

Tenterfield Shire Council

Tenterfield Bike Plan

Version 1 - January 2014

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1. Introduction

Cycling is vital to any integrated transport network. It provides healthy, fast and convenient travel with minimal impact on the environment.

One of the main reasons to develop a bike plan is so that Council can determine a coordinated and strategic approach to delivering cycling infrastructure and promotional programs to the community.

1.1. Background

Roads and Maritime Services (RMS) have developed a guide *How to prepare a bike plan – Version 2 November 2012*.

It is the responsibility of every Council in NSW to ensure that a bike plan is developed and implemented to provide for safe and convenient cycling routes that will encourage people to cycle rather than use their cars.

The Bike Plan is essentially a strategic document that identifies the cycling network hierarchy and an associated cycling 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 cycling routes within the study area that form a coherent 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 a properly implemented Bike Plan cover a wide range of transportation, environmental and social matters, such as:

- Contribute to a healthy, active and liveable community,
- Help reduce greenhouse gas emissions,
- Improve bicycle and pedestrian infrastructure,
- Reduce dependency on private motor vehicle usage,
- Reduce road congestion,
- Reduce parking congestion,
- Increase mobility and independence for those without cars,
- Increase capacity for local public transport networks,
- Reduce health costs, travel times, noise and vehicle operating costs

In recent years, many of the Councils throughout NSW have developed their Bike Plans. 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 Bike Plan. The Guide highlights the main issues that need to be considered during the process.

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The Bike Plan 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 Bike Plan for the only major population centre of Tenterfield Shire, the town of Tenterfield.

Tenterfield Shire Council is committed to providing long term planning for cycling as desirable replacements for short trips to community facilities. The Bike Plan will work together with the Tenterfield Pedestrian Access and Mobility Plan (PAMP) which is a separate document that was completed in December 2013.

1.2. Study Aims

The focal aim of the Tenterfield Bike Plan is to identify the cycling 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. Study Objectives

The objectives of the Tenterfield Bike Plan need to be clear and achievable within a reasonable period. In setting the objectives, the Bike Plan team considered the existing cycleway 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 cycling routes of similar standard linking the major pedestrian generators.

The Bike Plan 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 cycle access to as many places as possible particularly to community facilities.
- To integrate the needs of all cyclists by providing for and maintaining high quality facilities that are socially inclusive.
- To provide clean, well-lit streets and cycle ways free from obstruction, with sufficient opportunities to cross roads safely.
- To provide safe access for those who chose cycling as primary mode of transport for short to medium distance trips.
- To ensure clear signage and onsite information is provided to increase awareness of cycling movements.
- To ensure that cycle paths are safe for all users.

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1.4. Methodology of Bike Plan

In preparing this Bike Plan, 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 Cycle routes
- 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 Bike Plan report from the RTA guidelines on "How to Prepare a Bike Plan". The document is split into 10 parts as follows:

- 1. Introduction and background
- 2. Study Area
- 3. Research, Review and Data Collection
- 4. Characteristics of the Local Government Area
- 5. Public Consultation
- 6. Saddle Survey
- 7. Funding Sources and Implementation of Tenterfield Bikeplan
- 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.

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2. Study Area

Tenterfield Shire Council covers an area of 7,134 km² 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 Bike Plan addresses the cycling demands in the township of Tenterfield which comprises over half of the Shire's population.

2.1. Scoping Study

Although cycle 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.

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3. Research, Review and Data Collection

3.1. Literature Review

The main resource for the preparation of this Bike Plan was the document titled "How To Prepare A Bike Plan" produced by the Roads and Maritime Service (RMS) in 2012. This document is essentially a practical manual for the preparation of a Bike Plan, and includes information on document structure, methodology and implementation.

Various reference documents have been consulted including:

- NSW Bicycle Guidelines
- Cycling Aspects of Austroads Guides
- NSW Safe Systems Approach

3.2. Traffic 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.

3.3. Cycle 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 cycle crashes 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 a maximum of one (1) cycle crash each year on average.

3.4. Design Standards

Recently constructed cycle ways in Tenterfield are generally in accordance with Austroads Guidelines. In view of the relatively low cycle density, the width of the cycle ways has been standardised at 2.0m which is at the lower scale of the recommended width of 2.5-3.5m (lesser widths are acceptable where cyclist volumes and operational speeds will remain low).

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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.

5. Public Consultation

An important factor in the development of a Bike Plan 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 Tenterfield Bike Plan 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, Director of Engineering Services and Deputy Director of Engineering Services.

5.1. Identified Groups

Community Centres, Schools and an informal cycling group were identified as being potentially interested in cycling needs in the community. A survey was circulated in the community calling for feedback in relation to current cycling facilities and the need for future cycling facilities.

Community members were asked to identify locations they felt were unsafe and hazardous and any additional cycle paths that could be justified.

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5.2. Identified Cycling Issues

The following issues have been identified:

- The cycle way that is in the process of being constructed between Scott Street and Saddlers estate will allow cyclists and pedestrians to travel from Saddlers estate in the south to Millrace Nursing Home in the north without crossing the busy New England Highway. A section of this link is on road which will ideally be improved by widening the road to provide a dedicated cycle lane,
- A suggested extension to the footpath from Millrace to Rouse Street, where
 the highway turns westwards. This is a busy section of road and there is
 nowhere safe for pedestrians to walk or cyclists to ride their bikes. The
 proposed location of the cycle way is on the eastern side of Rouse Street.
- The on-road cycleway along Miles street has a missing link section between Logan and Bulwer St on the southern side of the road that needs to be constructed.
- An on road cycleway should be painted along Molesworth Street to provide access to the western side of town.

5.3. Community Consultation Survey

Community consultation comments will be incorporated into the revised document.

6. Saddle Survey

The existing cycle facilities audit forms part of Tenterfield Council's Bike Plan. Field audits undertaken on a bike are essential to determine the type and scale of work required along designated cycle routes. Generally, audits were undertaken by an experienced asset manager who has training and experience in road safety auditing.

6.1. Route selection

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

Existing cycle facilities were reviewed as part of the Bike Plan. Off road paths provide a safer cycling environment and often present shortcuts between areas, therefore making them more appealing for cyclists.

Bike Plan routes:

- Provide links between main attractors and generators
- Improve existing cycle hazards locations

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- Formalise existing cycle links
- Create new off-road facilities

6.2. Route Audit Process

On site physical audits were conducted along all high, medium and low priority cycle routes. The key focus of the route audits was any identified access impediments for cyclists. The identified difficulties found in a number of locations were:

- Poor maintenance of bitumen edge,
- Lack of separate cycle ways,

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.

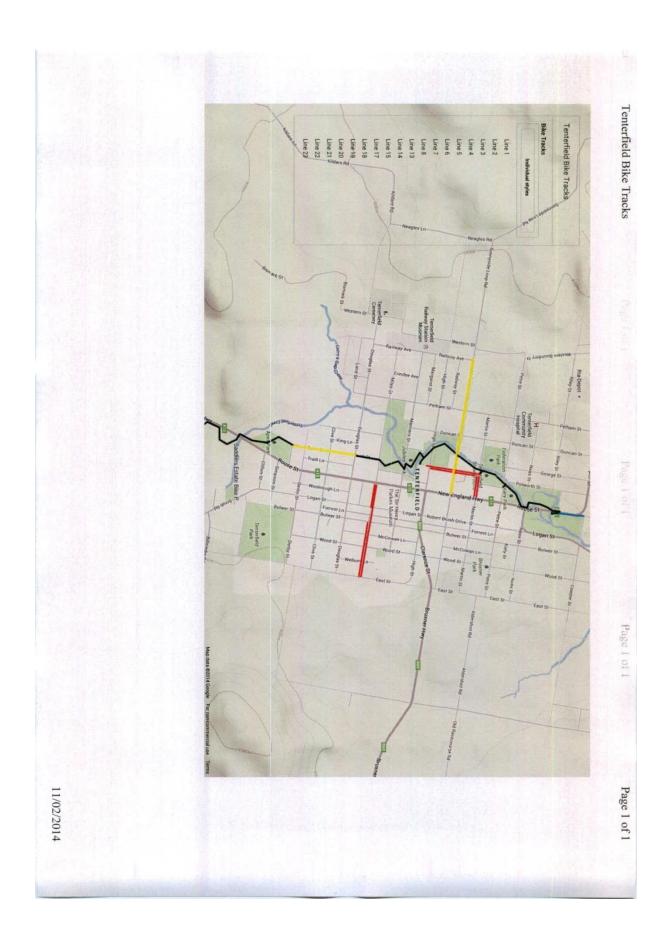
A Works Schedule has been produced and is outlined in the appendix.

6.4 Existing and Proposed Cycle Track Network

The map on the following page outlines the networks:

- Black represents existing off road track (with underpasses below Molesworth St and New England Highway);
- Red represents existing on road tracks designated by line marking;
- Yellow represents proposed on road tracks;
- Blue represents proposed off road track.

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7. Funding Sources and Implementation of Bike Plan

Generally funding for implementation of the projects identified in this Bike Plan come from Council and the RMS. The works identified in this Bike Plan total \$237,750.

Council's budget for 2013/2014 does not contain any specific funding for cycle way construction, although this may change in 2014/15.

The RMS Policy is to fund approved cycle ways 50%. In addition, Council has the opportunity of imposing conditions on major developments to require the construction of cycle ways if the development warrants it (for example, the recent work undertaken to Saddlers estate is part of a development condition and was supplemented by a 50% grant from RMS).

8. Monitoring Program

Initial monitoring of this plan will consist of 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 the Bike Plan, 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 Bike Plan 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 Bike Plan to cover villages within the shire. This is proposed for 2014/15.

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10. Conclusion and Recommendations

This Bike Plan will be a valuable tool to assist in providing enhanced access for pedestrians and cyclists. The implementation of the nominated improvements to the cycle facilities in Tenterfield will also provide a safer pedestrian environment for school children.

It is recommended that Council provide a budget allowance for the implementation of the Bike Plan 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.

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11. Appendix 1 - High priority works schedule

Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Scott Street (East side of road)	Molesworth to Martin Streets	Encroaching weeds need to be removed and bitumen reinstated	200m	\$500	\$500	1	

Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Scott Street (West side of road)	Molesworth to Martin Streets	Encroaching weeds need to be removed and bitumen reinstated	200m	\$500	\$500	2	

Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
New England Highway	Near Willows bridge to Rouse Street	Extend the concrete cycleway along the eastern side of the road to Rouse Street	221	\$225	\$50,000	3	

Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Miles Street	Logan to Bulwer Streets	Widen pavement to fill in "missing link" for on road cycleway	120m	\$75	\$9,000	4	

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Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Molesworth Street	Rouse St to Railway Avenue	Paint an on road cycleway both sides of road to provide a western link	1.3km	\$2,500	\$3,250	5	

Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Scott Street	Douglas to Clive Street	Construct an on road cycleway by widening the bitumen on both sides of the road and providing kerb and gutter	225m	\$300	\$67,500	6	

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	Street	Cross Street	Description of works	# or length	Unit Cost	TOTAL	Priority	
Sco	ott Street	Clive to football oval	Construct an on road cycleway by widening the bitumen on both sides of the road and providing kerb and gutter	350m	\$300	\$105,00 0	7	