed.

In addition to this, a 'future volume' of traffic is provided. This value is calculated assuming 3% growth in traffic volumes on all roads over the next 20 years. In some instances the projected increase in volume will cause the volume of traffic along a road to exceed the criteria set by the Transport Strategy which is identified by the classification (classif.) change column. This helps identifies streets that are likely to require treatment in future to remain in their current classification.

It should be noted that this is a 'worst case scenario' analysis and would be highly subject to any future changes that would occur over the next 20 years.

Table 4 - Daily Traffic Volumes in Torrensville

Street	Location	Past Volume (vpd)	Volume (vpd)	Meets Criteria ?	Future Volume (vpd)	Classif. Change ?
Torrensville						
Armour Ave	Holbrooks Rd to Sherriff St	746	725	YES	1,309	-
Ashley St	Holbrooks Rd to Sherriff St (Major Collector)	-	6,191	NO	11,182	YES
	Hardys Rd to Stephens Ave	2,656	2,415	NO	4,362	YES
	Stephens Ave to Hayward Ave	-	1,448	YES	2,615	YES
	Clifford St and Jervois St	-	385	YES	695	-
	Jervois St to East St	-	300	YES	542	-
	Danby St to South Rd (Local Collector)	1,702	1,525	YES	2,754	-
Ashwin Pde	Hardys Rd to Stephens Ave (Major Collector)	-	4,910	YES	8,868	YES
	East St to South Rd (Major Collector)	-	10,315	NO	18,630	YES
Carlton Pde	Stephens Ave to Hayward Ave	1,343	1,315	YES	2,375	YES
	Jervois St to East St	1,578	1,700	YES	3,070	YES
	Danby St to South Rd	1,201	1,330	YES	2,402	YES
Clifford St	Ashley St to Meyer St	-	872	YES	1,575	-
	Ashwin Pde to Meyer St	-	670	YES	1,210	-
	Carlton Pde to Henley Beach Rd	-	1,430	YES	2,583	YES
Cranbrook Ave	Holbrooks Rd to Sherriff St	-	625	YES	1,129	-
Danby St	Carlton Pde to Henley Beach Rd	-	515	YES	930	-
East St	Ashwin Pde to Meyer St	-	1,060	YES	1,914	-

	Meyer St to Ashley St	-	1,030	YES	1,860	-
	Carlton Pde to Henley Beach Rd	-	1,665	YES	3,007	YES
Fernleigh St	Norman St to Henley Beach Rd	-	320	YES	578	-
Golden Glow Ave	Holbrooks Rd to Sherriff St	940	969	YES	1,750	-
Hardys Rd	Ashwin Pde to Wilford Ave (Major Collector)	5,203	5,070	YES	9,157	YES
	Ashley St to Stuckey Ave (Major Collector)	2,843	2,975	YES	5,373	-
	Norman Street to North Pde (Major Collector)	-	2,633	YES	4,755	-
	Carlton Pde to Henley Beach Rd (Major Collector)	2,115	2,340	YES	4,226	-
Hayward Ave	Ashwin Pde to Howie Ave	-	710	YES	1,282	-
	Meyer St to Ashley St	1,106	1,120	YES	2,023	YES
	Carlton Pde to Henley Beach Rd	-	830	YES	1,499	-
Huntriss St	Carlton Pde to Henley Beach Rd	-	520	YES	939	-
Jervois St	Ashwin Pde to Meyer St	574	405	YES	731	-
	Meyer St to Ashley St	-	651	YES	1,176	-
	Ashley St to North Pde	-	695	YES	1,255	-
	North Pde to Carlton Pde	-	792	YES	1,430	-
	Carlton Pde to Henley Beach Rd	1,440	1,245	YES	2,249	YES
Meyer St	Clifford St to Jervois St	787	780	YES	1,409	-
Norman St	Holbrooks Rd to Fernleigh St	-	1,132	YES	2,045	YES
	Pearse St to Hardys Rd	-	690	YES	1,246	-
North Pde	Stephens Ave to Hayward Ave	1,595	1,310	YES	2,366	YES
	Clifford St to Jervois St	1,111	1,105	YES	1,996	-
	Wainhouse St to Northcote St	1,269	1,215	YES	2,194	YES
Northcote St	Carlton Pde to Henley Beach Rd	-	435	YES	786	-
Pearson St	Norman St to Henley Beach Rd	-	855	YES	1,544	-
Sherriff St	Norman St to Henley Beach Rd	-	290	YES	524	-
	Ashley St to Golden Glow Ave	1,123	1,040	YES	1,878	-
Shipster St	Carlton Pde to Henley Beach Rd	-	1,470	YES	2,655	YES
Stephens Ave	Bray Ave to Ashley St	1,100	1,030	YES	1,860	-
	Carlton Pde to Henley Beach Rd	-	655	YES	1,183	-
Stuckey Ave	Sherriff St to Hardys Rd	-	338	YES	610	-
Wainhouse St	Carlton Pde to Henley Beach Rd	-	1,120	YES	2,023	YES
West St	Ashwin Pde to Meyer St	-	605	YES	1,093	-
	Carlton Pde to Henley Beach Rd	-	920	YES	1,662	-
Wilford Ave	Sherriff St to Hardys Rd	-	1,020	YES	1,842	-

Table 5 - Daily Traffic Volumes in Thebarton

Street	Location	Past Volume (vpd)	Volume (vpd)	Meets Criteria ?	Future Volume (vpd)	Classif. Change ?
Thebarton						
Albert St	George St to Chapel St (Local Collector)	1,583	1,770	YES	3,197	YES
	George St to Maria St	-	1,442	YES	2,604	YES
Anderson St	Walsh St to Port Rd	416	471	YES	851	-
August St	South Rd to Neville Rd	-	155	YES	280	-
Ballantyne St	South Rd to Neville Rd	-	255	YES	461	-
	Brown St to Dew St	-	182	YES	329	-
Bennett St	South Rd to Lowe St	-	327	YES	591	-
Cawthorne St	Smith St to Light Tce	-	748	YES	1,351	-
Dew St	Henley Beach Rd to Taylors Ln	-	1,725	YES	3,116	YES

	Devon St to Kintore St	-	854	YES	1,542	-
	Ballantyne St to Osman Place	-	579	YES	1,046	-
	Osman Place to West Thebarton Rd	-	619	YES	1,118	-
George St	Filsell St to Dew St (Major Collector)	5,118	4,890	YES	8,832	YES
	Admella St to Port Rd (Major Collector)	3,416	3,350	YES	6,050	YES
Goodenough St	Parker St to James Congdon Dr	-	455	YES	822	-
Holland St	Light Tce to Smith St (Local Collector)	-	744	YES	1,344	-
	Smith St to Phillips St (Local Collector)	-	630	YES	1,138	-
James St	Phillips St to Smith St	-	501	YES	905	-
Kintore St	South Rd to Pearson St	-	415	YES	750	-
	Dew St to Parker St	-	667	YES	1,205	-
	Admella St to James Congdon Dr	947	840	YES	1,517	-
Light Tce	Dew St to Albert St	-	1,180	YES	2,131	YES
	Admella St to Port Rd (Proposed Local Collector)	2,003	1,510	YES	2,727	YES
Livingstone St	South Rd to Neville Rd	-	230	YES	415	-
Maria St	Admella St to James Congdon Dr	338	335	YES	605	-
Neville Rd	Ross St to August St	-	791	YES	1,429	-
Osman Pl	West Thebarton Rd to Dew St	-	111	YES	200	-
Parker St	Henley Beach Rd to Taylors Ln (Local Collector)	-	1,590	YES	2,872	YES
Phillips St	Walsh St to Port Rd (Major Collector)	7,853	7,565	NO	13,663	YES
	James St to Holland St (Major Collector)	-	7,123	NO	12,865	YES
Rose St	South Rd to Taylors Ln	-	1,055	YES	1,905	-
	Parker St to James Congdon Dr	1,167	860	YES	1,553	-
Ross St	South Rd to Neville Rd	-	380	YES	686	-
Smith St	Walsh St to Port Rd	1,726	1,370	YES	2,474	YES
	Holland St to Cawthorne St	-	686	YES	1,239	-
Walsh St	Phillips St to Smith St	696	1,130	YES	2,041	YES
	Anderson St to Phillips St	674	657	YES	1,187	-
Walter St	South Rd to Neville Rd	-	340	YES	614	-
West Thebarton Rd	South Rd to Lowe St (Major Collector)	-	7,510	NO	13,564	YES

The following observations are made in regards to the average daily traffic volume:

- The traffic volumes carried by the major collector roads being Ashwin Parade, Ashley Street (Holbrooks Road to Hardys Road), Hardys Road, West Thebarton Road / Phillips Street and George Street reflect the use of these roads being major collector roads. The east section of Ashwin Parade and West Thebarton Road / Phillips Street both substantially carry over the recommended 6,000 vehicles per day (vpd) which is not considered unreasonable considering the function of the road.
- The traffic volumes carried by the local collector roads being Ashley Street (South Road to East Street), Parker Street, Albert Street and Holland Street (between Light Tce and Phillips St) carry below 3,000 vpd. These volumes are below the acceptable limits for a local collector road.

- The general acceptable limit of vehicles in a local street is 2,000 vpd. This caters for local residents driving to and from work, school, shopping and other activities each day. Ashley Street east of Hardys Road carries more than this acceptable limit. All the other local streets carry less than 2,000 vpd which is considered acceptable.
- Local streets that carry above 1,000 vpd are generally located near school, shopping zones or industrial areas. In some cases particularly in the Torrensvile area there is also traffic from the main arterial roads or major collector roads, using the local streets to avoid delays.

The following observations are made in regards to the comparison of the average daily traffic volumes:

- In the Torrensvile area, traffic volumes have remained relatively the same over the past 5 years.
- A number of streets may require a classification change or treatment due to projected increases in traffic volumes over the next 20 years. In Torrensvile this includes: Ashley Street, Ashwin Parade, Carlton Parade, Clifford Street, East Street, Hardys Road, Hayward Avenue, Jervois Street, Norman Street, North Parade, Shipster Street and Wainhouse Street.
- In the Thebarton area, traffic in Rose Street between Parker Street and James Congdon drive has halved due to the Bakewell Underpass.
- The Coast to Coast tram line project along Port Road has significantly impacted on traffic volumes in the Thebarton area. In Light Terrace (Cawthorne Street to Port Road) the volume of traffic has decreased by a quarter potentially due to the installation of the traffic lights at the intersection of Light Terrace / Port Road causing a delay in being able to turn at the intersection. In Smith Street (Cawthorne Street to Port Road) traffic volumes have decreased by just under a quarter due to the banning of the right turn movements at Smith Street / Port Road intersection. In Walsh Street (Smith Street to Phillips Street) traffic volumes have increased by over half, likely due to the reasons stated above.
- A number of streets may require a classification change or treatment due to projected increases in traffic volumes over the next 20 years. In Thebarton this includes: Albert Street, Dew Street, George Street, Light Terrace, Parker Street, Phillips Street, Smith Street, Walsh Street and West Thebarton Road.

3.2. Traffic Speeds

Within the LATM area the speed limit for all the streets under Council's jurisdiction is 50 km/h, apart from the four school zones. The school zones are located at Torrensvile Primary School, St George Primary and High School, Temple Christian College and Lady Gowrie Child Care Centre. The arterial roads are 60km/h which are under the jurisdiction of the State Government and as such the speed limit on these streets are not considered within this study.

The mean speed and 85th percentile speed data in the streets that were surveyed is shown in **Appendix C – Data Maps** and in the table below. The speed of every vehicle was recorded by traffic counters over a one week period. Analysis of the data identified the 85th percentile speed of traffic. The 85th percentile speed is the speed at which 85% of the traffic using the street drives at or below and is used to determine if traffic control devices or other measures might be required. An 85th percentile speed of 55km/h or less is considered reasonable on a 50km/h road.

Table 6 - Mean Speed and 85th Percentile Speed in Torrensville

Street	Location	Mean Speed (km/h)	85 th Percentile Speed (km/h)	Meets Criteria ?
Torrensville				
Armour Ave	Holbrooks Rd to Sherriff St	46.2	55.1	NO
Ashley St	Holbrooks Rd to Sherriff St (Major Collector)	44.6	51.1	YES
	Hardys Rd to Stephens Ave	45.3	52.9	YES
	Stephens Ave to Hayward Ave	44.0	51.8	YES
	Clifford St and Jervois St	30.4	37.1	YES
	Jervois St to East St	32.8	41.8	YES
	Danby St to South Rd (Local Collector)	41.1	49.0	YES
Ashwin Pde	Hardys Rd to Stephens Ave (Major Collector)	48.6	54.4	YES
	East St to South Rd (Major Collector)	60.5	53.3	YES
Carlton Pde	Stephens Ave to Hayward Ave	41.9	48.2	YES
	Jervois St to East St	35.3	40.7	YES
	Danby St to South Rd	40.7	47.9	YES
Clifford St	Ashley St to Meyer St	44.6	52.2	YES
	Ashwin Pde to Meyer St	42.0	49.3	YES
	Carlton Pde to Henley Beach Rd	39.7	47.9	YES
Cranbrook Ave	Holbrooks Rd to Sherriff St	47.2	55.8	NO
Danby St	Carlton Pde to Henley Beach Rd	36.0	47.2	YES
East St	Ashwin Pde to Meyer St	37.6	45.4	YES
	Meyer St to Ashley St	37.6	46.1	YES
	Carlton Pde to Henley Beach Rd	38.8	46.1	YES
Fernleigh St	Norman St to Henley Beach Rd	41.9	51.8	YES
Golden Glow Ave	Holbrooks Rd to Sherriff St	45.9	53.3	YES
Hardys Rd	Ashwin Pde to Wilford Ave (Major Collector)	50.2	56.9	NO
	Ashley St to Stuckey Ave (Major Collector)	38.3	43.9	YES
	Norman Street to North Pde (Major Collector)	39.2	45.0	YES
	Carlton Pde to Henley Beach Rd (Major Collector)	36.7	42.8	YES
Hayward Ave	Ashwin Pde to Howie Ave	43.5	52.2	YES
	Meyer St to Ashley St	43.6	50.8	YES
	Carlton Pde to Henley Beach Rd	42.6	51.1	YES
Huntriss St	Carlton Pde to Henley Beach Rd	38.9	49.0	YES
Jervois St	Ashwin Pde to Meyer St	39.8	49.0	YES
	Meyer St to Ashley St	40.1	48.6	YES
	Ashley St to North Pde	41.7	49.7	YES
	North Pde to Carlton Pde	45.2	52.9	YES
	Carlton Pde to Henley Beach Rd	36.2	45.4	YES
Meyer St	Clifford St to Jervois St	37.9	45.0	YES
Norman St	Holbrooks Rd to Fernleigh St	40.9	48.6	YES
	Pearse St to Hardys Rd	37.5	44.6	YES
North Pde	Stephens Ave to Hayward Ave	36.1	43.9	YES
	Clifford St to Jervois St	35.4	41.0	YES
	Wainhouse St to Northcote St	43.1	50.0	YES
Northcote St	Carlton Pde to Henley Beach Rd	37.0	48.2	YES
Pearson St	Norman St to Henley Beach Rd	44.7	52.9	YES
Sherriff St	Norman St to Henley Beach Rd	35.1	46.1	YES
	Ashley St to Golden Glow Ave	34.3	40.3	YES
Shipster St	Carlton Pde to Henley Beach Rd	38.8	45.7	YES
Stephens Ave	Bray Ave to Ashley St	45.5	55.8	NO
	Carlton Pde to Henley Beach Rd	43.1	52.2	YES
Stuckey Ave	Sherriff St to Hardys Rd	42.7	52.9	YES
Wainhouse St	Carlton Pde to Henley Beach Rd	43.1	52.6	YES

West St	Ashwin Pde to Meyer St	40.9	49.7	YES
	Carlton Pde to Henley Beach Rd	41.9	51.1	YES
Wilford Ave	Sherriff St to Hardys Rd	43.8	51.8	YES

Table 7- Mean Speed and 85th Percentile Speed in Thebarton

Street	Location	Mean Speed (km/h)	85 th Percentile Speed (km/h)	Meets Criteria ?
Thebarton				
Albert St	George St to Chapel St (Local Collector)	36.6	43.9	YES
	George St to Maria St	29.1	34.9	YES
Anderson St	Walsh St to Port Rd	31.0	38.2	YES
August St	South Rd to Neville Rd	32.4	39.6	YES
Ballantyne St	South Rd to Neville Rd	34.3	42.5	YES
	Brown St to Dew St	34.0	45.0	YES
Bennett St	South Rd to Lowe St	26.6	33.5	YES
Cawthorne St	Smith St to Light Tce	41.9	50.2	YES
Dew St	Henley Beach Rd to Taylors Ln	34.0	40.0	YES
	Devon St to Kintore St	39.0	45.7	YES
	Ballantyne St to Osman Place	35.0	42.5	YES
	Osman Place to West Thebarton Rd	26.1	31.3	YES
George St	Filsell St to Dew St (Major Collector)	43.5	51.5	YES
	Admella St to Port Rd (Major Collector)	43.2	51.8	YES
Goodenough St	Parker St to James Congdon Dr	25.7	31.3	YES
Holland St	Light Tce to Smith St (Local Collector)	32.4	39.2	YES
	Smith St to Phillips St (Local Collector)	29.7	36.0	YES
James St	Phillips St to Smith St	32.0	38.9	YES
Kintore St	South Rd to Pearson St	26.4	35.3	YES
	Dew St to Parker St	39.4	46.4	YES
	Admella St to James Congdon Dr	40.1	47.9	YES
Light Tce	Dew St to Albert St	39.1	48.2	YES
	Admella St to Port Rd (Proposed Local Collector)	42.2	50.8	YES
Livingstone St	South Rd to Neville Rd	36.9	46.1	YES
Maria St	Admella St to James Congdon Dr	31.4	40.0	YES
Neville Rd	Ross St to August St	40.1	49.3	YES
Osman Pl	West Thebarton Rd to Dew St	31.0	40.0	YES
Parker St	Henley Beach Rd to Taylors Ln (Local Collector)	28.0	33.1	YES
Phillips St	Walsh St to Port Rd (Major Collector)	39.3	48.2	YES
	James St to Holland St (Major Collector)	43.1	49.3	YES
Rose St	South Rd to Taylors Ln	34.4	45.4	YES
	Parker St to James Congdon Dr	46.2	55.1	NO
Ross St	South Rd to Neville Rd	36.5	45.7	YES
Smith St	Walsh St to Port Rd	35.9	45.4	YES
	Holland St to Cawthorne St	36.1	42.8	YES
Walsh St	Phillips St to Smith St	41.2	50.8	YES
	Anderson St to Phillips St	39.1	50.0	YES
Walter St	South Rd to Neville Rd	31.5	39.6	YES
West Thebarton Rd	South Rd to Lowe St (Major Collector)	47.2	54.4	YES

The following observations are made in regards to the 85th percentile speeds:

- The 85th percentile speed in Hardys Road between Ashley Street and Ashwin Parade was 56.9 km/h. As Hardys Road is a major collector road and thus carries a significant volume of traffic and commercial vehicles, the installation of physical traffic calming devices to reduce the speed of vehicles may not be appropriate and thus police enforcement may be used to reduce vehicle speeds.

- The 85th percentile speeds in Cranbrook Avenue and Armour Avenue was 55.8 km/h and 55.1 km/h respectively (625vpd and 725vpd). These streets are mainly residential and carry low volumes of traffic. Further investigation into traffic control devices may be justified depending on community concerns.
- The 85th percentile speeds in Stephens Avenue, north of Ashley Street was 55.8 km/h (1,030vpd). This street is wide and used to access the industrial area. Narrowing the perception of the road by line marking it may assist in reducing the speed of vehicles. Other traffic control devices maybe limited due to trucks requiring access.
- The 85th percentile speeds in Rose Street west of Port Road was 55.1 km/h (860vpd). This street is wide, mainly residential and carries a low volume of traffic. Further investigation into traffic control devices may be justified depending on community concerns.
- Streets where the 85th percentile speeds are below 55km/h but above 50 km/h are listed and will continue to be monitored – Golden Glow Avenue; Fernleigh Street; Pearson Street, Ashley Street east of Hardys Road; Hayward Avenue north of Ashley Street; Ashwin Parade east of Hardys Road; Stephens Avenue, Hayward Avenue, West Street and Wainhouse Street (between Henley Beach Road and Carlton Parade); West Thebarton Road, Walsh Street south of Phillips Street; Light Terrace west of Port Road and George Street.
- The school zones generally have traffic control devices in place such as school crossings and the 25 km/h school zones. Often Police enforcement is required to remind motorists to slow down during school pick up and drop off.

3.3. Commercial Vehicles

The percentage of commercial vehicles surveyed in the study area by the traffic counters, are shown in **Appendix C- Data Maps** and in the table below. The traffic counts recorded the type of every vehicle over a one week period. The analysis of the data shows the percentage of commercial vehicles to the volume of traffic. Commercial vehicles include any truck or bus greater than 5.5m.

The acceptable percentages of commercial vehicles are:

- Local street – up to 4%
- Local collector road – up to 4%
- Major collector road – up to 10%

Table 8 - Percentage of Commercial Vehicles in Torrensville

Street	Location	Volume (vpd)	Commercial Vehicles (%)	Meets Criteria ?
Torrensville				
Armour Ave	Holbrooks Rd to Sherriff St –Industrial Zone (Part)	725	10.9	NO
Ashley Street	Holbrooks Rd to Sherriff St (Major Collector and Secondary Freight Route) – Industrial Zone and Bus Route	6,191	6.9	YES
	Hardys Rd to Stephens Ave – Industrial Zone and Bus Route	2,415	12.0	NO
	Stephens Ave to Hayward Ave – Bus Route	1,448	11.9	NO
	Clifford St and Jervois St – Bus Route	385	35.5	NO
	Jervois St to East St – Bus Route	300	39.8	NO
	Danby St to South Rd (Local Collector) – Bus	1,525	10.7	NO

Ashwin Pde	Route			
	Hardys Rd to Stephens Ave (Major Collector, Primary Freight Route and B Double Route) – Industrial Zone	4,910	7.5	YES
	East St to South Rd (Major Collector, Primary Freight Route and B Double Route) – Industrial Zone	10,315	12.4	NO
Carlton Pde	Stephens Ave to Hayward Ave	1,315	1.4	YES
	Jervois St to East St	1,700	1.7	YES
Clifford St	Danby St to South Rd	1,330	3.3	YES
	Ashley St to Meyer St	872	3.3	YES
	Ashwin Pde to Meyer St	670	4.1	NO
	Carlton Pde to Henley Beach Rd – DCe	1,430	2.3	YES
Cranbrook Ave	Holbrooks Rd to Sherriff St	625	5.8	NO
Danby St	Carlton Pde to Henley Beach Rd – DCe	515	5.2	NO
East St	Ashwin Pde to Meyer St	1,060	2.4	YES
	Meyer St to Ashley St	1,030	2.4	YES
	Carlton Pde to Henley Beach Rd – DCe	1,665	2.1	YES
Fernleigh St	Norman St to Henley Beach Rd	320	2.1	YES
Golden Glow Ave	Holbrooks Rd to Sherriff St	969	2.6	YES
Hardys Rd	Ashwin Pde to Wilford Ave (Major Collector and Secondary Freight Route) -Industrial Zone	5,070	8.2	YES
	Ashley St to Stuckey Ave (Major Collector)	2,975	3.6	YES
	Norman Street to North Pde (Major Collector)	2,633	3.2	YES
Hayward Ave	Carlton Pde to Henley Beach Rd (Major Collector)	2,340	3.5	YES
	Ashwin Pde to Howie Ave	710	5.8	NO
	Meyer St to Ashley St	1,120	5.7	NO
Huntriss St	Carlton Pde to Henley Beach Rd – DCe	830	2.5	YES
	Carlton Pde to Henley Beach Rd – DCe	520	2.5	YES
	Ashwin Pde to Meyer St	405	2.3	YES
	Meyer St to Ashley St	651	1.6	YES
Jervois St	Ashley St to North Pde	695	2.0	YES
	North Pde to Carlton Pde	792	4.7	NO
	Carlton Pde to Henley Beach Rd – DCe	1,245	2.1	YES
Meyer St	Clifford St to Jervois St	780	2.5	YES
Norman St	Holbrooks Rd to Fernleigh St	1,132	1.5	YES
	Pearse St to Hardys Rd	690	1.3	YES
North Pde	Stephens Ave to Hayward Ave	1,310	1.7	YES
	Clifford St to Jervois St	1,105	1.6	YES
	Wainhouse St to Northcote St	1,215	2.0	YES
Northcote St	Carlton Pde to Henley Beach Rd – DCe	435	5.1	NO
Pearson St	Norman St to Henley Beach Rd	855	2.1	YES
Sherriff St	Norman St to Henley Beach Rd	290	2.4	YES
	Ashley St to Golden Glow Ave	1,040	4.3	NO
Shipster St	Carlton Pde to Henley Beach Rd – DCe	1,470	2.4	YES
Stephens Ave	Bray Ave to Ashley St – Industrial Zone	1,030	10.9	NO
	Carlton Pde to Henley Beach Rd	655	2.8	YES
Stuckey Ave	Sherriff St to Hardys Rd	338	1.3	YES
Wainhouse St	Carlton Pde to Henley Beach Rd – DCe	1,120	3.2	YES
West St	Ashwin Pde to Meyer St	605	2.9	YES
	Carlton Pde to Henley Beach Rd – DCe	920	0.3	YES
Wilford Ave	Sherriff St to Hardys Rd – Industrial Zone	1,020	8.4	NO

Table 9 - Percentage of Commercial Vehicles in Thebarton

Street	Location	Volume (vpd)	Commercial Vehicles (%)	Meets Criteria ?
Thebarton				
Albert St	George St to Chapel St (Local Collector and Proposed Secondary Freight Route) – Industrial Zone	1,770	9.4	NO
Anderson St	George St to Maria St – Industrial Zone	1,442	4.2	NO
	Walsh St to Port Rd Secondary Freight Route) – Industrial Zone	471	12.1	NO
August St	South Rd to Neville Rd	155	2.5	YES
Ballantyne St	South Rd to Neville Rd	255	2.6	YES
Bennett St	Brown St to Dew St	182	2.6	YES
	South Rd to Lowe St – Industrial Zone	327	5.3	NO
Cawthorne St	Smith St to Light Tce – Industrial Zone	748	8.4	NO
Dew St	Henley Beach Rd to Taylors Ln	1,725	2.2	YES
	Devon St to Kintore St	854	3.1	YES
	Ballantyne St to Osman Place	579	2.8	YES
	Osman Place to West Thebarton Rd – Industrial Zone	619	4.2	NO
George St	Filsell St to Dew St (Major Collector and Secondary Freight Route) – Bus Route	4,890	6.6	YES
	Admella St to Port Rd (Major Collector and Secondary Freight Route) – Industrial Zone and Bus Route	3,350	9.5	YES
Goodenough St	Parker St to James Congdon Dr – Commercial Zone	455	5.0	NO
Holland St	Light Tce to Smith St (Local Collector)	744	5.4	NO
	Smith St to Phillips St (Local Collector)	630	3.8	YES
James St	Phillips St to Smith St	501	5.2	NO
Kintore St	South Rd to Pearson St	415	5.5	NO
	Dew St to Parker St	667	2.8	YES
	Admella St to James Congdon Dr - Commercial Zone	840	8.9	NO
Light Tce	Dew St to Albert St – Industrial Zone	1,180	4.1	NO
	Admella St to Port Rd (Proposed Local Collector and Proposed Secondary Freight Route) – Industrial Zone	1,510	6.1	NO
Livingstone St	South Rd to Neville Rd	230	2.1	YES
	Admella St to James Congdon Dr – Commercial Zone	335	4.3	NO
Neville Rd	Ross St to August St	791	2.8	YES
Osman Pl	West Thebarton Rd to Dew St – Industrial Zone	111	24.6	NO
Parker St	Henley Beach Rd to Taylors Ln (Local Collector)	1,590	3.2	YES
Phillips St	Walsh St to Port Rd (Major Collector and Primary Freight Route) – Industrial Zone and Bus Route	7,565	9.4	YES
	James St to Holland St (Major Collector and Primary Freight Route)	7,123	9.3	YES
Rose St	South Rd to Taylors Ln	1,055	2.2	YES
	Parker St to James Congdon Dr	860	3.5	YES
Ross St	South Rd to Neville Rd	380	1.8	YES
Smith St	Walsh St to Port Rd (Secondary Freight Route and B Double Route) – Industrial Zone	1,370	8.2	NO
Walsh St	Holland St to Cawthorne St	686	4.6	NO
	Phillips St to Smith St (Proposed Secondary Freight Route and B Double Route) – Industrial Zone	1,130	16.2	NO

	Anderson St to Phillips St (Secondary Freight Route) – Industrial Zone	657	11.9	NO
Walter St	South Rd to Neville Rd	340	3.7	YES
West	South Rd to Lowe St (Major Collector and Primary Freight Route) – Industrial Zone and Bus Route	7,510	10.4	NO
Thebarton Rd				

The following observations are made in regards to the traffic data collected on commercial vehicles in the Thebarton area:

- The majority of Torrensville has below 4% commercial vehicles on the local streets. This is likely due to the current traffic control devices in place such as roundabouts and the No Truck signs which were installed in 2008 for the majority of the area to prevent trucks going into the residential zones.
- The percentage of commercial vehicles is greater than the 10% recommended for a major collector road on the eastern end of Ashwin Parade. This is not considered unreasonable given the surrounding industries, the street being a primary freight route and a B Double route.
- Ashley Street between Hayward Avenue and East Street, where the road closures (buses expected) are located has a very high percentage of commercial vehicles. This is due to Ashley Street being a bus route and low volume of cars. Ashley Street to the west of South Road has a high percentage of commercial vehicles, again due to the bus route and this is not considered unreasonable.
- Ashley Street between Hardys Road and Hayward Avenue, Stephens Avenue north of Ashley Street and Hayward Avenue north of Ashley Street have commercial vehicle percentages greater than 4%. Ashley Street (between Hardys Road and Stephens Avenue) and Stephens Avenue are both located within the industrial area. Ashley Street (between Stephens Avenue and Hayward Avenue) and Hayward Avenue is a residential zone and has No Truck signs. Enforcement of the No Truck signs should be undertaken by the Police.
- Cranbrook Avenue, Armour Avenue, Wilford Avenue and Sherriff Street (Ashley Street to Golden Glow Avenue) have commercial vehicle percentages greater than 4%. Wilford Avenue is within an industrial area and either end of Armour Avenue is industrial. Cranbrook Avenue is all residential. No Truck signs could be installed in the residential zones of Cranbrook Avenue and Armour Avenue. Sherriff Street already has No Truck signs and enforcement could be undertaken by the Police.
- Clifford Street between Meyer Street and Ashwin Parade has 4.1% of commercial vehicles. This could be due to buses and truck servicing Thebarton School and the community facilities at the end of Myer Street. There are No Truck signs in Clifford Street which could be enforced by the Police.
- Jervois Street between Carlton Parade and North Parade also has 4.1% commercial vehicles. There are No Truck signs in this street which could be enforced by the Police.
- Northcote Street and Danby Street between Henley Beach Road and Carlton Parade have a percentage of commercial vehicles of 5.1% and 5.2% respectively. This is likely due to the low volume of traffic and the Henley Beach Road district zone.

The following observations are made in regards to the traffic data collected on commercial vehicles in the Torrensville area:

- West Thebarton Road has 10.4% of commercial vehicles. This is not considered unreasonable as this is a major collector road which can carry up to 10% commercial vehicles.
- Bennett Street has 327vpd with 5.3% of these being commercial vehicles (17 in total), Osman Place has 111vpd with 24.6% of these being commercial vehicles (27 in total) and Dew Street between Osman Place and West Thebarton Road has 619vpd with 4.2% of these being commercial vehicles (26 in total). These streets are in an industrial area, hence the volume of commercial vehicles is not considered unreasonable.
- James Street has 5.2% commercial vehicles, Smith Street (between Holland Street and Cawthorne Street) has 4.6% commercial vehicles, Holland Street (between Light Terrace and Smith Street) has 5.4% commercial vehicles and Kintore Street (South Road to Dew Street) has 5.5% commercial vehicles. The installation of No Truck signs could be used in these residential zones to address the percentage of commercial vehicle being over the recommended 4%.
- Maria Street to the west of Port Road and Albert Street (between George Street and Maria Street) has 4.3% and 4.2% commercial vehicles. The sites are in the industrial zone where commercial vehicles access businesses and thus are not considered unreasonable.
- Kintore Street and Goodenough Street to the west of Port Road have the following percentage of commercial vehicles being 8.9% and 5.0%. The traffic counters for these sites were located near Port Road in the industrial zone. If there is intrusion into the residential zone by trucks this could also be addressed by the installation of No Truck signs in the residential areas.
- Walsh Street (Phillips Street to Smith Street) and Smith Street (Walsh Street and Port Road) the percentage of commercial vehicles are high, being 16.2% and 8.2% respectively. These streets are in an industrial zone and service Coca-Cola hence the high use by commercial vehicles. It is proposed to make this section of Walsh Street a secondary freight route due to the changes that occurred to the network when the Coast to Coast tram line was installed along Port Road. These streets are also B Double routes.
- Light Terrace (Port Road to Albert Street) and Albert Street (Light Terrace to George Street) have 6.1% and 9.4% commercial vehicles receptivity. Due to the banning of the right turn movement at George Street onto Port Road and the installation of traffic lights at Port Road / Light Terrace, vehicles from the north now access the area via the above route and it is proposed to make this a secondary freight route.
- Light Terrace (Albert Street to Dew Street) has 4.1% commercial vehicle. This section of Light Terrace is zoned residential on the northern side and industrial on the southern hence the percentage of commercial vehicles is not unreasonable.
- Cawthorne Street (Smith Street to Light Terrace) has 8.4% commercial vehicles. The west side of the street is residential and the east side of the street is industrial being the back of the Coca-Cola premises. There are no driveways into the Coca-Cola premises on Cawthorne Street and thus no need for commercial vehicles to use the street. Commercial vehicles in the area should use Albert Street / Light Terrace and Walsh Street / Smith Street. It could therefore be possible to ban commercial vehicles using Cawthorne Street (Smith Street to Light Terrace), through the installation of No Truck signs.

- Walsh Street (Phillips Street to Port Road) has 11.9% commercial vehicles and Anderson Street (Walsh Street to Port Road) has 12.1% commercial vehicles. This is likely due to commercial vehicles accessing SA Brewery and other businesses in the street. This is not considered unreasonable given that it is in an industrial zone and forms part of the secondary freight route.

3.4. Crash Data

The crash data for the LATM area was obtained from the most recent State Government information for State and National Black Spot funding. Submissions for Black Spot funding can be obtained either through a road safety audit or if there have been three or more injury crashes at an intersection. Council reviews the crash data annually and submits State and National Black Spot funding applications where applicable.

The crash data shows the injury and fatality crashes within the LATM area. The crash data is over a five year period between 2008 and 2012 (inclusive) and is shown in **Appendix C – Data Maps**.

The crash data shows that between 2008 and 2012 there were no fatalities within the Torrensville and Thebarton area. There were a large majority of injury crashes on the arterial roads, which is not unexpected given the high traffic volumes on these roads. The arterial roads fall under the care and control of the State Government, who are responsible for reviewing the crash data. This LATM scheme will focus on the crashes on Council roads. Within the Torrensville and Thebarton area there were a number of single incident injury crashes over the 5 year period. This is not considered unreasonable however these locations continue to be monitored. Locations where there were two or more injury crashes are examined below.

In the Torrensville area, the following detailed crash information is provided and these locations will be reviewed as part of the LATM scheme:

- Hayward Avenue and Carlton Parade intersection - three injury crashes.
These crashes were all right angle crashes, with vehicle heading west not giving way to vehicle heading north. One of the crashes involved a cyclist heading west.
- Hardys Road and Ashley Street intersection - two injury crashes.
These crashes were both right angle crashes, with vehicle heading north not giving way to vehicle heading west. One of the crashes also involved a vehicle heading east.
- North Parade and West Street intersection – two injury crashes.
These crashes were both right angle crashes, with vehicle heading south not giving way to vehicle heading west.
- Sherriff Street and Norman Street intersection – two injury crashes.
These crashes were both right angle crashes, with vehicle heading south not giving way to vehicle heading west.

In the Thebarton area, the following detailed crash information is provided and these locations will be reviewed as part of the LATM scheme:

- George Street and Dew Street intersection – five injury crashes.
Three of the injury crashes were right angle crashes, with vehicles heading north not giving way to either vehicles heading east (two) or west (one). One crash was a right angle crash with vehicle heading south not giving way to vehicle heading west. The other crash was a rear end from vehicles heading west.

- Phillips Street and West Thebarton Road – four injury crashes.
Two head on crashes, one rear end crash with vehicles heading west and one pedestrian hit heading south by vehicle heading east.
- Phillips Street and Holland Street intersection - two injury crashes.
These crashes both involved a cyclist heading south, colliding with a vehicle heading west.
- Rose Street and Parker Street intersection - the two injury crashes.
These crashes both involved a cyclist heading north colliding with vehicle heading east.

4. Pedestrian Facilities

4.1. Infrastructure

Under the Disability Discrimination Act (DDA) 1992 it is a requirement that there is a footpath on one side of all roads, for the safety and accessibility of pedestrians. Local and major collector roads should have a footpath on both sides of the road for the safety of pedestrians.

As part of Council's asset management plans, the construction of new footpaths based on the requirements above were prioritised on four criteria being the hierarchy of the road, the existing condition of the footpath, the surrounding land use and proximity to pedestrian generators. The installation of new footpaths was adopted by Council as part of the Footpath Infrastructure Asset Management Plan 2012.

In the Thebarton and Torrensville area new footpaths are planned to be installed at the following locations:

- Eastern side of Hayward Avenue north of Ashwin Parade
- Eastern side of Holland Street north of Phillips Street.
- Western side of Queens Street

In the Thebarton area some laneways do not have footpaths as the road widths are too narrow to accommodate a footpath.

In Torrensville at the intersection of Ashley Street and Sherriff Street the footpath on the north-east side is approximately 1m wide which is not wide enough to provide a pram ramp. The footpath on the north-west side is on private property. This should be addressed so that pedestrians can safely cross at this intersection.

4.2. Pedestrian Generators

The primary and high schools within the study area are one of the main pedestrian generators. The infrastructure that is currently located at the schools is listed below:

- Torrensville Primary School – emu crossing in North Parade
- Thebarton Senior College – driveway links to slow traffic down in East Street
- St George Junior and Senior College – pedestrian island in Rose Street, roundabout at Rose Street / Dew Street and emu crossing in Dew Street
- Temple Christian College – emu crossing in Henley Beach Road slip lane

Other large pedestrian generators in the study area include Child Care Centres, the Henley Beach Road district centre, Foodland supermarket in George Street / Dew Street, children's playground particular the one opposite Danby Street, reserves and the River Torrens shared use path.

Within the study area the Linear Park shared use path runs along the River Torrens in the Torrensville area. The section of the Linear Park on the southern side of the river is under the care and control of the City of West Torrens. The City of Charles Sturt is responsible for the path on the northern side of the river. Council has and is continuously maintaining and improving this significant recreational facility.

4.3. Henley Beach Road

While Henley Beach Road is a road under the control and management of the State Government, Council has approached them to consider ways to manage pedestrian and traffic conflicts within the district centre zone from Hayward Avenue to South Road.

This shopping zone section of Henley Beach Road operates in such a way whereby pedestrians cross over a wide area, between places that they wish to visit, often outside of designated crossing points such as pedestrian signals. Due to the level difference between the eastbound and westbound lanes and the narrow width of the central median, there is a relatively steep slope in the central median surface. The protection afforded to pedestrians waiting in the central median is therefore far less than in other main roads, where the central median is much wider and generally flat.

In February 2010 Council resolved that the administration seek further discussions with the State Government to reduce the speed limit of Henley Beach Road between Hayward Avenue and South Road (extent of the DCE) from 60 km/hr to 50 km/hr.

The reduction in speed would improve pedestrian safety. It is viewed that the reduction in speeds would have little impact on traffic flow along Henley Beach Road. The reduction in speed limit would also assist drivers negotiate the narrow kerbside lane when cars are parked along Henley Beach Road and thus reduce the number of side swipes to parked cars and rear end crashes.

4.4. Behaviour Change

The State Government undertakes a variety of programs with the support of local Councils to encourage people to walk, cycle or use public transport to reduce car use. Such programs include TravelSmart and WAY2GO.

TravelSmart helps people explore and assess their transport option with the aim of reducing car use. Grants are available to businesses to encourage alternative modes of travel. The State Government has previously undertaken household programs in which a representative contacts and works with the household to reduce their car use.

The WAY2GO schools program looks at infrastructure issues at primary schools and encourages more active travel modes such as cycling and walking. As part of the program Council has installed school emu crossings and reviewed the parking and traffic management around schools. The State Government works with the schools to encourage students and thus parents to reduce their car usage.

5. Cycling Facilities

5.1. *Bikedirect* network

The City of West Torrens Strategic Bicycle Plan was adopted by Council in 2007. The plan provides a framework for the development and improvements of cycling routes within the City of West Torrens. A number of cycling routes are identified within this LATM study area and are part of the *Bikedirect* network.

Bikedirect is a network of bicycle routes across the Adelaide metropolitan area that was developed to encourage cycling. The *Bikedirect* maps provide options for people with different needs and abilities and show main roads, bicycle lanes, local streets and off-road paths. The *Bikedirect* network within the Torrensville and Thebarton area is shown in Figure 13 and in **Appendix C – Data Maps**.

Within the Torrensville and Thebarton area Ashwin Parade, West Thebarton Road / Phillips Street, Clifford Street, Holland Street, Albert Street, Parker Street and George Street (Parker Street to Port Road) are classed as secondary roads for cyclists. These roads are convenient connections for cyclists to the main roads and /or shared use paths.

Ashwin Parade has a part time bike lane on the northern side and a wide shoulder on the southern side of the road. West Thebarton Road / Phillips Street have bike lanes on both sides of the road. Clifford Street, Holland Street, Albert Street, Parker Street and George Street (Parker Street to Port Road) have no bike lanes but should provide reasonable cycling conditions to connect to bike lanes and/or shared use paths.

Due to the traffic changes in the Thebarton area from the Coast to Coast tram line along Port Road, it is proposed that the *Bikedirect* routes in the Thebarton area be re-assessed. In particular, Albert Street between Light Terrace and George Street route should be assessed as this is proposed to become a secondary freight route.

5.2. River Torrens Linear Park

The River Torrens Linear Park within the City of West Torrens runs along the southern side of the river and terminates on Ashwin Parade on the western side of the Brickworks. The southern path is disjointed on some sections but does provide good cycling and pedestrian facilities for local trips. Near Chatswood Grove and Holland Street, there are bridges to allow cyclists to cross between the two sides of the river. Holland Street bridge is currently closed and under review for reconstruction.

The northern side of the River Torrens Linear Park is the main cycling route, which is within the City of Charles Sturt. Grade separation is provided on the northern path at major crossing points of Holbrooks Road, South Road and Port Road.

Within the Strategic Bicycle Plan (2007) it was recommended that a detailed investigation of options for upgrading the shared use path at the rear of the Brickworks to Hardys Road be undertaken. This recommendation was driven by Ashwin Parade being reconstructed and the previous bicycle lanes on the road being replaced with a part-time bike lane on the northern side during peak hours and a wide kerbside lane on the southern side.

The current path along the southern side of the River Torrens is characterised by narrow widths on sections due to property boundaries and embankments. A suspended deck would likely be required to widen the path. Another option is to provide a new bridge crossing where the current weir is located to the west of the Brickworks site to allow cyclists and pedestrians to cross to the northern side of the river. Alternatively, as existing properties that back onto the

river are redeveloped additional land from these redevelopments are secured to provide a wider path in the future.

This last option is being used to hopefully secure land between Hardys Road and the existing shared use path in Chatswood Grove, Underdale. At present there is a pedestrian only path due to width constraints. The additional land secured by Council will enable the path to be widened and become a shared use path for cyclists and pedestrians. Council has received State Government Bicycle Funding for two-third of the cost of this project.

5.3. Arterial Roads and Reserves

Council has also constructed shared use paths around the Kings Park Reserve when it was redeveloped, thus linking Ashwin Parade with Ashley Street. A refuge island was located on Ashwin Parade to link Kings Reserve to the River Torrens Linear Park.

Adjacent to Port Road there is a shared use path which connects to the River Torrens Linear Park (northern side), Henley Beach Road via the Urban Forrest and the City of Adelaide. This path is under the care and control of the City of Adelaide. Along Port Road and James Congdon Drive there are permanent bike lanes on these roads.

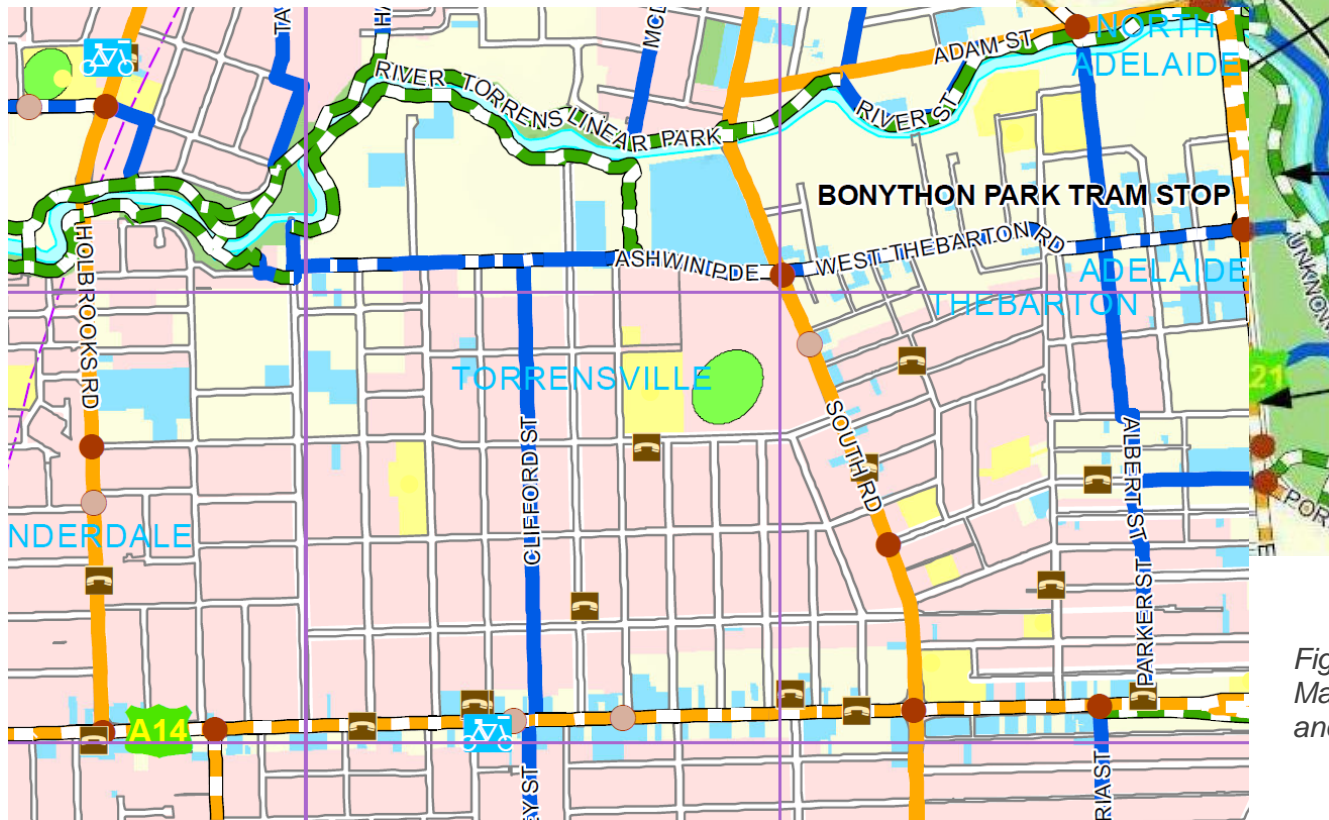
Henley Beach Road has part time bike lanes to cater for peak cycling flows into and out of the City of Adelaide which coincide with the Clearway times. On the northern side the bike lanes operate between 7.30am to 9.30am, Monday to Friday and on the southern side the bike lanes operate between 4pm and 6pm, Monday to Friday. However, on the northern side there is no Bike Lane between Danby Street and South Road and on the southern side between Falcon Avenue and South Road, due to intersection constraint at South Road / Henley Beach Road intersection. On the northern side between South Road and Parker Street there is no bike lane due to road width constraints. The State Government is responsible for these bike lanes and ensuring that there is a continuous bike lane where possible.

5.4. Behaviour Change

To encourage people to cycle within our community and to stop at our local facilities, Council has been installing bike racks on footpaths at strategic locations where there is sufficient room. Bike racks have recently been installed on the majority of side roads along Henley Beach Road within the district centre.

One of the main concerns generally raised by cyclists and pedestrians alike are conflicts between the two groups on shared use paths. The Australian Road Rules (under the Road Traffic Act 1961), rule 250 (2) states that “the rider of a bicycle riding on a footpath or shared path must: (a) keep to the left of the footpath or shared path unless it is impracticable to do so; and (b) give way to any pedestrian on the footpath or shared path.” It is also considered reasonable to expect pedestrians to keep to the left and allow cyclists to pass.

Bikedirect May 2012



Secondary roads generally have light to medium traffic. They are convenient for cyclists, as many run parallel to and connect with main roads. Traffic conditions may vary and cyclists should be aware of this.

Local roads are not part of the Bikedirect network however cyclists may find ideal cycling conditions on these roads.

Many **off road paths** with both sealed and unsealed surfaces are shared with pedestrians, so special care must be taken.

Main **arterial roads** carry heavy volumes of traffic at most times with many having major intersections. Many are signed with the alphanumeric route numbering system, which is also shown on the Bikedirect maps.

Figure 13 – Bikedirect Map for the Torrensville and Thebarton area

6. Public Transport Facilities

6.1. Bus Routes

The main east-west bus route is along Henley Beach Road, which is classed as a Go Zone for peak hour travel. The other bus routes in the Torrensville and Thebarton area are shown in Figure 14 and include Holbrooks Road, Ashley Street, South Road, West Thebarton Road / Phillips Street, George Street and Port Road.

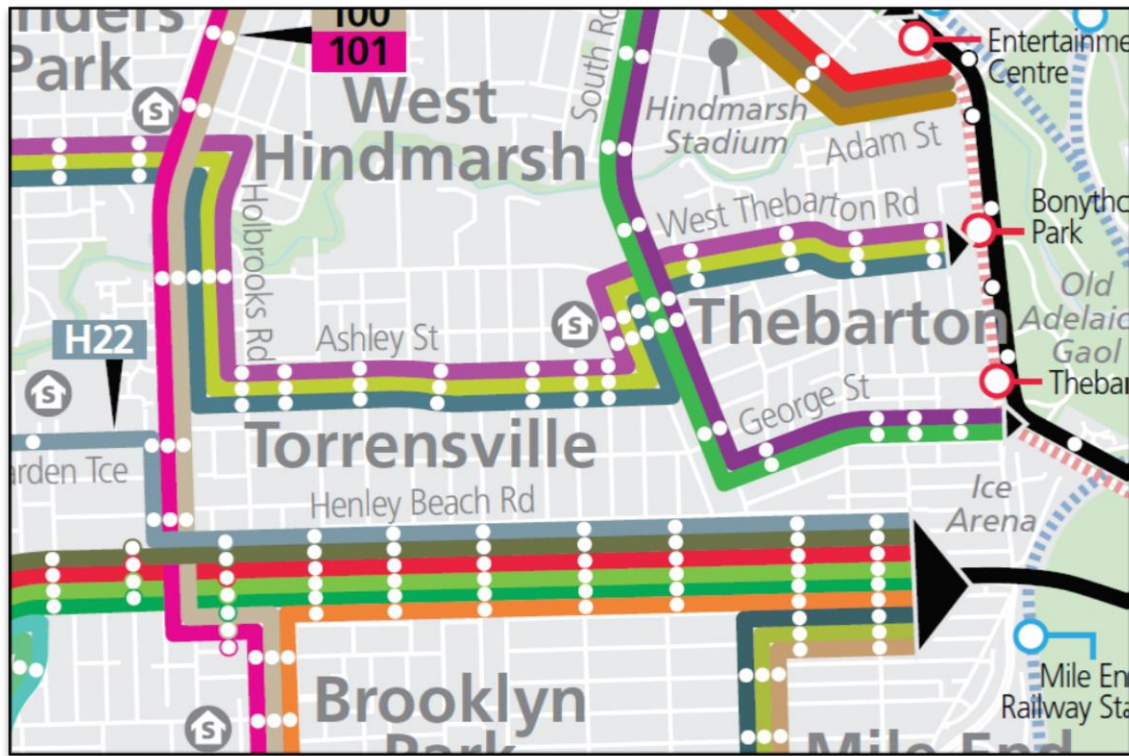


Figure 14 – Adelaide Metro Network Map 2014

The design of traffic control devices on local streets which form part of a bus route need to accommodate a normal bus plus consideration given to the infrequent articulated bus.

Ashley Street has been a bus route prior to the road closures (buses excepted) in the 1980s. When the road closures occurred the Public Transport Division was consulted and Ashley Street was required as a bus route to service the Torrensville area. Due to the development of the Brickworks site, there is the possibility that buses may divert to Ashwin Parade instead of using Ashley Street in future.

In Meyer Street east of Jervois Street and in East Street between Ashwin Parade and Ashley Street there are bus restrictions for buses greater than 7m. These restrictions were put in place due to a Council resolution in 2013, following concerns from the Thebarton Aquatic Centre about large buses not being able to safely turn at the end of Meyer Street. The restrictions allow small buses to be able to still access the centre. Large buses are catered for at a bus stop on the northern side of Ashley Street near the Thebarton Senior College and access to the centre is through the Thebarton Senior College.

6.2. Tram Routes

The Thebarton area has the tram line that runs along Port Road from the Adelaide Entertainment Centre into the City of Adelaide (Coast to Coast Light Rail Stage 2) and onto Glenelg. The vision for the tram line is that it will connect onto West Lakes, Port Adelaide and Semaphore. The section of tram line on Port Road between the Adelaide Entertainment Centre and the City of Adelaide was undertaken in 2009 and opened for full scheduled services in March 2010. The project includes a 'Park and Ride' facility at the Adelaide Entertainment Centre which provides an alternative to driving and parking in the City. To facilitate the Park and Ride, the tram has been made free for all users between the Adelaide Entertainment Centre and the City of Adelaide.

The State Government draft *Integrated Transport and Land Use Plan* proposes new tram network to the Henley Beach via Henley Breach Road with a link to the airport via Airport Road.

6.3. Bus Stops and Shelters

The Disability Discrimination Act 1992 (DDA) requires that all public transportation stops are constructed in a manner that meets the DDA requirements and the relevant Australian Standards by 2022. This means that all buses must have a hardstand area, ground surface indicators, adequate width for a wheel chair and connect to a footpath. Also, bus stop seats and shelters must comply too. The City of West Torrens is currently undertaking an audit of all our bus stops to ensure that the above requirements are met.

The installation of new bus shelters is the responsibility of the State Government. Council has a Memorandum of Understanding (MOU) with the State Government in which they supply the shelter and Council installs and undertakes any ground works to make the stop DDA compliant. The current MOU is for 7 shelters per year from 2010 to 2014 and it is envisaged that this MOU will be extended. Bus stops and shelters in the Torrensville and Thebarton area will be upgraded where appropriate through this ongoing program.

6.4. Behaviour Change

To encourage the use of public transport and thus reduce car use, there are Travel Demand Management (TDM) programs in place. TDM is aimed at modifying travel behaviour to reduce or redistribute travel demand and improve the utilisation of existing resources. TDM initiatives include reducing single-occupant car use and encouraging more sustainable transport choices to meet travel needs. Hence, TDM not only includes the use of public transport but also walking, cycling, carpooling or working from home.

The State Government undertakes a variety of TDM programs with the support of local Councils. TDM measures include:

- Educational and awareness campaigns
- Workplace travel plans
- Tele-working opportunities
- Flexible working hours
- Car pooling
- School programs
- Household travel programs
- Intelligent transport systems (ie real time travel information)
- Parking supply measures
- Parking prices

7. Urban Design and Amenity

Torrensville and Thebarton started to be developed in the 1840s and have evolved over time with a mix of commercial, industry and residential developments within the area which are often constrained by narrow streets and limited parking. The urban design and amenity of the area needs to be considered as part of any new traffic or parking management plans and to enhance the area.

West Thebarton Road / Phillips Street is one such street where urban design and amenity is being taken into account. The road pavements are approaching the end of their useful life and the street is due for reconstruction shortly. As part of the reconstruction it is considered opportune, to underground the power lines at the same time. The undergrounding of the power lines would contribute to providing a more consistent road cross section, wider traffic lanes, better defined parking lanes and bicycle lanes and improved landscaping and street scaping along the road which is a major collector road. A funding application to the Power Line Environment Committee (PLEC) has been undertaken regarding undergrounding the power lines.

The Residential / Industrial Interface Study (2013) noted that there was a harsh interface environment between residents and the industrial area along Ashley Street from Holbrooks Road to Stephens Avenue and along Stephens Avenue from Ashley Street to Bray Avenue. Hence, like West Thebarton Road if this road is to be reconstructed then the urban design and amenity should be taken into account.

Street lighting assists in creating an enjoyable urban design and amenity. Street lighting on Council owned streets are generally assessed and upgrades undertaken when a road is reconstructed. The cost of upgrading the street lighting is borne by Council. Minor changes to street lighting are undertaken on a request basis. The installation of lighting on shared use paths has steadily been occurring throughout the City.

Council will be redeveloping the verge area fronting the Urban Forest on James Congdon Drive to improve the urban design and amenity of the area. The works will increase the environmental and biodiversity value of the precinct through extension of the existing Urban Forest landscape pallet into the verge area through the inclusion of Water Sensitive Urban Design (WSUD) installations. The works will include the extension to existing car parking area to cater for the increasing demand for parking in the area.

Urban design and amenity can be used to create vibrant and busy commercial and cafe zones whilst encouraging walking, cycling and public transport. Additionally it can be used to create shared use zones of open community space, pedestrian traffic, cycling facilities and vehicle use. One such example is Bank Street in the City of Adelaide. This sort of treatment could be considered for the high density developments proposed along Port Road and Henley Beach Road.

8. On-Street Parking

Within the Torrensville and Thebarton area there is a limited amount of on-street parking spaces available. The on-street parking within the study area is often shared between the different parking characteristics of the area. For example, during normal business hours the retail and commercial land uses generated high parking demands. During the evening, residents and their visitors generated on-street parking.

As indicated earlier, many of the business and schools in the study area have limited or no off-street parking. These businesses and schools have been operating for many years and have relied on on-street parking. In the study area there are competing parking demands not only generated from residential properties, schools and businesses, but from other users such as commuters parking in the study area and travelling via public transport into Adelaide.

8.1. Parking Permit Policy

In July 2010, the City of West Torrens adopted a new Parking Permit Policy. This policy sets out when residents, community service personnel, trades persons and/or visitors are able to obtain an exemption to park a car in excess of time limited parking controls in an area where the resident lives.

The policy is explained in more detail in Councils information flyer to the community shown in Figure 15. The eligibility criteria for each type of permit are shown below which allows the permit holder to be able to park in Resident Only Zones of a nominated precinct and park beyond the time limit displayed in time limited areas (1P, 2P, 3P) of a nominated precinct.

Residential Parking Permit Criteria:

- be a resident of the City of West Torrens
- nominate a vehicle to which the permit will apply (the vehicle must be registered
- to you at your address or be a work vehicle in private use)
- have no or insufficient space on your premises to park that vehicle
- have genuine difficulty finding parking for that vehicle close to your premises
- not exceed the maximum limit of two permits per residence.

Community Service Parking Permit (ie. a carer) Criteria:

- the client is a resident of the City of West Torrens
- the applicant is a registered / legitimate carer
- the vehicle is registered to the carer.

Temporary Parking Permits (ie. visitors, contractors or resident vehicle when your usual off-street parking space is temporarily unavailable due to building renovations) Criteria:

- be a resident of the City of West Torrens
- nominate a vehicle to which the permit will apply
- provide details of the vehicle registration and period for which the temporary permit is sought
- have genuine difficulties finding parking for that vehicle close to your premises
- provide sufficient information to explain why the vehicle cannot be physically accommodated on-site for the temporary period
- not exceed the maximum limit of two permits per residence.

Each resident has the opportunity to purchase a booklet of 12 visitor vouchers to be used in a calendar year. Each voucher is valid for a full day from the restrictions on parking in 1P, 2P and 3P areas in a resident's precinct.

Visitor Vouchers Criteria:

- be a resident of the City of West Torrens
- submit your form along with proof of residence (see below)
- agree to the conditions of use.



parking permits

Council's parking permit scheme

In July 2010, the City of West Torrens adopted a new Parking Permit Policy. This policy provides you with a number of options to help meet your parking needs and those of any visitors, tradespeople or carers who need to park close to your home.



More places to park

With a residential parking permit you can park in the 'resident only' zones and overstay the posted time limit in 1P, 2P and 3P areas, providing you with a number of options.

Parking permits apply to precincts, not individual streets, so you can park 'around the corner' which may be closer to your house than the end of your street.

Parking for everyone

A maximum limit of two residential parking permits per residence has been set. This is a fair way of sharing kerbside space now that our streets are becoming more congested and competition for parking is increasing. The scheme also plans ahead for areas where the demand is so high they are becoming 'saturated'.

Caring for our residents

Residents who need regular care will be assisted by the scheme of community service permits. Carers (including registered carers, volunteers and family members) can

apply for a permit for the precinct(s) where they provide support. Conditions apply.

When you have someone staying

When you have a visitor from overseas, interstate or from the country who is staying for a length of time, it can be difficult to find a park near you. You can apply for a temporary parking permit for the precinct in which you live.

When you renovate

When you renovate, parking can also prove difficult. This is another time you may qualify for a temporary parking permit – for either your own vehicle because your on site parking is not available, or for your builder's vehicle who will be in regular attendance at your property.

When you need a tradesperson

If you need a tradesperson for a short period to provide essential services or deliveries to your property and parking on site is not possible or practical, they can seek a temporary exemption. Provided your tradesperson

telephones Council (at least) a day before the work is scheduled, they will be able to park their vehicle for up to two days contrary to the time limits of loading zones and 1P, 2P and 3P areas in your street. (A further phone call is required if they need longer.)

When you entertain

Entertaining friends, visitors and relatives can be difficult when parking is limited in your street. Generally most time restrictions in residential streets do not apply during weekends and at night when many residents entertain. However, residents also have the opportunity to apply for a booklet of visitor vouchers to be used in a calendar year. Each voucher will be valid for a vehicle to be exempted for a full day from the restrictions in 1P, 2P and 3P areas in your precinct. If you would like further information on residential, temporary and community service permits or tradespersons exemptions and visitors vouchers, you can visit Council's website, www.wtcc.sa.gov.au or phone 8416 6333.

The City of West Torrens / A: 165 Sir Donald Bradman Drive, Hilton 5033 / P: (08) 8416 6333 / F: (08) 8443 5709
E: csu@wtcc.sa.gov.au / W: westtorrens.sa.gov.au



Figure 15 – Parking Permit Information

8.2. Narrow Roads

Under the Australian Road Rules, a 3m wide lane must be available for traffic access. Streets which are narrower than 7.6m are not able to accommodate parking on both sides of the road. If the street is less than 6m wide then parking may need to be prohibited on both sides of the road.

Within the Torrensville and Thebarton area, there are a number of narrow roads / laneways which are below 7.6m wide. A review of the parking controls in these streets should be undertaken. The table below shows the streets that are less than 7.6m wide.

In March 2010 a petition was received by Council due to concerns from residents over the width of Maria Street not being able to accommodate parking and two way traffic. Council resolved that as part of the LATM scheme, the possibility of making Maria Street one way to be investigated.

Table 10 - Narrow Roads within the Torrensville and Thebarton Area

Asset ID #	Road Description	Suburb	Length	Width
1608	Admella St (George St to End)	Thebarton	47.02	6.2
1609	Admella St (Light Tce to End)	Thebarton	42.21	3.4
1628	Albert St (Maria St to Kintore St)	Thebarton	70.08	5.6
1757	Ballantyne St (Dew St to Brown St)	Thebarton	264.0	5.0
1758	Ballantyne St (Brown St to Lowe St)	Thebarton	88.99	5.0
1844	Ballantyne St (Lowe St to South Rd)	Thebarton	201.0	5.4
1785	Bennett St (South Rd to Brown St)	Thebarton	282.18	5.55
2214	Dalglish St (End to West Thebarton Rd)	Thebarton	188.26	6.05
87430	Harley Pearson Lane	Thebarton	175.0	4.0
2702	Kintore L (South Rd to User Ch 250)	Mile End	249.85	4.4
2703	Kintore L (User Ch 250 to Dew St)	Mile End	76.82	4.4
2828	Lowe St (Ballantyne St to Bennett St)	Thebarton	82.13	5.2
2829	Lowe St (Bennett St to West Thebarton Rd)	Thebarton	100.02	5.9
2954	Maria St (James Congdon Dr to User Ch 110)	Thebarton	108.11	4.8
2955	Maria St (User Ch 110 to Albert St)	Thebarton	200.72	5.3
2956	Maria St (Albert St to Dew St)	Thebarton	191.52	4.8
25703	Moore Lane	Thebarton	61.05	5.0
3426	Neville Road (Walter St to Ballantyne St)	Thebarton	56.80	3.2
3435	Northcote St (Carlton Pde to North Pde)	Torrensville	200.04	5.7
3093	Pearson Street	Thebarton	130.99	5.3
3209	Queen Street	Thebarton	271.11	5.1
3325	Reid Street	Thebarton	91.14	2.7
3580	Ronald Street	Thebarton	114.02	5.0
3581	Rose Lane	Mile End	179.76	4.9
3294	Taylors L (James Congdon Dr to User Ch 250)	Mile End	249.85	5.6
3295	Taylors L (User Ch 250 to Parker St)	Mile End	73.97	5.6
3296	Taylors L (Parker St to Dew St)	Mile End	188.11	5.4
3380	Taylors L (Dew St to User Ch 190)	Mile End	189.48	5.4

8.3. Existing Parking Controls in Torrensville

The existing parking controls in the Torrensville area are shown in **Appendix B – Current Parking Controls**. The parking controls have been put in place to either provide a safe environment for vehicles to be able to travel along the road through No Stopping controls or parking zones such as 1hour parking, to provide access for residents and/or patrons to businesses to be able to park in the street. The appendix also shows the bus zones, no parking restrictions (ie for football events at Thebarton oval), restricted zones (ie loading zones and taxi zones) and permit zones (ie disabled parking zones).

One of the outcomes of the Transport Strategy was the recommendation to instigate area-wide parking reviews for the five key areas identified and to formulate parking measures on a strategic level for each of these areas. The Torrensville Distinct Centre (DCe) is one of these five key areas for investigation. A report was presented to Council in April 2010, outlining the extensive parking study undertaken for the Torrensville Distinct Centre.

The quantification of the parking demands and the extensive surveys undertaken as part of the study have shown that:

- There is good compliance with the existing parking controls that are present, therefore a recommendation to increase parking enforcement from what Council is currently doing, does not appear to be necessary.
- When considered as a whole area, there is spare capacity available in off-street car parks and on-street parking, such that the “juggling” between residential parking demand and non-residential parking demand through the use of parking controls does not appear to be warranted at present. However, it is acknowledged that from time to time, there would be requests from residents to implement or amend parking controls to address impacts of parking intrusion from the DCe and these would be dealt with in accordance with the process outlined in Section 8.1 of the Transport Strategy.

Since the report was undertaken there appears to be a slight increase in the number of commuters parking near Henley Beach Road, probably to access the bus into Adelaide City.

Within the Torrensville area there are a few locations where business parking is overflowing into residential streets such as Stephens Avenue and Hayward Avenue. At these locations, if requested by the residents, then a review of the current parking demand and controls should occur and time limited parking possibly put in place.

Around the Thebarton Oval parking controls have been put in place to provide a safe environment and two way traffic flow when football matches are held. Parking is prohibited in certain streets close to the oval when football matches occur.

The Thebarton Senior College and Aquatic Centre generate a reasonable amount of on-street parking in the area, as there is limited on-site parking for vehicles. Time limited parking has been put in place to provide turnover of vehicle for the college and aquatic centre and enable residents to be able to park in their street for the time indicated on the parking sign.

Torrensville Primary School is located within the Torrensville area. There are limited parking restrictions in the street, as there is a reasonable amount of on-street parking outside the school gates in Hayward Avenue which is also a cul-de-sac and thus provides a safe environment for the children to be picked up and dropped off.

Disabled zones have been provided at a few locations in the study area on-street. These zones are located on the side roads off Henley Beach Road and provide access for people with a disability permit to be able to park in close proximity to the businesses in the district zone on

Henley Beach Road. However, the zones do not comply with the current standards and it would be beneficial to renew the zone to the current standard.

Bicycle lanes and clearways are located within the study area, in particular on Henley Beach Road and South Road. These existing controls provide a balance of parking for shops and business along Henley Beach Road as well as clearance for vehicular traffic in peak periods.

8.4. Existing Parking Controls in Thebarton

The existing parking controls in the Thebarton area are in **Appendix B – Current Parking Controls**. The parking controls have been put in place to either provide a safe environment for vehicles to be able to travel along the road though No Stopping controls or parking zones such as 1 hour parking, to provide access for residents and/or patrons to businesses to be able to park in the street. The appendix also shows the bus zones, no parking restrictions (ie school drop off and pick up areas), restricted zones (ie loading zones) and permit zones.

Time limited parking controls are mainly located adjacent to Henley Beach Road and Port Road where there is overspill from businesses or commuter parking. The time limit parking controls have been put in place to prevent vehicles parking all day in the street. This allows residents, visitors and customers to businesses to be able to park on-street for the time indicated.

The extension of the tram line along Port Road has increased commuter parking in the Thebarton area mainly adjacent to Port Road, along with the construction of the Royal Adelaide Hospital (RAH) and South Australian Medical Research Institute (SAMRI) Developments. It is unlikely that when the RAH and SAMRI construction is finished that commuter parking will decrease, as this will likely be replaced by staff and visitors of the RAH and SAMRI.

Adjacent to Henley Beach Road there are significant time limited parking controls in place to prevent all day parking in the street from businesses and commuters, probably catching the bus or walking into Adelaide City.

To assist in providing parking to all residents and businesses in the area, further time limited parking controls maybe required. A review of the current parking demand and controls should occur and time limited parking control put in place where requested and supported by the majority of residents and businesses affected.

To lessen the number of commuters parking in the Thebarton area who may be catching the free tram along Port Road into the City, it is proposed that Council request the State Government to charge patrons for the tram except if they park at the Adelaide Entertainment Centre. This would still enable the Park and Ride facility to occur without commuters parking in the Thebarton area.

Within the Thebarton area, major events are held at Bonython Park. Parking and traffic management plans are put in place for these events to assist in reducing the impact on the local community.

There are two schools within the Thebarton area being St George Junior and Senior College in Rose Street and Temple Christian College at the corner of Henley Beach Road and James Congdon Drive. Temple Christian College has limited parking on-site and thus leases a section of the car park on the eastern side of James Congdon Drive to reduce its parking impact in the area.

Both schools have drop off and pick up zones outside their schools that operate during the start and end of the school day. These zones allow a large number of vehicles to be able to drop off or pick up patrons without taking up valuable parking spaces.

9. Site Investigations

At the beginning of the study, all roads in the study area were reviewed and driven by a vehicle with specific locations investigated further on foot. Issues that were identified during the site inspections were noted below and will be undertaken as part of Councils generally maintenance and administration work.

Further site inspections and investigations will be undertaken as part of the results from the community consultation and when investigating solutions to issues.

Torrensville

Line marking (and rumble bars if applicable) to be renewed at the following intersections:

- Ashley St and Sherriff St
- Ashley St and Hardys Rd
- Ashley St and Hayward Ave
- Ashley St and Clifford St
- Ashley St and Jervois St
- North Pde and West St
- North Pde and Jervois St
- Carlton Pde and East St
- Norman St and Sherriff St
- Norman St and Pearse St
- Golden Glow Ave and Sherriff St

Line marking (and rubble bars if applicable) to be renewed at the following locations:

- River Torrens shared use path alongside River Rd
- Ashwin Parade between Hardys Road and East St
- West St, Clifford St, Jervois St and East St at Ashwin Pde (islands)
- North Pde between East St and Danby St, parking bays
- Sherriff St on either side of Armour Ave
- Wilford Ave at both intersections
- Stephens Ave at Ashley St intersection
- Hayward Ave between Ashley St and Meyer St (note- school zone not to be renewed as it has been blacked out previously)
- Bray Ave at intersection with Hayward Ave
- Meyer St at intersection with Hayward Ave
- Clifford St on either side of Meyer St
- Shipster St at intersection with Ashley St
- Wainhouse Ave at intersection with Ashley St and North Parade
- East St between Meyer St and Ashley St (island)

Rubble bars to be renewed at the following locations (line marking adequate):

- Hardys Rd just to south of Ashwin Parade
- Herbert Ave at Hayward Ave intersection

Signage to be renewed at following locations:

- Hazard Marker signs – northern end of Hardys Rd; southern side of Stephens Ave and Ashley St; southern side of Hayward Ave and Ashley St, East St island between Meyer St and Ashley St; intersection of East St and North Pde
- Keep Left sign – Clifford St at intersection with Ashwin Pde
- No Entry sign – Ashley St to west of West St
- No Through Road, On Side Road sign– West St north of Ashley St, replace with No Right Hand sign

- Slow Point sign - Hardys Rd west side, north of Henley Beach Rd
- Wheel Chair sign – Hayward Ave at intersection with Ashwin Pde, replace with pedestrian and cycling sign

Sight distance at corner blocks:

- Intersection of Jervois St and Ashwin Pde, over hanging tree on north-east property blocking sight distance
- Intersection of Jervois St and Henley Beach Road restricted due to outside dining barrier at Royal Hotel
- Intersection of West Street and Henley Beach Road restricted due to parking on Henley Beach Road

Other:

- North Parade between East Street and Danby Street, trees on road within parking area and not protected by kerb.

Thebarton

Line marking (and rubble bars if applicable) to be renewed at the following intersections:

- George St and Dew St
- George St and Admella St
- Light Tce and Cawthorne St
- Smith St and Holland St
- Kintore St and Dew St
- Parker St and Henley Beach Rd
- Kintore St and Parker St
- Parker St and Maria St
- Maria St and Admella St
- Stirling Street and West Thebarton Road (new)

Line marking (and rubble bars if applicable) to be renewed at the following locations:

- West Thebarton Rd and Phillips St
- Dew St/Light Tce between George St and Albert St
- Dew St at intersection with Dove St
- Dew Street eastern side between Light Tce and Phillips St
- Cawthorne St between Light Tce and Smith St
- Kintore Lane school zone missing the zigzag
- Walsh St, Cawthorne St, Holland St, Stirling St (place centre line) and Ware St, on north side of Phillips St / West Thebarton Rd
- Dove St line marking on speed humps
- Taylors Lane line marking on speed humps
- Goodenough St line marking on speed humps
- Holland St line marking on speed humps
- James St line marking on speed humps
- Ware St line marking on speed humps

Signage to be renewed at following locations:

- Cross Road Ahead signs – on all approaches to intersection of Dew St and Kintore St. Replace with Stop Sign Ahead on Kintore St
- Curve Warning sign – Dew St west side near intersection with Light Tce
- Hazard Marker signs – intersection of Dew St and Rose St; Walter St at intersection with Neville Rd, north-west side
- Keep Left sign – Parker St and Rose St intersection

- School Speed Zone signs – Rose Street north side to east of South Road (review location as behind tree); Dew Street east side near intersection with Light Terrace facing southbound traffic;
- No Entry sign – Ballantyne St at intersection with Brown St, north-east side
- No Through Road signs– Rose Lane north side east of Parker St and Dew St west side south of Dove St
- Speed Hump signs – Taylors Lane, first two signs to east of Parker St; Parker St west side north of Rose St (review location as behind tree); Parker St east side south of Goodenough St (review location as behind tree); Goodenough St north side second hump (review location as behind tree); James St east side south of Smith St, James St east side north of Smith St (raise sign so not behind bush); James St east side to south of Phillips St (turn sign around so facing northbound traffic); Holland St east side south of Phillips St and north of Smith St; Ware St west side south of Weber St
- Speed Humps next 'distance' signs – Goodenough St north side east of Parker St; Holland St east side south of Phillips St and Weber St north side east of South Rd

Gross load limit and No Truck signs to be reviewed:

- Gross Load Limit 5t – Holland St at intersection with Light Tce and Phillips St (south side), Smith St west of Holland St and Smith St west of Cawthorne St along with current No Truck sign
- Blue No Truck signs (non-complaint) - James St at intersection with Phillips St and Smith St (north side) and Smith St at intersection with Dew St

Sight distance at corner blocks:

- Billboard on south- west corner of George St and Dew St restricting sight distance

Other:

- River Road eastern end – no barrier between road and shared use path and shared use path line marking needs renewing

10. Public Consultation

In July 2013 Council circulated a survey to residents, property owners and stakeholders in the Torrensville and Thebarton area asking them to identify their top three transport and parking issues within the study area. A copy of the survey form is shown in **Appendix D – Community Survey**.

The community and stakeholders consultation raised various concerns, issues and opportunities regarding transport and parking management in the Torrensville and Thebarton area. There were just over 5,000 surveys sent out, in which Council received 200 responses from the Torrensville area and 160 responses from the Thebarton area. This is a 7.2% response rate which is considered reasonable as most surveys of this type generally about a 5% to 10% response rate.

The covering letter and survey was sent to stakeholders such as adjoining Council's, relevant Ministers, the State Government Department of Planning, Transport and Infrastructure and educational facilities. No responses were received from the stakeholders.

Issues from the consultation and data collected will be assessed and potential measures developed through the Working Party. The Working Party consists of Ward Councillors and Council staff to guide the LATM plan. This report will then be presented to Council for endorsement.

10.1. Community Issues

The issues raised by the community are all shown in **Appendix E – Summary of Community Issues**. If more than three issues were mentioned in a response then the first three issues were taken.

The issues are divided into traffic management, parking management and pedestrian, cycling, public transport and urban design and amenity tables for the Torrensville and Thebarton areas.

The tables show the issue raised and the location. The location shown is either within an area, along the street or at an intersection. The Torrensville and Thebarton areas have been divided up into smaller precincts, as shown on the maps in **Attachment C – Data Maps**.

If the location in the issues tables is within an area or a street then the second location column is left blank. If the location is at an intersection then the second location column is filled in. The intersections are ordered alphabetically.

The issues are tallied up at the bottom of the tables. Issues that score greater than ten are considered key issues. These key issues form the basis of the recommended plan for the LATM scheme along with the data collected as detailed in this report.

10.2. Key Community Issues

Where 10 or more community responses regarding one issue were received they were deemed as a 'key community issue'. This is summarised below where the number in the bracket relates to the number of responses received regarding the particular issue.

Torrensville Community Issues

Traffic Management

1. Cut through traffic from main roads (45)

2. Ashley Street road closures – close to buses (9), maintain / enforce existing (6), open closures to traffic (17)
3. Speeding (33)
4. Dangerous intersections (13)
5. Commercial vehicles (13)
6. Sight distance at intersections (13)

Pedestrian, Cycling, Public Transport Facilities and Urban Design and Amenity

1. Uneven footpaths often due to tree roots (10)
2. Road needs improving for cyclists (11)

Parking Management

1. Parked cars as road not wide enough (44) with 34 of these responses concerning Henley Beach Road
2. Parking due to surrounding businesses (17)
3. Parking - not enough off-street parks (11)
4. Parking on-street from Thebarton College (11)
5. Parking illegally ie. over driveways, in no stopping zones, too close to intersections, overstaying the time limits or in permit zones (10)
6. Parking not available on-street near property (10)

Thebarton Community Issues

Traffic Management

1. Speeding (42)
2. Cut through traffic from main roads (36)
3. Condition of road and footpaths (19) with 11 of the responses concerning Phillips Street / West Thebarton Road
4. Dangerous intersections (16)
5. Commercial vehicles (13)

Pedestrian, Cycling, Public Transport Facilities and Urban Design and Amenity

1. Holland Street bridge re-open (15)
2. Improve / more pedestrian crossing facilities (15) with 8 of the responses concerning the intersection of Dew Street and George Street
3. Uneven footpaths often due to tree roots (12)

Parking Management

1. Parking due to commuters (44)
2. Parking not available on-street near property (14)
3. Parking due to surrounding businesses (11)
4. Parking exemptions for residents to time limits (10)
5. Parking illegally ie over driveways, in no stopping zones, too close to intersections, overstaying the time limits or in permit zones (10)

It is reasonable for appropriate solutions to be assessed for these key community issues even if there is no warrant necessarily generated by the traffic or parking data collected.

PART 2 – LATM WORKS REQUIRED AND STAGING PLAN

1. Introduction

With Part 1 comprehensively analysing current traffic conditions and concerns of the area, an understanding of where traffic issues are located has been developed.

1.1. Locations for Further Assessment

To address these issues, this study will make a number of recommendations from requesting police enforcement to the installation of physical infrastructure in the form of traffic control devices.

These actions and recommendations for specific streets and intersections are proposed and listed in 2 Torrensville/Underdale and 3 Thebarton/Mile End Solutions and Staging Plan. These locations were selected based on existing traffic data in consideration of the criteria set by the Transport Strategy, community concerns from the consultation period and the expected traffic impact from future developments.

With further investigation, consultation and subsequent action at these streets for assessment, it is envisaged that the LATM objectives will be met for the study area.

1.2. Structure and Separation of Staging Plans

To enable installation of physical infrastructure that requires budget, resources and planning, a staging plan needs to be created.

While there is a significant link of traffic movements between the Torrensville/Underdale and Thebarton/Mile End areas, throughout the analysis period the areas were considered separately for simple information presentation and dissemination. For the purposes of staging solutions, each area was then further separated into smaller sub-areas based on barriers such as major and local collector roads.

These sub-areas were prioritised in each area based on the results of traffic data, community responses and the developments mentioned above. Through this method, when solutions are to be installed in a sub-area, residents and businesses will be consulted in that sub-area for treatments specific to their street while also being provided information of treatments planned for implementation in streets immediate to them.

This method was chosen as opposed to ranking individual streets or treatments as these sub-areas experience similar traffic conditions and residents or businesses in these areas are likely to have an interest in other projects proposed for the immediate area. This method will provide context as to why devices are to be installed or not installed along a particular street and will also allow for easier information dissemination and consultation.

The sub-areas were ranked separately in Torrensville/Underdale and Thebarton/Mile End which will result in two separate implementation lists. It is envisaged that one sub-area from each area is addressed and would form a program for one financial year. This will present Council with clear budgetary requirements for implementation of works while also ensuring that priority issues in both areas are being addressed as soon as possible.

2. Torrensville/Underdale Solutions and Staging Plan

In analysis of the Torrensville and Underdale data and community issues, the area has divided into 5 sub-areas. These areas are shown in Figure 16 and are:

- Sub-Area A - bounded by Ashley Street, South Road, River Torrens and Hardys Road
- Sub-Area B - bounded by Henley Beach Road, Hardys Road, Ashley Street and Holbrooks Road
- Sub-Area C - bounded by Ashley Street, Hardys Road, River Torrens and Holbrooks Road
- Sub-Area D - bounded by Carlton Parade, South Road, Ashley Street and Hardys Road
- Sub-Area E - bounded by Henley Beach Road, South Road, Carlton Parade and Hardys Road

These areas will be staged in this order which is discussed further below.

Sub-area A is the north-eastern portion of the Torrensville/Underdale LATM. The Brickworks development will have a significant impact in this area. The collector roads of Ashwin Parade, Hardys Road (Ashwin Parade to Ashley Street) and Ashley Street (Hardys Road to Holbrooks Road) are the preferred routes to the arterial roads for existing traffic and future Brickworks traffic.

There is significant potential for through traffic and traffic generated by the Brickworks development to flow through the local connecting streets. As a consequence, this sub-area has been accorded a Staging Priority of 1.

Staging priority 1

SUB-AREA A

	Treatment reference
Howie Ave	Series A &/or B
Bray Ave	Series A &/or B
Herbert Ave	Series A &/or B
Stephens Ave (Ashley-Ashwin)	Series A &/or B
Hayward Ave (Ashley-Ashwin)	Series A &/or B
West St (Ashley-Ashwin)	Series A &/or B
Clifford St (Ashley-Ashwin)	Series A &/or B
Jervois St (Ashley-Ashwin)	Series A &/or B
East St (Meyer-Ashwin)	Series A &/or B
Ashley St (Hardys-South)	Series A, C
IS Ashley St/Hardys Rd	Series B

Note: At some locations, the traffic issues may be addressed by intersection treatments (Series B) without having to treat the whole street length (Series A). The appropriate treatment will be considered during the implementation design stage in consultation with the community.

Sub-area B is the south-western portion of the Torrensville/Underdale LATM. In general, the sub-area is subject to through traffic movements between Holbrooks Road and Henley Beach Road/South Road. It is also subject to through traffic movements from drivers avoiding the traffic signals at Ashley Street/Holbrooks Road.

Because of the potentially significant increase in traffic movements that would arise from the Brickworks development, this sub-area has been accorded a Staging Priority of 2.

Staging priority 2

SUB-AREA B

	Treatment reference
Norman St	Series A &/or B
Pearse St	Series A &/or B
Golden Glow Ave	Series A &/or B

Stuckey Ave	Series A &/or B
Sheriff St (Norman-Ashley)	Series A &/or B
North Pde (Sheriff-Hardys)	Series A &/or B
IS Norman St/Sheriff St	Series B
IS Ashley St/Sheriff St	Series B, C

Note: At some locations, the traffic issues may be addressed by intersection treatments (Series B) without having to treat the whole street length (Series A). The appropriate treatment will be considered during the implementation design stage in consultation with the community.

Sub-area C is the north-western portion of the Torrensville/Underdale LATM. In general, the sub-area is subject to through traffic movements, in particular from the Holbrooks Road to Henley Beach Road/South Road direction, from drivers avoiding the traffic signals at Ashley Street/Holbrooks Road.

Because of the potentially significant increase in traffic movements that would arise from the Brickworks development, this sub-area has been accorded a Staging Priority of 3.

Staging priority 3	Treatment reference
SUB-AREA C	
Cranbrook Ave	Series A &/or B
Armour Ave	Series A &/or B

Note: At some locations, the traffic issues may be addressed by intersection treatments (Series B) without having to treat the whole street length (Series A). The appropriate treatment will be considered during the implementation design stage in consultation with the community.

Sub-area D/E lies south of Ashley Street and bounded by South Road and Henley Beach Road. In general, the sub-area is subject to some through traffic movements between Holbrooks Road and Henley Beach Road/South Road. There are also isolated intersection issues present.

Compared to the higher level of traffic issues experienced in other sub-areas, this sub-area has been accorded the lowest Staging Priority of 4.

Staging priority 4	Treatment reference
SUB-AREA D/E	
North Pde (Hayward-Danby)	Series A
Carlton Pde (3 sections)	Series A
Hardys Rd (Henley Beach-Ashley)	Review extg Series A
IS Hayward Ave/Carlton Pde	Series B
IS West St/North Pde	Series B

Note: The appropriate treatment will be considered during the implementation design stage in consultation with the community.

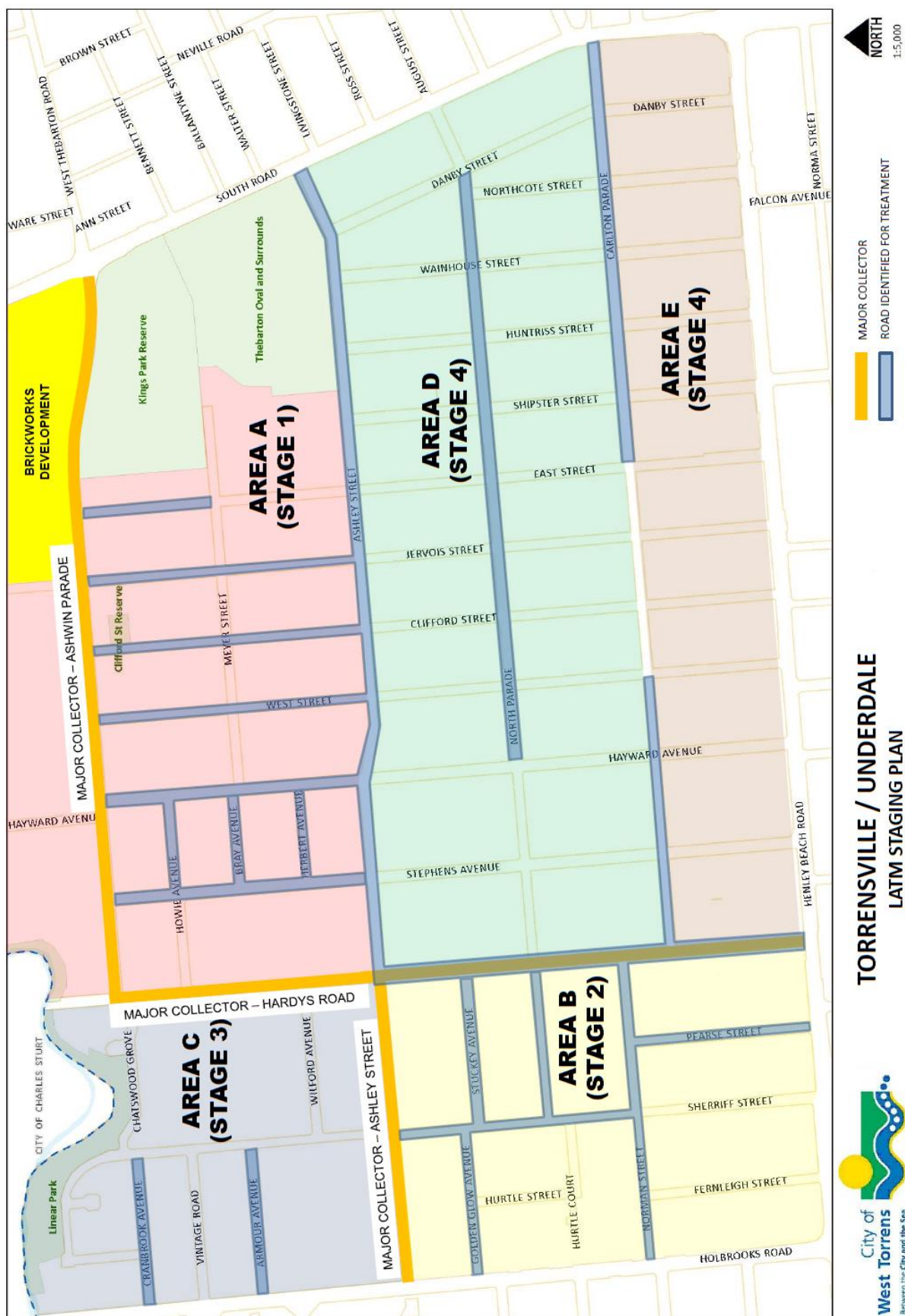


Figure 16 - Torrensville/Underdale LATM Staging Plan

3. Thebarton/Mile End Solutions and Staging Plan

In analysis of the Thebarton and Mile End data and community issues, the area has divided into 5 sub-areas. These areas are shown in Figure 17 and are:

- Sub-Area F - bounded by Kintore Lane, James Congdon Drive, George Street and South Road
- Sub-Area G - bounded by Henley Beach Road, James Congdon Drive, Kintore Lane and South Road
- Sub-Area H - bounded by George Street, Port Road, Phillips Street and Dew Street
- Sub-Area I - bounded by George Street, Dew Street, West Thebarton Road and South Road
- Sub-Area J - bounded by West Thebarton Road/ Phillips Street, Port Road, River Torrens and South Road

These areas will be staged in this order which is discussed further below.

Sub-area F lies between Sub-area F and George Street.

There are a number of intersection issues related to road safety, such as George Street/Dew Street and George Street/Albert Street. Some potential through traffic routes are also present. As a consequence, this has been accorded a Staging Priority of 1.

Staging priority 1	
SUB-AREA F	Treatment reference
Dew St (Kintore Ln-St)	Series A
Kintore St (Dew-Parker)	Series A
Maria St	Series A
IS Parker St/Kintore St	Series B
IS Dew St/George St	Series B
IS Albert St/George St	Series B

Sub-area G lies south of Kintore Lane and Rose Lane. The traffic issues here are more localised in nature, eg school safety, speeding etc. This has been accorded a Staging Priority of 2.

Staging priority 2	
SUB-AREA G	Treatment reference
Rose St	Series A, C
IS Parker St/Rose St	Series D

Sub-area H lies to the east of Dew Street. The traffic data do not show significant traffic issues here. Upgrade of some existing traffic controls could be considered. Due to the tram line project, the collector route in this area needs to be updated for the Transport Plan. This sub-area has been accorded a Staging Priority of 3.

Staging priority 3	
SUB-AREA H	Treatment reference
James St (Light-Phillips)	Review extg
Holland St (Light-Phillips)	Review extg
Cawthorne St (Light-Smith)	Series A
Light Tce-Albert St	Review collector route

Sub-area I lies to the west of Dew Street. The traffic data do not suggest any significant traffic issues in this area. One minor project has been identified at the Walter Street/South Road corner. This sub-area has been accorded a Staging Priority of 3.

Staging priority 4**SUB-AREA I**

Neville Road
IS Walter St/South Rd

Treatment reference

Series A
Series B

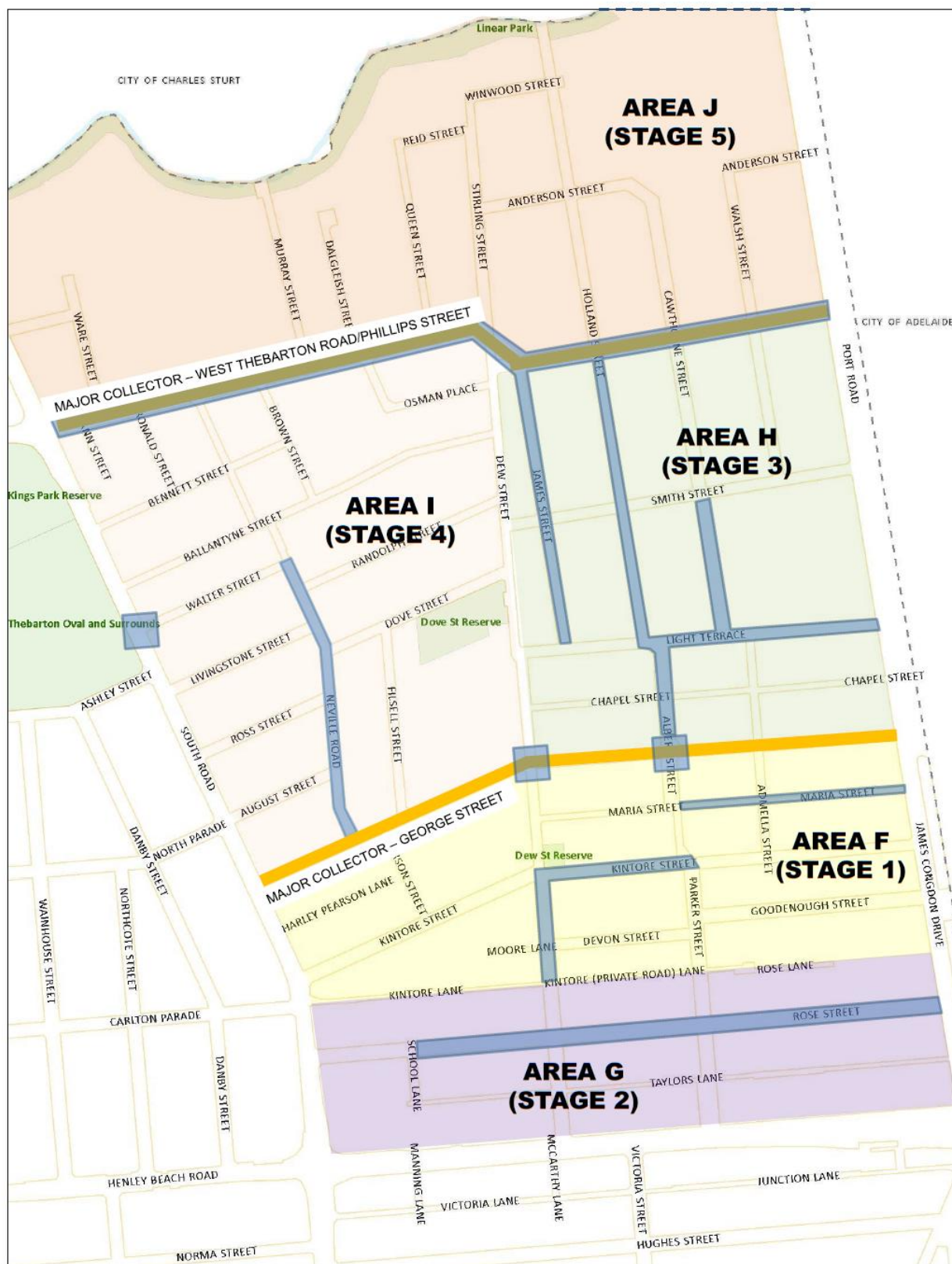
Sub-area J lies to north of West Thebarton Road and Phillips Street. West Thebarton Road-Phillips Street will be upgraded as part of the PLEC funding. The Thebarton Bioscience Master Plan provides a wide range of recommendations for this area and these recommendations will be incorporated into the implementation stage when finalised. The Holland Street bridge, when reopened, would reinstate the pedestrian/cyclist link across the river.

Staging priority 5**SUB-AREA J**

Bioscience Master Plan
West Thebarton Rd-Phillips St
Holland St bridge

Treatment reference

Series A, B, C, D
PLEC funding
Re-opening in
progress



THEBARTON / MILE END LATM STAGING PLAN

Figure 17 - Thebarton / Mile End LATM Staging Plan

4. Parking Measures

The key parking issues raised through the review of the data and community consultation are addressed through a range of measures outlined below. Some of the key issues have already been addressed through transport and parking projects currently underway.

As with the transport measures, a parking measure in one street may address an issue in another street and/or within the area.

The parking measures are divided into three categories being:

- Solutions A – Parking Projects Currently Underway
- Solutions B – General Parking Measures, which can be undertaken as part of Councils existing budget and works
- Solution C – Specific Parking Measures, which can be undertaken as part Councils existing budget and works but will need to be staged based on sub-areas

Any change to parking controls will involve consulting affected residents, businesses and stakeholders.

Unlike the transport measures, the parking measures are generally undertaken as part of the normal work of council, for example, assessing and implementing street parking controls or area-wide parking controls. Parking management also generally does not involve significant expenditure amounts. A staging plan for parking management is therefore not considered to be necessary.

4.1. Torrensvile/Underdale LATM Area

Solutions A – Parking Projects Currently Underway

- Henley Beach Road – Reduction in Speed to 50km/h

Solutions B – General Parking Measures

- Develop Car Park Fund for New Developments
- Henley Beach Road Facilitate Businesses Combining Car Parks
- Council Enforcement of Parking Controls and Regulations (ie over staying time limits, parking over driveways, in no stopping zones, too close to intersections, in bike lane and commercial vehicle unloading on the street)
- Review and Enforcement of Parking Controls for Events
- Review Parking Controls at Intersections
- Review Parking Exemptions to Time Limit Controls and for Carers

Solution C – Specific Parking Controls

- Install Time Limit Parking Controls
- Construct More Off-street Parking near Playground on Ashley St / Danby St

4.2. Thebarton/Mile End LATM Area

Solutions A – Parking Projects Currently Underway

- Increased Parking at the Urban Forest alongside James Congdon Drive
- New Time Limited Parking Controls in Areas I and J

Solutions B – General Parking Measures

- Develop Car Park Fund for New Developments
- Review Parking Control on Narrow Roads / Laneways

- Council Enforcement of Parking Controls and Regulations (ie over staying time limits, parking over driveways, in no stopping zones, too close to intersections, in bike lane and commercial vehicle unloading on the street)
- Review and Enforcement of Parking Controls for Events
- Review Parking Controls at Intersections
- Review Parking Exemptions to Time Limit Controls and for Carers

Solution C – Specific Parking Controls

- Install Time Limit Parking Controls
- Investigate No Parking on One Side of George Street between South Road and Dew Street

5. Summary of LATM Works

Table 11 below summarises the staging plan for assessment of streets as part of the Torrensville/Thebarton LATM.

Table 11 - Summary of LATM and Staging Plan

STAGE/AREA	TORRENSVILLE/UNDERDALE	THEBARTON/MILE END
STAGE 1	Howie Ave	Dew St (Kintore Ln-St)
	Bray Ave	Kintore St (Dew-Parker)
	Herbert Ave	Maria St
	Stephens Ave (Ashley-Ashwin)	IS Parker St/Kintore St
	Hayward Ave (Ashley-Ashwin)	IS Dew St/George St
	West St (Ashley-Ashwin)	IS Albert St/George St
	Clifford St (Ashley-Ashwin)	
	Jervois St (Ashley-Ashwin)	
	East St (Meyer-Ashwin)	
	Ashley St (Hardys-South)	
	IS Ashley St/Hardys Rd	
STAGE 2	Norman St	Rose St
	Pearse St	IS Parker St/Rose St
	Golden Glow Ave	
	Stuckey Ave	
	Sheriff St (Norman-Ashley)	
	North Pde (Sheriff-Hardys)	
	IS Norman St/Sheriff St	
STAGE 3	IS Ashley St/Sheriff St	
	Cranbrook Ave	James St (Light-Phillips)
STAGE 4	Armour Ave	Holland St (Light-Phillips)
		Cawthorne St (Light-Smith)
		Light Tce-Albert St
STAGE 5	North Pde (Hayward-Danby)	Neville Road
	Carlton Pde (3 sections)	IS Walter St/South Rd
	Hardys Rd (Henley Beach-Ashley)	
	IS Hayward Ave/Carlton Pde	
	IS West St/North Pde	
STAGE 6		Bioscience Master Plan
		West Thebarton Rd-Phillips St
		Holland St bridge

Parking related and other miscellaneous actions developed as part of the Torrensville/Thebarton LATM are listed below:

- Reassess road classifications including freight routes as part of the Transport Strategy
- Continue to facilitate a car parking fund for new developments
- Facilitate businesses combining off-street car parking along Henley Beach Road
- Continue effective enforcement of parking controls and regulations
- Review parking controls and enforcement procedures for major events
- Review parking controls at intersections
- Review parking exemptions and time limit controls for residents, businesses and carers
- Continue to install time limited controls as required
- Construct new off-street car parking facilities where appropriate
- Review parking controls along Narrow Roads / Laneways
- Review parking controls along George Street

Through the implementation of these measures and actions, the LATM will meet its goals to improve the safety of the street network and reduce the environmental impact of traffic.

6. Conclusion

An extensive review of data, community consultation information and analysis of traffic, transport, pedestrian and cyclist issues have been undertaken to this stage of the LATM development.

A LATM Plan has been developed for the Torrensville/Underdale and Thebarton/Mile End areas. The Plan identifies the streets where LATM treatment is to be considered. Within each of the LATM area, a Staging Plan has also been developed to prioritise the implementation for that particular LATM area.

The next step in the LATM process is therefore to seek Council endorsement of the LATM Plan, which nominates the streets that are to be treated, and the Staging Plan (sub-areas within the LATM precinct) to guide future implementation.

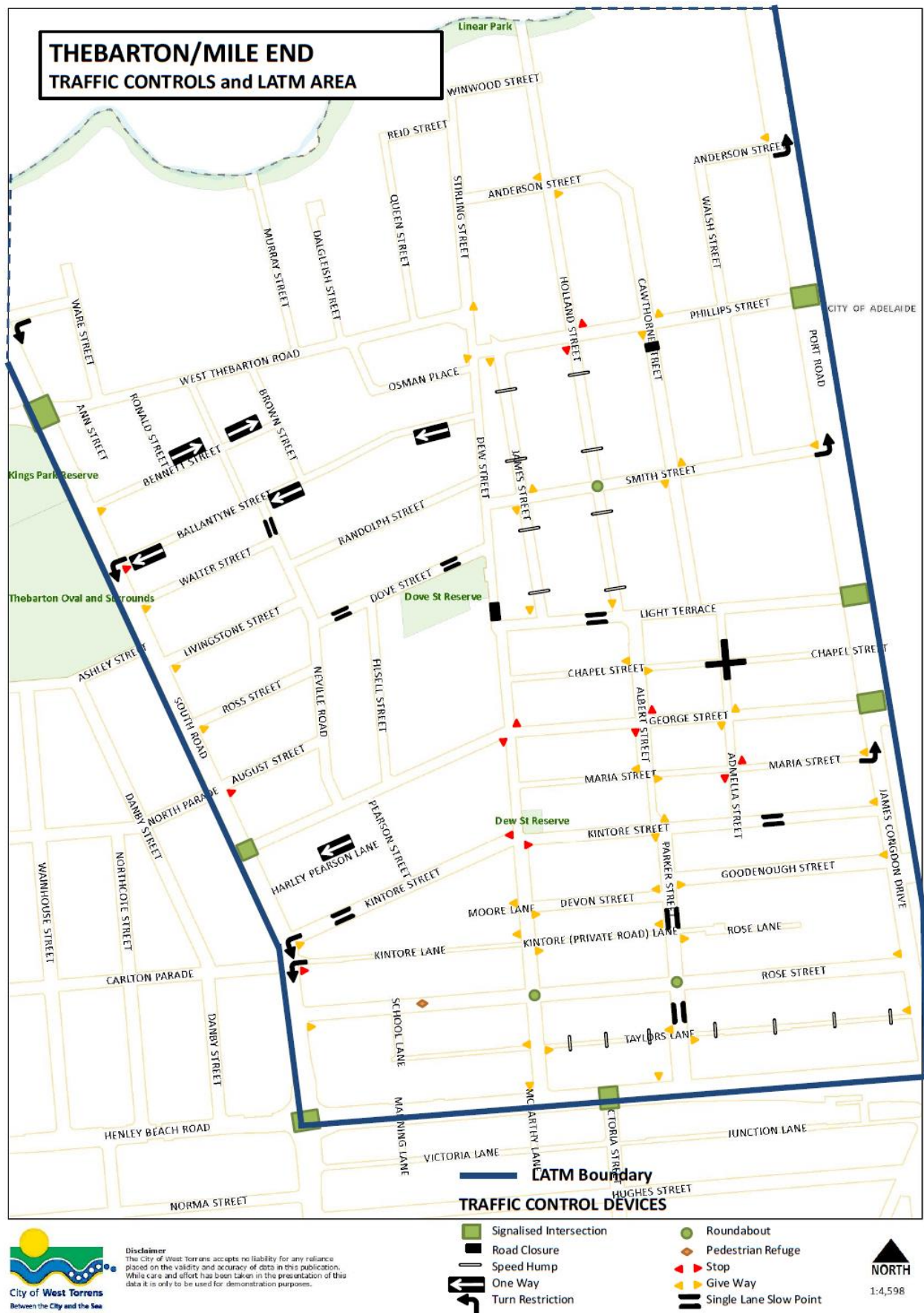
The community can then be consulted on the above LATM Plan (identifying the streets for further assessment but not the specific types of traffic control devices at this stage) and the Staging Plan. Comments would then be reviewed and a final LATM Plan and Staging Plan put to the Council for endorsement.

Once Council endorsement is received, the LATM Plan and Staging Plan would form the blueprint for the future implementation of the LATM for the precinct.

In future, when budget allocations have been provided to undertake a particular stage of the adopted LATM Plan during a particular financial year, detailed consultation will be undertaken with residents of the sub-area on the specific types of traffic control devices to use for that sub-area.

The above process would ensure that the community is firstly consulted and given the opportunity to provide feedback on the overall LATM Plan and Staging Plan. In the implementation stage, the community within the sub-area, where funds have been allocated for the installation of traffic control devices, will be given the opportunity to comment on the types of traffic control devices for their sub-area. This process would ensure that the community would have had ample opportunity to provide feedback on the development of the LATM Plan in their area.

Appendix A- Current Traffic Controls Maps





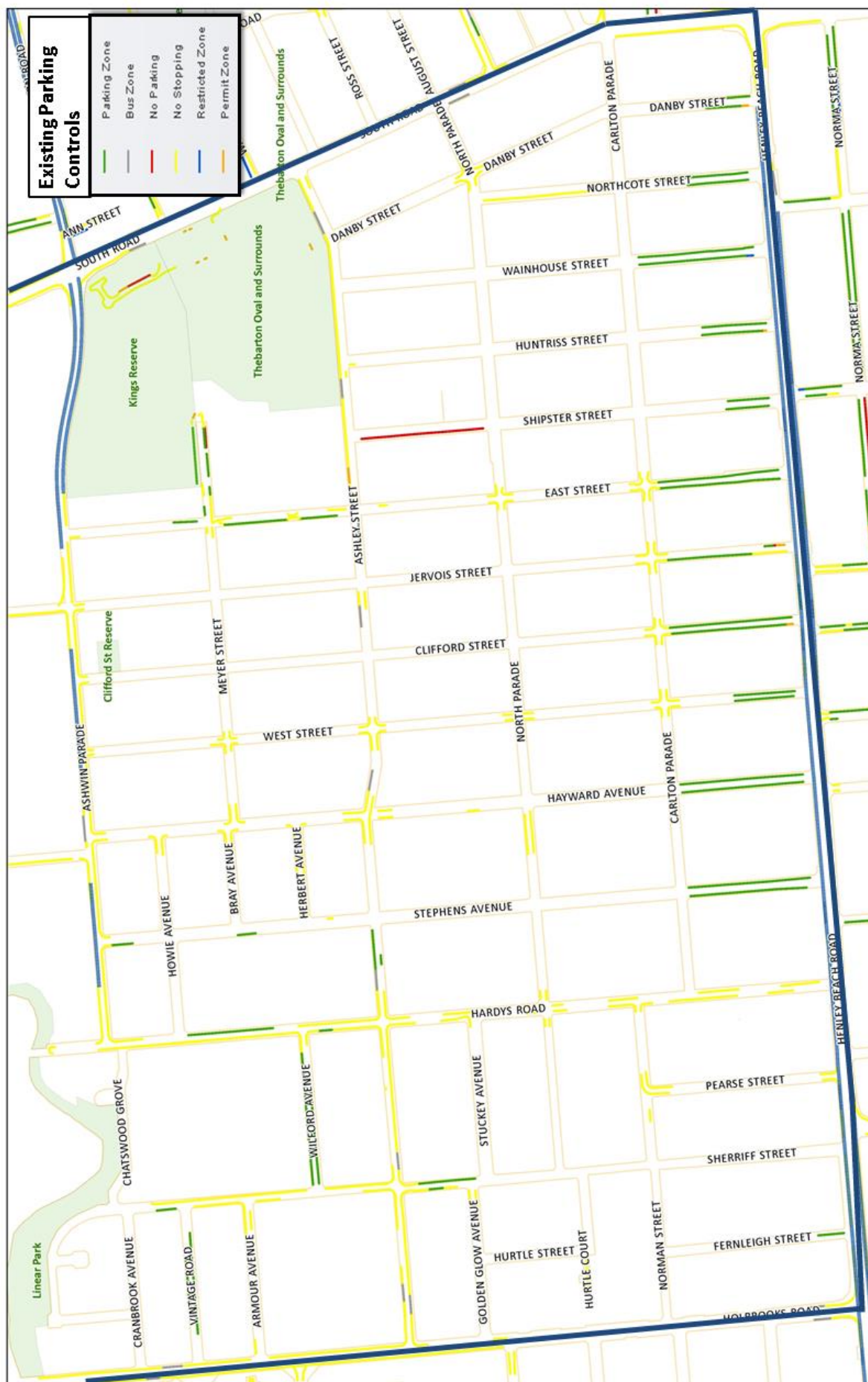
UNDERDALE/TORRENSVILLE **TRAFFIC CONTROLS and LATM AREA**

Disclaimer
The City of West Torrens accepts no liability for any reliance placed on the validity and accuracy of data in this publication. While care and effort has been taken in the presentation of this data it is only to be used for demonstration purposes.



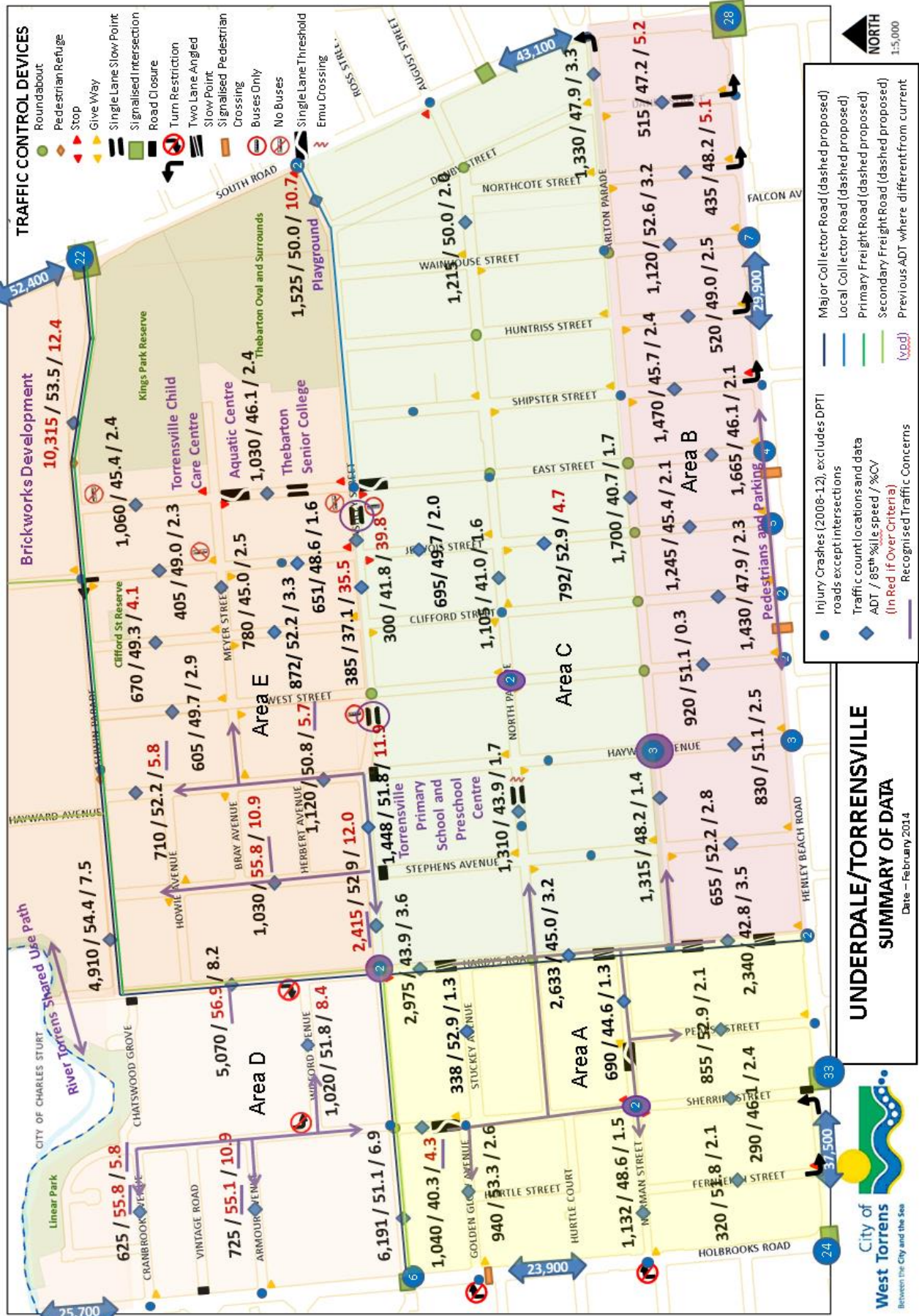
Appendix B - Current Parking Controls Maps





Appendix C - Data Maps





Appendix D - Community Survey

Torrensville and Thebarton Local Area Traffic Management Plan Share your views

City of
West Torrens
Between the City and the Sea



The City of West Torrens is reviewing traffic and parking in Torrensville, Thebarton and parts of Mile End and Underdale. We would like to hear your views on improving traffic and parking in these areas to help us produce a Local Area Traffic Management plan.

If you require this information to be translated or in an alternative format such as Braille or audio, contact Council on (08) 8416 6333.

What is a Local Area Traffic Management plan?

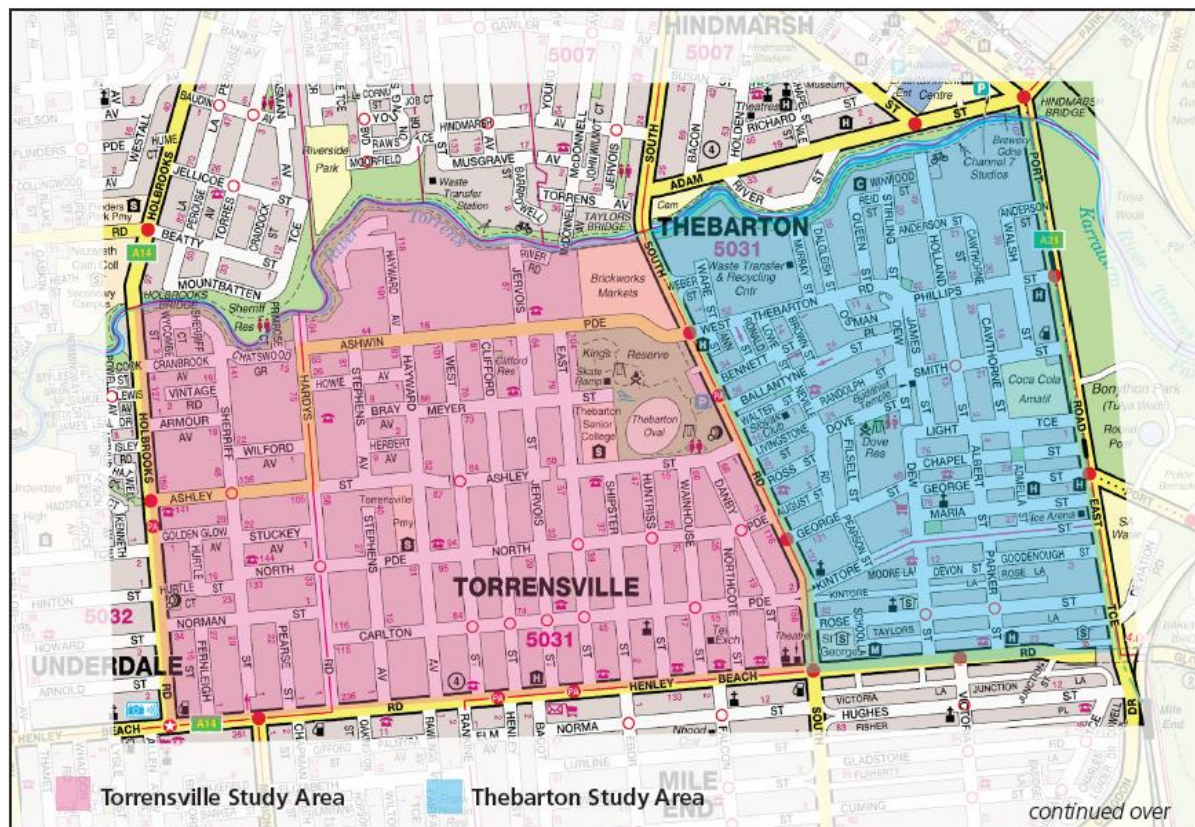
The Local Area Traffic Management (LATM) plan aims to better manage traffic and parking in local streets and improve road safety, by identifying transport and parking issues and then developing improvements in the Study Areas. The LATM plan considers all users of the road network, including pedestrians, cyclists, public transport, private vehicles and commercial vehicles.

The LATM can include simple, low cost measures such as line-marking and signage, through to major works such as road humps, roundabouts and slow points. The measures are tailored to address problems such as dangerous intersections, high traffic volumes, high traffic speeds, pedestrian safety, improving cycling facilities, supporting public transport, parking issues and addressing future major developments in the area.

The Study Area

The Study Area is bounded by the River Torrens and the major arterial roads of Holbrooks Road, Henley Beach Road and Port Road / James Congdon Drive. South Road runs through the middle of the Study Area.

For this study, the 'Torrensville area' will be defined as the suburbs of Torrensville, north of Henley Beach Road and Underdale, east of Holbrooks Road. The 'Thebarton area' will be defined as the suburbs of Thebarton and Mile End, north of Henley Beach Road.



Why is this happening in Torrensville and Thebarton?

A ranking system has been developed that prioritised the order in which LATM schemes should be investigated over the entire Council area. The 'Torrensville area' and 'Thebarton area' were identified as the first priority regions. Subsequent LATM schemes will be undertaken in other areas.

How you can be involved

To help us identify and address transport and parking issues of primary concern to you, it would be appreciated if you could complete the attached questionnaire. Feedback is to be submitted to Council by **Monday 22 July 2013**.

What happens next?

The LATM process is anticipated to take 12 to 18 months. The first step is to identify the main traffic and parking issues in the Study Area and collect traffic and parking data. Once this has been undertaken, options will be developed to address the significant issues.

A report will be presented to Council which will provide analysis of the issues and potential treatment options in the Study Area. The potential treatment options will be developed through a Working Party consisting of Elected Members and Council staff.

The community and stakeholders within the Study Area will be invited to comment on the potential treatment options through surveys and workshops. A draft LATM plan will be developed and presented to Council for endorsement and implementation over the next 10 years. Implementation will be based on priority of treatments and subject to funding.

If you require further information, contact Council's Traffic Engineer on (08) 8416 6333.

Civic Centre, 165 Sir Donald Bradman Drive, Hilton SA 5033
Telephone 8416 6333
Email csu@wtcc.sa.gov.au
westtorrens.sa.gov.au



Torrensville and Thebarton Local Area Traffic Management Plan Feedback form



Your input will help Council in identifying the transport and parking issues in Torrensville, Thebarton and parts of Mile End and Underdale, so that an effective LATM plan can be developed. Please restrict your comments to traffic and parking matters in the Study Area as previously defined.

How to submit your feedback: To enable your concerns to be considered as part of the Local Area Traffic Management study, please complete and return this questionnaire to Council by **22 July 2013**, using the reply paid envelope enclosed. Alternatively, you can complete this questionnaire online at westtorrens.sa.gov.au.

Your details: It is optional to provide these details, but doing so will assist in identifying and clarifying issues. Any submissions received may be made public unless you request that the details in the submission remain confidential.

Name: _____

Address: _____

Phone: _____

Email: _____

1. Which type of statement best describes your interest in the Study Area? (Tick one or more boxes.)

- | | |
|--|---|
| <input type="checkbox"/> Ratepayer in the Study Area | <input type="checkbox"/> Commute through the Study Area |
| <input type="checkbox"/> Live in the Study Area | <input type="checkbox"/> Visitor to the Study Area |
| <input type="checkbox"/> Work in the Study Area | <input type="checkbox"/> Sporting and/or leisure activities in the Study Area |
| <input type="checkbox"/> Own property in the Study Area | <input type="checkbox"/> Children attend school in the Study Area |
| <input type="checkbox"/> Operate a business in the Study Area | |
| <input type="checkbox"/> Ratepayer / live / work / own property / operate business, adjacent to the Study Area | |
| <input type="checkbox"/> Other, please specify: _____ | |

If you live and/or work in the study area, provide your street's name: _____

2. Which type of transport do you frequently use when in the Study Area? (Tick one or more boxes.)

- | | | |
|--|-------------------------------|--|
| <input type="checkbox"/> Private vehicle | <input type="checkbox"/> Bus | <input type="checkbox"/> Motorised wheelchair |
| <input type="checkbox"/> Bicycle | <input type="checkbox"/> Tram | <input type="checkbox"/> Commercial vehicle |
| <input type="checkbox"/> Walking | <input type="checkbox"/> Taxi | <input type="checkbox"/> Other (Please specify): _____ |

3. What would you like the Local Area Traffic Management plan to achieve?

continued over

4. What do you consider to be the top three transport and/or parking issues or opportunities facing the Study Area? Please list the location and nature of the problem. Consider problems you encounter when walking, cycling, using public transport, parking and driving.

Issue 1:

Issue 2:

Issue 3:

5. Do you have any other feedback?

Thank you for your time in providing feedback about this study.

Office use only: GDS 20.20.2

Civic Centre, 165 Sir Donald Bradman Drive, Hilton SA 5033
Telephone 8416 6333
Email csu@wtcc.sa.gov.au
westtorrens.sa.gov.au



Appendix E - Summary of Community Issues

[illegible]

THEBARTON - COMMUNITY ISSUES																					
PARKING MANAGEMENT																					
	ISSUE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Location 1	Location 2	Parking due to Commuters	Parking not available on-street near properties	Parking due to surrounding businesses	Parking Exemption for Residents to Time Limits	Parking illegally ie over driveway(s)	Parked cars as road not wide enough	Parking restricting sight distance	Parking on rubbish collection day	Parking on-street from Bonython park events	Parking at school drop off / pick up times	Parking not enough on-street parking	Parking for carers near property	Parking in bike lane	Parking near businesses and schools	Parking not enough off-street parks	Parking not available on-street for commercial vehicles at property	Parking on-street as no parking at property/business	Parking on-street from Church	Parking on-street from Entertainment Centre	Grand Total
Whole LATM area	(blank)																				0
Thebarton LATM Area	(blank)	10	1		2			1	1	1		1	1								18
Area F	(blank)	1	2	1												1		1			6
Area G	(blank)	4								1						1					6
Area H	(blank)																				0
Area I	(blank)	2						1		2											5
Area J	(blank)																				0
ADMELLA STREET	CHAPEL STREET																				0
ALBERT STREET	GEORGE STREET							1													1
	KINTORE STREET																				0
	MARIA STREET																				0
	(blank)																				0
ANDERSON STREET	CAWTHORNE STREET							1													1
ANN STREET	WEST THEBARTON ROAD																				0
AUGUST STREET	(blank)			1																	1
BALLANTYNE STREET	(blank)		3									1									4
BENNETT STREET	(blank)	1	1	1																	3
CAWTHORNE STREET	LIGHT TERRACE							1													1
	(blank)	3			1	1											1				6
CHAPEL STREET	(blank)																				0
DALGLEISH STREET	(blank)						1														1
DEW STREET	GEORGE STREET							1													1
	HENLEY BEACH ROAD							1													1
	LIGHT TERRACE																				0
	(blank)	2										1							1		4
GEORGE STREET	NEVILLE ROAD							1													1
	PORT ROAD																				0
	SOUTH ROAD																				0
	(blank)						6														6
GOODENOUGH STREET	(blank)	1																			1
HENLEY BEACH ROAD	JAMES CONGDON DRIVE																				0
	PARKER STREET																				0
	(blank)			1										1	1	1					4
HOLLAND STREET	PHILLIPS STREET													1							1
	(blank)	6	1	1		1	2		1	1										1	14
JAMES CONGDON DRIVE	ROSE STREET																				0
	(blank)																				0
JAMES STREET	(blank)			1																	1
KINTORE STREET	(blank)	6	4	3	2				1												16
LANEWAYS	(blank)																				0
LIGHT TERRACE	PORT ROAD																				0
	(blank)	2							1	1											4
MARIA STREET	(blank)	3		1		1			1												6
NEVILLE ROAD	(blank)												1								1
PARKER STREET	ROSE STREET																				0
	(blank)				1																1
PHILLIPS STREET	PORT ROAD																				0
	(blank)																1				1
PORT ROAD	(blank)																				0
RIVER TORRENS	SOUTH ROAD																				0
ROSE STREET	SOUTH ROAD																				0
	(blank)	1	1	1	3	4					5		1		1				1		18
ROSS STREET	SOUTH ROAD																				0
	(blank)																				0
SMITH STREET	(blank)	1	1			1			1				1			1					6
SOUTH ROAD	WALTER STREET																				0
	WEST THEBARTON ROAD																				0
	(blank)																				0
STIRLING STREET	WEST THEBARTON ROAD																				0
	(blank)					1												1			2
WALTER STREET	(blank)	1			1	1															3
WARE STREET	(blank)																				0
WEBER STREET	(blank)																				0
WEST THEBARTON ROAD	(blank)													1							1
TOTAL		44	14	11	10	10	9	8	6	6	5	4	3	3	3	3	2	2	2	1	146

THEBARTON - COMMUNITY ISSUES																				
PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT FACILITIES AND URBAN DESIGN AND AMENITY																				
		PEDESTRIAN FACILITIES							CYCLING FACILITIES		PUBLIC TRANSPORT		URBAN DESIGN AND AMENITY							
	ISSUE	1	2	3	4	5	6	7	1	2	1	2	1	2	3	4	5	6		
Location 1	Location 2	Holland Street bridge re-open	Improve/more pedestrian crossings facilities	Uneven footpaths often due to tree roots	Not enough green time for pedestrians	Crossings for students	Footpath to narrow	Pedestrians not using traffic lights	Road needs improving for cyclists	Lack of cycling links on local roads	Improve public transport	Improve public transport infrastructure	Stormwater	Leaves on road	Poor street lighting	Litter	Poor street scape, includes safety (walking) and aesthetic	Reduce car use / encourage public transport, bike and walking	GRAND TOTAL	
Whole LATM area	(blank)									1									1	
Thebarton LATM	(blank)			9					2	2	2			2	2	1	1	1	22	
Area F	(blank)																		0	
Area G	(blank)																		0	
Area H	(blank)																		0	
Area I	(blank)																		0	
Area J	(blank)																		0	
ADMELLA STREET	CHAPEL STREET								1										1	
ALBERT STREET	GEORGE STREET																		0	
	KINTORE STREET																		0	
	MARIA STREET																		0	
	(blank)																		0	
ANDERSON STREET	CAWTHORNE STREET																		0	
ANN STREET	WEST THEBARTON ROAD																		0	
AUGUST STREET	(blank)																		0	
BALLANTYNE STREET	(blank)																		0	
BENNETT STREET	(blank)																		0	
CAWTHORNE STREET	LIGHT TERRACE																		0	
	(blank)																		0	
CHAPEL STREET	(blank)																		0	
DALGLEISH STREET	(blank)																		0	
DEW STREET	GEORGE STREET			8															8	
	HENLEY BEACH ROAD																		0	
	LIGHT TERRACE																		0	
	(blank)																		0	
GEORGE STREET	NEVILLE ROAD																		0	
	PORT ROAD																		0	
	SOUTH ROAD																		0	
	(blank)			1									1						2	
GOODENOUGH STREET	(blank)																		0	
HENLEY BEACH ROAD	JAMES CONGDON DRIVE			1															1	
	PARKER STREET																		0	
	(blank)								1										1	
HOLLAND STREET	PHILLIPS STREET																		0	
	(blank)	15																	15	
JAMES CONGDON	ROSE STREET																		0	
	(blank)					1		1											2	
JAMES STREET	(blank)																		0	
KINTORE STREET	(blank)												1	1					2	
LANEWAYS	(blank)																		0	
LIGHT TERRACE	PORT ROAD			1		2													3	
	(blank)				1											1			2	
MARIA STREET	(blank)												1						1	
NEVILLE ROAD	(blank)																		0	
PARKER STREET	ROSE STREET																		0	
	(blank)																		0	
PHILLIPS STREET	PORT ROAD																		0	
	(blank)			1	1								1						3	
PORT ROAD	(blank)					1													1	
RIVER TORRENS	SOUTH ROAD						1		1										2	
ROSE STREET	SOUTH ROAD																		0	
	(blank)			1			1												2	
ROSS STREET	SOUTH ROAD															1			1	
	(blank)																		0	
SMITH STREET	(blank)																		0	
SOUTH ROAD	WALTER STREET																		0	
	WEST THEBARTON ROAD																		0	
	(blank)																		0	
STIRLING STREET	WEST THEBARTON ROAD			2															2	
	(blank)																		0	
WALTER STREET	(blank)																		0	
WARE STREET	(blank)																		0	
WEBER STREET	(blank)			1															1	
WEST THEBARTON	(blank)						1		2			1							4	
TOTAL		15	15	12	3	2	2	1	7	3	2	1	4	3	3	2	1	1	77	

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TORRENSVILLE - COMMUNITY ISSUES																				
PEDESTRIAN, CYCLING AND PUBLIC TRANSPORT FACILITIES AND URBAN DESIGN AND AMENITY																				
Location 1	Location 2	PEDESTRIAN FACILITIES						CYCLING FACILITIES					PUBLIC TRANSPORT FACILITIES			URBAN DESIGN AND AMENITY				GRAND TOTAL
		1	2	3	4	5	6	1	2	3	4	5	1	2	Reduce car use / encourage public transport, bike and walking	1	2	3	4	
		Uneven footpaths often due to tree roots	Crossings for students	Improve/more pedestrian crossings facilities	Pram Ramps missing or not DDA compliant	Drivers do not giving way to pedestrians	Not enough green time for pedestrians	Road needs improving for cyclists	Shared use path improve and maintain access, fencing, clear areas, lighting etc	No shared use path	Road closures do not cater for cyclists	Secure/m ore bike parking	Improve public transport	Buses delayed due to traffic		Poor street lighting	Leaves on road	Litter	Stormwater	
Whole LATM area	(blank)	4	1		1			3			1	1	2			1	1	1		16
Torrensville LATM Area	(blank)	3			2			2					1			1	2			11
Area A	(blank)	1																		1
Area B	(blank)																			0
Area C	(blank)																			0
Area D	(blank)																			0
Area E	(blank)																			0
ARMOUR AVENUE	SHERRIFF STREET																			0
ASHLEY STREET	DANBY STREET				2															2
	EAST STREET																			0
	HARDYS ROAD																			0
	HAYWARD AVENUE		1																	1
	HOLBROOKS ROAD																			0
	SHERRIFF STREET				1															1
	WEST STREET																			0
	(blank)		2					1												3
ASHWIN PARADE	JERVOIS STREET																			0
	SHIPSTER STREET																			0
	SOUTH ROAD																			0
	(blank)																			0
CARLTON PARADE	HAYWARD AVENUE																			0
	JERVOIS STREET																			0
	(blank)																			0
CLIFFORD STREET	HENLEY BEACH ROAD					1														1
	MEYER STREET																			0
	NORTH PARADE																			0
	(blank)																			0
CRANBROOK AVENUE	HOLBROOKS ROAD																			0
	SHERRIFF STREET																			0
	(blank)																			0
DANBY STREET	(blank)																1			1
EAST STREET	MEYER STREET																	1		0
	(blank)																			1
GOLDEN GLOW AVENUE	HOLBROOKS ROAD																			0
	(blank)																			0
HARDYS ROAD	NORMAN STREET																			0
	RIVER TORRENS									1										1
	(blank)																			0
HAYWARD AVENUE	NORTH PARADE																			0
	(blank)																			0
HENLEY BEACH ROAD	JERVOIS STREET																			0
	MARION ROAD					1														1
	PEARSE STREET																			0
	SOUTH ROAD							2												2
	STEPHENS AVENUE																			0
	WAINHOUSE STREET																			0
	WEST STREET																			0
	(blank)			1		1		2						1						5
HERBERT AVENUE	(blank)																1			1
HOLBROOKS ROAD	NORMAN STREET													1						1
	(blank)																			0
HOWIE AVENUE	(blank)																			0
HUNTRISS STREET	(blank)	1																1		2
JERVOIS STREET	NORTH PARADE																			0
	(blank)																			0
MEYER STREET	WEST STREET																			0
NORMAN STREET	PEARSE STREET																			0
	(blank)																			0
NORTH PARADE	WAINHOUSE STREET																			0
	WEST STREET																			0
	(blank)		1					1											1	3
PEARSE STREET	(blank)																			0
RIVER TORRENS	(blank)								3											3
SHERRIFF STREET	VINTAGE ROAD																			0
	WILFORD AVENUE																			0
	(blank)																1			1
SHIPSTER STREET	(blank)																			0
SOUTH ROAD	NORTH PARADE																			0
	(blank)																			0
STEPHENS AVENUE	(blank)	1																	1	2
STUCKEY AVENUE	(blank)																			0
VINTAGE ROAD	(blank)																			0
WAINHOUSE STREET	(blank)																			0
WEST STREET	(blank)																1			1
WILFORD AVENUE	(blank)																			0
TOTAL		10	5	4	3	2	1	11	3	1	1	1	3	2	2	5	3	2	2	61

Appendix F - Detailed Assessment of Streets and Intersections

1. TORRENSVILLE/UNDERDALE LATM TRAFFIC MANAGEMENT CONSIDERATIONS

AREA A

1.1. Series A, C: Ashley Street

Ashley Street Road Closures:

Option 1 – Remove Road Closures

Issue(s) Addressed:

- Road closures to be open (17 community responses)
- Road closures do not cater for cyclists (1 community response)
- Change or remove existing traffic control device on Ashley Street near East Street (1 community response)
- Drivers unable to find property due to road closures (1 community response)

Discussion:

The community generally asked for the road closures on Ashley Street to be removed so that traffic did not use other local streets such as North Parade and Carlton Parade. The road closures were originally implemented, due to the volume of traffic and accidents that were occurring in the street.

If the road closures were removed, there would be an increase in traffic along Ashley Street which may see drivers then diverting to north-south roads and then onto North Parade and Carlton Parade. It is estimated that up to 3,000 vehicles per day (approximately) could be diverted to Ashley Street from Ashwin Parade.

Option 2 – keep road closures and undertake enforcement

Issue(s) Addressed:

- Road closures to be maintained and more enforcement to occur to prevent cars going through them (6 community responses)

Discussion:

To reduce the illegal movements at the road closures.

Option 3 – Closure to all traffic, including buses

Issue(s) Addressed:

- Road closures to be closed to buses (9 community responses)
- Speed of vehicles in Ashley Street between West Street and East Street (2 community responses)

Discussion:

This option would be dependent on the bus route being diverted to other streets.

1.2. Series A &/or B devices: Herbert Avenue, Bray Avenue and Howie Avenue

Issue(s) Addressed:

- Cut through traffic from main roads and volume of traffic in Hayward Avenue between Meyer Street and Ashley Street (1 community response)
- Number of commercial vehicles using Area E (2 community responses) and Hayward Avenue between Ashley Street and Ashwin Parade (review of data)

- Traffic impact due to developments and events in Torrensville LATM area (2 community responses) and Area E (2 community responses)
- Increase in traffic from Brickworks development (review of data)

Discussion:

These measures would assist in reducing through traffic and speeding in the street.

1.3. Series A &/or B along the following streets between Ashwin Parade and Ashley Street: Hayward Avenue, West Street and Clifford Street, Jervois Street; and East Street (Meyer Street to Ashwin Pde)

Issue(s) Addressed:

- Cut through traffic from main roads and volume of traffic in:
 - Whole LATM area (5 community responses) and Thebarton LATM area (3 community responses)
 - Clifford Street between Ashley Street and Meyer Street (3 community responses)
 - East Street between Meyer Street and Ashwin Parade (3 community responses)
 - Hayward Avenue between Meyer Street and Ashley Street (1 community response)
 - West Street between Meyer Street and Ashwin Parade (1 community response)
- Projected volume increase over the next 20 years along:
 - Ashley Street between Hardys Road and Hayward Avenue
 - Hayward Avenue between Meyer Street and Ashley Street
- Speed of vehicles in:
 - Ashley Street between West Street and East Street (2 community responses)
 - Ashley Street between Stephens Avenue and West Street (1 community response)
 - Clifford Street between Ashley Street and Meyer Street (1 community response)
 - East Street between Meyer Street and Ashwin Parade (2 community responses)
 - Hayward Avenue between Meyer Street and Ashley Street (1 community response)
- Safety at intersection of Meyer Street and West Street (1 community response)
- Number of commercial vehicles using Area E (2 community responses) and:
 - Clifford Street between Ashley Street and Meyer Street (1 community response)
 - Jervois Street between Ashley Street and Ashwin Parade (1 community response)
 - West Street between Ashwin Parade and Meyer Street (1 community response)
 - Ashley Street between Stephens Avenue and Hayward Avenue (review of data)
 - Hayward Avenue between Ashley Street and Ashwin Parade (review of data)
- Failure of drivers to give way at intersection of Clifford Street and Meyer Street (1 community response)
- Traffic impact due to developments and events in Torrensville LATM area (2 community responses) and Area E (2 community responses)
- Increase in traffic from Brickworks development (review of data)

Discussion:

These measures would assist in reducing through traffic and speeding in the street.

1.4. Series C device: Pedestrian crossing facilities in Ashley Street to Thebarton Senior College and Playground opposite Danby Street

Issue(s) Addressed:

- Crossing for students along Ashley Street (2 community responses)
- Pedestrian crossing facilities in Ashley Street near Danby Street / playground (1 community response)

Discussion:

Improve pedestrian safety in the street.

1.5. Series A &/or B devices: Stephens Avenue between Ashley Street and Ashwin Parade

Issue(s) Addressed:

- Speed of vehicles over the recommended 55km/h (review of data)
- Speed of vehicles in Stephens Avenue between Ashley Street and Howie Avenue (review of data)

Discussion:

The street is very wide (approximately 12m). Line marking will narrow the perception of a wide carriageway and thus assist in reducing the speed of vehicles

1.6. Series B device: Hardys Road/Ashley Street intersection

Issue(s) Addressed:

- Cut through traffic from main roads and volume of traffic in whole LATM area (5 community responses) and Thebarton LATM area (3 community responses)
- Cut through traffic from main roads and volume of traffic in Hardys Road between Carlton Parade and North Parade (6 community responses)
- Speed of vehicles in Hardys Road between Carlton Parade and North Parade (3 community responses) and Hardys Road between Ashley Street and Ashwin Parade (review of data)
- Safety of intersection (3 community responses)
- Traffic congestions at intersection (1 community response)
- Close Hardy Road due to volume of traffic (2 community responses)
- Improve/more pedestrian crossing facilities (1 community response)
- Two injury crashes. These crashes were both right angle crashes, with vehicle heading north not giving way to a vehicle heading west and vehicle heading east.

Discussion:

To improve safety at the intersection. Also review existing traffic management controls in Hardys Road.

AREA B

1.7. Series A &/or B devices along the following streets: Pearse Street, Norman Street, Sherriff Street (between Norman Street and Ashley Street), Golden Glow Avenue, Stuckey Avenue and North Parade (between Sherriff Street and Hardys Road)

Issue(s) Addressed:

- Cut through traffic from main roads and volume of traffic in:
 - Whole LATM area (5 community responses) and Thebarton LATM area (3 community responses)
 - Area A (1 community response), Golden Glow Avenue (1 community response), Norman Street (1 community response), Pearse Street (3 community responses), Sherriff Street between Ashley St and Golden Glow Ave (2 community responses) and Stuckey Avenue (1 community response)
- Projected volume increase over the next 20 years along:
 - Norman Street between Holbrooks Road and Fernleigh Street
- Speed of vehicles in Golden Glow Avenue (1 community response), Norman Street between Holbrooks Road and Sherriff Street (1 community response) and Stuckey Avenue (1 community response)
- Safety at intersection of Norman Street and Pearse Street (1 community response)
- Number of commercial vehicles using Norman Street between Holbrooks Road / Sherriff Street (1 community response) and Sherriff Street between Ashley Street / Golden Glow Avenue (1 community response and review of data)
- Intersection of Sherriff Street and Norman Street, two injury crashes. These crashes were both right angle crashes, with vehicle heading south not giving way to vehicle heading west.(review of data)
- Cut through traffic from arterial roads (review of data)

Discussion:

The measure should also reduce traffic volume in Sherriff St between Ashley St and Golden Glow Ave and possibly other surrounding streets such as Carlton Parade and North Parade. The measures should divert traffic to the collector roads or arterial roads.

1.8. Series B, C devices: Sherriff Street (south end) at Ashley Street intersection

Issue(s) Addressed:

- Cut through traffic from main roads and volume of traffic in Area A (1 community response), Pearse Street (3 community responses) and Sherriff Street between Ashley St and Golden Glow Ave (2 community responses)
- Number of commercial vehicles using Sherriff Street between Ashley Street / Golden Glow Avenue (1 community response and review of data)
- Footpath not to standard on north side of intersection (review of data)
- Cut through traffic from arterial roads (review of data)

Discussion:

The measure should encourage traffic to use Ashley Street to Holbrooks Road. It should also improve safety at the intersection, particularly for pedestrians.

1.9. Series B device: Sherriff Street and Norman Street intersection

Issue(s) Addressed:

- Two injury crashes. These crashes were both right angle crashes, with vehicle heading south not giving way to vehicle heading west. .(review of data)

Discussion:

The north-east kerb does not line up with north-west kerb. Consider line marking and signage to increase the driver's view of oncoming vehicles.

AREA C

1.10. River Torrens Shared Use Path upgrade path opposite Chatswood Grove

Issue(s) Addressed:

- Shared use path needs improving and maintenance (3 community responses)
- No shared use path opposite Chatswood Grove (1 community response)
- Shared use path currently stops and goes along Chatswood Grove (review of data)

Discussion:

Black spot bicycle funding is currently available to undertake this work, in conjunction with securing of additional land to improve the path alignment.

1.11. Series A &/or B devices: Cranbrook Avenue and Armour Avenue

Issue(s) Addressed:

- Cut through traffic from main roads and volume of traffic in Whole LATM area (5 community responses) and Thebarton LATM area (3 community responses)
- Speed of vehicle in Cranbrook Avenue (3 community responses)
- Speed of vehicles over the recommended 55km/h (review of data)
- Commercial vehicles are over the recommended 4% for a residential street (review of data)
- Cut through traffic from arterial roads (review of data)

Discussion:

These measures would assist in reducing through traffic and speeding in the street.

1.12. Cranbrook Avenue, Armour Avenue and northern section of Sherriff Street: install no truck signs

Issue(s) Addressed:

- Number of commercial vehicles using Cranbrook Avenue (1 community response)
- Commercial vehicles are over the recommended 4% for a residential street in Cranbrook Avenue and Armour Avenue (review of data)

Discussion:

Install No Truck signs in residential areas.

AREA D and E

1.13. Series A devices: Carlton Parade

Issue(s) Addressed:

- Cut through traffic from main roads and volume of traffic in:
 - Whole LATM area (5 community responses) and Thebarton LATM area (3 community responses)
 - Area B (1 community response)
 - Carlton Parade (5 community responses)
- Projected volume increase over the next 20 years along Carlton Parade
- Speed of vehicles in Carlton Parade between Clifford Street and Huntriss Street (3 community responses)
- Cut through traffic from arterial roads (review of data)

Discussion:

These measures would help reduce the speed of vehicles and reduce through traffic. The measures would complement the existing roundabouts in the street.

1.14. Series A devices: North Parade

Issue(s) Addressed:

- Cut through traffic from main roads and volume of traffic in North Parade between Wainhouse St and Danby St (1 community response)
- Projected volume increase over the next 20 years along North Parade
- Safety at intersection of North Parade and Wainhouse Avenue (1 community response)
- Safety issue of trees not being behind kerb (review of data)
- Cut through traffic from arterial roads (review of data)
- Cut through traffic from main roads and volume of traffic in:
 - Whole LATM area (5 community responses) and Thebarton LATM area (3 community responses)
 - Area C (4 community responses)
- Safety at intersection of Clifford Street / North Parade (1 community response) and West Street / North Parade (1 community response)
- Failure of drivers to give way at intersection of Clifford Street / North Parade (1 community response)
- Cut through traffic from arterial roads (review of data)

Discussion:

The measures would help narrow the perception of a wide street and protect the trees planted on the carriageway. The measures would help reduce the speed of vehicles and reduce through traffic and safety at intersections.

1.15. Series B device: Hayward Avenue and Carlton Parade intersection

Issue(s) Addressed:

- Safety at intersection (2 community responses)
- Give way/stop sign configuration (1 community response)
- Three injury crashes. The crashes were all right angle crashes, with vehicle heading west not giving way to vehicle heading north. One of the crashes involved a cyclist heading west (review of data)

Discussion:

Improve safety at the intersection.

1.16. Series B device: North Parade and West Street intersection

Issue(s) Addressed:

- Safety at intersection (1 community response)
- Two injury crashes. These crashes were both right angle crashes, with vehicle heading south not giving way to vehicle heading west.

Discussion:

Shift the north give way line 2m back from kerb so as to accommodate pram ramps. Re-do pram ramps so compliant and can then move give way line forward in-line with kerb. This will increase driver's view of oncoming vehicles (review of data).

ALL AREAS

1.17. Signs and Line Marking to be Renewed

Issue(s) Addressed –

- Intersection of Pearse Street and Norman Street renew signs and trim vegetation due to failure of drivers to give way (1 community response)
- Signage faded/damaged/missing/not visible at intersection of Clifford Street and North Parade (1 community response) and West Street and North Parade (1 community response)
- Pavement bars along Hayward Avenue to be renewed, if not already undertaken (1 community response)
- Give way/stop signs not visible in whole LATM area (1 community response)
- Site inspection report regarding signage and line marking which has faded, damaged, missing or not visible (review of data)

Discussion:

Review signage (line marking and signs) to improve traffic and safety conditions.

1.18. Condition of Roads and Footpaths into Asset Management Plan

Issue(s) Addressed:

- Uneven footpaths often due to tree roots in:
 - Whole LATM area (4 community responses)
 - Torrensville LATM area (3 community responses)
 - Area A (1 community response)
 - Huntriss Street between Henley Beach Road and Carlton Parade (1 community response)
 - Stephens Avenue (1 community response)
- State of road and footpath in whole LATM area (3 community responses), Area E (1 community response) and North Parade (1 community response)
- Dips in roads dangerous in whole LATM area (2 community responses) and Torrensville area (1 community response)
- Pram ramps missing or not compliant in whole LATM area (1 community response) and Torrensville LATM area (2 community responses)

Discussion:

Upgrade conditions of roads and footpaths to improve safety for all road users.

1.19. Review Street Lighting in Herbert Avenue and Sherriff Street

Issue(s) Addressed –

- Poor street lighting in Herbert Avenue (1 community response)
- Poor street lighting in Sherriff Street (1 community response)
- Poor street lighting in Torrensville area (3 community responses)

Discussion:

Lighting reviewed when a road is reconstructed. Review lighting at locations raised by residents.

1.20. Police Enforcement of Vehicle Speeds and Signage

Issue(s) Addressed:

- Speed of vehicles within the LATM area (4 community responses)
- Speed of vehicles in the following streets:

- Ashley Street between West Street and East Street (2 community responses)
- Ashley Street between Stephens Avenue and West Street (1 community response)
- Ashwin Parade (3 community response)
- Carlton Parade between Clifford Street and Huntriss Street (3 community responses)
- Clifford Street between Ashley Street and Meyer Street (1 community response)
- Cranbrook Avenue (3 community responses)
- East Street between Meyer Street and Ashwin Parade (2 community responses)
- Golden Glow Avenue (1 community response)
- Hardys Road between Carlton Parade and North Parade (3 community responses)
- Hayward Avenue between Meyer Street and Ashley Street (1 community response)
- Jervois Street between Carlton Parade and Meyer Street (2 community responses)
- Norman Street between Holbrooks Road and Sherriff Street (1 community response)
- Stuckey Avenue (1 community response)
- Wainhouse Avenue between Henley Beach road and Carlton Parade (1 community response)
- Hardys Road between Ashley Street and Ashwin Parade (review of data)
- Stephens Avenue between Ashley Street and Howie Avenue (review of data)

Discussion:

The traffic data for these streets show that the 85th percentile speed is below the acceptable limit of 55km/h in a 50km/h zone. Hence, police enforcement has been recommended as the appropriate course of action to assist in reducing the speed of vehicles. It is also recommended that Remember 50km/h signs and Council's variable message board being placed in appropriate locations for a period of time to remind drivers to drive at or below 50km/h and to the conditions.

In regards to traffic issues raised by the community, these are compared to the traffic data collected. If the traffic data shows the speed, volume or percentage of commercial vehicles is below the acceptable limit then in most cases Police enforcement is the commonly adopted course of action; in other instances signage and line marking maybe used.

1.21. Police Enforcement of Illegal Behaviour

Issue(s) Addressed:

- Road closures in Ashley Street to be maintained and more enforcement to occur to prevent cars going through them (6 community responses)
- Enforcement of No Truck signs in:
 - Torrensville LATM area (1 community response) and Area E (2 community responses)
 - Clifford Street between Ashley Street and Meyer Street (1 community response)
 - Jervois Street between Ashley Street and Ashwin Parade (1 community response)

- Norman Street between Holbrooks Road and Sherriff Street (1 community response)
- Sherriff Street between Ashley Street and Golden Glow Avenue (1 community response and review of data)
- West Street between Ashwin Parade and Meyer Street (1 community response)
- Jervois Street between Carlton Parade and North Parade (review of data)
- Ashley Street between Stephens Avenue and Hayward Avenue (review of data)
- Hayward Avenue between Ashley Street and Ashwin Parade (review of data)
- Drivers disobeying restrictions being no through road (bus except) in Area C (1 community response) and turn restriction in Golden Glow Avenue (1 community response)
- Drivers doing U-turns on Henley Beach Road at Clifford Street (1 community response)
- Crossing for students in North Parade ensuring drivers stop and obey the 25km/h school zone (1 community response)
- Drivers not giving way to pedestrians along Henley Beach Road (1 community response) and at intersection with Clifford Street (1 community response)

Discussion:

As these offences are only enforced by SAPOL, these matters, as they arise, will be referred to the Police for enforcement action.

1.22. Concerns to State Government Regarding Timing of Traffic Lights, Safety at Intersections, Pedestrian Crossings and Cycling Facilities

Issue(s) Addressed:

- Drivers using local roads instead of collector or arterial roads in whole LATM area (5 community responses) and Thebarton LATM area (3 community responses)
- Safety at intersection of Ashley Street and Holbrooks Road (1 community response)
- Intersection of Henley Beach Road and South Road needs improving for cyclists (2 community responses)
- Extend bike lanes times along Henley Beach Road (2 community responses)
- Traffic congestion at South Road and Ashwin Parade intersection (2 community responses)
- Traffic congestion along Henley Beach Road (4 community responses)
- Traffic congestion along Holbrooks Road (1 community response)
- Traffic congestion along South Road (1 community response)
- Speed limit reduced to 40km/h within whole LATM area (3 community responses) or increased to 60km/h within whole LATM area (1 community response)
- Restricted access and delays getting onto arterial areas in Area E (1 community response), Henley Beach Road at Wainhouse Street (1 community response) and along the street (1 community response)
- Not enough room in right turn lane on Holbrooks Road to get into Cranbrook Avenue (2 community responses)
- Would like u-turns banned on Holbrooks Road at junction with Cranbrook Avenue (1 community response)
- Line marking confusing along Holbrooks Road (1 community response)

- No right turn arrow on Henley Beach Road to South Road (1 community response)
- Not enough green time for pedestrians at intersection of Marion Road and Henley Beach Road (1 community response)
- Improve/more pedestrian crossing facilities along Henley Beach Road (1 community response)
- Parked/stopped buses along Henley Beach Road (1 community response), on Henley Beach Road at Marion Road (2 community responses) and on South Road at North Parade (1 community response)

Discussion:

Council to support the State Government initiatives re travel demand, arterial road upgrade projects to improve traffic conditions and reduce congestion (eg South Road upgrade project)

1.23. Concerns to State Government to consider when undertaking future works along South Road

Issue(s) Addressed:

- Intersection of Henley Beach Road and South Road needs improving for cyclists (2 community responses)
- Traffic congestion at South Road and Ashwin Parade intersection (2 community responses)
- Traffic congestion along Henley Beach Road (4 community responses)
- Traffic congestion along South Road (1 community response)
- Not enough green time and right turning lane from South Road onto Ashwin Parade

Discussion:

Council to work with DPTI on the South Road/Ashwin Parade intersection upgrade and River Torrens to Torrens Road upgrade project.

2. TORRENSVILLE/UNDERDALE LATM PARKING MANAGEMENT CONSIDERATIONS

2.1. Henley Beach Road – reduction in speed to 50km/h or lower

Issue(s) Addressed:

- Parked cars as road not wide enough (34 community responses)
- Sight distance at intersections along Henley Beach Road (4 community responses) and at certain intersections being Clifford Street (3 community responses), Jervois Street (2 community responses) and Stephens Avenue (1 community response)
- Speed limited reduced to 40km/h along Henley Beach Road (2 community responses)
- Speed limited reduced to 50km/h along Henley Beach Road (2 community responses)
- Improve/more pedestrian crossing facilities along Henley Beach Road (1 community response)
- Pedestrian safety (review of data)

Discussion:

DPTI currently considering a lower speed limit on Henley Beach Road adjacent to the Torrensville District Centre.

2.2. Construct more off-street parking in Ashley Street adjacent to playground

Issue(s) Addressed:

- Not enough off-street parks in:
 - Area E (2 community responses)
 - Ashley Street and Danby Street to play ground (1 community response)
 - Shipster Street (1 community response)
- Parking on-street from Thebarton Senior College:
 - Area C (1 community response)
 - Area E (5 community responses)
 - Ashley Street and East Street (1 community response)
 - Ashley Street between East Street and Danby Street (1 community response)
 - East Street (1 community response)
 - Huntriss Street (1 community response)
 - Shipster Street (1 community response)

Discussion –

Use parking controls to better manage use of kerb space and consider additional off-street car parks where appropriate.

2.3. Henley Beach Road facilitate businesses combining car parks

Issue(s) Addressed:

- Not enough off-street parks in:
 - Area B (2 community responses)
 - Henley Beach Road (5 community responses)
 - Shipster Street (1 community response)

Discussion:

Work with commercial property owners to combine car parks to improve availability and efficiency of use.

2.4. Investigate installation of additional parking on wide roads when reconstructed

Issue(s) Addressed:

- Not enough off-street parks in:
 - Area B (2 community responses)
 - Area E (2 community responses)
 - Ashley Street and Danby Street to play ground (1 community response)
 - Henley Beach Road (5 community responses)
 - Shipster Street (1 community response)
- Parking on-street from Thebarton Senior College:
 - Area C (1 community response)
 - Area E (5 community responses)
 - Ashley Street and East Street (1 community response)
 - Ashley Street between East Street and Danby Street (1 community response)
 - East Street (1 community response)
 - Huntriss Street (1 community response)
 - Shipster Street (1 community response)

Discussion:

Where possible, consider angled parking in wide streets to increase parking availability.

2.5. Develop Car Park Fund for New Developments

Issue(s) Addressed:

- Not enough off-street parks in:
 - Area E (2 community responses)
 - Ashley Street and Danby Street to play ground (1 community response)
 - Shipster Street (1 community response)
- Parking due to surrounding business in:
 - Area B (3 community responses), Area C (1 community response) and Area E (2 community responses)
 - Cranbrook Avenue (1 community response)
 - Hayward Avenue between Ashwin Parade and Ashley Street (2 community responses)
 - Howie Avenue (1 community response)
 - Huntriss Street between Henley Beach Road and Carlton Parade (1 community response)
 - Jervois Street between Henley Beach Road and Carlton Parade (1 community response)
 - Shipster Street (1 community response)
- Would like to park near business or school in Howie Street (1 community response)

Discussion:

Under the Development Act 1993, Council can set up a car parking fund. Developers would contribute to the car parking fund for a designated area if they were unable to provide sufficient spaces for the parking of cars at their site. Council would then be able to use these funds in the designated area to provide car parking facility; to maintain, operate or improve car parking facilities; or provide funds for the establishment, maintenance or improvements of transport facilities to reduce the need for car parking.

2.6. Install Time Limit Parking Controls

Issue(s) Addressed:

- Parking due to surrounding business in:
 - Area B (3 community responses), Area C (1 community response) and Area E (2 community responses)
 - Cranbrook Avenue (1 community response)
 - Hayward Avenue between Ashwin Parade and Ashley Street (2 community responses)
 - Howie Avenue (1 community response)
 - Huntriss Street between Henley Beach Road and Carlton Parade (1 community response)
 - Jervois Street between Henley Beach Road and Carlton Parade (1 community response)
 - Shipster Street (1 community response)
- Parking on-street from Thebarton Senior College:
 - Area C (1 community response)
 - Area E (5 community responses)
 - Ashley Street between East Street and Danby Street (1 community response)
 - East Street (1 community response)
 - Huntriss Street (1 community response)
 - Shipster Street (1 community response)
- Parking not available on-street near property:
 - Area D (1 community response)
 - Henley Beach Road between Hayward Ave and West St (1 community response)
 - Shipster Street between Carlton Parade and North Parade (1 community response)
- Commuters parking in streets:
 - Area B (1 community response)
 - Jervois Street (1 community response)
 - Pearse Street (1 community response)
 - Shipster Street (5 community responses)
- Would like to park near business or school in Howie Street (1 community response)
- Parked cars on rubbish collection day in East Street (1 community response) and Shipster Street (1 community response)
- Increase parking time limit from 1 hour to 2 hours in Area B (1 community response)

Discussion –

Use parking controls to better manage use of kerb space.

2.7. Council Enforcement of Parking Controls and Regulations (ie over staying time limits, parking over driveways, in no stopping zones, too close to intersections, in bike lane and commercial vehicle unloading on the street)

Issue(s) Addressed:

- Parking due to surrounding business in:
 - Area B (3 community responses), Area C (1 community response) and Area E (2 community responses)
 - Intersection of East Street and Meyer Street (1 community response)
 - East Street between Meyer Street and Ashley Street (1 community response)

- Huntriss Street between Henley Beach Road and Carlton Parade (1 community response)
- Jervois Street between Henley Beach Road and Carlton Parade (1 community response)
- Shipster Street (1 community response)
- Vintage Road (1 community response)
- West Street (1 community response)
- Parking Illegally ie over driveways, in no stopping area, close to intersections:
 - Whole LATM area (3 community responses)
 - Ashley Street and Danby Street (1 community response)
 - East Street between Ashwin Parade and Meyer Street (1 community response)
 - Hardys Road (1 community response)
 - Henley Beach Road (1 community response)
 - North Parade between Stephen Ave and Hayward Ave, school zone (1 community response)
 - Sherriff Street and Vintage Road (1 community response)
 - Sherriff Street (1 community response)
- Parking not available on-street near property:
 - Whole LATM area (1 community response)
 - Torrensville LATM area (1 community response)
 - Armour Avenue and Sherriff Street (1 community response)
 - Stephens Avenue (1 community response)
 - West Street (1 community response)
- Parking in bike lane along Henley Beach Road (4 community responses) and whole LATM area (1 community response)
- Would like to park near business or school in Area E (1 community response) and Henley Beach Road (2 community responses)
- Commercial vehicles queuing to get into property or unloading on road in Sherriff Street north sections (1 community response)
- Parked trailer on the street in Hayward Avenue at North Parade (1 community response)
- Parking at school drop off and pick up times in North Parade (1 community response)

Discussion:

Enforce parking controls to ensure compliance and to improve parking availability.

2.8. Review and Enforce Parking Controls for Events

Issue(s) Addressed:

- Parking on-street from events at oval in Torrensville LATM area (1 community response), Area E (2 community responses) and East Street (1 community response)
- Parking on-street from events at Thebarton Theatre in Area B (2 community responses) and Huntriss Street (1 community response)

Discussion:

To better manage parking for events.

2.9. Review of Parking Controls at Intersections

Issue(s) Addressed:

- Parking restricting sight distance at intersection of:
 - Ashley Street and Shipster Street (1 community response)

- Clifford Street and Henley Beach Road (1 community response)
- Hayward Avenue and North Parade (1 community response)
- Henley Beach Road and Stephens Avenue (1 community response)

Discussion:

Review parking controls at intersections to address sight distance issues.

2.10. Review Parking Exemptions to Time Limit Controls and for Carers

Issue(s) Addressed:

- Parking exemptions for residents to time limit controls in:
 - Area B (1 community response)
 - Area E (1 community response)
 - Ashley Street (1 community response)
 - Clifford Street (1 community response)
 - Stephens Avenue (1 community response)
- Parking for carers near property in Cranbrook Avenue (1 community response) and Shipster Street (2 community responses)

Discussion:

Review parking management to improve accessibility and availability.

3. THEBARTON/MILE END LATM TRAFFIC MANAGEMENT CONSIDERATIONS

AREA F

3.1 Series B device: George Street and Dew Street Intersection

Issue(s) Addressed:

- 5 injury crash in last 5 years
- Speed of vehicles along George Street (5 community responses)
- Volume of traffic (3 community responses)
- Improve pedestrian crossing facilities at the intersection (8 community responses)
- Failure of drivers to give way (1 community response)
- Parking restricting sight distance (1 community response)
- George Street and Dew Street intersection – five injury crashes. Three of the injury crashes were right angle crashes, with vehicles heading north not giving way to either vehicles heading east (two) or west (one). One crash was a right angle crash with vehicle heading south not giving way to vehicle heading west. The other crash was a rear end from vehicles heading west. (review of data)
- Improvements to pedestrian crossing facilities at the intersection (review of data)

Discussion:

Black spot funding has been sought to install a roundabout at this location.

3.2 Series B Device: Albert Street and Kintore Street Intersection

Issue(s) Addressed:

- Safety of intersection (3 community concerns)
- Drivers using local roads instead of collector or arterial roads in Area G (6 responses)
- Speed of vehicles in Kintore Street (2 community responses)
- Failure of drivers to give way (1 community response)
-

Discussion:

Kerb realignment would assist in improving the safety of the intersection.

3.3 Series A Devices: Dew Street between Kintore Lane to Kintore Street

Issue(s) Addressed:

- Drivers using local roads instead of collector or arterial roads in Area G (6 responses)
- Speed of vehicles in the following streets in Dew Street between Rose St and Kintore St (3 community responses)

Discussion:

To address the through traffic and speeding issues.

3.4 Series A Devices: Maria Street

Issue(s) Addressed:

- Dangerous intersection Maria St and Albert St (1 community response)
- Volume of commercial vehicles (1 community responses)

- In March 2010 a petition was received by Council due to concerns from residents over the width of Maria Street not being able to accommodate parking and two way traffic. Council resolved that as part of the LATM scheme, the possibility of making Maria Street one way to be investigated.

Discussion:

Consider a one-way traffic flow for Maria Street.

3.5 Series B Device: George Street and Albert Street Intersection

Issue(s) Addressed:

- Speed of vehicles in George St (5 community responses)
- Safety of intersection (4 community responses)
- Unable to load good in and out of car due to no stopping on west side of street (1 community response)

Discussion:

Consider kerb realignment to improve the safety at the intersection.

AREA G

3.6 Rose Street School Emu Crossing

Issue(s) Addressed:

- Crossing for students (1 community response)
- Location of pedestrian median island hinders driveway access (1 community response)
- Safety of school children (review of data)

Discussion:

Improve safety for school children,

3.7 Series A devices: Rose Street

Issue(s) Addressed:

- Speed of vehicles (3 community responses)
- Improve pedestrian crossing facilities near James Congdon Drive (1 community response)
- Line marking faded (1 community response)
- The 85th percentile speed is greater than 55km/h (review of data)
- Speed of vehicles outside St George College (review of data)

Discussion – Rose Street is a wide street (11m). Line marking will narrow the perception of a wide road and thus assist in reducing the speed of vehicles. The line marking will also improve pedestrian safety by defining the path of travel of vehicles and reducing speeds.

3.8 Series D: Rose Street and Parker Street Intersection

Issue(s) Addressed:

- Rose Street and Parker Street intersection - the two injury crashes. These crashes both involved a cyclist heading north colliding with vehicle heading east. (review of data)

- Right Turn from Port Road onto George Street banned by State Government which means Light Terrace between Port Road and Albert Street has become a local collector road (review of data)
- Right Turn ban has also meant that Light Terrace (between Port Road and Albert Street) and Albert Street (between Light Terrace and George Street) is a secondary freight route (review of data)

Discussion:

Review the Bikedirect network through this area.

AREA H

3.9 Series A Devices: Cawthorne Street (Light Tce to Smith St)

Issue(s):

- Drivers using local roads instead of collector or arterial roads in Area I (5 responses)
- Volume of commercial vehicles in Area I (4 community responses)
- Existing traffic control devices change/remove in Area I (1 community response)
- Traffic avoiding the Light Terrace and Port Road lights and using the local streets instead (review of data)
- Due to the tram line the right turns at Smith Street and Port Road intersection were banned and traffic now using the local streets instead (review of data)

Discussion:

To reduce through traffic.

3.10 Holland St (Light Tce to Phillips St) and James Street (Light Tce to Phillips St) – Review existing speed humps

Issue(s):

- Drivers using local roads instead of collector or arterial roads in Area I (5 responses)
- Volume of commercial vehicles in Area I (4 community responses)
- Existing traffic control devices change/remove in Area I (1 community response)
- Traffic avoiding the Light Terrace and Port Road lights and using the local streets instead (review of data)
- Due to the tram line the right turns at Smith Street and Port Road intersection were banned and traffic now using the local streets instead (review of data)

Discussion:

Review suitability of existing devices.

3.11 Changes in Road Hierarchy due to Tram Line

Issue(s) Addressed:

- Right Turn from Port Road onto George Street banned by State Government which means Light Terrace between Port Road and Albert Street has become a local collector road (review of data)
- Right Turn ban has also meant that Light Terrace (between Port Road and Albert Street) and Albert Street (between Light Terrace and George Street) is a secondary freight route (review of data)

- The banning of the right turn into Smith Street from Port Road due to the tram line means Walsh Street between Phillips Street and Smith street is now a secondary freight route (review of data)

Discussion:

Review the collector route for Light Terrace and Albert Street.

AREA I

3.12 Series A Devices: Neville Road (George St to Walter St)

Issue(s) Addressed:

- Drivers using local roads instead of collector or arterial roads in Area H (2 responses)
- Speed of vehicles in Neville Rd between George St and Walter St (3 community responses)

Discussion:

To address the through traffic and speeding issues.

3.13 Series B Device: Walter Street and South Road intersection

Issue(s) Addressed:

- Safety concern at intersection of South Road and Walter Street (1 community response)

Discussion:

Minor improvement to better facilitate traffic flows.

AREA J

3.14 West Thebarton Road / Philips Street Re-design

Issue(s) Addressed:

- State of road pavement (11 community responses)
- Speed of vehicles (6 community responses)
- Drivers using local roads instead of collector or arterial roads in Area H (9 responses)
- Safety concern at intersection of Ann Street and West Thebarton Road (1 community response); Stirling Street and West Thebarton Road (1 community response); and Holland Street and Phillips Street (1 community response)
- Improve pedestrian crossing facilities along Phillips Street (1 community response) and at intersection of Stirling Street and West Thebarton Road (2 community response)
- Uneven footpaths often due to tree roots (1 community response)
- Restricted access, delays and congestion getting onto arterial road at South Road and West Thebarton Road (4 community responses)
- Unable to turn into Holland Street (north) if vehicle turning out (1 community concern)
- Improve public transport infrastructure (1 community response)
- Phillips Street and West Thebarton Road – four injury crashes. Two head on crashes, one rear end crash with vehicles heading west and one pedestrian hit heading south by vehicle heading east. (review of data)

- Phillips Street and Holland Street intersection - two injury crashes. The crashes both involved cyclists heading south, colliding with a vehicle heading west. (review of data)
- Thebarton Bioscience Precinct Master Plan refer to key actions – upgrade quality of footpath and create a safer pedestrian link at Dew Street (review of data)
- Thebarton Bioscience Precinct Master Plan key actions – paving at entrance to side streets and signage (review of data)

Discussion:

Part of the PLEC funding project to upgrade the road conditions, footpath conditions and cyclist access.

3.15 Holland Street Bridge Re-Open

Issue(s) Addressed:

- Re-open Holland Street bridge as a pedestrian and cycling link (15 community responses)
- Thebarton Bioscience Precinct Master Plan refer to key actions – re-open Holland Street bridge (review of data)

Discussion:

Bridge replacement currently in progress.

3.16 Develop the linear park shared use path and cycling links

Issue(s) Addressed –

- Lack of cycling links on local roads (3 community responses) and roads need improving for cyclists (2 community responses) within Thebarton LATM area
- Thebarton Bioscience Precinct Master Plan key actions – continue linear path trail on southern side of River Torrens and connections to it. (review of data)
- Thebarton Bioscience Precinct Master Plan key actions – establish free bike hire service (review of data)

Discussion:

Part of the Bioscience Master Plan recommendations.

ALL AREAS

3.17 No Truck Signs

Issue(s) Addressed:

- Volume of commercial vehicles in the Thebarton area in particular Area I (7 community responses)
- Volume of commercial vehicles in Holland Street (1 community response), Maria Street (1 community response), Ross Street (1 community response) and at the corner of Dew Street and Light Terrace (1 community response)
- Trucks avoiding the Light Terrace and Port Road lights and using the local streets instead (review of data)
- Due to the tram line the right turns at Smith Street and Port Road intersection were banned and trucks now using the local streets instead (review of data)
- Traffic data shows that the percentage of commercial vehicles is above the acceptable 4% for a local street that are not in an industrial area, being Kintore Street, Goodenough Street, James Street, Holland Street, Cawthorne Street and Smith Street.(review of data)

Discussion:

Review existing signage and install No Truck signs in residential areas.

3.18 Pram Ramps at Intersections

Issue(s) Addressed:

- Improve pedestrian crossing facilities near James Congdon Drive in Rose Street (1 community response)
- Improve pedestrian crossing facilities in Weber Street (1 community response) at South Road end

Discussion:

Upgrade as required.

3.19 Speed Limit in Lanes Ways with No Footpath

Issue(s) Addressed:

- Speed limit reduced to 40km/h in laneways (2 community responses)
- Pedestrian safety

Discussion:

Review traffic management in lane ways that do not have footpaths and where properties front the laneways.

3.20 Police Enforcement of Vehicle Speeds and Signage

Issue(s) Addressed:

- Speed of vehicles within the LATM area (9 community responses)
- Speed of vehicles in the following streets:
 - August Street (1 community response)
 - Ballantyne Street (2 community responses)
 - Dew Street at Light Tce corner (1 community response)
 - Dew Street between Rose St and Kintore St (3 community responses)
 - George Street (5 community responses)
 - Holland Street between Light Tce and Smith St (1 community response)
 - Kintore Street between Albert St and Dew St (2 community responses)
 - Light Terrace (3 community responses)
 - Neville Road (3 community responses)
 - Phillips Street (4 community responses)
 - Rose Street (3 community responses)
 - Ross Street (1 community response)
 - Smith street (1 community response)
 - Weber St (1 community response)
 - West Thebarton Road (2 community responses)

Discussion:

The traffic data for these streets show that the 85th percentile speed is below the acceptable limit of 55km/h in a 50km/h zone. Hence, police enforcement has been recommended as the appropriate course of action to assist in reducing the speed of vehicles. It is also recommended that Remember 50km/h signs and Council's variable message board being placed in appropriate locations for a period of time to remind drivers to drive at or below 50km/h and to the conditions.

In regards to traffic issues raised by the community, these are compared to the traffic data collected. If the traffic data shows the speed, volume or percentage of commercial vehicles is below the acceptable limit then in most cases Police enforcement is the commonly adopted course of action; in other instances signage and line marking may be used.

3.21 Police Enforcement of Illegal Behaviour

Issue(s) Addressed:

- Ballantyne Street drivers going wrong way along one-way street (1 community response)

Discussion:

Refer to Police.

3.22 Concerns to State Government Regarding Timing of Traffic Lights, Safety at Intersections, Pedestrian Crossings and Cycling Facilities

Issue(s) Addressed:

- Drivers using local roads instead of collector or arterial roads in whole LATM area (8 community responses), Area G (6 responses), Area H (9 responses) and Area I (5 responses)
- Safety concern at intersection of Henley Beach Road and Parker Street (1 community response)
- Safety concern at intersection of James Congdon Drive and Rose Street (1 community response)
- Improve pedestrian crossing facilities at the intersection of Henley Beach Road and James Congdon Drive (1 community response) and along James Congdon Drive between school and car park (1 community response)
- Improve pedestrian crossing facilities (more pedestrian green time at lights) at the intersection of Light Terrace and Port Road (3 community response) and along Port Road (1 community response)
- Restricted access and delays getting onto arterial road at intersection of George Street/South Road (1 community response) and Port Road (1 community response),
- Not enough green time on George Street at the intersection of South Road and Port Road (3 community responses)
- No right turn arrow from Port Road onto George Street (1 community response)
- Not enough room in the right turn lane from South Road onto George Street (1 community response)
- Improve drivers signage to Henley Beach Road and James Congdon Drive and vice versa (1 community response)
- Vehicles doing u-turns at intersection of Port Road and Phillips Street (1 community response)
- Pedestrians not using traffic lights along James Congdon Drive (1 community response)
- Henley Beach Road to be reduced to 50km/h (1 community response) and improve cycling facilities along Henley Beach Road (1 community response)
- Traffic avoiding the Light Terrace and Port Road lights and using the local streets instead (review of data)
- Due to the tram line the right turns at Smith Street and Port Road intersection were banned and traffic now using the local streets instead (review of data)

Discussion:

Seek DPTI to review the timing of the traffic lights within the LATM area to assist in preventing drivers avoiding the traffic lights and using local streets.

Council to support the State Government initiatives re travel demand, arterial road upgrade projects to improve traffic conditions and reduce congestion (eg South Road upgrade project)

3.23 South Road works at Intersection with Ashwin Pde and Future Works along South Road

Issue(s) Addressed:

- Drivers using local roads instead of collector or arterial roads in whole LATM area (8 community responses), Area G (6 responses), Area H (9 responses) and Area I (5 responses)
- Safety concern at intersection of South Road and Rose Street (1 community response)
- Safety concern at intersection of South Road and Walter Street (1 community response)
- Volume of commercial vehicles along West Thebarton Road instead of using the arterial roads (1 community response)
- Restricted access and delays getting onto arterial road at intersection of George Street/South Road (1 community response) and South Road/West Thebarton Road (4 community responses) and South Road (1 community response)
- Traffic congestion on South Road (1 community response)
- No right turn arrow from West Thebarton Road onto South Road (1 community concern)
- Not enough room in the right turn lane from South Road onto George Street (1 community response)
- Footpath along South Road at the River Torrens is too narrow (1 community response) and improve cycling facilities at this location (1 community response)

Discussion:

Council to work with DPTI on the South Road/Ashwin Parade intersection upgrade and River Torrens to Torrens Road upgrade project.

3.24 Condition of Roads and Footpaths into Asset Management Plan

Issue(s) Addressed:

- State of road pavement in:
 - Thebarton LATM area in particular Area H and I (6 community responses)
 - Ballantyne Street (1 community response)
 - Walter Street (1 community response)
- Uneven footpaths often due to tree roots in:
 - Thebarton area (9 community responses)
 - George Street (1 community response)
 - Light Terrace (1 community response)
- Thebarton Bioscience Precinct Master Plan refer to key actions – improvements to footpaths in side streets (review of data)

Discussion:

Upgrade conditions of roads and footpaths to improve safety for all road users.

3.25 Signs and Line Marking to be Renewed

Issue(s) Addressed –

- Speed of vehicle around Light Tce / Dew St corner (1 community response)
- Safety concern at intersection of Albert Street and Maria Street (1 community response)
- Line marking faded in Chapel Street (1 community response), Dew Street (1 community response) and Ware Street (1 community response)
- Signage faded/damaged/missing or not visible on Dew Street
- Drivers unable to find property in Dew Street due to road closure (1 community response)
- Site inspection report regarding signage and line marking which has faded, damaged, missing or not visible within the LATM area (3 community responses) and give way or stop signs not visible (1 community response)

Discussion:

Review signage (line marking and signs) to improve traffic and safety conditions.

4. THEBARTON/MILE END LATM PARKING CONSIDERATIONS

4.1. Increase the car park fronting the Urban Forest on James Melrose Road

Issue(s) Addressed:

- Not enough off-street parks in Area F(1 community response), Area G(1 community response) and Henley Beach Road (1 community response)

Discussion:

Council will be redeveloping the verge area fronting the Urban Forest on James Congdon Drive to improve the urban design and amenity of the area. The works will increase the environmental and biodiversity value of the precinct through extension of the existing Urban Forest landscape pallet into the verge area through the inclusion of Water Sensitive Urban Design (WSUD) installations. The works will include the extension to existing car parking area to cater for the increasing demand for parking in the area.

4.2. Install Time Limit Parking Controls

Issue(s) Addressed:

- Commuters parking in streets:
 - Thebarton LATM area (10 community responses), Area F (1 community response); Area G (4 community responses) and Area I (2 community responses)
 - Bennett Street – north side in middle section (1 community response)
 - Cawthorne Street –east side north section (3 community responses)
 - Goodenough Street (1 community response)
 - Holland Street (6 community responses)
 - Kintore Street (6 community responses)
 - Light Terrace, north side middle section (2 community responses)
 - Maria Street, south side east end (3 community responses)
 - Smith Street, west end (1 community response)
 - Walter Street, north side ((1 community response)
- Parking not available on-street near property:
 - Thebarton LATM area (1 community response) and Area F (2 community response)
 - Ballantyne Street, south side middle section (3 community responses)
 - Bennett Street, north side middle section (1 community response)
 - Holland Street (1 community response)
 - Kintore Street (4 community responses)
 - Smith Street (1 community response)
- Surrounding businesses parking in street:
 - August Street (1 community response)
 - Bennett Street, north side middle section (1 community response)
 - Henley Beach Road, west section (1 community response)
 - Holland Street (1 community response)
 - James Street (1 community response)
 - Kintore Street (3 community responses)
 - Maria Street (1 community response)
- Parked cars as road not wide enough:
 - Holland Street (2 community responses)
- Parked cars on rubbish collection day:
 - Holland Street (1 community response)
 - Kintore Street (1 community response)
 - Light Terrace (1 community response)

- Maria Street (1 community response)
 - Smith Street (1 community response)
- Unable to park near business on Henley Beach Road, west end (1 community response) and Smith Street (1 community response)

Discussion:

Use parking controls to better manage use of kerb space.

4.3. Council Enforcement of Parking Signs and Regulations

Issue(s) Addressed:

- Commuters parking in time limited parking areas in Bennett Street, Cawthorne Street, Light Terrace and Rose Street (7 community responses)
- Parking not available on-street near property:
 - Rose Street (1 community response)
- Surrounding businesses parking in street:
 - Area F (1 community response)
 - Bennett Street (1 community response)
 - Henley Beach Road (1 community response)
 - Rose Street (1 community response)
- Parking Illegally ie over driveways, in no stopping area, close to intersections:
 - Cawthorne Street (1 community response)
 - Holland Street (1 community response)
 - Maria Street (1 community response)
 - Rose Street (4 community responses)
 - Smith Street (1 community response)
 - Stirling Street (1 community response)
 - Walter Street (1 community response)
- Parking restricting sight distance within Thebarton LATM area (1 community response) and area I (1 community response)
- Parking in Dew Street (1 community response) and Rose Street (1 community response) from church events
- Parking at school drop off and pick up times in Rose Street (5 community responses)
- Parking in bike lane on Henley Beach Road (1 community response) and on Phillips Street at intersection with Holland Street (1 community response)
- Unable to park near school to pick up students in Rose Street (1 community response)
- Commercial vehicles queuing to get into property or unloading on road in Area I (2 community responses)

Discussion:

Enforce parking controls to ensure compliance and to improve parking availability.

4.4. Review and Enforce Parking Signs

Issue(s) Addressed:

- Parking on-street from Bonython park events in Thebarton LATM area (4 community responses), Holland Street (1 community response) and Light Terrace (1 community response)
- Parking in Holland Street due to events at entertainment centre (1 community response)
- Parking restricting sight distance at:
 - Albert Street and George Street intersection (1 community response)

- Anderson Street and Cawthorne Street corner (1 community response)
- Cawthorne Street and Light Terrace intersection (1 community response)

Discussion:

Enforce parking controls to ensure compliance and to improve parking availability.

4.5. Review Council's Parking Permit Policy

Issue(s) Addressed:

- Parking not available on-street near property:
 - Ballantyne Street (3 community responses)
 - Bennett Street (1 community response)
 - Rose Street (1 community response)
- Exemption for residents to time limited parking controls:
 - Thebarton LATM area (2 community responses)
 - Cawthorne Street (1 community response)
 - Kintore Street (2 community responses)
 - Parker Street (1 community response)
 - Rose Street (3 community responses)
 - Walter Street (1 community response)
- Parking for carers near property
 - Neville Road (1 community response)
 - Rose Street (1 community response)

Discussion:

Review policy to respond to parking demands.

4.6. Review Parking Control on Narrow Roads / Laneways

Issue(s) Addressed:

- There are a number of narrow roads / laneways which are below 7.6m wide. A review of the parking controls in these streets should be undertaken (review of data). The streets that are less than 7.6m wide are:
 - Admella St (George St to End and Light Tce to End)
 - Albert St (Maria St to Kintore St)
 - Ballantyne St (Dew Street to South Road)
 - Bennett St (South Rd to Brown St)
 - Dalgleish St (End to West Thebarton Rd)
 - Harley Pearson Lane
 - Kintore Lane (Dew St to South Rd)
 - Lowe St (Ballantyne St to West Thebarton Rd)
 - Maria St (James Congdon Dr to Dew St)
 - Moore Lane
 - Neville Road (Walter St to Ballantyne St)
 - Pearson Street
 - Queen Street
 - Reid Street
 - Ronald Street
 - Rose Lane
 - Taylors Lane (James Congdon Dr to School Lane)

Discussion:

Review parking control strategy for narrow roads and laneways.