

Draft Henley Transport and Parking Plan



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Appendices

Focus of the Henley Transport and Parking Plan
Analysis of Treatment Optoions not included in the Draft HTPP

Introduction to the Henley Transport and Parking Plan

Aurecon has been engaged by the City of Charles Sturt to prepare a Henley Transport and Parking Plan (HTPP) for the Henley Beach study area.

This HTPP looks at existing transport and parking issues in the Henley Beach study area, with a specific focus on the Henley Square Precinct. The Plan contains specific actions to improve transport and parking, now and in the future.

The HTPP focuses on the following themes that emerged through consultation with stakeholders and the community:

- 1. Walking and Pedestrians.
- 2. Cycling.
- 3. Public Transport.
- 4. Traffic Management.
- 5. Car Parking and Loading Facilities.
- 6. Urban Design and Amenity.
- 7. Improvements to Main Street (between Seaview Road and Military Road).

The Coast Park Bikeway upgrades and the Henley Square Urban Design Competition are separate projects and therefore are not a focus of the HTPP. However, they are important elements of the overall HTPP strategy and should be developed to integrate with recommendations contained within this plan.

The timeframe for improvements recommended in the HTPP are not specifically defined; however, the HTPP focuses on short to medium term solutions that can provide best value for money in meeting the Council's overall transport objectives for the Henley Beach study area.

Study Area

The study area for the HTPP includes the Henley Square Precinct, bordered by North Street, East Terrace, South Street and the coast, and the wider Henley Beach area between Grange Road, Cudmore Terrace,

Henley Beach Road and the coast. A plan of the study area is shown in **Figure 1**. **Figure 2** provides a map of Council's existing Road Hierarchy.

Objectives of the HTPP

The South Australian Government has released the '30-Year Plan for Greater Adelaide'. This HTPP is being developed to accommodate sustainable growth of the study area and align with the following objectives of the 30-Year Plan:

- To better align transport with other aspects of a prosperous, socially and culturally cohesive community.
- To promote healthy, active sustainable lifestyles and transport choices.
- To plan for the future demand of streets and public places in response to the changing needs and expectations of people living in the precinct, foreseeable changing land uses and increasing urban densities.

HTPP Study Area GRANGE JETTY Grange Lakes BARRY ST HENLEY AVE WRIGHTST Western Community Hospital CHAMBER ST VICTORIA ST Fulham Gardens Primary BECK ST MARLBOROUGH STREET St Michaels College CLARENCE ST MAIN ST Henley Grange Memorial Oval Fulham North Primary HENLEY JETTY ATKIN ST KENT ST HARVEY ST John Mitchell Oval CHARLES ST CLUSE ST HENLEY BEACH ROAD Wider Henley Beach Study Area Henley Square Precinct Open Space School Church Hospital Hotel

Figure 1 – Henley Transport and Parking Plan Study Area Map

Study Area Road Hierarchy

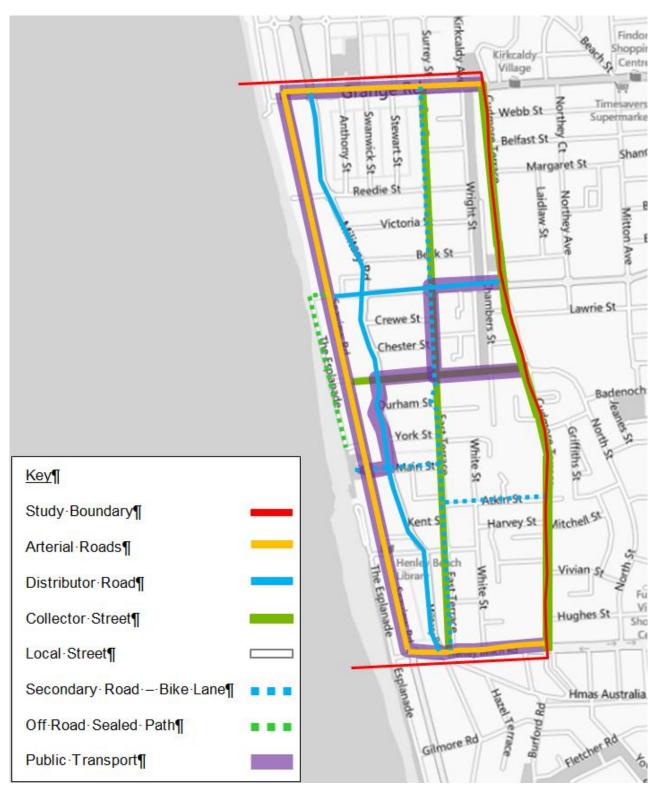
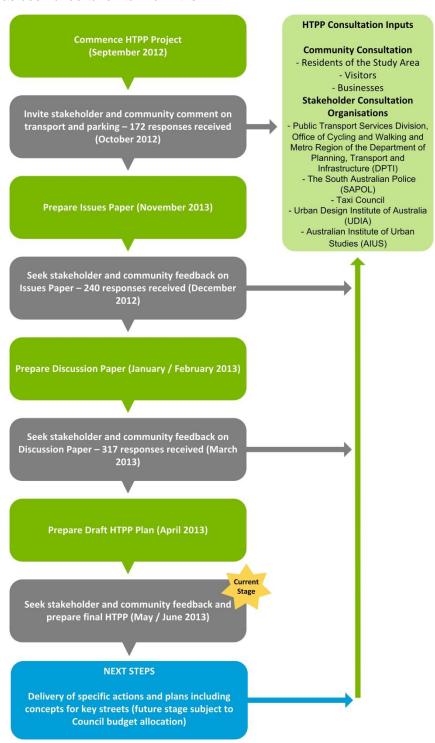


Figure 2 - Study Area Road Hierarchy

Henley Transport and Parking Plan Progress

During the course of development of the HTPP there has been considerable input from local residents and stakeholders to identify existing issues and potential solutions. Specifically, the following consultation has been undertaken to inform the HTPP



The Issues Paper and Discussion Paper, along with raw data from the Community Workshops, can be viewed at the City of Charles Sturt website via the following link: http://www.charlessturt.sa.gov.au.

Summary of Issues 2.

A summary of the key issues identified in the Issues Paper, including those highlighted through community feedback, is presented below. It is recognised that some issues may have a positive or negative impact on people or the environment, and include competing views of different people. The Issues Paper considers each of the issues in more detail.

WALKING AND PEDESTRAINS

- 1. Improve pedestrian safety on Seaview Road, particularly adjacent Henley Square
- 2. Improve pedestrian safety on Military Road, particularly footpath quality and for pedestrians accessing Henley Square
- 3. Improve pedestrian safety on Grange Road, particularly for access to shopping and recreational areas
- 4. Ensure footpaths comply with the Disability Discrimination Act (DDA)1992
- 5. Look at innovative, alternative pedestrian crossing solutions
- 6. Improve pedestrian accessibility within the Study Area

CAR PARKING AND LOADING FACILITIES

- 1. Car parking surrounding Henley Square at
- capacity during peak times
 2. Congestion at the Henley Square Car Park
 (adjacent Evida restaurant)
 3. Pavilion (Foodland) Parking/Baju/H2O car
 - park underutilised
 4. Conflict between Pavilion (Foodland)
 loading zone and bus stop / layover on
- Military Road

 5. Some land in the Study Area is currently underutilised or requiring additional off -street
- car parking
 6. Bin collection clashes with peak Sunday
 night car parking
 7. Overspill of car parking into residential
- 8. Additional car parking required to cater for
- demand 9. Vehicles parking illegally in residential
- areas
 10. Noise impacts associated with late night
- parking
 11. Improve school traffic and parking at the
 Star of the Sea School 12. Retain / improve car parking for local business and community facilities

TRAFFIC MANAGEMENT

- 1. Current speed limits on Seaview Road are too high 2. Improve traffic management
- within the Study Area to address perceived issues such as congestion and noise impacts of traffic
- 3. Improve safety by implementing a lower precinct speed limit
- 4. Speeding drivers (including motorbikes) within Study Area 5. Improve pedestrian safety at
 - roundabouts 6. Service delivery vehicles
- accessing local roads 7. Improve emergency vehicle
- access to Henley Square 8. Improve vehicle sight distance at corner blocks

HTPP STUDY AREA - KEY ISSUES

CYCLING

- 1. No Exclusive Bicycle Lanes provided on Seaview Road
- 2. Improve Cyclist safety on Military Road
- 3. Limited bicycle parking and facilities within the Study Area e.g. lockable storage units, bike racks and cyclist front storage 'boxes'
- 4. Cyclists have different needs, at different times
- 5. Improve cyclist accessibility / safety throughout the study area

PUBLIC TRANSPORT

- 1. Review existing bus routes*
- 2. There is no official Taxi rank provided near Henley Square 3. Improve bus wayfinding
- 4. There is no existing bus stop / route to Western Community Hospital*
- 5. The bus stops at Henley Square are poorly located
- 6. Improve bus stop locations and quality
- 7. No provision of light rail or train services
- *Jurisdiction of Public Transport Services

URBAN DESIGN AND AMENITY

- 1. Close or partly close Main Street between Seaview Road and Military Road to create a shared use area with priority for pedestrians and cyclists, with outdoor dining opportunities
 - 2. Improve streetscape along Seaview Road
- 3. Improve streetscape along main roads - Military Road, Grange Road, Henley Beach Road
- 4. Take 'pressures' of demand off Henley Square
- 5. Replace trees lost to natural attrition
- 6. Ensure open space is retained 7. Improve amenity adjacent the coast

3. Selection Criteria for Key Actions of the Plan

Fifty-eight potential treatments were subsequently developed to address the transport related issues. The treatments were presented in the Discussion Paper that formed the basis of community and stakeholder consultation.

Each Treatment Option was subsequently assessed to identify key actions that should be taken forward into the HTPP using the following criteria developed in conjunction with Council, and at the Community Workshop 2 (selection criteria is listed in no particular order):

- Improvement to safety.
- Improvement to character and amenity.
- Improvement to sustainable transport (walking, cycling and public transport).
- Cost.
- Achieves a realistic balance between the needs of different users in the community (residents, businesses, sporting and community groups and visitors).
- Caters for general needs rather than seasonal / peak needs.
- Improvement to convenience for users of the study area.
- Financial and economic benefits (e.g. to businesses and for events).
- Level of support indicated through community consultation.

The following considerations have been taken into account, in addition to the above selection criteria and community / stakeholder consultation:

- Seaview Road and Grange Road are under the care and control of the Department of Planning, Transport and Infrastructure.
- Seaview Road is (and will remain) the main north / south arterial road for the study area.
- All public transport services are under the care and control of the Public Transport

- Services Division of the Department of Planning, Transport and Infrastructure.
- Council has indicated their preference to utilise existing facilities as opposed to investing in significant capital.
- The Henley Square Design Competition is running concurrently and will focus on Henley Square specifically.
- Implementation process for recommended key actions.

A supplementary Technical Report with relevant background analysis and summary of existing data collection has been developed which has informed the key actions selected. This can be viewed at http://www.charlessturt.sa.gov.au.

Key Actions

Seven themes have been identified in developing the HTPP. Various key actions are grouped under each theme. It is noted that recommended actions are not all intended to be implemented straight away. Implementation dates are subject to Council discretion and associated priority.

Key actions are intended to form integrated transport improvements for Henley Beach and achieve balance for all users.

Key actions may have associated consequences that will need to be considered prior to implementation, such as:

- Banning of some vehicle turning movements.
- Reduction of on-street car parking.
- Creating new vehicle thoroughfares.
- Migrating issues and impacts from one area to another.
- Changed public transport routes.

Key actions are listed in priority order under each theme. An assessment of the Selection Criteria for each key action is provided in **Section 5**.

Detailed design and delivery of key actions is a separate Henley Transport and Parking Plan project, subject to Council approval.

Theme 1 – Walking and Pedestrians - Improve Pedestrian Accessibility throughout the Study Area

Community Response: The community consultation indicated a high preference to improve pedestrian accessibility throughout the study area. Responses were generally focused on conditions of footpaths and the additional provision of safe pedestrian crossing points. Pedestrian accessibility and the provision of east / west pedestrian crossings were

considered high priority at the second Community Workshop.

Key Actions:

1.1 Review and improve the locations of dedicated pedestrian crossings, including the provision of appropriate signage

Issues Addressed:

- · Pedestrian safety on main roads.
- Pedestrian accessibility throughout the study area.
- Lack of wayfinding.
- Connections from schools to Henley Square and from the Grange Lakes corridor to the Coast.

A network assessment and the community consultation has identified that pedestrian accessibility is poor in many areas of Henley Beach. It is recommended that existing pedestrian crossings are reviewed and upgraded, and new crossings considered to improve access and encourage sustainable transport. This includes:

- Amend locations of pram ramps and provide tactile ground surface indicators (TGSI) to comply with the Disability Discrimination Act (DDA) requirements.
- Provide additional formal pedestrian crossings (un-signalised) on Seaview Road and Military Road – e.g. central medians to improve east / west connections.

1.2 Install a pedestrian (and cyclist) crossing on Grange Road connecting Grange Lakes and the Wright Street Reserve

Issues Addressed:

- Pedestrian and cyclist safety on Grange Road between Grange Lakes and the Wright Street Reserve.
- Pedestrian accessibility throughout the study area.

It is noted that proposed upgrades to Grange Lakes and the existing Wright Street Reserve are part of a separate Council project named the 'Grange Lakes Corridor Master Plan'.

This Master Plan includes the provision of a crossing on Grange Road connecting a pedestrian and cyclist shared path through Grange Lakes and the Wright Street Reserve respectively.

It is recommended that a pedestrian and cyclist crossing be installed on Grange Road with the provision of a central median of 2m width minimum. Two lanes for the Grange Road eastbound and westbound carriageway would be retained.

It is recommended that Council proceed with their Master Plan (or the shared path component) for the Grange Lakes corridor to compliment the crossing facility on Grange Road. It is noted that the pedestrian / cycle crossing may impact on the existing right turn storage lane from Grange Road into Kirkcaldy Avenue. The location for the proposed crossing is shown below in yellow.



The Grange Lakes Master Plan (or the shared path component) will link sporting and community facilities at Henley and Grange Memorial Oval by providing a linear connection. Connections to Henley Square and the Coast Park Bikeway would be subsequently improved as cyclists utilise North Street and Clarence Avenue from a shared path in the Wright Street reserve to connect to bicycle lanes on East Terrace, Seaview Road and Main Street.

The supplementary Technical Report includes relevant concept plans from the Grange Lakes Corridor Master Plan.

1.3 Improve safety and capacity of existing signalised pedestrian crossing at Henley Square

Issues Addressed:

 Pedestrian accessibility throughout the study area.

The signalised pedestrian crossing on Seaview Road is well used and forms an import link between the Henley Square, the coast and Seaview Road / Military Road / Main Street.

To improve connectivity between Henley Square and Main Street for pedestrians, improvement of the crossing is recommended. This may include:

- Widening the crossing.
- Integrate with improvements to Main Street (refer to Key Action 7.1)

• The installation of a pedestrian countdown timer (see description below).

The installation of pedestrian countdown timers at signalised intersections has been successful in the Adelaide CBD. The pedestrian countdown timer will provide real time information (number of seconds) for pedestrians crossing to and from Henley Square and Main Street.

It is noted that this signalised intersection is a Department of Transport, Planning and Infrastructure asset and therefore requires their approval. See below for a typical example of a pedestrian countdown timer.



Theme 2 – Cycling - Improve Cyclist Accessibility throughout the Study Area

Community Response: The provision of bicycle lanes on Seaview Road was given high priority within the Feedback Forms and at the second Community Workshop. There was also a high level of support for the installation of bicycle lanes on Military Road. The perception of conflict between cyclists / vehicles and pedestrians throughout the study area received significant commentary.

Key Actions:

2.1 Advocate for the installation of bicycle lanes on Seaview Road

Issues Addressed:

 No exclusive bicycle lanes provided on Seaview Road. Improve cyclist accessibility / safety throughout the study area.

It is recommended that 1.5m bicycle lanes on Seaview Road are installed to improve cyclist safety and encourage sustainable transport.

This option would predominantly involve line marking changes with the following recommended widths:

- 1.5m bicycle lanes on the northbound and southbound carriageways.
- 2.1m for parallel car parking bays.
- 3.2m for traffic lanes.

(total of 13.6m required)

These lane widths can be accommodated on Seaview Road between Henley Beach Road and Marlborough Street without any changes in kerbline as it is proposed to provide bicycle lanes without footpath widening (kerb widening was proposed in the Discussion Paper).

Provision of bicycle lanes along the section of Seaview Road north of Marlborough Street is subject to a detailed engineering investigation due to the potential need for pavement / drainage modifications and resulting loss of on-street car parking on one side of the carriageway.

An alternative to the installation of bicycle lanes on Seaview Road is to provide bicycle lanes along Military Road. As both roads run parallel to each other it is not recommended that bicycle lanes are provided on both roads. While cyclist surveys do not indicate high cyclist volumes along either road, Seaview Road is preferred for the following reasons:

- Proximity of Seaview Road to the coastline for cyclists.
- Proximity of Seaview Road to the Coast Park Shared Path and services, for example bicycle parking facilities in Henley Square and local businesses.
- Perceived community concern regarding existing cyclist and vehicle conflict on Seaview Road.
- Roundabouts on Military Road provide a squeeze point for cyclists.

2.2 Provide bicycle advisory treatments on Military Road

Issues Addressed:

- Improve cyclist safety on Military Road.
- Improve cyclist accessibility / safety throughout the study area.

Given the high level of support for bicycle lanes along Military Road, it is recommended the bicycle advisory treatments, which are currently installed north of North Street, are continued through the study area. See below for an example of existing advisory treatment on Military Road.



2.3 Improved separation in Henley Square to reduce pedestrian and cyclist conflict

Issues Addressed:

Improve pedestrian safety.

The pedestrian and cyclist surveys indicate there are high numbers of pedestrians along the section of the Coast Park Bikeway section in Henley Square in comparison to cyclists. To alleviate issues with cyclist / pedestrian conflict it is recommended to provide line marking or contrasting pavement to improve delineation for cyclists. This treatment will require integration with the Henley Square Urban Design Competition. The indicative area is shown below:



2.4 Additional bicycle parking facilities in Henley Square

Issues Addressed:

 Limited bicycle parking and facilities within the study area.

End of trip facilities are vital in making Henley Beach attractive to bicycle users. At present there are limited facilities in the area.

It is therefore recommended to provide bicycle parking facilities in or adjacent to Henley Square to encourage sustainable transport modes. Key considerations include impact on amenity and integration with the Henley Square Design Competition. The exact location for these facilities should be determined through further stakeholder consultation.

Theme 3 – Facilitate the use of Public Transport

Community Response: Strong community support was received for the provision of a bus stop for the Western Community Hospital, relocating the existing bus layover area on Military Road and the provision of 'iconic' bus stops located at Henley Square.

Key Actions:

3.1 Provide 'iconic' bus waiting facilities (bus stops) for Henley Square

Issues Addressed:

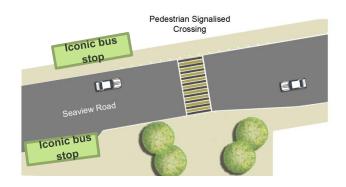
- Improve bus wayfinding.
- Bus stops for Henley Square are poorly located.
- Improve bus stop quality.

The City of Charles Sturt and the Public Transport Services Division of the Department of Planning, Transport and Infrastructure has indicated their preference for new, iconic bus stops (waiting facilities) located at Henley Square. As the western bus stop was temporarily moved approximately 200m north of Henley Square, it is proposed to move it back closer to Henley Square to provide a revised bus stop location for the northbound carriageway. The bus stop for the southbound carriageway outside the Ramsgate Hotel would also be improved.

'Iconic' waiting facilities may include:

- Bus shelters, including seating.
- Good contemporary design.
- Real time information (if the technology is available).
- DDA compliance.
- Street furniture such as bins and public lighting.
- An indented bay for the bus which does not obstruct through traffic.

It is noted that this recommendation may affect orientation of existing facilities in Henley Square and the existing pedestrian footpath adjacent to the Ramsgate Hotel entry / exit on Seaview Road. The waiting facilities for the northbound stop will require integration with the winning design of the Henley Square Urban Design Competition. Indicative areas for new facilities are shown below.



3.2 Upgrade bus stops within the Study Area to comply with the Disability Discrimination Act requirements

Issues Addressed:

 Improve bus stop quality and accessibility for all.

It is recommended to upgrade all bus stops within the study area to a consistent DDA compliant standard to improve accessibility for all and encourage sustainable transport use.

This recommendation may require narrowing of roadway cross sections to widen the footpath in some locations. It is not practical to upgrade all stops concurrently and a priority list based on community consultation and existing patronage should be developed.

3.3 Negotiate with the Public Transport Services Division of the Department of Planning, Transport and Infrastructure to relocate / modify bus layover area on Military Road, immediately north of Main Street

Issues Addressed:

 Conflict between Pavilion (Foodland) loading zone / car park exit and bus stop layover on Military Road.

The community consultation and network assessment has identified visibility issues associated with the Pavilion (Foodland) car park exit and existing bus layover located on Military Road. It is recommended to relocate the existing layover area to eliminate this issue. Consultation will be required with the

Public Services Transport Division of the Department of Planning, Transport and Infrastructure and relevant stakeholders to identify and design a suitable alternative location.

Potential locations may include:

- Seaview Road adjacent the existing entry to the Henley Square car park (modifications to the existing car park entry / exit may subsequently be required)
- Military Road south of Main Street (if buses are re-routed to South Street as opposed to the existing route on Main Street – refer to key action 7.1).

3.4 Advocate for a bus service outside the Western Community Hospital

Issues Addressed:

 No existing bus route to the Western Community Hospital.

The provision of a new bus stop in front of the Western Community Hospital (Cudmore Terrace) was identified during community and stakeholder consultation. This would involve re-routing an existing service or providing a new bus to service the location. This option will involve negotiations with the Public Transport Services Division of the Department of Planning, Transport and infrastructure regarding public transport provision.

It is noted that a bus stop in this location may also serve the tennis club and the hospital's ancillary services. Discussions with the Public Transport Services Division of the Department for Planning, Transport and Infrastructure who are responsible for metropolitan bus services will be required.

A diagram of the Western Community Hospital and the approximate locations of the nearest bus stops on Grange Road and Marlborough Street are shown below.



Western Community Hospital Precinct

 Existing locations of bus stops in close proximity (approximately 200m-300m away)

Theme 4 – Traffic Management

Community Response: While lower speed limits for the whole study area and Henley Square Precinct area received high priority at the second Community Workshop, some negative responses were received for speed reduction during the community consultation. It is noted that there was greater support for a more localised traffic calmed area than across the whole study area during stakeholder consultation.

Key Actions:

4.1 Implement a 40 km/h Henley Square Precinct Speed Limit (between North Street, East Terrace, South Street and the coast)

Issues Addressed:

Improved precinct safety.

A 40 km/hr area wherever possible, should be designed so that vehicles are not encouraged to travel at higher speeds. This usually means physical measures such as local traffic management. Implementation of the measures across the whole study area would be a relatively high cost. Pedestrian and cyclist surveys indicate that the Henley Square Precinct is the main activity area with significant east / west movement to access the Henley Square, the coast and other facilities.

The provision of a 40 km/hr speed limit in the Henley Square Precinct (bounded by North Street, East Terrace, South Street and the Coast - refer to the map on page 2) is recommended. A reduced speed limit will contribute to improve pedestrian and cyclist safety. It is noted LATM's such as entry treatments may be required.

Further investigation and consultation is required in the concept development stage to define the exact extent and nature of the option.

4.2 Wright Street and Cudmore Terrace traffic calming

Issues Addressed:

 Speeding drivers (including motorbikes) within the study area.

The community consultation highlighted speeding on these roads and speed data identified that 85th percentile vehicle speeds on Wright Street and Cudmore Terrace are higher than the posted speed limit of 50 km/hr.

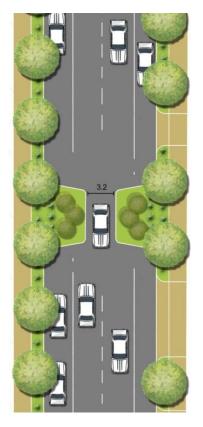
It is recommended a form of local area traffic management (LATM) is introduced to lower vehicle speeds on these roads. A selection of LATM devices (centre blister island, slow point and angled slow point) were presented in the Discussion Paper, however, the exact type of LATM installed would be subject to further community and Council consultation. The benefits of LATM are stated in *Austroads Guide to Traffic Management*, *Part 8*, *Local Area Traffic Management*.

'The primary target of LATM is to change driver behaviour, both directly by physical influence on vehicle operation, and indirectly by influencing the driver's perceptions of what is appropriate behaviour in that street. The objective is to reduce traffic volumes and speeds in local streets to increase liveability and improve safety and access for pedestrians and cyclists'. It is noted that the Department of Planning, Transport and Infrastructure indicated further investigation was required for the provision of LATM on East Terrace due to it being a current bus route and safety concerns for cyclists. Council may wish to investigate speed reduction measures on East Terrace in the future to reduce vehicle speeds (currently above the posted speed limit).

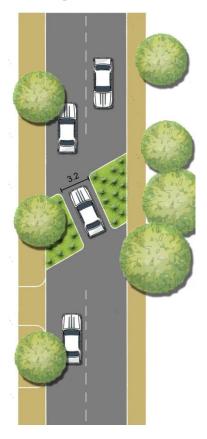
The following LATM treatments may be applied:

Slow Points / Angled Slow Points - Slow points deter and slow vehicles along a whole street as they must be used in a series, spaced evenly along the entire section of road (80m to 120m apart).

Slow Point

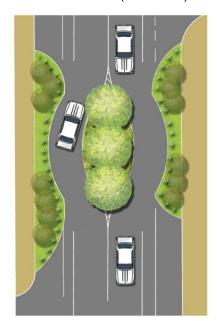


Angled Slow Point



Other LATM treatments may include:

- Road humps / road cushions.
- Lane narrowing / kerb (footpath) extensions.
- Raised pavements.
- Centre blister islands (see below).



4.3 Improve pedestrian safety at roundabouts by providing raised wombat crossings at each approach arm

Issues Addressed:

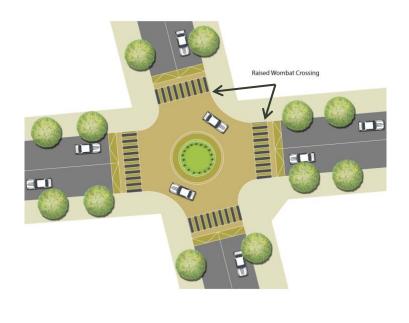
- · Pedestrian safety at roundabouts.
- Pedestrian accessibility throughout the study area.

This treatment option utilises roundabouts to slow traffic with raised pedestrian wombat crossings on each roundabout approach arm (whole roundabout raised). This treatment is new to South Australia and discussions with the Department of Planning, Transport and Infrastructure may be required. User education regarding the operation of the roundabout will also be necessary.

This treatment option can be applied to existing roundabouts in the study area (where a 40 km/hr speed limit will apply – refer to key action 4.1) or used for areas where a new roundabout may be installed. This includes:

- Military Road / North Street.
- Military Road / South Street.

An indicative concept is shown below:



4.4 Review locations of traffic control signs or street furniture where applicable to ensure compliance with sight distance requirements

Issues Addressed:

Poor visibility at intersections.

Community consultation has highlighted poor visibility at several existing intersections due to overgrown vegetation or the location of street furniture. To address this it is recommended existing vegetation is trimmed or removed where applicable and locations of street furniture reviewed.

Relevant Council approvals and investigations would be required for this treatment option. Exact locations for this recommendation are subject to a site assessment.

It has been identified that visibility at some junctions in the study area is poor due to fencing height. While this is difficult to treat due to property boundaries, Council may wish to consider the issue for future development on corner blocks, particularly at junctions of laneways with streets.

4.5 Redesign existing roundabout where buses currently 'hit' the kerbing when the road / roundabout is due for reconstruction

Issues Addressed:

- Discomfort for public transport passengers.
- Potential damage to roundabout kerbing.

This recommendation will require the reshaping of roundabout kerb profile / internal radius to enable buses to navigate the roundabout without 'hitting' the roundabout kerbing.

4.6 Advocate with the Department of Planning, Transport and Infrastructure to redesign the Henley Beach Road and Seaview Road Roundabout

This intersection has been identified as the location with the highest number of crashes (24) in the study area over the 5 year crash data period (2007 – 2011).

To improve safety it is recommended that the current intersection layout is amended and the existing reserve is extended to provide a 4 approach arm roundabout. This includes removing the stop sign at the Seaview Road approach arm.

It is noted that this treatment would be subject to a full intersection analysis and engineering report to determine if it is appropriate and feasible.

Theme 5 - Car Parking Improvements

Community Response: Car parking has been a major issue which has received divided community / business opinion throughout each consultation / workshop stage. Diverse issues raised included the limited availability of car parking and ensuring that more private vehicles are not attracted to the study area by providing additional car parking, have been prominent.

Key Actions:

5.1 Provide a dedicated pick up / drop off points along the beach for beach goers travelling by car

Issues Addressed:

 Car parking at Henley Square at capacity at peak times.

A dedicated pick up point / drop off zone may reduce the perceived congestion and parking issues associated with Henley Square. For example beachgoers may be comfortable parking further away if they have an area to unload before finding a car park.

Possible locations for this treatment recommendation include:

- Coast Park car park (south of Henley Square - accessed from the Esplanade).
- Henley Square Car Park.
- Esplanade, immediately north of Henley Square.

It is noted that the provision of a dedicated pick up / drop off point at these locations may result in the loss of existing car parking for other uses.

5.2 Advocate for public access to the Pavilion (Foodland) car park outside of normal trading hours

Issues Addressed:

- Overspill of car parking into residential areas.
- Car parking at Henley Square at capacity at peak times.
- Additional car parking required to cater for demand.

Parking surveys have identified that the Pavilion (Foodland) car park is underutilised during busy periods and closes relatively early on Saturday and Sundays, Public Holidays and evenings.

This recommendation involves negotiating the increased use of the car park for the public, particularly after shop closing times. This may be for warmer months only when demand for car parking adjacent the coast is highest. It is noted security of the car park is a consideration after shopping hours.

The provision of electronic signage indicating car park opening hours and available parking spaces may also increase community and visitor awareness that the car park is free for the first two hours. Additional use of the car park may also encourage increased use of the Pavilion shopping facilities. Advocating the use of these car parking spaces may alleviate the issue of parked cars 'spilling' out into residential areas during peak times.

5.3 Redesign Coast Park car park (located south of Henley Square, accessed from the Esplanade)

Issues Addressed:

 Perceived congestion at car park areas adjacent Henley Square. A network assessment has indicated some vehicles cannot make some required turns in the car park.

Initial investigations indicate that a one-way system within the car park would address this problem. It would also simplify access and egress into the car park from the Esplanade.

5.4 Promote the 'Way2Go Schools Program' to the Star of the Sea School, including the consideration of a walking school bus

Issues Addressed:

 Parental vehicle congestion at Star of the Sea School.

It is recommended Council promote this initiative to reduce congestion caused by parental parking adjacent to Star of the Sea School during peak times and to provide a sustainable and a healthy transport option for children attending school.

It is recommended Council promote a walking bus to and from Star of the Sea school via a pre-determined route, with pre-determined adult supervisors. This could potentially be from dedicated pick up / set down areas. A review of car parking zones for the school is also recommended for this key action.

5.5 Increase car parking near Henley Square for persons with a disability

Issues Addressed:

 Additional car parking required to cater for demand.

It is recommended to increase existing provision of car parking for persons with a disability along the Coast Park car park (south of Henley Square - accessed from the Esplanade) and Henley Square Car Park to increase accessibility.

The current provision for reserved spaces for people with a disability in close proximity to Henley Square is:

Henley Square Car Park - 2.

- Pavilion (Foodland) car park 8.
- Henley and Grange Library car park 3.
- Off-street car park on the Corner of Main Street and Military Road - 2.

Car parking surveys indicate bay utilisation is high on the weekend.

The spaces and location of additional spaces would be subject to a site analysis and further community consultation.

Theme 6 – Urban Design and Amenity

Community Response: Many urban design and amenity options received high community support, particularly treatment option 57 (improve streetscape on main roads). This generally aligns with previously identified issues that amenity is lacking on roads such as Seaview Road, Grange Road and Henley Beach Road.

Key Actions:

6.1 Improve Streetscape along main roads (Seaview Road, Military Road, Grange Road, Henley Beach Road)

Issues Addressed:

Improve Streetscape along main roads.

Options to improve the streetscape and amenity in these locations includes improved branding and signage (including wayfinding), safety i.e. improvements to public lighting and undertaking street maintenance to improve quality of the paving, providing pedestrian comfort through seating and drinking fountains, increased shade with street trees and improved pedestrian safety through better crossing points / reduction in traffic speed. This may involve providing native plant species for any landscaping improvements.

6.2 Improved wayfinding signage directing pedestrians to safe crossing points, the coast and other destinations

Issues Addressed:

Limited wayfinding within the study area.

A network assessment has identified that wayfinding in the area is generally poor. The provision of signage directing pedestrians to safe crossing points to access the beach and other notable areas or facilities is proposed. In addition, the network assessment has identified the requirement for a general improvement and provision of public transport wayfinding such as real time information at bus stops and additional directional signage throughout the study area.

Theme 7 – Main Street / Seaview Road / Military Road

Community Response: Community responses pertaining to closure or partial closures for the section of Main Street between Seaview Road and Military Road were generally mixed. However, the option for a roundabout at the Military Road Main Street intersection received high support.

Key Actions:

7.1 Investigate the options for improving the streetscape along Main Street between Seaview Road and Military Road

Options for this key action include:

- Closing this section of Main Street to general through traffic to create a shared zone. The existing angled parking adjacent to the Ramsgate Hotel on Main Street would be removed to facilitate the shared zone and a kerbless area would be provided for ease of transition for pedestrians and cyclists from / to Seaview Road.
- Providing a new centralised signalised pedestrian crossing to link Henley Square with the shared zone.
- Providing a roundabout at the Military Road / Main Street intersection with raised wombat crossings at each approach arm (refer to Key Action 4.4).

Improvements to Main Street would present opportunities for landscaping and outdoor dining opportunities to be provided, improving amenity adjacent Henley Square.

Initially it is expected that access to the existing off-street car park from Main Street would be retained. However, ultimately it would be preferable for this to be closed and relocated to Military Road (left in / left out only). It is likely that the existing bus layover area would be removed to facilitate this (refer to Key Action 3.3.).

An indicate examples of the ultimate vision for this key action is provided below.

Pedestrian Signalised Off-Street Car Park (Access from Military Road) **Potential shared** pedestrian / cycle area with hard / soft landscaping - to be determined at the concept design stage

This recommendation will require consultation with the Public Transport Services Division of the Department of Planning, Transport and Infrastructure to find a suitable alternative route for the H31 bus which currently turns left from Seaview Road into Main Street.

In addition it will increase the use of North Street and South Street for east / west travel (approximately 1200 vehicles per day use this section of Main Street).

7.2 Install a formal Taxi Rank on Seaview Road outside the Ramsgate Hotel

Issues Addressed:

 No formal taxi rank provided which results in taxi queuing blocking private vehicles on Main Street, adjacent the Ramsgate Hotel.

The consultation to date has identifed that taxis currently store informally on Main Street, blocking the existing angled car parking adjacent the Ramsgate Hotel.

The recommended location for a taxi rank is Seaview Road, directly outside of the Ramsgate Hotel. While it is acknowledged that the Taxi Council preferred a taxi rank on Main Street due to an issue of users 'taking' the first available taxi (as opposed to the first in line), it is not desirable to have vehicles in the proposed shared zone on Main Street.

It is noted that this treatment option will result in the loss of some on-street car parking on Seaview Road. Integration with Key Action 3.3 is also required for the bus stop on the southbound carriageway outside of the Ramsgate Hotel. Suitable alternative parking may be required for any residential permit parking which is affected.

5. Selection Criteria Assessment

Table 1 sets out the impacts of each recommended action in relation to the assessment criteria. In assessing estimated costs and timescales for implementation the following broad ranges have been adopted. It is noted that both costs and timescales are indicative only and may change significantly as a result of more detailed investigation, design and prioritisation by Council

Indicative cost estimate:

- Very Low, \$0-\$5,000.
- Low, \$5,000-\$20,000.
- Medium, \$20,000-100,000.
- High, \$100,000-200,000.
- Very High, \$200,000 (staged over several years).

The following timescale has been applied to the selection criteria:

- Very Low, 0-6 months.
- Low, 6 months 1 year.
- Medium, 1-2 years.
- High, 2-5 years.
- Very High, 5-10 years.

Table 1 - Selection Criteria

Table 1 – Selection Criteria									
Criteria	Improvement to safety	Improvement to character and amenity	Improvement to sustainable transport (walking, cycling and public transport)	Achieves a realistic balance between the needs of different users in the community	Caters for general needs rather than seasonal / peak needs	Improvement to convenience	Financial and economic benefits (e.g. to businesses and for events)	Cost	Indicative timescale to undertake the treatment (subject to change)
1.1 Review and improve the locations of dedicated pedestrian crossings, including the provision of appropriate signage.	High	High	Very High	High	Medium	High	Medium	High	Medium
1.2 Install a pedestrian (and cyclist) crossing on Grange Road connecting Grange Lakes and the Wright Street Reserve	Very High	High	Very High	Medium	Medium	Very High	Medium	Medium	Medium
1.3 Improve safety and capacity of existing signalised pedestrian crossing at Henley Square	Medium	Medium	High	High	High	Very High	Low	Low	Low
2.1 Advocate for the installation of bicycle lanes on Seaview Road	High	High	Very High	Medium	Medium	High	Low	Medium	Medium (with no kerbing modifications)
2.2 Provide bicycle advisory treatments on Military Road	Medium	Medium	High	Medium	Medium	High	Low	Low	Low
2.3 Improved separation in Henley Square to reduce pedestrian and cyclist conflict	Low	Medium	Very High	Medium	Medium	High	High	Low	Low
2.4 Additional bicycle parking facilities in Henley Square	High	High	High	High	High	High	Low	Low	Medium
3.1 Provide 'iconic' bus waiting facilities (bus stops) for Henley Square	Medium	Very High	Very High	Medium	Medium	High	High	High	Medium
3.2 Upgrade bus stops within the Study Area to comply with the Disability Discrimination Act requirements	Medium	High	Very High	Medium	Medium	High	Medium	Low (each stop)	Low (each stop)
3.3 Negotiate with the Public Transport Services Division of the Department of Planning, Transport and Infrastructure to relocate / modify bus layover area on Military Road, immediately north of Main Street	High	High	Medium	Medium	High	High	Low	Medium	Medium
3.4 Advocate for a bus service outside the Western Community Hospital the Western Community Hospital	Medium	High	Very High	Medium	High	Very High	High	Medium	Medium
4.1 Implement a 40 km/h Henley Square Precinct Speed Limit (between North Street, East Terrace, South Street and the coast)	Very High	High	High	High	High	Low	Low	High	Low

Criteria	Improvement to safety	Improvement to character and amenity	Improvement to sustainable transport (walking, cycling and public transport)	Achieves a realistic balance between the needs of different users in the community	Caters for general needs rather than seasonal / peak needs	Improvement to convenience	Financial and economic benefits (e.g. to businesses and for events)	Cost	Indicative timescale to undertake the treatment (subject to change)
4.2 Wright Street and Cudmore Terrace traffic calming	High	High	Low	High	High	Low	Low	High	High
4.3 Improve pedestrian safety at roundabouts by providing raised wombat crossings at each approach arm	High	High	High	Medium	High	High	Low	High (each one)	Medium
4.4 Review locations of traffic control signs or street furniture where applicable to ensure compliance with sight distance requirements	High	Low	Low	High	High	High	Low	Low	Medium
4.5 Redesign existing roundabout where buses currently 'hit' the kerbing when the road / roundabout is due for reconstruction	Medium	High	Very High	Medium	Medium	High	Low	High (each one)	High
4.6 Advocate with the Department of Planning, Transport and Infrastructure to redesign the Henley Beach Road and Seaview Road Roundabout	High	High	Medium (depending on design)	High	High	High	Low	Medium	High
5.1 Provide a dedicated pick up / drop off points along the beach for beach goers travelling by car	Low	High	Low	Medium	Medium	High	Medium	Medium	High
5.2 Advocate for public access to the Pavilion (Foodland) car park outside of normal trading hours	Low	High	Very Low	High	Medium	High	High	Medium (each year)	Medium
5.3 Redesign Coast Park car park (located south of Henley Square, accessed from the Esplanade)	Medium	High	Very Low	High	Very High	Very High	High	Medium	Low
5.4 Promote the 'Way2Go Schools Program' to the Star of the Sea School, including the consideration of a walking school bus	Low	Medium	Very High	High	Very High	Very High	Low	Very Low	Very Low
5.5 Increase car parking near Henley Square for persons with a disability	Medium	Medium	Very Low	Medium	Low	Very High	Medium	Low	Low
6.1 Improve Streetscape along main roads (Seaview Road, Military Road, Grange Road, Henley Beach Road)	Low	Very High	Low	High	High	Low	High	Medium (each road)	High

Criteria	Improvement to safety	Improvement to character and amenity	Improvement to sustainable transport (walking, cycling and public transport)	Achieves a realistic balance between the needs of different users in the community	Caters for general needs rather than seasonal / peak needs	Improvement to convenience	Financial and economic benefits (e.g. to businesses and for events)	Cost	Indicative timescale to undertake the treatment (subject to change)
6.2 Improved wayfinding signage directing pedestrians to safe crossing points, the coast and other destinations	High	Medium	High	High	High	Very High	High	Medium	High
7.1 Investigate the options for improving the streetscape along Main Street between Seaview Road and Military Road	High	Very High	High	Medium	Medium	High	Very High	Very High	Very High
7.2 Install a formal Taxi Rank on Seaview Road outside the Ramsgate Hotel	Medium	Medium	Medium	High	High	High	High	Medium	Medium

6. Next Steps

This Henley Transport and Parking Plan recommend twenty-five specific actions to address existing issues in the area, promote healthy active sustainable lifestyles, and plan for future transport needs.

Although the actions are described under seven 'themes' they should be considered together to provide an integrated transport plan, now and in the future.

The HTPP has, in the main, concentrated on identifying actions that are low cost, provide value for money and can be implemented relatively quickly. However, many of the actions will require further development and consultation with the community, key stakeholders and road authorities.

While the HTPP suggests a priority order of action under each 'theme', it will be for Council to determine actual priorities that will be determined by many factors outside the scope of consideration for this document.

Notwithstanding this, we recommended that Council put in place an implementation strategy for the actions considered in the HTPP, including further detailed investigations where identified.

As with any plan it is important that implementation of the actions and recording of outcomes is reviewed at regular intervals, so that it continues to meet the ever changing needs and priorities of the community.

Focus of the Henley Transport and Parking Plan



Focus of the Henley Transport and Parking Plan (HTPP)

Walking and Pedestrians

North/south Grange Lakes connection

Focus of the Plan Outside of the Plan Key walking routes (infrastructure condition + footpath width) Detailed design Personal safety, convenience, resting, amenity, way-finding and Coast Park (part of separate project) disability access Connectivity improvements (at particular points) Pedestrian crossing facilities (signs, signals, school crossings and wombat crossings) Shared or pedestrian only area e.g. between Seaview Road and Military Road Pedestrian safety Cycle network (Council cycle network, Grange Lakes Green Link)

Cycling

Focus of the Plan	Outside of the Plan
Bicycle paths and bicycle parking	Detailed design
 Possible east-west connections to Coast Park 	 Coast Park (part of separate project)
Cycling demand	
 Connectivity to schools and community facilities 	
Exclusive bicycle lanes (EBLs)	
Cyclist safety	
 Cycle network (Council cycle network, Grange Lakes Green Link) 	

Traffic Management

Focus of the Plan	Outside of the Plan
Traffic speed and volumes	Detailed Design
 Traffic calming (one way, two way, traffic control devices e.g. 	
roundabouts, speed control devices, road narrowing)	
Safety	
School traffic	
Heavy vehicle/truck movement	
Delivery/service vehicle movement	
Emergency vehicle access	

Car Parking and Loading Facilities	
Focus of the Plan	Outside of the Plan
 Car parking demand and supply Review of existing and potential new on/off street car parking (relocation or new) Potential new underground car park location and broad assessment Payment for car parking on/off street 	 Detailed design Financial feasibility of new car parks
Parking limits (regulations and controls)	
Landscape amenity of on street car parkingPeak and off peak parking (seasonal variations)	

	Focus of the Plan	Outside of the Plan
	I ocus of the Flati	Outside of the Flati
•	Bus stop facilities (location and condition)	 Trams/light rail extensions along coast
•	Connectivity and way-finding (connections to places/facilities)	 Train services
•	Taxi rank location	Taxi movement plan
•	Smart-stop technology (Public Transport Services (PTS)	Community buses
	jurisdiction but able to comment)	Bus priority lanes
•	Bus services (PTS jurisdiction but able to comment)	Detailed design
•	Bus timetabling (PTS jurisdiction but able to comment)	
•	Bus Routes (PTS jurisdiction but able to comment)	
	Bus Shelters	

Urban Design and Amenity

Focus of the Plan	Outside of the Plan
Outdoor dining (if on footpaths)	 Henley Square urban design redevelopment
Public lighting	 Jetty upgrade
 Landscaping and street scaping 	 Detailed design
Signage	 Detailed landscaping (preferred trees and plants)
Street cross sections	 Stormwater management
 Overlap and integration with Henley Square urban design 	 Development zoning, heights and density
redevelopment	 Building design, style and character
	 Public facilities (e.g. toilets)

Analysis of Treatment Optoions not included in the Draft HTPP



Treatment Option Analysis

Treatment Option	Part of HTPP	Analysis
Narrow Seaview Road to increase safety and amenity (full length of study area)	×	This treatment option was unsupported at stakeholder consultation.
2. Install bicycle lanes on Seaview Road	✓	Refer to Key Action 2.1.
3. Install bicycle lanes on Military Road	×	It is not recommended to install lanes on both Seaview Road and Military Road. Advisory treatments are however recommended on Military Road. Refer to Key Action 2.1
Improve pedestrian safety at roundabouts by providing raised wombat crossings at each approach arm	✓	Refer to Key Action 4.3.
5. Create a Pedestrian and cyclist shared zone on Main Street between Military Road and Seaview Road / closure option	✓	Refer to Key Action 7.1.
6. Create a Pedestrian and cyclist shared zone on Main Street between Military Road and Seaview Road / partial closure option	-	Refer to Key Action 7.1.
7. Create a central median on Main Street linking to a signalised crossing on Seaview Road	×	Refer to Key Action 7.1.
8. Install a roundabout at the Main Street / Military Road intersection	-	Refer to Key Action 7.1.
9. Provide a formal Taxi Rank on Main Street adjacent the Ramsgate Hotel	×	A formal taxi rank is preferred on Seaview Road to accommodate the shared zone. Refer to Key Action 7.2.
Install a pedestrian and cyclist crossing to Grange Lakes on Grange Road	✓	Refer to Key Action 1.2.
11. Install a pedestrian crossing on Grange Road between Military Road and Anthony Street	×	Received less community support than Treatment Option 10. Pedestrian and Cyclist surveys indicated that north / south volumes we low.

Treatment Option	Part of HTPP	Analysis
12. Ensure east / west major pedestrian thoroughfares have safe pedestrian crossing points across north /south streets	1	Refer to Key Action 1.1.
13. Improve pedestrian accessibility (throughout study area)	✓	Refer to Key Action 1.1.
14. Line marked pedestrian areas adjacent Henley Jetty and stairs to beach in Henley Square	1	Refer to Key Action 2.2.
15. Cyclists required to dismount in Henley Square	×	This treatment option was not considered appropriate with the recommendation of Key Action 2.2.
16. Introduce centre blister island on East Terrace to calm traffic	-	Refer to Key Action 4.2.
17. Introduce slow points along Cudmore Terrace to calm traffic	-	Refer to Key Action 4.2.
18. Introduce angled slow points on Wright Street to calm traffic	-	Refer to Key Action 4.2.
19. Introduce a 40 km/hr study area precinct speed limit	×	Considered expensive to introduce across the whole study area due to the implementation of physical measures such as local area traffic management.
20. Introduce a 40 km/hr Henley Beach precinct speed limit	✓	Refer to Key Action 4.1.
21. Introduce a 25 km/hr Henley Beach precinct speed limit	×	This treatment option was unsupported at stakeholder consultation.
22. Low speed design solutions within the study area	×	This treatment option was not considered appropriate with the recommendation of Key Action 4.1 and 4.2
23. Left out only into Seaview Road from the Henley Square car park	×	This treatment option is considered low priority.
24. Left out only into Military Road from the Foodland car park	×	This treatment option is considered low priority.
25. Remove slip lanes at the South Street and Military Road intersection	×	May be completed during reconstruction of the roundabout when due.
26. Create a 4 approach arm roundabout at the Henley Beach Road / Seaview Road intersection	√	Refer to Key Action 4.6.

Treatment Option	Part of HTPP	Analysis
27. Provide signage and line marking to control and limit through traffic, speed and parking in laneways	×	This treatment option is considered low priority.
28. All laneways modified to one-way	×	This treatment option is considered low priority.
29. Re-mark faded line marking throughout study area	-	General Council maintenance to be carried out as required.
30. Redesign existing roundabouts to cater for buses that currently 'hit' existing kerbing	1	Refer to Key Action 4.5.
31. Remove / trim existing vegetation where possible to alleviate sight distance concerns at corner blocks	√	Refer to Key Action 4.4.
32. New off-street car park (to replace car parking removed for other treatment options) – New underground / undercroft car park	×	This treatment option is considered unfeasible for this plan due to high cost of establishment and maintenance.
33. New off-street car park (to replace car parking removed for other treatment options) – New mulit-storey car park	×	This treatment option is considered unfeasible for this plan due to high cost of establishment and maintenance.
34. Install car parking meters for existing on-street and off-street car parks adjacent to Henley Square	×	This treatment option received very low community support and therefore is considered low priority.
35. Remove Henley Square car park (north of Henley Square) if suitable alternative is built	×	This treatment option is considered unfeasible for this plan due to high cost of establishment and maintenance.
36. Provide a dedicated pick up / drop off point at the beach for beach goers travelling by car	√	Refer to Key Action 5.1.
37. Increase car parking near Henley Square for persons with a disability	✓	Refer to Key Action 5.5.
38. Redesign Coast Park car park (located south of Henley Square, accessed from the Esplanade) to improve amenity, provide more car parking and improve traffic flow	√	Refer to Key Action 5.3.

Treatment Option	Part of HTPP	Analysis
39. Establish a car parking fund for any new development	×	Not considered at this stage as no new significant car parking areas are proposed.
40. Negotiate a deal with the Pavilion (Foodland) car park proprietor regarding increased use and opening hours s	√	Refer to Key Action 5.2.
41. Regulate on-street car parking and create a drop off zone at Star of the Sea School	×	This treatment option is considered unfeasible at this stage, a review of existing car parking zones for the school is recommended as part of Key Action 5.5.
42. Star of the Sea School – Promote 'walking bus'	✓	Refer to Key Action 5.5.
43. Utilise existing schools for off-street car parking on weekends	×	This treatment option is considered unfeasible at this stage due to logistical concerns and required security measures to protect school property.
44. Provide additional off-street car parking for Henley and Grange Community Oval and utilise for events associated with Henley Square	×	This treatment option is considered low priority.
45. Provision of 'watch for cyclists' signs at roundabouts	×	This treatment option was unsupported at stakeholder consultation.
46. Increase bicycle parking facilities at Henley Square	✓	Refer to Key Action 2.3.
47. Create line marked shared path along Coast Park section (adjacent jetty) or rumble strips to delineate change of conditions	√	Refer to Key Action 2.2.
48. Negotiate with the Public Transport Services Division of DPTI to re-route an existing bus service or provide a new bus service and provide a bus stop adjacent the Western Community Hospital	✓	Refer to Key Action 3.4.
49. Provide 'iconic' bus stops at Henley Square	✓	Refer to Key Action 3.1.
50. Upgrade all bus stops within the study area to comply with the Disability Discrimination Act requirements	√	Refer to Key Action 3.2.
51. Relocate / modify bus layover area on Military Road	✓	Refer to Key Action 3.3.

Treatment Option	Part of HTPP	Analysis
52. Provide a late night taxi rank on Seaview Road	✓	Refer to Key Action 7.2.
53. Improve wayfinding in the study area	-	Incorporated into Key Action 1.1.
54. Use native plant species in landscaping improvements	✓	Incorporated into Key Action 6.1.
55. Improve the consistency of landscaping treatments s	-	Incorporated into Key Action 6.1.
56. Advocate for a 'green wall' or green landscaping at the Baju/H2O development on Military Road	×	This treatment option is considered unfeasible at this stage due to logistical and financial requirements for establishment.
57. Improve Streetscape along main roads (Seaview Road, Military Road, Grange Road, Henley Beach Road)	√	Refer to Key Action 6.1.
58. Improve pedestrian and cyclist connections to Grange Lakes	✓	Incorporated into Key Action 1.1.



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