

St Marys Urban Design & Traffic Management Strategy- Part A Break O' Day Council Municipal Management Plan September 2013 BOAGS

# ST MARYS TRAFFIC STUDY

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FOR

BREAK O'DAY COUNCIL



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# 1. **INTRODUCTION**

# 1.1 PURPOSE

Bitzios Consulting is working with TCG Planning to develop an urban design strategy and masterplan for the St Marys town centre.

This report provides a summary of the condition of the existing traffic network in terms of operating efficiency, safety and connectivity, recommends guiding principles and lists infrastructure and non-infrastructure needs for the centre to address future predicted growth. The recommendations from this report will provide input towards the development of the final urban design strategy and masterplan.

# 1.2 LOCATION

The geographic scope of the study is shown in Figure 1.1.



Figure 1.1: Study Area

# 1.3 BACKGROUND

A number of previous studies and strategies exist which relate to traffic and transport issues in the St Marys town centre area. These studies and strategies are listed as follows:

- Regional Land Use Strategy of Northern Tasmania (2011);
- St Marys Traffic Management Review (2006);
- St Marys Townscape Project (1995);
- Break O'Day Tourism Development Strategy 2012-2017 (2012);
- St Marys Angle Parking Options Council Report (2012); and
- Break O'Day Transport Masterplan (under development).

A short summary of the key issues raised in each of the above studies / strategies are discussed in Section

# 2. PREVIOUS STUDY RECOMMENDATIONS

# 2.1 REGIONAL LAND USE STRATEGY OF NORTHERN TASMANIA (2011)

## 2.1.1 Strategic Directions

The Regional Land Use Strategy of Northern Tasmania (RLUSNT) is the state government's current strategic direction document for the northern region of Tasmania. This encompasses the Break O'Day municipality.

The RLUSNT places an emphasis on the need to better integrate land use and transport as outlined early within the document within Strategic Direction #2 as follows:

#### • 2(b) Co-ordinate transport planning and land use planning by:

- safeguarding planned network improvements;
- identifying key transport networks and future networks; and
- understanding growth predictions.

#### • 2(c) Encourage sustainable modes of transport by:

- protecting the rail and road network from encroachment of sensitive issues;
- ensuring traffic impacts and car parking are adequately considered; and
- encouraging greater cycling, walking and public transport use.

The RLUSNT also has a strong emphasis on promoting the use of non-car based modes of travel and is listed in Strategic Direction #9 as follows:

#### Integrated Sustainable Transport Design

- encourage access by means other than private car and creating opportunity and infrastructure for sustainable transport;
- ensure that residential and freight transport and travel demands are central concerns in the location of new development; and
- ensure full consideration is given to creating and securing opportunities for sustainable transport initiatives such as improved access to walking, cycling and public and freight transport networks.

### 2.1.2 Strategic Directions - Policies and Actions

Stemming from the strategic directions are regional policies and actions. The 'Integrated Land Use and Transport' section is shown in Table 2.1 below.

### Table 2.1: Strategic Directions - Integrated Land Use and Transport Policies and Actions

	-
Policy RNS-P7 Ensure new development utilises existing infrastructure or can be provided with timely transport infrastructure, community services and employment. RNS-P8 Apply transit oriented development principles and practices to the planning and development of transit nodes, having regard for local circumstances and character. RNS-P9 Plan new public transport routes, facilities and high-frequency services to ensure safe and convenient passenger accessibility, and support the interrelationship between land use and transport.	Action RNS-A10 Prioritise amendments to planning schemes to support new urban growth areas and re-development sites with access to existing or planned transport infrastructure namely to support delivery of transit oriented development outcomes in activity centres and identified transit nodes (i.e. bus interchanges) on priority transit corridors.
RNS-P10 Undertake land use and transport planning concurrently and sequence development with timely infrastructure provision. RNS-P11 Connect active transport routes to improve accessibility and encourage transport use by a broader range of people.	<ul> <li>RNS-A11 The strategy will be further informed by the 2012 Northern Integrated Transport Plan. Future iterations of the strategy are to ensure planning schemes provide appropriate zoning patterns and supporting land use activities with regard to:</li> <li>identification of transport demands and infrastructure required;</li> <li>protection of key transport corridors from incompatible land uses, and</li> <li>creation of sustainable land use patterns that maximise efficient use of all future transportation modes i.e. road/rail, freight routes (including land and sea ports), and public transport, pedestrian and cyclists networks.</li> </ul>
RNS-P12 Manage car parking provision in regional activity centres and high-capacity transport nodes to support walking, cycling and public transport accessibility.         RNS-13 Ensure all new development within walking distance of a transit node or regional activity centre maximises pedestrian amenity, connectivity and safety.	RNS-A12 Promote the region's Activity Centres network as multi-functional mixed use areas that provide a focus for integrating higher residential development outcomes, delivering of social and community facilities and services, and public transport provision.

## 2.1.3 Settlement Hierarchy

The RLUSNT specifies a settlement hierarchy for the northern Tasmania region. St Marys is identified as a 'rural town'.



Figure 2.1: Northern Tasmania Settlement Hierarchy

A 'rural town' is described as larger townships providing lower order administrative and commercial functions for sub-regions where distances to major urban areas make regular travel difficult.

St Marys is acknowledged in the strategy as a historic settlement area with a 'mining' heritage. Rural towns are also described and mostly residing in flat areas adjacent to rivers and containing a 'main street' with high pedestrian amenity.

As the 'main street' in St Marys currently has a low pedestrian amenity and as such this is an area that will require particular attention during the 'masterplanning' phase for the town centre.

## 2.1.4 Regional Activity Centre Network

St Marys is identified to contain facilities and services of an activity centre network. The RLUSNT states that activity centre networks are to:

- create economic growth by co-locating a mix of land uses;
- concentrate goods and services more efficiently;
- provide appropriate locations for government investment in public transport, health, education, cultural and entertainment facilities;
- provide a focus for community and social interaction;
- encourage multi-purpose trips and shorter travel distances to reduce demand for private travel;
- integrate land use and transport to support walking, cycling and public transport; and

• accommodate higher density residential development, employment and trip-generating activities.

The settlement hierarchy for a 'rural town' further emphasises that St Marys should be highly accessible by cycling or walking from the surrounding area to enhance local access, and if appropriate ideally be adjacent to a public transport corridor.

### 2.1.5 Regional Activity Centre – Policies and Actions

Key traffic and transport related policies and actions relating to regional activity centres are shown in Table 2.2.

### Table 2.2: Regional Activity Centre – Transport Related Policies and Actions

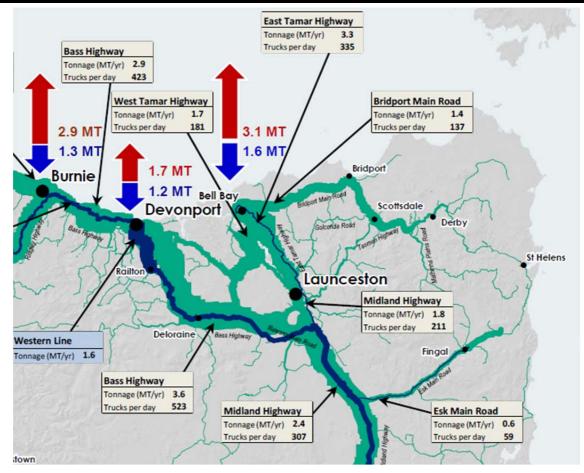
Policy	Action
RAC-P5 Ensure safe and amenable access for all members of the community to Activity Centres by supporting active transport opportunities to encourage people to walk, cycle and use public transport to access Activity Centres.	RAC-A6 Ensure planning schemes have consistent policy, planning and design provisions to support and maximise public transport and pedestrian and cycle access to the hierarchy of activity centres;
	RAC-A7 Support the improved use of public transport and alternative modes of transport, pedestrian amenity and urban environment in a coordinated and consistent manner between the higher order activity centres.
RAC-P6 Improve the integration of public transport with Activity Centre planning, particularly where it relates to higher order activity centres.	RAC-A8 Ensure planning schemes support integrated land use and transport planning principles to reinforce the role and function of the Regional Activity Centres network.
RAC-P7 Coordinate with state agencies such as DIER to ensure the ongoing delivery of high quality, high frequency public transport that meets the needs and expectations of the community and supports the Regional	RAC-A9 Ensure transport strategies and future infrastructure provision support the role and function of the Regional Activity Centres network.

### 2.1.6 Infrastructure Provisions

The RLUSNT commits to a number of short term and long term infrastructure priorities. There is no mention of strategic intent to improve the Esk Main Road or the road access between St Marys and St Helens.

### 2.1.7 Tasmania Freight Strategy

A Tasmania Freight Strategy will soon be developed for the State. The 2008/09 freight survey data is shown in Figure 2.2.



#### Figure 2.2: Freight Survey Data Summary

Based on the findings in Figure 2.2, it is very unlikely that heavy vehicle usage on the Esk Main Road will be a reason for funding any future road upgrades. It should also be noted that it is suggested that there are only 59 daily truck movements which is expected to be even less through the St Marys 'main street'.

### 2.1.8 Northern Integrated Transport Plan

The Northern Integrated Transport Plan (NIPT) 2003 is currently being updated and has objectives to:

- provide guidelines to facilitate planning for the development of transport infrastructure to enhance economic and social development of the region taking into account environmental and safety needs;
- identify key transport corridors (freight, tourist);
- identify transport demands and infrastructure required to 2020;
- identify future land use patterns;
- identify suitability for development of future transport modes in response to predicted demands for their use;
- promote a cooperative approach to the development of other transport infrastructure to meet needs; and
- encourage a partnership between Region North and State Government in prioritising projects.

### 2.1.9 Regional Infrastructure Network – Policies and Actions

Key traffic and transport related policies and actions relating to the regional infrastructure network are shown in Table 2.3. Whilst Table 2.3 is lengthy, it contains important information that should be used to assist with shaping the masterplan for the St Marys town centre.

# Table 2.3: Regional Infrastructure Network – Transport Related Policies and Actions

	vetwork - Transport Related Folicies and Actions
Policy	Action
RIN-P1 Coordinate, prioritise and sequence the supply of infrastructure throughout the region to match its settlement framework.	RIN-A1 Liaise with state agencies principally DIER to develop transport initiatives.
RIN-P2 Identify infrastructure capacity, need and gaps in current provision to meet requirements for projected population and economic activity.	RIN-A2 Liaise with state agencies namely DEDTA and DIER to develop infrastructure strategies for Northern Tasmania.
RIN-P3 Direct new development towards settlement areas that have been identified as having spare infrastructure capacity.	RIN-A3 Preference growth in areas in that uses under capacity of existing infrastructure and give preference to urban expansion that is in physical proximity to existing transport corridors and the higher order Activity Centres.
RIN-P4 Recognise the DIER Road Hierarchy and protect the operation of major road and rail corridors (existing and planned) from development that will preclude or have an adverse effect upon the existing and future operations.	RIN-A7 Protect the region's road and rail infrastructure network to enable a transition between compatible land uses and an adequate separation between conflicting development (e.g. ribbon residential development and limit multiple new accesses onto regional freight roads) that would compromise safe and efficient operations of existing and future planned road and rail corridors.
RIN-P5 Recognise and protect the region's port, and airport and other intermodal facilities (existing and planned) and protect their operation from development that will preclude or have an adverse impact upon the existing and future operations.	RIN-A8 Protect strategic road corridors that are predominately State Roads (Category 1-3) under Tasmanian Road Hierarchy (ie includes the Esk Highway but not Elephant Pass Road).
	RIN-A9 Ensure appropriate zoning and/or other mechanisms within planning schemes support future roads that are currently being planned by DIER.
RIN-P6 Facilitate and encourage active modes of transport through land use planning.	<ul> <li>RIN-A10 Ensure that subdivision roads are designed and constructed to meet the needs of all users and to reinforce the functions, safety and efficiency of the road or communal driveway, e.g. pedestrians and cyclists</li> <li>RIN-A11 Ensure that future subdivision design allows for permeability and connectivity in the transportation network.</li> <li>RIN-A12 Incorporate contemporary guidelines and other relevant subdivision design codes into Planning Schemes to ensure the provision of facilities for walking and cycling deals with this.</li> <li>RIN-A13 Ensure the needs of off-road and on-road facilities cycle facilities (shared pathways and engineering aspects associated with the different needs of cyclists and walkers) are addressed.</li> <li>RIN-A14 Ensure future Specific or Local Area Development Plans can provide a means of linking the development of the Principal Urban Cycling Networks (bike highways) with the work that has to be done at local level to create appropriate local cycling 'connector routes' and end of trip facilities.</li> <li>RIN-A15 Ensure Local Area Development Plans enable and motivate walking for transport via provision of local walking routes as part of Local Area Development Plans.</li> <li>RIN-A16 Facilitate the increased use of active transport modes for short trips by ensuring future subdivisions provide for pedestrian connectivity to open spaces, trails, and cycle and bus routes and include adequate provision of cycle ways.</li> </ul>

# 2.2 ST MARYS TRAFFIC MANAGEMENT REVIEW (2006)

The St Marys Traffic Management Review was completed by SKM in 2006 and focussed on addressing traffic issues raised by Break O'Day Council following a public meeting held in St Marys.

The study is comprehensive and makes detailed positive recommendations in relation to the 'main street' summarised as follows:

- gateway treatments as suggested in the St Marys Townscape project would calm traffic if supported with other measures;
- the 50kph section of road 'stretches the limits' of the speed limits process;
- installation of kerb-outs to improve pedestrian crossing movements near the staggered intersections of Frank Street and Story Street with Main Road as well as the Cameron Street intersection;
- edge lines be installed, combined with kerb-outs to narrow the road and have a calming effect on vehicle speeds;
- the 45 degree angle parking complied with the Australian Standards however required maintenance / upgrading to current signage standards. It is understood that this maintenance is yet to be carried out;
- installation of a median strip and edge lines would narrow the lanes having a calming effect on traffic whilst also facilitate safe cross road pedestrian movements. This would however require the angle parking to be removed. This option was recently presented to the community and the outcomes of that process is discussed in Section 2.5; and
- installation of speed camera has not been successful to date.

The need for speed cameras is normally dictated by a function of a history of traffic volumes, vehicle speeding and a poor crash record. The crash data and traffic volume data would suggest that this will remain a low priority for the foreseeable future.

The report mentions discussions with DIER and the inability to provide roundabout 'gateway' treatments due to the need to provide for heavy vehicle movements through the town centre. This issue warrants further discussion as there are some positive examples of heritage/tourist based centres which have used a roundabout (or roundabouts) as 'gateway' treatments to the town centre to promote a sense of 'arrival' to a destination. The difficulty however will be on how to justify the expenditure when the economic return is not expected to be as great.

# 2.3 ST MARYS TOWNSCAPE PROJECT (1995)

The St Marys Townscape project is now quite dated however still very relevant. A number of important conclusions/ recommendations were made within the project which can still guide the towns form into the future.

Key traffic related findings from the study relate to:

- a proposed roundabout at the Main Street / Story Street intersection to provide a 'gateway' style treatment for the town centre;
- a signage strategy to promote local potential tourism attractions; and
- localised footpath widening around the Main Street bridge to improve pedestrian safety.

# 2.4 BREAK O'DAY TOURISM DEVELOPMENT STRATEGY 2012-2017 (2012)

The Break O'Day Tourism Development Strategy identified that whilst there was growth in visitors to the area in 2009/2010, there has been a dramatic reduction in visitations in 2011.

A key focus of the strategy is the need to lobby for support for an alternative 'robust and safe' road link between St Marys and St Helens. The strategy also discusses developing initiatives that provide 'year round' benefits. The key issue surrounding the viability of providing an alternative high quality traffic route is the low traffic volumes that exist in the area and the low return on investment that would be expected (from a traffic perspective only).

# 2.5 ST MARYS ANGLE PARKING OPTIONS – COUNCIL REPORT (2012)

A report to Council was submitted on two parking options that were presented to the community on 25<sup>th</sup> September 2012.

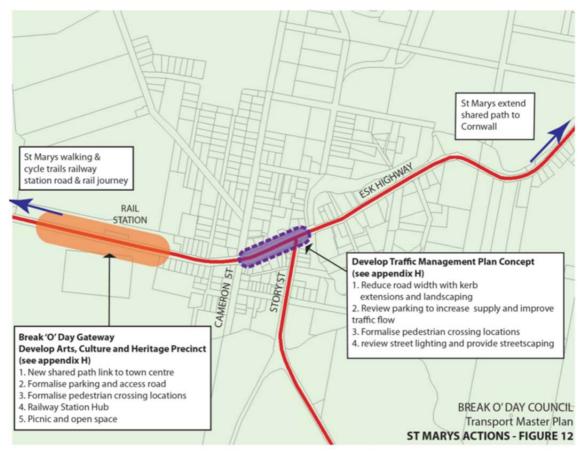
The options focussed around including a pedestrian refuge area within Main Street and considered angle parking or parallel parking solutions.

The community opted for a 'do nothing' option wanting the existing situation to be retained, whilst the Council submitted report supported DIER's preferred option to convert the angle parking to parallel parking. The main reasoning for supporting DIER's position was that the current parking configuration was considered to be non-compliant with relevant standards, and the final solution would have to be approved by DIER, limiting the recommended way forward to conform with the state's position.

Developing a solution that meets both DIER's requirements and the local communities' objectives will be a key challenge for St Marys.

# 2.6 BREAK O'DAY TRANSPORT MASTERPLAN (UNDER DEVELOPMENT)

The Break O'Day Transport Masterplan is currently under development and is shortly due for release. The transport masterplan will provide overarching guiding principles and infrastructure solutions to the management of the movement of people and goods through the region over the next 20 years.



The key draft recommendations from the Masterplan report for St Marys are shown in Figure 2.3 below.

Figure 2.3: Transport Masterplan Recommendations

# 3. EXISTING ISSUES

# 3.1 ROAD HIERARCHY

The Tasmanian State Road Hierarchy is specified by DIER. The State road hierarchy maps show that Main Street is a Category 3 – Regional Access Road and Story Street / Elephant Pass Road is a Category 5 – Other Road.

Regional Access Roads are intended to facilitate:

- connection of smaller regional resource bases with trunk and regional freight roads;
- local commercial interaction;
- sub-regional and inter-regional freight movement by connecting with trunk and regional freight roads;
- sub-regional passenger vehicle movement and connection to trunk and regional freight roads; and
- sub-regional tourist movement and connection to trunk and regional freight roads.

Other Roads are intended to:

- log transport but they are not the most important log transport roads, and experience fluctuation in use; and
- farm property access for purposes including delivery of fuel and supplies, stock transport, crop delivery and milk pick-up.

The above road hierarchy presents a functional hierarchy focussed on freight transport needs. More traditional road hierarchies in its most simplistic form are as follows:

- Arterial roads carry through traffic external to the specific area
- Sub arterial roads carry through traffic between multiple specific areas and the arterial roads.
- **Collector streets** are located within the specific area, providing indirect and direct access for land uses within the specific area to the road network. These streets should carry no traffic external to the specific area.
- Local streets are bounded by the collector streets with low speed environments and pedestrian priority. Their function is to provide direct property access.

Based on the more traditional functional hierarchy, Figure 3.1 shows the existing road hierarchy in St Marys.

The road hierarchy is somewhat disjointed and does not provide any east-west connectivity parallel to Main Street. There are opportunities to consider implementing rear-lane ways or access streets providing improved opportunities to circulate around the town centre. Whilst this is unlikely to be a short term need, it is a matter for consideration towards the development of a longer term masterplan.

# BITZIOS

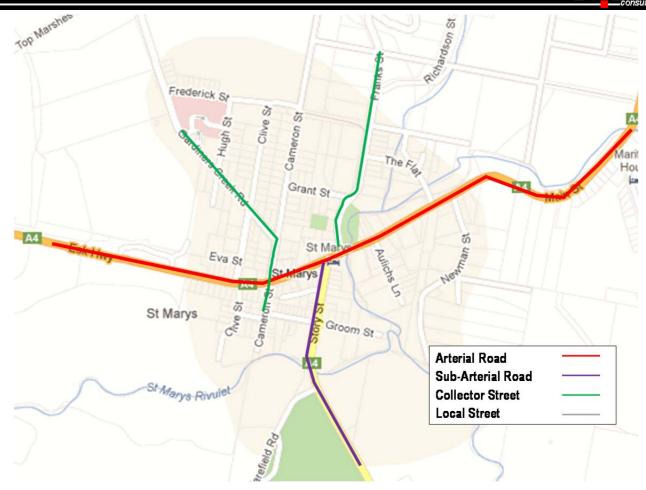


Figure 3.1: St Marys Existing Road Hierarchy

# 3.2 TRAFFIC VOLUMES

A summary of the existing traffic volumes (2012) are shown in Figure 3.2. The traffic volumes were annualised to the peak (January) and off-peak (June) periods and increased by 1.25% per annum to reflect 2012 traffic conditions.

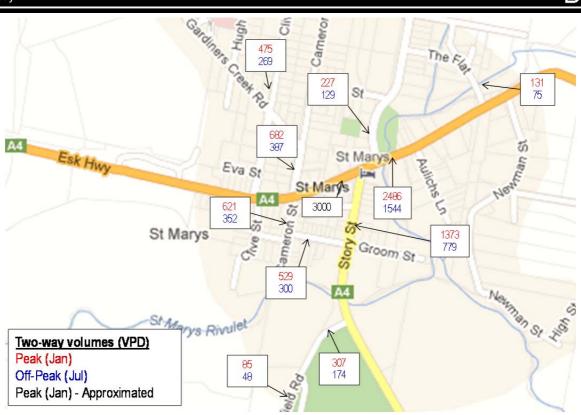


Figure 3.2: 2012 Peak and Off Peak Daily Traffic Volumes

Figure 3.2 shows that the traffic volumes within the town centre are extremely low. Traffic congestion will not be of any concern for many years to come. The key issue surrounding the town centre revolves around the need to create enough friction on the main street to slow tourist traffic within the town centre. This needs to be combined with interesting road-side attractions and improved road-side signage to encourage tourists to 'stop', rather than passing 'through' the town centre.

The *Tasmanian Freight Survey 2008-09 – Data Summary Report* states that Esk-Main Road only carries in the order of 60 trucks per day (towards the western end of the road corridor). The truck movements through St Marys are expected to be even lower.

Notwithstanding this, a competing management issue for this road space is the need to suitably cater for heavy vehicle movements whilst also cater for local and tourist traffic.

## 3.3 SAFETY

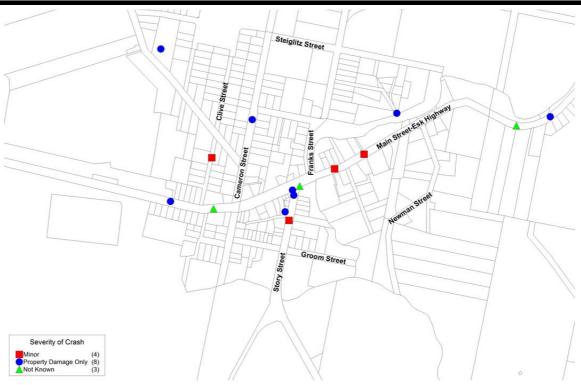
Crash data for a five year period between 2006 and 2011 was provided by DIER. Figure 3.3 to Figure 3.5 provides a summary of the key crash trends.





Figure 3.4: 0

Crash by Time of Year



### Figure 3.5: Crash by Severity

The crash information does not suggest that there is any single major crash type of concern.

## 3.4 TRAFFIC ISSUES

Main Street resides on the Esk Main Road and is controlled by the State Government. It is 100kph either side of the St Marys township. The key traffic issue relating to Main Street is the need to overcome the inconsistent road environment where the pavement widths are narrow (7m width) in the 100kph speed zone, which then leads into a much wider (18m width) road section approaching the town centre where the speed limit reduces to 50kph. Figure 3.6 shows the width of the road formation through the town centre and in particular at the key intersection of Main Street and Story Street.



Figure 3.6: Main Street / Story Street Intersection

The 50kph speed reduction needs to coincide with a narrowing of the road formation and introduction of roadside elements to suggest that there is a reason for reducing the speed limit.

From the east, there is an existing road narrowing with the location of the existing town bridge. This provides an opportunity to provide an effective entry statement to entering the heart of the town centre. Figure 3.7 shows the approach to the town centre from the east.



### Figure 3.7: Road Narrowing from the East

Conflicting with this road narrow is the presence of a consistent 50kph speed limit which extends too far to the east. Consideration should be given to reviewing the speed limit to the east of the town centre with the 50kph speed limit starting closer to Aulichs Lane.

### Lane widths

DIER's Road Hazard Management Guide states that the width of a traffic lane influences the ease with which vehicles can operate in that lane. Austroads specifies appropriate lane widths for urban and rural environments in Section 12 of Urban Road Design and Section 11 of Rural Road Design respectively. However, the recommended lane widths and shoulder widths for the various categories of Tasmanian roads differ from the Austroads requirements and are shown in Table 3.1.

Road category Daily Traffic	1	2	3	4	5
0-1000	N/A	3.0m	3.0m	2.75m	As warranted
1000-2500	N/A	3.0m	3.0m	2.75m	As warranted
2500-5000	3.5m	3.5m	3.0m	3.0m	As warranted
5000 plus	3.5m	3.5m	3.25m	3.0m	As warranted

### Table 3.1:Recommended lane widths

Adopting the above road design standards, and considering the existing Main Street formation width is 18m, there is ample opportunity to improve the management of the road space through the main street.

## Traffic Management

It is understood that DIER has previously rejected Council and community requests for the installation of a roundabout as a 'gateway' treatment on Main Street due to the need to provide for heavy vehicle movements through the town centre.

Examples of the types of roundabout treatments adopted in other centres are shown in Figure 3.8. The locations chosen are seen to suitably cater for heavy vehicle traffic whilst also providing the visual queue that motorists have arrived at a local centre.



## Figure 3.8: Roundabout Examples

Due to the short length of the St Marys main street, and with the main activities also branching down Story Street, it is very easy to drive past St Marys and not having any opportunity to slow down or turn around to go back. The provision of a roundabout will address most of these needs, however based on the traffic volumes alone, the implementation of such a facility is unlikely to be warranted for many years to come.

Whilst the provision of a roundabout may provide for a longer term solution once the town has matured, in the shorter term, treatments such as edge line marking and kerb extensions can be cheaply implemented to introduce a series of road narrowings along the main street.

Improvements to line marking, combined with effective signposting of parking areas and key local destinations, along with roadside vertical elements such as banners, street lighting and trees can all assist with reducing vehicles speeds and improving the legibility of the town centre.

A key issue that requires rectification in the short term is the height of the kerbing that exists adjacent to the angle parking. The height different provides a physical separation / barrier between the parking bays and the footpaths, reducing the attractiveness and pedestrian amenity for the integration between parking areas and potential active public areas. The increased height also poses a significant challenge for the elderly. As a result of the additional kerb height, wheel stops have been provided as shown in Figure 3.9. This adds to the visual clutter and further reduces the attractiveness of the main street as well as the amenity for pedestrians.

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### Figure 3.9: Kerbing Too High

To address this issue the road should be re-profiled and raised to a suitable level to achieve the relevant standard. The wheel stops may then be removed and the parking bays marked in accordance with AS2890.5.

## 3.5 PARKING

### 3.5.1 Parking Supply

Site observations revealed that the on-street parking area for the 'main street' section between Story Street and Cameron Street was generally occupied about 30% during most part of the day, with sometimes increasing to approximately 80% utilised during the higher peak periods (ie mid-morning and mid-afternoon). Figure 3.10 shows the extent of parking utilisation around 8.30am.



Figure 3.10: Parking Utilisation

The bakery located on the eastern side of the town bridge was noticed to be popular with a high turnover of parkers particularly in the morning period. Most of the people parking in the bays along Main Street and Story Street only stayed for a short duration, whilst there were a number of vehicles which appeared to park all day, suggesting they were shop owners or employees.

During the quieter months it would be considered acceptable for employees /shop owners to park outside of their shop, but during peak periods it is more beneficial for the town to have the parking bays restricted to 1hr or 2hr parking.

As the town matures, additional overflow parking will be required to be considered. Site servicing will also become slightly more problematic. Consideration should be given to extending the existing rear lane-way and creating 'back of shop' at-grade parking.

Potential re-development of the town hall site could also assist with creating a formal at-grade off-street parking area for visitors to the town.

Figure 3.11 shows the potential location for a series of at-grade car parking areas and rear service lane connectivity.

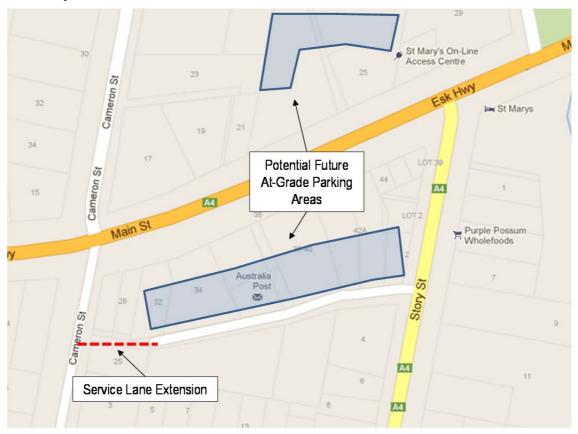


Figure 3.11: Rear Servicing and Parking Overflow

### 3.5.2 Parking Configuration

Community consultation to date has suggested that it is desired to retain the angle parking on the main street, whilst Story Street should retain its parallel parking arrangement. Angle parking is often preferred for smaller town precincts as the spaces are typically more convenient to access for drop-in trips (ie Post Office / Groceries / Coffee).

Notwithstanding this, the replacement of angle parking with parallel parking will reduce the road footprint substantially, providing greater opportunities for improved 'main street' public areas and pedestrian crossing facilities. The reduced roadway width will also provide an impression of a busy vibrant town centre, slowing traffic down and encouraging tourists to stop and visit.

Council Agenda and Minutes from November 19<sup>th</sup> 2012 regarding St Marys Streetscape indicate an agreement to progress with the parallel parking option. The concept plan includes a centre refuge, turning lane and pedestrian islands with parallel parking along Main Street.

With an adjustment to the pavement levels to address the kerb height and inclusion of improved parking bay and edge line marking, the roadside environment could change the appearance of the 'main street' drastically.

The installation of edge line marking should be considered for implementation within the core town centre area. The parallel parking spaces should also be line marked through this area as well. The area considered appropriate for additional line marking and streetscaping in the first instance is shown in Figure 3.12.

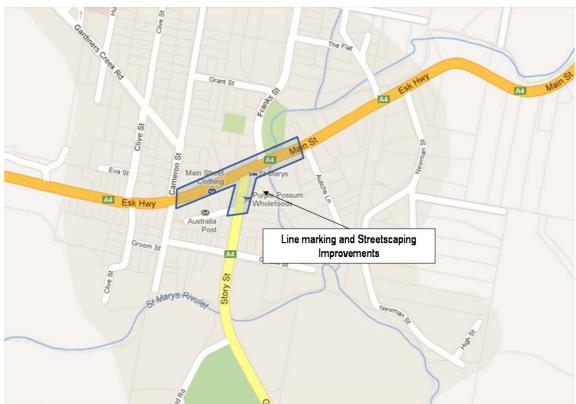


Figure 3.12: Area for Improved Line Marking / Streetscaping Improvements

# 3.5.3 Disabled Parking

Currently there are no parking areas set aside for persons with a disability. Consultation with the community should occur to determine if there is a demand for such a need and if so, where the space/s should be allocated. It should be noted that the dimension requirements for an on-street disabled car space is substantially more than a general car space due to the need to provide for an increased level of access.

# 3.6 PEDESTRIANS/CYCLISTS

# 3.6.1 Site Observations

Site observation revealed a number of students in the morning walking between Franks Street and the local school. In the afternoon peak period there was also a number of students seen to be returning from the school. Throughout the day there were a number of people noticed walking from the eastern residential areas into town.

Whilst footpaths have been provided for most part of the core town areas and connections to key destinations, there were only a number of areas where suitable widths were provided. These areas include

the northern side of Main Street, east of the town bridge near the library and bakery and along the northern side of Gardiners Creek Road down to Cameron Street. This will become problematic in the future as the ageing community begins to increasingly access the town centre via mobility scooters.

Strategies will need to be implemented to gradually upgrade the existing footpath areas to a suitable width. Many residential streets are yet to include a pavement footpath and rely on the grassed verge for access. Franks Street is an example where a paved footpath would be beneficial.

Site observations also revealed a short section of missing footpath along Story Street, between the rear service lane and Main Street (refer Figure 3.13). This should be prioritised for improvements.



Figure 3.13: Missing Footpath Section

### 3.6.2 Cycle Facilities

St Marys currently does not have any formal on-street or off-street cycle facilities. During the site observations no cyclists were noticed within the town centre area. Based on the current usage it would be difficult to justify the funding required to provide dedicated on-street or off-street facilities within the town centre.

The road widths within the town centre are generally wide and the traffic volumes are low enough for safe shared on-road use.

A program of widening existing narrow footpaths to cater for mobility scooters will also assist with catering for younger cyclists off-street.

### 3.6.3 Pedestrian Crossing Facilities

Wide road formations and a lack of dedicated pedestrian crossing facilities exist within the town centre. As the traffic volumes are low, there are no current crash trends or known pedestrian to vehicle conflicts in the area. Some anecdotal evidence exists that pedestrian safety is compromised as people cross Main Street in conflict with a reversing angled parked car.

Recent 'main street' options focussed on including a pedestrian refuge along Main Street to assist with pedestrian movements. Another method for assisting pedestrians crossing a road is to install roadside kerb

extensions to physically narrow the entire road formation. Combined with edge line marking this can be an effective tool in reducing vehicle speeds, providing a series of dedicated crossing points and reducing the crossing distance.

Figure 3.14 shows the existing pedestrian crossing point adjacent to the town bridge and Figure 3.15 shows a kerb extension as already installed at Cameron Street. Whilst these facilities have made an improvement to the pedestrian amenity in the area, it is lacking the associated line marking or treatment on the opposite side of the road to finalise the intent.

These types of treatments are also required at the Franks Street intersection and Story Street intersection.



Figure 3.14: Pedestrian Facility Town Bridge



Figure 3.15: Kerb Extension Cameron Street

# 3.6.4 Pedestrian/Cycle Connectivity

With the medical facility located on Gardiners Creek Road and the newly established footpath, consideration should be given to try and provide an improved connection from Gardiners Creek Road through to the town hall. Opening pedestrian access from the Gardiners Creek Road catchment area through to the town hall may be ideally completed as part of a re-development of that site.

In addition, a pedestrian / cycle connection from Newman Street to Aulichs Lane will assist with providing direct connections for locals into the town centre encouraging a greater proportion of walking trips.

As developments occur along the main street and demands for 'back of shop' parking initiates, a series of pedestrian walk-throughs should be created to increase the permeability from the at-grade car park to the main street.

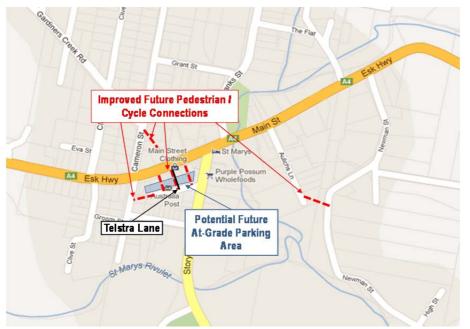


Figure 3.16 shows the suggested connections.

Figure 3.16: Possible Pedestrian / Cycle Connections

## 3.6.5 Footpath Crossfall

Figure 3.17 shows the change in crossfall that exists when crossing a driveway. Council should develop a standard drawing which depicts a required driveway grade when crossing the footpath area to ensure a consistent footpath crossfall along its entire length.



Figure 3.17: Changing Footpath Grades due to Driveway

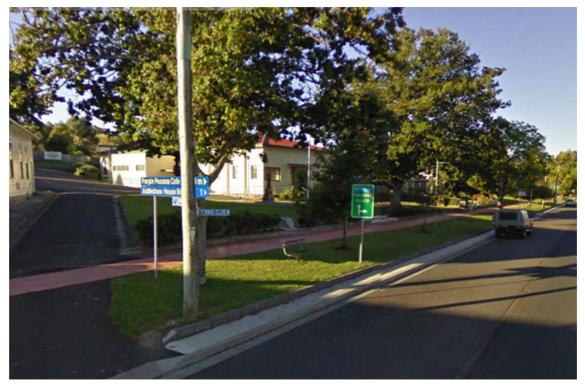
## 3.7 SIGNAGE

Figure 3.18 shows the location of the existing signage at the main Story Street intersection. The majority of the important directional signage is obscured by vegetation.



## Figure 3.18: Existing Directional Signage

Figure 3.19 shows the existing tourist related signage that exists on approaching the main intersection.

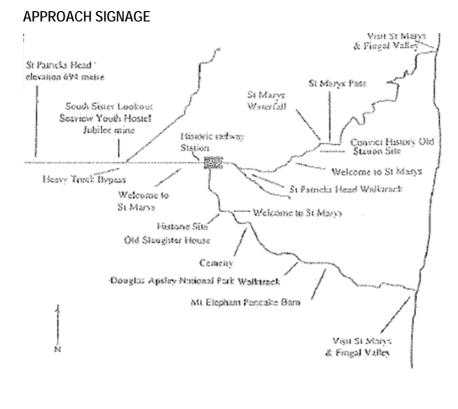


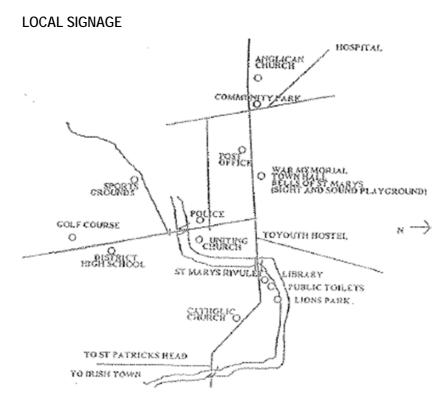
## Figure 3.19: Existing Tourist Signage

The information tourist signs provide little impact on encouraging a visitor to stop in St Marys. The 'Touring Route' sign in fact tells the motorists to drive through St Marys and either turn right or go straight ahead (which are the only two options available at the next major intersection) which makes it a redundant sign.

The Townscape Project complete in 1995 for St Marys provides a good starting point to develop a local signage strategy to approach DIER for approval.

The local signage strategy as included in the Townscape Project is shown in Figure 3.20.





## Figure 3.20: Townscape Project Signage Strategy

The existing tourist information board on the corner of Story Street and Main Street requires enhancement. Possible relocation of the tourist information and creation of a new park adjacent to town hall may assist with providing an identity for the town centre. Road signage to guide motorists to the information centre should also be considered.

# 3.8 EXISTING ISSUE SUMMARY

Bitzios Consulting was requested to provide an existing conditions traffic report that summarises the traffic network in terms of operating efficiency, safety and connectivity. The recommendations from this report will provide an input towards the development of the final urban design strategy and masterplan.

The key findings from the existing issues assessment are as follows:

- there is a strategic focus from the state government to reduce the reliance on private motor vehicle travel through effective land use planning policy to encourage the development of 'walking/cycling and public transport friendly' communities;
- the St Marys Traffic Management Review (2006) and St Marys Townscape Project (1995) provide an good foundation to use as a basis to develop a town centre masterplan;
- the adoption of a roundabout as an intersection control measure at the Story Street / Main Street intersection should be further considered and debated as a possible longer term solution as it also provides an opportunity for tourists to turn around after driving past the town centre;
- the community were consulted on two options for the main street which focussed around including a series of pedestrian refuges. The community opted for a do nothing opting, desiring to keep their current 45 degree angle parking. Notwithstanding this, the replacement of angle parking with parallel parking will reduce the road footprint substantially, providing greater opportunities for improved 'main street' public areas as well pedestrian crossing facilities. The reduced roadway width will also provide an impression of a busy vibrant town centre, slowing traffic down and encouraging tourists to stop and visit;
- improvements to line marking and kerb extensions can be effective in slowing traffic down and reducing pedestrian crossing distances. Combined with other road side elements such as vertical banners, streetlights, trees, interesting architecture and land uses can all assist with improving the local environment;
- consideration should be given to reducing the 50kph zone to the east to increase its effectiveness. The start of the zone should coincide with a 'gateway' treatment to the immediate east of the town centre (in the vicinity of the Library);
- the pavement along the southern edge of Main Street should be raised to reduce the kerb height. Wheel stops should be removed and the parking bays marked and signposted in accordance with AS2890.5;
- future at-grade overflow parking areas should be considered as part of a town hall re-development
  project along with additional parking provided at the rear of the Main Street businesses. The rear
  service lane should be extended through to Cameron Street providing appropriate access to the
  parking areas from Main Street;
- parking restrictions on the main street should be considered during peak periods in the longer term, should business owners/employees not agree to remove their vehicles from the area;
- future pedestrian/cycle connections should be implemented connecting Newman Street to Aulichs Lane, Gardiners Creek Road to Town Hall and the proposed future rear parking areas to Main Street;
- there doesn't appear to be a high demand for cycling, however improvements to widening existing footpaths to cater for mobility scooters will also assist with cycle movements. Traffic volumes and road width suggests that cyclists could safely share the road in the current environment;
- the St Marys Townscape Project (1995) recommended a signposting strategy for St Marys. This should be adopted as a starting point in developing a local signposting strategy that may be submitted to DIER for approval prior to implementation; and
- consideration be given to relocating the tourist information board adjacent to town hall, along with a town park, with appropriate guidance signage for motorists approaching from all directions.

# 4. GUIDING TRANSPORT PRINCIPLES

## 4.1 **OVERVIEW**

St Marys Town Centre has the potential to attract tourists as a 'drop in' destination on visiting other key attractions in the region. The key issue that remains for St Marys is its lack of an identity of a town centre core. It is very easy for a tourist to drive through St Marys without realising where they should have stopped.

Re-configuring the 'main-street' between Cameron Street and Story Street including attracting redevelopment or refurbishment of the adjacent land uses will be a key challenge. The provision of financial support to encourage change will also remain problematic.

Based on these key immediate challenges, regional strategies and existing issues, the guiding traffic and transport principles for St Marys are suggested as follows:

- 1. Improve the pedestrian experience;
- 2. Ensure road safety is maintained;
- 3. Integrate traffic mixes;
- 4. Better manage existing parking;
- 5. Improve connectivity; and
- 6. Provide a Town Centre identity.

The above key principles are discussed further in the following sections:

### 4.2 IMPROVE THE PEDESTRIAN EXPERIENCE

The pedestrian footpath along the shop front and the interface to the 'main street' currently do not attract tourists to 'drop in' for a visit. Figure 4.1 below provides a comparison between what currently exists and potentially what could exist within the 'main street' area.

In addition, a general improvement to the key pedestrian areas leading into the town centre is essential. Some of the streets where footpath improvements could be beneficial include Franks Street, Story Street and Cameron Street (south).







Figure 4.1: Example Footpath Improvement for Main Street

## 4.3 ENSURE ROAD SAFETY IS MAINTAINED

There are a low number of reported crashes within the town centre. The only crash trend noticeable were manoeuvring related crashes near existing car parks. If the town centre is to attract increased levels of tourist and local demands, improvements to the existing on-street parking configurations and introduction of formal pedestrian crossing facilities connecting parking areas to key land uses will be required.

The emphasis of this guiding principle is to maintain the positive road safety record that exists within the town centre.

## 4.4 INTEGRATION OF TRAFFIC MIXES

As the town centre evolves over time and infrastructure improvements are completed, they need to be cognisant of the fact that the town centre attracts a wide range of traffic types. These traffic types include:

- Heavy vehicles long distance freight;
- Heavy vehicle short distance freight;



- Tourist buses;
- Inter-regional buses;
- Local School buses;
- Campervans;
- Tourist traffic;
- Local traffic;
- Through business traffic;
- Local cyclists;
- Local pedestrians; and
- Local school children.

Each of the above traffic types contains different road infrastructure considerations, and as the town centre evolves, design practitioners and decision-makers need to be cognisant of the above issue. In particular, there appears to be a distinct lack of cycle facilities. In the interim, increased levels of linemarking should be provided to improve the safety for cyclists on-road, particularly where traffic volumes are higher and an off-road facility has not been provided.

## 4.5 BETTER MANAGE EXISTING PARKING

As the demand for parking along the main street intensifies, there will be a need to better manage the usage of existing parking spaces. Improvements required to be considered will mostly relate to the need for time restricted parking. This will ensure employees of the associated business premises are parking on the fringes of the town centre, with paying customers having direct access to premium parking locations.

In the longer term, consideration for larger at-grade car parks at the rear of the main street will become necessary (refer Figure 3.11).

## 4.6 **IMPROVE CONNECTIVITY**

There are opportunities in a number of locations within St Marys to improve the traffic, pedestrian and cycle connectivity, providing improved accessibility and increased directness of travel. Recommendations for new pedestrian/cycle and road linkages are shown in Figure 3.11 and Figure 3.16.

## 4.7 PROVIDING A TOWN CENTRE IDENTITY

It is currently very easy for traffic to pass through St Marys as there is no identifiable adjacent land uses, the road configuration is extremely wide and not intimate and there is a general lack of advisory and directional signage.

Re-defining a masterplan for St Marys through providing a defined 'heart' of the town centre is essential to communicate to motorists of their arrival. The town hall site appears to provide a logical location to establish this identity where additional development supported by a 'town park' where people can stop for a picnic or take a short break.

In addition to defining the 'heart' of the centre, additional supporting road treatments should be implemented to reinforce the arrival to St Marys. Figure 4.2 below provides examples of a number of smaller centres where then 'main street' has been designed to be narrower and more intimate, resulting in lower vehicle speeds commensurate with the speed environment expected for a pedestrianised town centre.

Implementation of well-structured signage to the key town centre community facilities such as the town park or town hall, as well as access locations to the main parking areas will also assist with managing this legibility issue.

# BITZIOS



Figure 4.2: On-Street Parking / Main Street Examples

# 5. STAKEHOLDER CONSULTATION

# 5.1 COUNCIL SITE INSPECTION

A site inspection was conducted with Council officers on 3<sup>rd</sup> and 4<sup>th</sup> September 2012. Key past and current issues were highlighted and discussed. Some of the issues identified included:

- draft proposals for the Main Street prepared by DIER;
- previous traffic report completed by SKM and its relevance;
- previous town streetscaping plan and its relevance;
- concerns over safety of angle parking and lack of pedestrian crossing facilities within the town; and
- need to improve signage.

# 5.2 COMMUNITY ENGAGEMENT

A community engagement forum was conducted on 21 March 2013 between 5pm and 6.30pm at the St Marys Sports Hall.

The key issues raised from the forum is summarised in Table 5.1.

## Table 5.1:Community Comments

#	Comment
1	<ul> <li>Priority should be to fix footpaths;</li> <li>Linemarking improvements to the main street would be welcomed;</li> <li>The road extension from Steiglitz to St Marys Pass will assist the St Helens Point Road intersection.</li> </ul>
2	<ul> <li>A general lack of pedestrian crossing facilities in the area, in particular the pedestrian movement from Cameron Street across Main Street and then from Groom Street across Story Street and onwards to the school.</li> </ul>
3	<ul><li>Relocating town park to near town hall is a good idea;</li><li>Council should focus on delivering one or two projects.</li></ul>

# 5.3 CONSULTATION WITH DIER

A meeting was held with a DIER transport planning representative of 22 March 2013.

Discussions surrounded the proposed Main Street design and potential interim options until the scheme secured the necessary funding to be delivered.

Any short term linemarking option that involved shifting the centre-line would require the underlying pavement condition to be verified. The crossfall is also likely to be rectified under any change to the location of the central barrier line.

Suggested signposting improvements and future pedestrian and road linkage suggestions were also noted and appeared to be generally well-accepted.

# 6. IMPLEMENTATION PLAN

The key items for implementation have been separated into Short Term (1-3yrs) actions, Medium Term (3yrs-10yrs) actions and Long Term (>10yrs) actions. Indicative costings have been provided for the Short Term and Medium Term items.

Each recommendation has been categorised as follows:

CW – Cycling and Walking

P – Parking

T – Traffic Infrastructure

L – Land Use Planning

The key recommendations for implementation are included in the tables below.

## Table 6.1:Short Term Actions (1-3yrs)

Item#	Action	Cost (\$ 2013)
CW.01	Install missing footpath on western side of Story Street.	\$5,000
CW.02	Install missing pram ramp on north west corner of the Groom Street / Story Street intersection.	\$500
CW.03	Provide a pedestrian crossing facility to cater for students crossing from Franks Street to Story Street.	\$10,000
CW.04	Enforce AS2890 grade requirements for driveways across footpath areas to ensure appropriate cross falls.	-
T.01	Implement edge line marking for the 50kph zone (Main Street and Story Street).	\$10,000

## Table 6.2:Medium Term Actions (3yrs-10yrs)

Item#	Action	Cost (\$ 2013)
CW.05	Install pedestrian fencing for steep drop off towards the eastern end of town.	\$10,000
CW.08	Install footpath along Franks Street between Main Street and Grant Street.	\$20,000
CW.09	Maintain and update existing footpaths on Story Street through to the school	\$50,000
P.01	Implement parallel parking scheme as presented by DIER and endorsed by Council for the Main Street, addressing kerb heights and additional pedestrian crossing facilities.	-
P.02	Consider implementing parking restrictions along Main Street during peak seasons.	-
T.02	Install guardrail along the bend for the eastbound movement at the eastern end of town.	\$35,000
T.03	Improve directional signage so that it is clear and visible.	\$10,000

# BITZIOS

Item#	Action	Cost (\$ 2013)
T.04	Improve tourist signage to promote people to stop at St Marys.	\$5,000
T.05	Implement kerb extensions to support edge line marking within the 50kph zone, particularly the Cameron Street/Main Street, Franks Street / Main Street and Groom Street / Story Street intersections.	\$15,000

# Table 6.3:Long Term Actions (>10yrs)

Item#	Action
CW.06	Provide formal pedestrian connection from Aulichs Lane through to Newman Street.
CW.07	Provide improved finished to footpath surface along main tourist / retail area of main street.
L.01	Extend rear service lane through to Cameron Street.
L.02	Consider re-development of town hall with a relocated park / information site to provide town centre identity, and design with some relationship with town bridge, main Story Street intersection and library.
L.03	Promote pedestrian walk-throughs between longer term rear parking areas and the main street.
L.04	Promote a direct pedestrian path of travel from Gardeners Road into town via town hall.
L.05	Plan for overflow parking to exist at rear of main street.