



# **Tenterfield Shire Council**

## **Pedestrian Access and Mobility Plan (PAMP)**

**Version 1.3 – June 2014 (incorporating the Disability Action Plan)**

25 June 2014 (Res No. 220/14)

## Table of Contents

<b>1. Introduction .....</b>	<b>1</b>
1.1. Background .....	2
1.2. Study Objectives .....	3
1.3. Objectives.....	3
1.4. Methodology of PAMP.....	4
1.5. Structure of Report .....	4
<b>2. Study Area.....</b>	<b>5</b>
2.1. Scoping Study.....	5
<b>3. Research, Review and Data Collection.....</b>	<b>6</b>
3.1. Literature Review .....	6
3.2. Traffic and Pedestrian Data .....	6
3.3. Pedestrian Crash Data.....	7
3.4. Design Standards .....	7
<b>4. Characteristics of Local Government Area .....</b>	<b>8</b>
4.1. Population and Land use.....	8
4.2. Road Hierarchy.....	8
4.3. Public Transport .....	10
4.4. Future Pedestrian Needs .....	10
<b>5. Public Consultation .....</b>	<b>11</b>
5.1. Identified Groups .....	11
5.2. Identified Pedestrian Issues .....	11
5.3. Community Consultation Survey .....	12
<b>6. Audits.....</b>	<b>13</b>
6.1. Route selection .....	13
6.2. Route Audit Process.....	13
6.3. Work Prioritisation Methods .....	14
<b>7. Funding Sources and Implementation of PAMP .....</b>	<b>15</b>
<b>8. Monitoring Program .....</b>	<b>15</b>
<b>9. Recommendation for future studies.....</b>	<b>15</b>
<b>10. Conclusion and Recommendations .....</b>	<b>16</b>
<b>11. Appendix 1 - High priority works schedule – State Highways .....</b>	<b>17</b>
<b>12. Appendix 2 - High priority works schedule – Local roads.....</b>	<b>24</b>

## 1. Introduction

Walking is an integral part of the transport system and day-to-day mobility. Walking provides an important role in bringing people out into the community for a wide range of reasons, be it travelling to work, school, visiting local facilities, getting to public transport or walking for fitness and recreation. Walking is one of our most social, accessible and sustainable modes of transport. Most individual trips, whatever the primary mode used, begin and / or finish with a walk section, so that walking is a fundamental component of all travel. Thus, pedestrians form the largest single road user group.

Walking provides a range of benefits to both individuals and society as a whole ranging from health and fitness, economic including tourism, and environmental. Walking is a form of transport that has a negligible environmental impact. Outlined below is a summary of some of the benefits.

### **Health and wellbeing of communities**

In the last ten years, it has emerged that one of the major causes of preventable illness is overweight and obesity. Improving the frequency of participation in physical activity (e.g. walking) is the best way to combat obesity and set a lifelong pattern for an active and healthy lifestyle. Risks that are easily addressed by exercise are more commonly observed in socially disadvantaged communities.

### **Responding to climate change**

We are currently living in a time where climate change and the issues arising from it will affect upon our everyday lives. Increased walking can reduce air pollution and reduce greenhouse gas emissions.

### **Economic benefits**

Achieving increases in walking numbers can have economic benefits for communities. This can be a result of a more productive workforce. Physical activity can increase an individual's health resulting in a more fit and productive workforce with reductions in absenteeism.

The importance and benefits of walking are recognised within our communities and it is commonly acknowledged that further actions are needed in order to provide for safe and convenient walking.

Pedestrian Access Mobility Plans (PAMPs) are aimed at not only promoting walking, but also reducing the incidence and severity of pedestrian crashes. It aims to optimise and promote the movement of recreational, commuter and local pedestrians throughout the community. This is achieved by providing more appropriate pedestrian facilities especially in busy areas and improving access for mobility-impaired groups.

*The Pedestrian Council of Australia comments that 'walking is a fundamental and direct means of access to most places and to the goods, services and information available at those places' and that 'walking can be an ideal substitute for short car trips, including those to public transport stops. Those short trips contribute*

*disproportionately to air pollution: the more they can be avoided, the better for us all'.*

Pedestrian Council of Australia (1999) The Australian Pedestrian Charter

## 1.1. Background

Roads and Maritime Services (RMS) have developed the Pedestrian Access and Mobility Plan (PAMP) program to ensure better planning for pedestrians and to assist the NSW Councils with planning for pedestrians.

It is the responsibility of every Council in NSW to ensure the Pedestrian Access and Mobility Plan (PAMP) is developed and implemented to provide for safe and convenient pedestrian routes that will encourage people to walk rather than use their cars. It also has a responsibility to ensure that people who do not have access to cars – particularly the young – are able safely to reach needed facilities in their everyday activities, and that as far as possible, people with a physical disability do not have their access impaired because of that disability.

The PAMP is essentially a strategic document that identifies the pedestrian network hierarchy and an associated pedestrian facilities action plan. It is developed through community consultation, data collection, and review of existing standards and current practice.

The outcomes of this process are the identification of pedestrian routes within the study area that form a coherent pedestrian network and the development of an action plan for these routes identifying locations where work is required to ensure the routes are safe, convenient, and meet current standards.

The benefits to the community of properly implemented Pedestrian Access and Mobility Plan are wide range of transportation, environmental and social, such as:

- more appropriate pedestrian facilities, especially in the busy areas
- improved access for mobility impaired groups in the community, including older persons
- safe and convenient crossing opportunity on major roads
- reduced injuries to pedestrians
- meeting the special events needs for pedestrians
- pedestrian facilities which are consistent and appropriate throughout NSW.

Since the development of the program, many of the Councils throughout NSW have developed their PAMP's. After reviewing the methods used by different councils in NSW, improvements have been incorporated in the process to provide a framework for best practice. Roads and Maritime Services have developed a practical manual to be used as a guide for council staff or others undertaking a PAMP. The Guide highlights the main issues that need to be considered during the process.

The PAMP approach entails cooperative funding from Council and the Roads and Maritime Services (RMS) and in the 2013/14 financial year RMS funds were allocated to Tenterfield Shire Council for development of a PAMP for the only major population centre of Tenterfield Shire, the town of Tenterfield.

Tenterfield Shire Council is committed to providing long term planning for pedestrian access and mobility, to promote walking and cycling as desirable replacements for short trips to community facilities. The PAMP will work together with the Tenterfield Bike Plan which is a separate document which will be completed by the end of 2013.

## **1.2. Study Objectives**

The focal aim of the Tenterfield PAMP is to identify the pedestrian routes of most significance to the community and provide a strategy for the enhancement of those routes in terms of safety and mobility.

## **1.3. Objectives**

The objectives of the PAMP need to be clear and achievable within a reasonable period. In setting the objectives, the PAMP team considered the existing footpath network, its maintenance requirements and the likely availability of funding to meet the objectives.

Specifically, the team has looked at connectivity within the network, directness, safety, accessibility and mobility and has focused strongly on providing continuity of pedestrian routes of similar standard linking the major pedestrian generators.

The PAMP team is made up of officers from the technical services, community services and planning and environmental services divisions of Council, and the teams work is subject to internal review and community consultation.

The objectives of the plan are:

- To ensure safe and convenient independent mobility by providing pedestrian access to as many places as possible particularly to community facilities.
- To integrate the needs of all pedestrians by providing for and maintaining high quality facilities that are socially inclusive.
- To facilitate improvements in the level of personal mobility and safety for pedestrians with disabilities and older persons. Specific issues associated with disability are addressed in the Disability Action Plan.
- To provide clean, well-lit streets and footpaths free from obstruction, with sufficient opportunities to cross roads safely.
- To provide safe access for those who chose walking as primary mode of transport for short to medium distance trips.
- To ensure clear signage and onsite information is provided to increase awareness of pedestrian movements.
- To ensure that pedestrian spaces are safe for all users.

## **1.4. Methodology of PAMP**

In preparing this PAMP, three broad stages were involved in the process, namely;

- Stage 1:** Objectives
- Stage 2:** Preparation
- Stage 3:** Implementation.

There are a number of components involved in the various stages of this methodology including:

- Data review
- Surveys
- Community consultation
- Development of PAMP routes
- Pedestrian audit of the routes
- Development of actions and the forward works program

## **1.5. Structure of Report**

The structure of this report is based on the suggested contents for a PAMP report from the RTA guidelines on “How to Prepare a PAMP”. The document is split into 10 parts as follows:

1. Introduction
2. Study Area
3. Research, Review and Data Collection
4. Characteristics of the Local Government Area
5. Public Consultation
6. Audits
7. Funding Sources and Implementation of PAMP
8. Monitoring Program
9. Recommendation for Future Studies
10. Conclusions and Recommendations

In addition to these parts, there are several other relevant attachments. These are listed in the Table of Contents at the beginning of this document.

## **2. Study Area**

Tenterfield Shire Council covers an area of 7,134 km<sup>2</sup> and has a population of approximately 7,000. The Council area is comprised of a mix of villages and rural communities as well as the township of Tenterfield.

Considering the extent and condition of infrastructure, this PAMP addresses the pedestrian demands in the township of Tenterfield which comprises over half of the Shire's population.

### **2.1. Scoping Study**

Although pedestrian and traffic volumes in the Tenterfield Local Government Area (LGA) are relatively low in comparison with the much more densely populated areas, the need to provide adequate facilities is just as important to the community.

#### Tenterfield

Figures from the 2011 census show that the population of Tenterfield SSC (Census 2011) is 3,966. The main method of travel in the area is mostly by private vehicle with small numbers using public transport. Public transport is mostly used for inter town travel with few opportunities for intra town trips, other than those undertaken by various forms of community transport. Walking and biking has increased with recent extensions to the town's bikeway system along Tenterfield Creek.

### 3. Research, Review and Data Collection

#### 3.1. Literature Review

The main resource for the preparation of this PAMP was the document titled ***“How To Prepare A PAMP”*** produced by the RTA (now RMS) in 2001. This document is essentially a practical manual for the preparation of a PAMP, and includes information on document structure, methodology and implementation of a PAMP.

Traffic Planning has been identified as a key issue in the Tenterfield Shire ***“4 Year Delivery Program (2013-17)”***. One of the objectives in this document is to undertake traffic planning to facilitate safe and efficient traffic flows and pedestrian movements.

Councils ***“Social Plan”*** identifies the need for improved pedestrian safety in the main street of Tenterfield and the need to cater for increases in disabled and less mobile pedestrians. It also mentions the need to improve access to the CBD for older people.

Councils ***“Tenterfield Main Street Plan”*** proposes to make the town worth walking through and focus on people not cars. It proposes a number of measures to meet these objectives and that information has been included in this report.

A recent report by GHD for the RMS dated April 2013 ***“Tenterfield Heavy Vehicle Bypass - Assessment of Route Options – Preliminary Traffic and Transport Study”*** provides recent traffic data and some pedestrian data.

#### 3.2. Traffic and Pedestrian Data

Traffic volumes through the main street are considered high (6,321 Average Annual Daily Traffic 2011) and has led to a renewed push towards the construction of a Tenterfield bypass. The Roads and Maritime Service has been allocated \$3m by the Federal Government to conduct a study on the preferred route for the bypass and that study is currently underway by GHD.

A preliminary traffic and Transport Study for the heavy Vehicle Bypass revealed the following points of interest:

- Existing pedestrian crossings in Rouse Street have an afternoon peak significantly higher than the morning peak. Afternoon peak numbers were 67 for peak hour at the crossing north of Manners Street, 63 for peak hour at the crossing south of High Street and 21 for peak hour at crossing south of Molesworth St;
- Turning movements to / from High Street are higher in the afternoon peak than in the morning peak. They represent between 20-30% of through traffic volumes;
- Heavy vehicle volumes on both through and turning into / from High Street are generally in the order of 10%.
- The afternoon peak hour traffic count at the Rouse Street / High Street intersection amounted to 243 vehicles northbound, 213 vehicles southbound,



45 vehicles turning east into High St (from south), 49 vehicles turning west into High Street (from south), 58 vehicles turning east into high street (from north), 16 vehicles turning west into High Street (from north), 65 vehicles turning south into Rouse Street from High Street, 44 vehicles turning north into Rouse Street from High Street and 16 vehicles going straight ahead in High street.

### **3.3. Pedestrian Crash Data**

Tenterfield LGA Pedestrian crash data 2005-2010 was examined as part of the overall road accident data provided by the RTA through the NSW Police records. There was very limited data available on pedestrian incidents in this data set. Incidents and anecdotal evidence of near misses and high-risk areas are not included in this report and are unavailable to Council.

The analysis of total road crashes for the Tenterfield LGA available at the time of this report show that one (1) pedestrian accident occurs each year on average (although three (3) occurred in 2009 and Nil in 2005).

### **3.4. Design Standards**

Path surface and dimension standards in Tenterfield are out dated and are generally not in accordance with Australian Standard 1428 and 1742 series and the Austroads Guide to Traffic Engineering Practice Part 13: Pedestrians.

Examples of “poor infrastructure” can be found in many locations, particularly bad kerb ramps and absence of paved footpaths – see photo below.



The review of the background information mainly provides information to help formulate concept and support the direction of thinking for the PAMP rather than to raise key findings.

## **4. Characteristics of Local Government Area**

### **4.1. Population and Land use**

According to the Australian Bureau Statistics there:

- were 7,024 people as at 30 June 2011. It was equal to 0.1% of the New South Wales population of 7,211,468;
- was a rise in population over the 10 years to 30 June 2011 of 127 people or 1.8% (0.2% in annual average terms).

Persons age 85 years and over make up 2.2% of the total population in Tenterfield LGA which is slightly higher than the 1.9% average for NSW as a whole.

The population aged 65 and over will more than double between the Years 2001 and 2031.

This factor must be a major consideration in planning for pedestrian access and mobility.

### **4.2. Road Hierarchy**

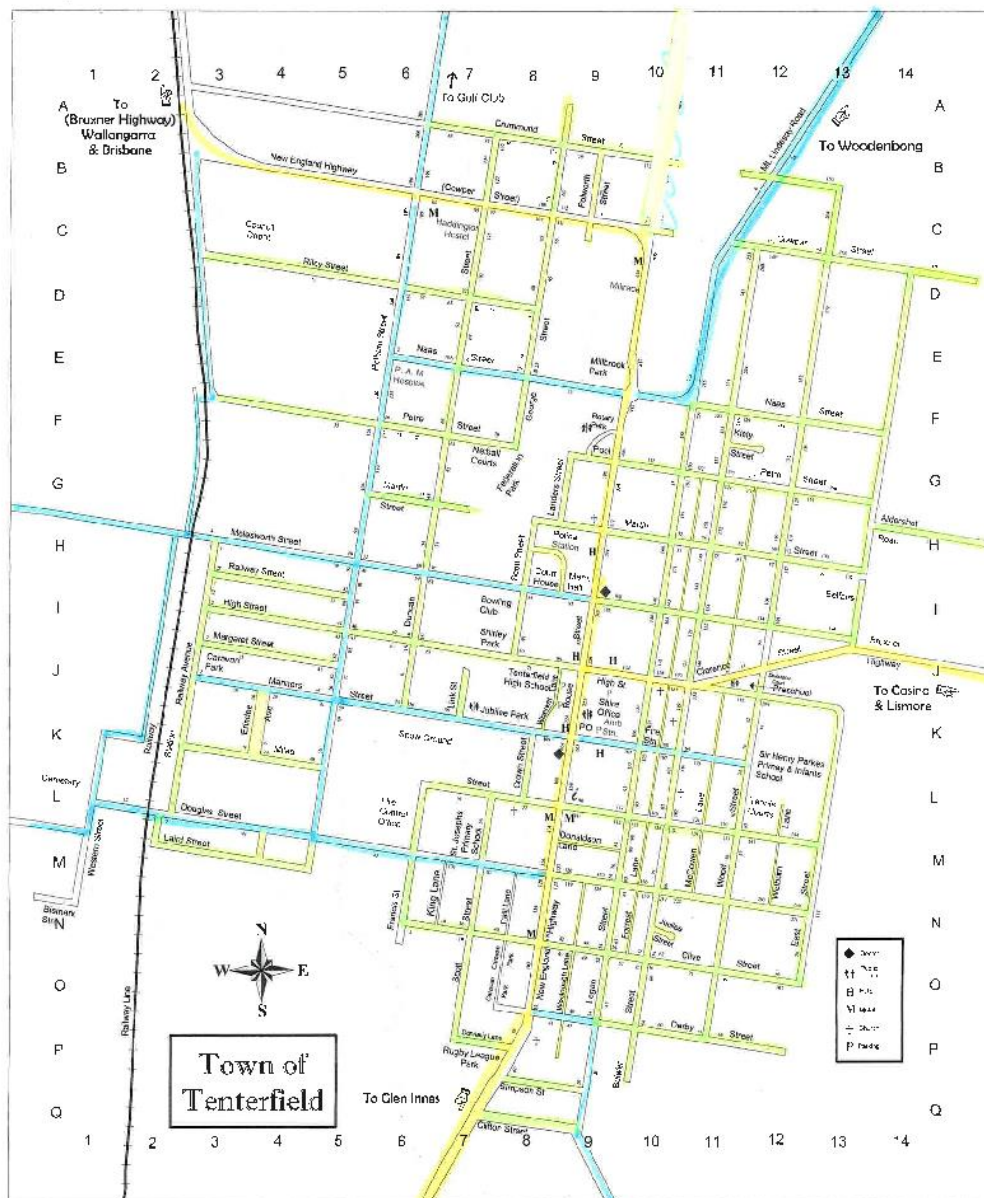
The New England Highway passes through Tenterfield generating reasonable traffic volumes in the study area. The width of some of the streets has made pedestrian travel more difficult and pedestrian facilities will need to be considered to assist with road crossing in these areas.

Councils Road hierarchy and classification system for urban streets and rural roads is defined as per the *RMS Road Design Guide*.

A hierarchical road network is essential to maximise road safety, residential amenity and legibility. Each class of road in the network serves a distinct set of functions and is designed accordingly. The road hierarchy for Tenterfield is shown in Figure 1.

Legend for map:

- Class A Roads – Arterial (State Highways) -Yellow
- Class B Roads – Sub Arterial (Regional Roads) – Darker Blue
- Class C Roads – Collector – Blue
- Class D – Local Access – Green
- Class E – Lanes - Green



#### DISCLAIMER

Although all care is taken in the preparation of this plan, Tenterfield Shire Council accepts no responsibility for any errors, omissions, or inaccuracies. The information contained within this plan is pictorial representation only.

© Land & Property Information 2004

Street Name	Ref.	Street Name	Ref.	Street Name	Ref.	Street Name	Ref.
Bismark Street	A1	Dunoon Street	K6	Link Street	K7	Railway Street	F3
Buxton Street	M10	East Street	C12	Logan Street	H9	Rilly Street	C3
Clarance Street	J11	Errol Street	K4	Yarrong Street	J5	Errol Street	P6
C. Park Street	Q7	Errol Lane	N10	Yarrong Street	J6	Errol Street	O7
C. Park Street	N6	Errol Street	N5	Yarrong Street	J6	Errol Street	P8
Cooper Street	R5	Errol Street	N5	Yarrong Street	J6	Errol Street	P8
Crown Street	L8	Errol Street	N5	Yarrong Street	J6	Errol Street	P8
Dorsey Street	O8	Errol Street	N5	Yarrong Street	J6	Errol Street	P8
Donaldson Lane	M6	Errol Street	N5	Yarrong Street	J6	Errol Street	P8
Donnelly Lane	P8	Errol Street	N5	Yarrong Street	J6	Errol Street	P8
Douglas Street	L7	Errol Street	N5	Yarrong Street	J6	Errol Street	P8
Drummond Street	A2	Errol Street	N5	Yarrong Street	J6	Errol Street	P8

Figure 1

### Tenterfield Road Hierarchy

### **4.3. Public Transport**

Public transport in Tenterfield LGA is limited to community transport services operated by government agencies or non-profit organisations, school buses and taxi services.

The location of set down and pick up areas and taxi ranks have been considered in identifying PAMP routes and projects. These have also been taken into consideration for PAMP work priorities process.

There are five inter-regional transport services servicing Tenterfield including;

- Crisps Coaches (Tenterfield to Toowoomba/Brisbane)
- New England Coaches (Glen Innes/Brisbane/Toowoomba)
- Northern Rivers Busline (East to Lismore)
- CountryLink Rail Connection Bus to Armidale
- Greyhound (already on site)

The Countrylink service is a rail connection to the NSW rail service at Armidale.

There are two bus/coach stops for these services. Greyhound and New England Coaches are serviced from the BP Seven Knights Service Station while the remainder are serviced from the bus stop in the CBD at Manners St opposite the Telegraph hotel.

### **4.4. Future Pedestrian Needs**

As mentioned in "Tenterfield Social Plan", there appears to be a significant demographic shift which will see an increase in the aged population. This expected growth and the increase of people choosing to walk, and the increase of special mobility vehicles, pedestrian facilities must cater for a number of different needs.

With the completion of this PAMP, through the thorough crash analysis, community consultation and existing facility audit, the aim is to create pedestrian facilities for all pedestrians.

## **5. Public Consultation**

An important factor in the development of a PAMP is community consultation to determine what level of service the community finds acceptable for each pedestrian route category, and to identify current and future demands and needs to determine access priorities.

The community consultation is conducted by means of the following methods:

- Advertisement in local paper seeking comments;
- Letters to identified groups;
- Adoption in draft form and public display for 28 days.

The PAMP team incorporated Council employees that worked together to enable the best possible outcomes for the plan and included Health and Building Inspector, Director of Environmental Services, Community Development Officer and Deputy Director of Engineering Services.

### **5.1. Identified Groups**

Seniors groups, Community Centres, Disability Groups and Schools were identified as being potentially interested in pedestrian needs in the community. A survey was circulated in the community calling for feedback in relation to current pedestrian facilities and the need for future pedestrian facilities.

Community members were asked to identify locations they felt were unsafe and hazardous, areas where they walk and they find difficult to walk, locations where they have difficulty crossing the road and areas they would like to walk if made available.

### **5.2. Identified Pedestrian Issues**

The following issues have been identified:

- The Manners Street bus stop in front of the Home and Community Care (HACC) building is used for inter and intra state coach services, and as a drop off and collection point for local services. Existing pedestrian levels may grow through efforts to provide improved shelter at the site and an aging population. Current disability access is limited and needs to be improved as does public amenity signage.
- The Tenterfield Main Street Plan has identified the following issues:
  - 40 kph High Pedestrian Zone would be beneficial along Rouse Street from between Miles and Manners St to between High and Molesworth Streets and also along approximately 100m of High Street to the east.
  - Relocate the pedestrian crossing in Rouse St near the post office to align with the laneway that leads to the carparking on the western side of the main street.

- Reconstruct the existing pedestrian crossing in Rouse Street near High Street following the proposed resurfacing of the road by RMS.
- Relocate the pedestrian crossing in Rouse St north of High Street further south to be near the High Street junction.
- Relocate the informal kerb ramps at Manners Street and High Street further along those roads to improve safety.
- A new crossing to facilitate pedestrian movements to the cinema and school of arts which are frequently used after hours.
- Broken pavers around service pits in various locations along rouse Street.
- Some trip hazards caused by movement in the slabs in various locations.

### **5.3. Community Consultation Survey**

Community consultation comments have been incorporated into the revised document except for the following matters that were raised:

- A suggested extension to the footpath at the north end of Rouse Street to Millrace. Comment – this project will be included in the Tenterfield Bike Plan which is currently being prepared.
- Haddington Nursing Home requested that pedestrian facilities should be provided from Haddington, especially for taking residents for walks in wheel chairs. Comment – Unfortunately the Haddington facility has been constructed a long way from any existing footpaths network and connectivity would require more funding than the rest of the plan allows (approximately 1km of footpath). Further, there is a large difference in elevation and steep terrain making wheelchair transport very difficult.
- Meals on Wheels suggested a number of additional pedestrian crossings, many of which will be reconfigured as part of the main street project, but not all will be marked pedestrian crossings because they do not meet the warrants required for formal pedestrian crossings.
- A suggested upgrade to the small section of footpath on the eastern side of Crown St behind Sexton and Green. Comment – this would require significant additional works including retaining structures and kerb and gutter.

## **6. Audits**

The existing pedestrian facilities audit forms part of Tenterfield Council's Pedestrian Access and Mobility Plan.

On-foot field audits are essential to determine the type and scale of work required along designated pedestrian routes. Generally, audits were undertaken by an experienced asset manager who has training and experience in road safety auditing, or in design for access and mobility.

### **6.1. Route selection**

Pedestrian routes were selected for the study area. Taken into consideration were that pedestrian attractors and generators, central business district (CBD), community consultation, identified hazardous locations and existing pedestrian facilities. With the CBD being the initial priority, feeder routes to the CBD were identified then extended to outlying areas. A number of pedestrian generators and attractors are located within the study area. Pedestrian attractors include central business districts community centres, hospital/s, medical and age care centres, schools, business zone, churches, supermarkets and recreational facilities (e.g. sporting facilities and parks).

Existing footpaths and pedestrian facilities were reviewed as part of the PAMP. Off road paths provide a safer walking environment and often present shortcuts between areas, therefore making them more appealing for pedestrians.

PAMP routes:

- Provide links between main attractors and generators
- Improve existing pedestrian hazards locations
- Formalise existing pedestrian links
- Create new off-road facilities

### **6.2. Route Audit Process**

On site physical audits were conducted along all high, medium and low priority pedestrian routes. The key focus of the route audits was any identified access impediments for pedestrians with particular focus on access for less mobile pedestrians such as the elderly and people with disabilities. The identified difficulties found in a number of locations were:

- Poor kerb ramp design
- Lack of footpaths
- Incoherent footpaths

### **6.3. Work Prioritisation Methods**

The facility audit conducted identified high, medium or low priority issues. Those issues identified as a high priority have been included in the Appendix 1, including indicative costs for rectification.

The IPWEA system for prioritised modified condition score (PMCS) was applied to issues identified and provided a rational method of prioritising items for action. Further refinement was then carried out which also considered other factors including Councils existing works program and results of the community consultation. Issues with a high priority were documented for corrective action.

A Works Schedule has been produced for crossing points that require upgrading of existing ramps, new ramp installation, or provision of other crossing facilities.



## **7. Funding Sources and Implementation of PAMP**

Generally funding for implementation of the projects identified in this PAMP come from Council and the RMS. The works identified in this PAMP total \$732,400 for state roads and \$76,830 for local roads.

Council's budget for 2013/2014 contains a total funding allowance in the order of \$20,000 for the provision of new and replacement of existing pedestrian facilities as well as additional funding for the main street revitalisation project (Council has recently been successful in attracting a \$455,000 grant from the RMS for various Main Street pedestrian projects) . The RMS have advised that they will provide additional funding towards PAMP projects of up to \$25,000.00 if matched by Council. At this level of expenditure, the PAMP projects would take around 5-8 years to implement.

The RMS Policy on Implementation Funding for PAMP works is State Roads projects 100% RMS for road crossing facilities and kerb ramps only, and Regional and Local Roads 50/50 RMS and Council. RMS funds road crossing facilities and kerb ramps only.

## **8. Monitoring Program**

Initial monitoring of this plan will consist of management of works within the current budget projections, and input to future budget considerations. Works as completed will be recorded and incoming comments will be recorded to gauge effectiveness.

It is proposed to review the plan on a five-year basis. This will allow the document to be reviewed against works completed and community expectations. The five year cycle will also allow for a review of the objectives to ensure they remain relevant.

## **9. Recommendation for future studies**

As described earlier in this study many deficiencies have been identified during the route audit process. Considering the limitation of the scope of PAMP several issues will remain unsolved. If incorporated with another plan or program, this document may assist in resolving those problems.

At this point, it is not envisioned that further studies will be required outside the review of this PAMP at the nominated interval. Further detailed investigation and design will be required for many projects and there will be a need to ensure these works are completed and that delays to programmed works are minimal when funding is made available.

It is also proposed to prepare a separate PAMP to cover villages within the shire. This is proposed for 2014/15.



## **10. Conclusion and Recommendations**



This PAMP will be a valuable tool to assist in providing enhanced access for pedestrians, cyclists and the mobility and/or vision impaired. The implementation of the nominated improvements to the pedestrian facilities in Tenterfield will also provide more opportunity to the aged and a safer pedestrian environment for school children.



It is recommended that Council provide a budget allowance for the implementation of the PAMP project in the 2014/15 Operational Plan which reflects the community's expectations and priorities, and to allow the project to be implemented in the fastest possible timeframe.



## 11. Appendix 1 - High priority works schedule – State Highways



Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Rouse Street	Miles / Manners to High / Molesworth 100m from Rouse St	40 KPH High Pedestrian Activity Zone	1	\$600,000	\$600,000	1	See attached plan (page 8 below)  COMPLETED
Rouse Street	Manners to Molesworth St	Relocate and reconstruct pedestrian crossings	4	incl in 40 kph	incl in 40 kph	2	
Rouse Street	Manners and High St	Relocate informal crossing ramps further from the highway	6	incl in 40 kph	incl in 40 kph	3	
Rouse Street	Manners and High St	Regrade paved footpaths both sides	900m2	\$95	\$86,500	4	

Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Rouse Street	Manners St	Broken pavers around water meter covers. Repair trip hazards.  COMPLETED	10	\$500	\$5000	5	
Rouse Street	Manners St	Broken pavers around Telstra cover. Repair trip hazard.  COMPLETED	4	\$500	\$2000	6	

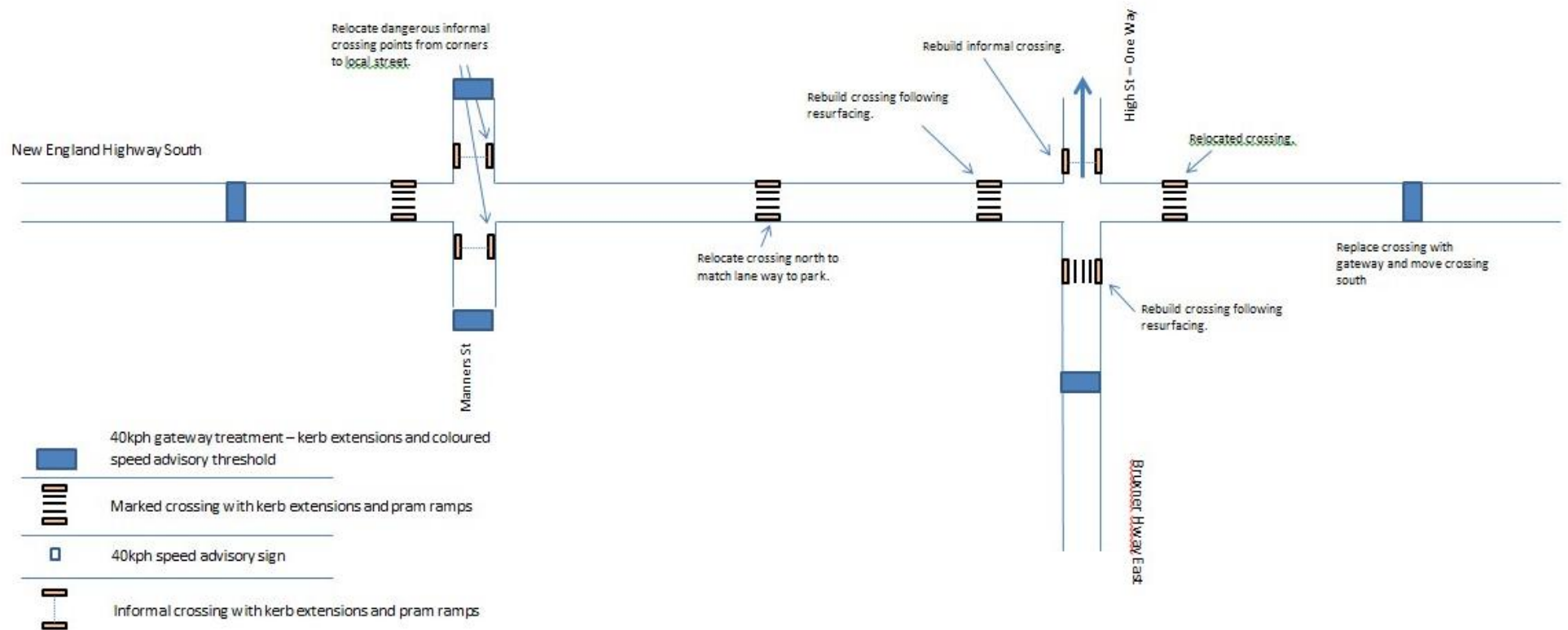
Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Rouse Street	High St	Entry needs reconstruction to provide a trip free area	1	\$4,000	\$4,000	7	
Rouse Street	Molesworth St	Replace cracked footpath and drain	25m	\$500	\$15,000	8	

Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Rouse Street		Replace slab to remove trip hazard	2m	\$400	\$800	9	
Rouse Street		Replace slab to remove trip hazard	2m	\$400	\$800	10	


Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Rouse Street		Replace slab to remove trip hazard	2m	\$400	\$800	11	
Rouse Street	High St	Replace unused access	1	\$8,000	\$8,000	12	



Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Rouse Street	Miles Street	Construct concrete footpath	25m	\$400	\$10,000	13	
High Street	Logan St	Repair Access	10m	\$15	\$500	14	

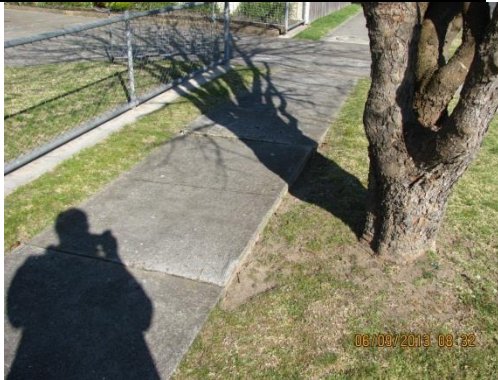







## 12. Appendix 2 - High priority works schedule – Local roads



Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Manners Street	Logan Street	Sunken pavers COMPLETED	1	\$150	\$150	1	
Manners Street	Rouse Street	Replace old broken and uneven concrete adj. Exchange Hotel  COMPLETED	32m2	\$250	\$8000	1a	


Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Access lane to CBD from parking west of Rouse	N/A	Uneven asphalt surface with trip hazards	50m2	200	\$10,000	2	
Miles Street	Rouse Street	Old Concrete, trip hazard	16m	\$200	\$3200	3	



Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Manners Street	Bulwer Street	40mm trip hazard Remove tree root and reconstruct section	1.2m	\$400	\$480	4	
Manners Street	Bulwer Street	Sunken pavers trip hazard	1	\$200	\$200	5	





Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
High Street	Rouse Street	Uneven old concrete - replace	54 x 2.5m	\$500	\$27,000	6	
Logan Street	High Street	Replace bitumen with concrete footpath	18m	\$250	\$4,500	7	



Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Manners Street	Whereat Lane	Grind footpath trip hazard	1	\$200	\$200	8	
Manners Street	Whereat Lane	Grind footpath trip hazard	1	\$200	\$200	9	



Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Manners Street	Whereat Lane	Grind footpath trip hazard	1	\$200	\$200	10	
Manners Street	Bulwer Street	Repair trip hazard	1	\$500	\$500	11	

Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Scott Street	Miles Street	Grind trip hazard	1	\$500	\$500	12	
Manners Street	Wood Street	Repair trip hazard #181	1	\$2,000	\$2,000	13	



Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Manners Street	Wood Street	Repair Trip Hazard #181	1	\$2,000	\$2,000	14	
Molesworth Street	Rouse Street	Repair trip hazards	1	\$2,000	\$2,000	15	

Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Molesworth Street	Rouse Street	Replace with concrete	10m	\$500	\$5000	16	
Miles Street	Rouse Street	Upgrade to concrete	30m	\$250	\$7,500	17	

Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Miles Street	Rouse Street	Upgrade to concrete	10m	\$250	\$2,500	18	
Railway Avenue	Manners Street	Replace concrete	17m	\$500	\$8,500	19	

Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Wood Street	Manners Street	Extend concrete footpath from Manners Street to School Crossing	50m	\$200	\$10,000	20	