



# **Pedestrian Access and Mobility Plan**

## **Kempsey Local Government Area**

July 2016

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# 1. INTRODUCTION

## 1.1 Background

In 2015 grant funding was received under the Active Transport Program for the purpose of reviewing the existing Pedestrian Access and Mobility Plan. The purpose of the grant was “to review the current Kempsey and South West Rocks Pedestrian Access Mobility Plan (2003) as well as including other Shire villages and pedestrian links between villages”.

The existing PAMP was developed in 2003 and covered Kempsey and South West Rocks. The proposed Work Schedules of Treatments for each area were prioritised and a proportion of identified treatments were funded during the period 2002 - 2008.

The development of a revised long term financial plan, which eliminated borrowings, significantly altered Council’s investment priorities in 2009. No further loans were taken and Council has been focusing on repaying debt to increase the overall amount of funding available for asset replacement (rather than servicing loans). Following the prioritisation of community demands all available funds were redirected towards refurbishment of the transport asset network.

The review and expansion of the PAMP will offer Council a strategic plan to develop pedestrian policies and an action plan to build pedestrian facilities. The PAMP will be a tool used by Council to coordinate investment in safe, convenient and connected pedestrian routes.

## 1.2 Outcomes and Benefits

An adopted PAMP will deliver these outcomes:

- encourage the incorporation of planned improvements into annual and long term budgets,
- support applications for suitable grant funding, and
- incorporate pedestrian access and mobility into other plans and actions such as Council’s Development Control Plan 2013 and Local Environmental Plan 2013, road works, kerb and gutter and park and reserve plans.

The benefits of a properly developed and implemented PAMP include:

- Structured consultation with the community about pedestrian needs
- A strategic plan to provide appropriate pedestrian facilities especially in busy areas
- Improved access for mobility impaired groups in the community including older persons
- Safe and convenient crossing opportunities on major roads
- Meeting the special event needs of pedestrians
- Links with other transport services
- Integration with planning instruments such as Section 94 and Section 79(c) under the EP&A Act, provisions within Local Environment Plans (LEPs) and Development Control Plans (DCPs)
- Links with existing vulnerable road user plans such as bike plans, maintenance programs and accessible public transport, and
- Reduced injuries to pedestrians

## 1.3 Equity and Health Benefits

Providing good linkages and continuous access between popular destinations will encourage our residents to walk rather than use a car. It will give young people, older people and others without a car better access to services.

There is an awareness within the community of the need to maintain the 'quality of life' on residential streets by creating an environment that discourages unnecessary motorized traffic and inappropriate speeds. Strategies to achieve this are discussed in Section 11.

Providing improved pedestrian experiences will promote physical activity, lowering the incidence of illnesses related to sedentary lifestyles.

The Macleay Valley 2036 Community Strategic Plan [CSP] links with the four year Delivery Program and the Annual Report. The CSP identified that *"significant infrastructure is already in place and planning for replacement or upgrades needs to include a focus on encouragement of healthy lifestyle choices. Increased levels of activity are seen as a key action in reducing preventable illness and increasing the length of lives of people in the community"* and *"increased use of public space increases a feeling of safety and reduces the opportunity for crime"*. The revised PAMP will align with the CSP.

The Delivery Plan 2013 -2017 states that *"Extensive pedestrian and cycle ways around Kempsey and South West Rocks are seen as highly valuable by giving people better ways of getting around these centres. Linking different areas will allow easier access to centres and facilities. They will also encourage healthier activities, giving better health levels within the community"*. The revised PAMP was a specific action identified in the delivery program to progress towards the CSP goals.

Studies undertaken in Southern Queensland have identified that approximately 60% of the community regularly uses the footpath network each day/week. Generally this use is associated with recreational activity. This indicates that this particular asset group is highly valued by the community and is very well utilised. The study results add weight to further investment in this form of infrastructure, particularly connecting key or desire nodes together as it is relatively low in capital and maintenance costs for the level of benefit derived from the community. Having a good footpath/bicycle path network builds an alternative to using vehicles for transport and regular use by the community aids in building community wellbeing.

## **2. CHARACTERISTICS OF THE LOCAL GOVERNMENT AREA**

### **2.1 Population and Land Use**

Kempsey Shire is located on the Mid North Coast of New South Wales and covers a total area of 3,377 square kilometres.

Land use is generally rural, with some industrial and tourism nodes. Population centres are relatively compact and most coastal villages have only one main access road.

The population in 2016 is estimated as 29,262. The projected population for 2036 is 33,457 (14% increase).

Population data from the 2011 census is in brackets after each centre. The major population centres include Kempsey and surrounds (10,016), South West Rocks (4,961), and Frederickton (2,074). The villages of Crescent Head (2,144), Stuarts Point (1,376), Smithtown and Gladstone (2,300) have also been considered as potential locations for pedestrian access treatments.

Between 2011 and 2026, the age structure forecasts for Kempsey Shire indicate a 1.2% decrease in population under working age, a 4.8% decrease in population of working age and a 45.2% increase in

*population of retirement age*. This is consistent with an ageing population and an increase of residents moving into the region from elsewhere for retirement.

## 2.2 Future Pedestrian Needs

The ability of Council to meet the needs of an aging population includes providing pedestrian paths and road crossings that are suitable for mobility scooters, motorized wheelchairs, walkers and other mobility aids is limited to the funding that Council is able to raise through rates and charges and the support provided to the Council by the State & Federal Governments. With a projected increase in population and a substantial change in the demographics it is essential that planning be undertaken to cater for this area into the future.

Like any service or infrastructure provided by Council, there needs to be an educated and informed decision made on the level of priority for pedestrian and mobility services/infrastructure relative to the overall community's needs. In order to provide more than is currently being provided, Council must first either secure additional funding or reduce the service provided in another area. Council is currently well below the level where assets can be maintained and replaced sustainably into the future and this also needs to be addressed as part of the long term planning.

Notwithstanding this, the needs of pedestrians should be included in DCPs, LEPs and Land Release Plans to ensure that pedestrian access and mobility receives consideration. A comprehensive plan will help to balance the needs of existing and future residents with the other infrastructure and services provided by Council.

## 2.3 Road Hierarchy

The funding classification of roads in NSW defines a road hierarchy which includes state, regional and local roads. Local roads are generally fully funded by Council and regional roads receive a subsidy from the state government but still require Council to maintain.

The functional classification reflects the traffic function of the road with the following classifications: arterial, sub arterial, local collector roads and local streets. This classification is more useful for the purposes of this document as it relates to the whole road environment and is indicative of likely levels of use and risk for pedestrian activities. This road classification will be used to prioritise suggested pedestrian routes and facility improvements.

Generally, the road hierarchy reflects the traffic volume which may be expected on the route, the travel speed and the types of pedestrian crossing facilities as well as the footpaths which are appropriate on various road classifications.

Examples of arterial roads are Armidale Road and South West Rocks Road, sub-arterial roads are Plummers Lane and Crescent Head Road, and local collectors are Gowings Hill Road and Cochrane Street.

## 2.4 Existing Pedestrian Asset Portfolios

Council has an existing network of pedestrian infrastructure which is managed via the relevant sections of Council Asset Management Strategy 2013 and Community Infrastructure Asset Management Plan 2013. A summary excerpt from the strategy is detailed below.

Table 1. Footpath and Cycleways Assets Summary

Footpath and Cycleways Assets Summary						
<b>Assets</b>	62km of footpaths/cycleways.					
<b>Available Data</b>	Footpath condition information system including GIS from 2013 Survey Data. At this stage the asset data has not been separated for footpaths and cycleways and all asset information is currently shown in the footpath classification.					
<b>Condition Data</b>	<b>Condition Rating</b>		<b>Footpaths</b>	<b>Cycleways</b>		
	<b>1</b>	Excellent	2%			
	<b>2</b>	Good	9%			
	<b>3</b>	Satisfactory	62%			
	<b>4</b>	Poor	25%			
	<b>5</b>	Very poor	2%			
<b>Main Findings</b>	<p>73% of the footpath network is in satisfactory condition or better. Footpaths have a relatively low rate of depreciation and low rates of maintenance funding for the majority of their effective lives. Towards the end of their life, regular maintenance costs significantly increase, due to the need to manage trip hazards.</p> <p>Current known high risks include the slipperiness of the older paved footpaths which are 15-20 years old.</p>					
<b>Budget Implications</b>	Minimal funding is allocated to maintenance and replacement of footpaths. Works are prioritised according to condition, risk and known defects.					
<b>Asset Reporting</b>	<b>Asset Group / Class</b>		<b>Asset Consumption Ratio</b>	<b>Asset Renewal Ratio</b>	<b>Asset Funding ratio</b>	
	Footpaths		2.02%	0.31%	9.01%	

In 2015/2016 Council introduced funding for targeted renewals in the footpath asset portfolio of \$80,000 per year. At current unit rates this will permit the renewal of 600m<sup>2</sup> of footpath per year (or approximately 450 lineal metres). Considering that 27% of the 62km of footpath/cycleway is in poor or very poor condition, at this level of expenditure it would take over 30 years to bring these sections of footpath up to new condition. This indicates that the worst condition paths can be improved, however sections of foot paths will remain in poor condition as a possible renewal backlog depending upon the residual risk. Over time, the backlog will increase as the average condition continues to decline at a rate greater than it is being replaced. Too2sick

In order to be providing for sustainable asset replenishment approximately 1.3km of footpaths should be replaced each year (approximately 3 times the current level of renewal).

Specific data regarding the traffic facilities present on the Shire’s roads is yet to be separated from the road asset information and this improvement will occur during future revision and updating of the asset management plans and strategy.

## 2.5 Known Asset/Service Performance Deficiencies

The following critical deficiencies were identified in the 2013 Asset Condition Inspection:

Table 2. Extracts from the Footpath Asset Condition Inspections 2013

Forth Street between Yaelwood Street and Holman Street, Kempsey	35m in very poor condition (condition grade 5))
Forth Street between Holman Street and Regent Street, Kempsey	80m in very poor condition (condition grade 5)
Lachlan Street between Bloomfield Street and Druitt Street , South Kempsey	114m in very poor condition (condition grade 5)
Lord Street between Memorial Park to Herborne Avenue, East Kempsey	135m in very poor condition (condition grade 5)
Regent Street between Forth Street and End, Kempsey	193m in very poor condition (condition grade 5)
Tozer Street between Jubilee Lane and Short Street , West Kempsey	110m in very poor condition (condition grade 5)
Remembrance Way between Macleay Street and Lawson Street , Frederickton	53m in very poor condition (condition grade 5)

\*The green shading indicates sections listed for replacement in the coming year

Other known deficiencies include a lack of compliant paths/ramps for disabled access and missing links connecting key desire nodes.

### 2.5.1 Pram Ramps and other Pedestrian Facilities

During the process of inspecting and inputting footpath data into REFLECT for this review it became evident that pram ramps are an important item of pedestrian infrastructure that requires attention either because they are missing or they are unsuitable. Pram ramps permit pedestrians to travel from footpath level to road level when crossing roads. The difference in level between a roadway and an adjacent footpath is a common on-street situation which poses difficulties for pedestrians, particularly those with mobility and vision disabilities. While the level difference is relatively small, its treatment needs careful attention to properly cater for all users. This is something which has not been traditionally done in older established areas and even in newer areas the standard lip provided at the gutter invert still provides an obstruction to use.

The cost of constructing new pram ramps that comply with the AustRoads Guide to Road design and other relevant Australian Standards is approximately \$1,600 per ramp. Inspections indicate that there are many places where pram ramps are needed and that pram ramps that are there do not meet the needs of mobility impaired pedestrians, particularly if they were constructed more than three years ago. The cost to demolish and replace an existing pram ramp is about \$2,000.

There are 518 individual footpath segments in Council's asset register. Approximately 90% of these go from road to road and should have a pram ramp at either end. Based on the inspection to date at least half of these would be non-complaint in one way or another or not have a ramp at all. This means that around 500 ramps require reconstruction to bring them into compliance and therefore the costs to rectify this would be estimated at \$1M.

In Kempsey Shire the amount of vehicle traffic and the numbers of pedestrians using a particular footpath usually does not warrant marked pedestrian crossings. Risk assessments will determine the most effective methods to keep pedestrians safe. Kerb blisters and pedestrian refuges are facilities



that can narrow a road to slow down speeding vehicles and also narrow the road width to make it easier for pedestrians to cross safely. Splitter islands with pedestrian gaps placed at intersections also perform this function. The cost to construct a combination kerb blister/pedestrian refuge/kerb blister is in the order of \$19,000.

### 3. METHODOLOGY

The stages of this project are to:

**Phase 1 Preliminary** - Review the Work Schedules of Treatments in the 2003 PAMP to identify what has been achieved and what remains relevant to achieve

**Phase 2 Information Gathering** - To engage all Departments of Council and our residents and visitors in a shared goal of improving pedestrian and mobility scooter access by having input into development of this Plan. Collect and review information about pedestrian activities, planning guidelines, relevant standards

**Phase 3 Draft PAMP Development** - Identify key pedestrian routes and identify locations where work is required to ensure these routes are safe, convenient, coherent and meet current RMS guidelines and relevant Australian Standards. Identify key improvements in the level of pedestrian and mobility scooter access in areas of pedestrian concentration such as shopping precincts. Identify locations where pedestrian access is not continuously linked and enhance safe and convenient crossing opportunities on major roads. Develop the draft PAMP

**Phase 4 Consultation on a working draft PAMP** – Undertake consultation on a working draft of the PAMP. Consider and review feedback and finalise the draft plan.

**Phase 5 Adopt and Formalise the PAMP** – Report the outcomes of the process to Council and seek formal adoption.

### 4. SCOPE

#### 4.1 Study Area

The scope of the project includes areas where the amount of pedestrian activity justifies works on pedestrian routes. In this PAMP the areas are Kempsey township, South West Rocks, Crescent Head, Stuarts Point, Frederickton, Gladstone and Smithtown.

Locations like Business Districts, shopping centres, the hospital, medical centres, schools, bus stops, facilities for the aged and recreational facilities will be a focus. Access for pedestrians using mobility scooters, motorized wheelchairs, non-motorised wheelchairs, prams and strollers will also be a key focus.

#### 4.2 What is Outside the Scope

The scope of this project does not include cycle paths, although existing shared paths and opportunities to create shared paths may be considered. It is generally accepted that strategic

planning for bicycles is conducted under a separate process even though the process followed and topic is similar.

The scope of this project does not include providing disability access to buildings or other destinations or assessing lighting of roads and other public areas.

The scope of this project does not include funding for identified works, however it is intended to identify the priority for works so that these may be considered against the priorities of the whole community for future investment decisions.

## **5. REVIEW OF THE 2003 PAMP**

### **5.1 Review of the Schedule of Treatments**

The treatments itemised in the Schedules were inspected and the current status was recorded in REFLECT, Council's Asset Inspection and Defect Management System. Less than 10% of the 2003 Schedule of Treatments have been addressed. Those treatments that have not been achieved may not be included in this revised PAMP as the community's expectations and needs may have changed. It has been noted that the Schedule of Treatments was a 'wish list' of projects and that it may be more effective and achievable to make the revised Schedules shorter and more realistic. In addition, Standards and RMS requirements have altered in the ensuing years and this will impact on the nature and cost of the items that are included in the new Schedules.

## **6. KEY CHANGES IN THE LOCAL GOVERNMENT AREA**

### **6.1 Significant Changes**

There have been some significant changes in Kempsey Shire since 2003 that affect the PAMP.

The Bypass has changed the road hierarchy of Smith Street, the Central Business District (CBD) of Kempsey, and funding was allocated to upgrade that location to improve the pedestrian experience in relation to amenity, safety and convenience. This project was completed in late March 2016.

Funding due to the Bypass has also been made available for streetscape improvements at South Kempsey and Frederickton. The detailed design work for these projects is in progress and works are planned for construction during 2016.

The redevelopment of the hospital has seen changes to where hospital services are located and requires improved access via Polwood Street.

The population in South West Rocks has increased with more subdivisions opened up requiring footpath linkages into the township. The use of mobility scooters has increased significantly in this locality, highlighting the need for suitable pram ramps and safe road crossings.

Other urban areas have now been included in the PAMP study area.

## 6.2 New Projects

Projects which have been undertaken since the 2003 PAMP include the Smith Street redevelopment, the entry path from the Crescent Head CBD to the Day Visitor Area, paths along the Crescent Head Foreshore, Paragon Avenue and Prince of Wales upgrade at South West Rocks, and the Elbow Street upgrade at West Kempsey. The Mitchell Street footbridge, and footbridges at Stuarts Point and Hat Head have also been refurbished during this time.

Projects that are planned or in progress include the Point Briner boardwalk and footbridge and the Oil Terminal Bridge at South West Rocks, and replacement of the Killick Creek footbridge at Crescent Head. Back Creek footbridge at South West Rocks is also on the list for replacement in the coming years.

A shared path from West Street, South Kempsey, along Gowings Hill Road to Burnt Bridge has received grant funding under an Indigenous Road Safety Initiative and is currently in the construction stage.

Road works in Kemp Street and Marsh Street, West Kempsey include footpath upgrades and improved pedestrian crossing facilities for the two schools and churches.

The Kempsey Corridor Masterplan includes work along Macleay Street, Frederickton and Lachlan Street, South Kempsey that will add footpaths and pedestrian facilities at those locations.

## 7. COMMUNITY ENGAGEMENT PLAN

### 7.1 Stage One

The first stage of the Community Engagement Plan was about the development of the revised PAMP. It included media releases and notices on the website directing people to an online survey or questionnaire and a Fact Sheet.

A direct mail out to stakeholders included hard copy questionnaires and a Fact Sheet. Nineteen letters to key stakeholders and individuals were sent.

Telephone contact with schools and community groups was followed up with an email or letter, again including hard copy questionnaires and a Fact Sheet if required. Twenty two education institutions and nine other community groups were contacted and follow up emails were sent.

Surveys and Fact Sheets were made available at the Kempsey Show on 5 and 6 April 2016 and at Customer Services and Council libraries from 22 March 2016. The Show elicited thirteen more survey responses.

Posters at Customer Services, the Libraries and other public noticeboards, explain what a PAMP is and are an invitation to complete the online survey or request a hard copy or provide written submissions.

Feedback from this stage was collated and included in the draft PAMP which was provided to the Council in May 2016. Feedback received after the on-line survey closed on 8 April 2016 was included up to 2 May 2016 and later feedback was collated with feedback from the public exhibition stage and included in the final PAMP.

During the community engagement process in 2003 sixteen people attended workshops. Up until 2 May 2016 there have been 56 individual surveys submitted and Council has received numerous letters & emails on the subject.

## 7.2 Stage Two

The second stage of the Community Engagement Plan is to put the draft PAMP out on public exhibition for four weeks to gain further comment and feedback via an invitation to make written submissions. Council staff attended a meeting in South West Rocks with the Ratepayers Association at their invitation and delivered a presentation about the draft PAMP. Feedback from this stage has been considered and included in the final PAMP where warranted. The final PAMP is planned to be reported to the Council in July 2016 for adoption.

## 8. RESEARCH AND DATA COLLECTION

### 8.1 The Survey

The online survey asked people to comment on their activities as a pedestrian and what was important to them.

The survey results indicate that 90% of respondents use footpaths daily or weekly, and more people walk for recreation or fitness than to shop. A smaller percentage of respondents use footpaths to go to and from home or work. Around 2% of survey respondents use footpaths to get to school, medical facilities, or to catch public transport, in about equal numbers. Whilst the survey sample size may not be reflective of the entire population it does provide valuable insight into the typical use and importance of this type of asset.

The types of areas that survey respondents thought were important to access safely were streets where shops and medical facilities were located. Streets where sports facilities were located were least important.

Over 85% of respondents indicated that they were over 40 years of age and 35% of these were over 66 years of age.

A problem with the survey has meant that responses to Question 3 which asked respondents to rate footpaths in terms of pleasantness, convenience and safety is flawed. Despite this it was clear that safety was rated poorly in this survey. The survey data is summarised at Appendix A.

### 8.2 Survey Comments and Previous Submissions to Council

Correspondence to Council relating to pedestrian issues has been identified and included in a summary of written submissions at Appendix B. The comments from the survey are itemised in

Appendix C. The comments identifying particular pedestrian routes have been mapped where the route meets the criteria for inclusion. The Maps are attached at Appendices I to N.

### 8.3 Standards, Design Guidelines and Council Policies

Australian Standards, Roads and Maritime (RMS) Standards and RMS Guidelines have been identified and considered in preparing the PAMP.

Council's Section 94 and 94A Contribution Plans and relevant policies have been identified and considered. Council's Development Control Plan 2013 and Local Environmental Plan 2013 have also been reviewed.

A list of references is at Appendix D.

### 8.4 Pedestrian Crash Data

There was a total of 22 pedestrian crashes reported in the Kempsey Local Government Area during the 5-year period from 1 July 2010 until 30 June 2015. There were three fatalities.

There was a range of scenarios leading to a vehicle hitting a pedestrian. In one instance a child on a footpath was hit by a car and two pedestrians were hit when crossing driveways.

**Table 3 Pedestrian Crashes Compared with Population Percentage**

Age Group (Years)	0-4	5-8	9-11	12-17	18-25	26-59	60+	Total
% Population 2011	6.2%	4.5%	4.5%	8.5%	6.6%	41.9%	27.8%	100%
All Accidents	1	2	2	2	2	7	6	22
% Total Accidents	4.5%	9%	9%	9%	9%	32%	27.5%	100%
Fatal Accidents	1	0	0	0	1	1	0	3

The main conclusions from the analysis were:

- The younger age groups (school age 5-17 years) are over represented suggesting that structural measures such as flashing lights and 40 kilometre school zones, whilst improving the safety of children walking to school is not enough and a tendency for greater adult supervision will keep our children safer. These accidents all occurred on weekdays, three around school finish times although none were close to a school.
- The 18-25 group may be affected by issues related to distraction (for example as a result of using mobile phones or concentrating on a discussion with others),
- The 26-59 age group is significantly under represented whilst the 60+ age group is marginally under represented

- The greatest number of crashes (6 of the 22 accidents) were concentrated along Macleay Valley Way (the Pacific Highway pre Bypass), around Belgrave Street, Forth Street and Stuart Street. Works recently undertaken in Smith Street and Belgrave Street to reduce the width of road crossings, slow vehicle speeds and provide effective median refuges will address this cluster of pedestrian crashes. The lower overall traffic volumes will also influence the frequency and severity of future incidents in this area. West Kempsey had four accidents involving ages from 13 to 43.
- Fatal accidents occurred at or near the intersections of South West Rocks Road and Austral Eden Outer Road at Austral Eden, Middleton and West Streets at South Kempsey, and Armidale Road and Hickeys Creek Road at Hickeys Creek. With the exception of Middleton Street these are rural locations and not the subject of the PAMP. In addition work has advanced on a heavy vehicle bypass for Middleton Street and an outcome of a grant application is likely to be known during 2016.
- There were two accidents involving pedestrians aged 47 and 83, and no fatal pedestrian crashes in South West Rocks and no fatalities in other village/town areas.

## 9. PAMP ROUTES

### 9.1 Route Selection

Ideally, the condition of pedestrian routes and associated pedestrian facilities will reflect the number of people using them, the type of people using them, when they use them and the reason they use them. This reflects the importance of convenience and amenity for pedestrians.

The reality is that the road, the speed of vehicles and the number of vehicles travelling on the road (the road hierarchy) also determines the nature of pedestrian facilities, including footpaths and the level of service provided. The pedestrian crash data provided in Section 8.4 can assist in identifying unsafe places and root causes for crashes involving pedestrians. This is because the most important reason for providing pedestrian facilities is to keep pedestrians safe.

Pedestrian routes assume that:

- a route leads to a specific destination / pedestrian node, or
- a route creates opportunity for exercise and recreational walking.

The routes selected and identified in Appendices I - N incorporate existing footpaths and crossing points generally. Gaps in existing pedestrian linkages and sub-standard or missing pedestrian facilities such as pram ramps or traffic calming facilities have been identified.

Selection has been informed by feedback from the community engagement actions and assessment of existing infrastructure. The different types of routes are described below.

#### 9.1.1 Schools

Students who travel a distance greater than 1.6km to a primary school and 2.3km to a secondary school (via a direct line) are eligible for free public transport in NSW. This means that children living closer than these distances will probably walk, ride or be driven to school.

Inspection of the existing infrastructure around schools indicates that there are footpath linkages missing and opportunities to provide safer road crossings by implementing traffic calming and managing the road space.

The pedestrian crash data suggests that school age children are not involved in accidents close to schools but possibly on their way between home and school.

The Adventist School on Crescent Head Road and South Kempsey Public School provided detailed commentary in their survey response for consideration and are two schools affected by a lack of pedestrian facilities for their location. St Joseph's Primary School, Bellbrook Primary and Willawarrin Primary Schools were also the subject of comments. The facilities at Gladstone Primary School were recently identified due to an issue with a nearby development.

### 9.1.2 Shopping Routes

Shopping routes provide access to shopping centres, local convenience stores and fast food outlets.

### 9.1.3 Recreation Routes

Recreation routes link to the playing fields, in West Kempsey, Central Kempsey, South Kempsey, South West Rocks, Stuarts Point, Crescent Head, Frederickton, Smithtown and Gladstone with their residential catchments or other generator nodes (mainly retail). The survey suggests that people going to sporting fields mainly do not walk and that walking to sporting facilities is of lower importance than other destinations.

Recreation routes may connect residential areas with these facilities or with other routes. The cluster of recreational facilities on Belgrave Street in Kempsey and in South West Rocks are two locations that require special classification and attention to improve road crossing facilities and pedestrian linkages.

Recreation routes also include paths that have amenity value such as the shared path linking Horseshoe Bay Reserve to Cardwell Street, Arakoon. Recreational walking was a common reason for using footpaths for people completing the on-line survey.

### 9.1.4 Seniors Routes

Seniors routes link aged facilities with local services and public transport. Seniors routes require special attention to ensure that pedestrians using mobility aids like walking frames, motorised wheel chairs and mobility scooters can use footpaths and crossing facilities safely.

### 9.1.5 Special Events Routes

Regular special events that might include using pedestrian paths include ANZAC Day marches, NAIDOC Week marches, sporting carnivals and swimming carnivals.

## 10. ROUTE PRIORITISATION METHODOLOGY

The pedestrian network focuses on the pedestrian routes between the main pedestrian generators and attractors in Kempsey, South West Rocks and other population centres because there are more

people in those locations to benefit from improved pedestrian access and the road hierarchy supports having footpaths to keep pedestrians safe. The co-location of pedestrian generators and attractors, defined below, increase the value of chosen routes.

Pedestrian generators are places for which the user has less discretionary choice. Where access as a pedestrian is not ideal or possible, then other modes of transport tend to be used.

Generators include schools, bus stops, TAFE, retirement villages (and other aged housing complexes), SEPP5 housing (caravan parks, especially where used for permanent living), hospitals and medical centres/facilities.

Pedestrian attractors are places that people can choose to go to. Access or the lack of access may affect the decision to use that facility or place. Attractors include shopping/ business centres, recreation destinations (like sports fields, swimming pools, parks), tourist destinations, and community facilities (such as libraries, community centres, bowling and RSL Clubs).

## **11. PEDESTRIAN MOVEMENT AND CROSSING FACILITIES**

The selection of crossing facilities for pedestrians is a crucial component of planning for pedestrians. Guidelines for appropriate crossing facilities are generally related to the class (or function) of the road as described in AUSTRROADS Guide to Road Design.

There are a number of long straight stretches of roads in the various study areas, where there is no traffic management to contain free travel speed. It is recommended that traffic calming can be achieved by managing the road space so that pedestrians have a safer crossing environment. Some examples of these long stretches of road with no traffic speed impediment are North, Tozer and Sea Streets in West Kempsey, and Gregory Street and Gordon Young Drive in South West Rocks.

Pram ramps, also known as kerb ramps, are recommended at all intersections where a path exists in order to provide people with disabilities or people pushing prams or strollers, the opportunity to make decisions regarding their choice of path of travel. At present there is significant risk where these facilities are not provided as people with mobility aids need to continue along the roadway to the next driveway or access point so they can get back onto the footpath.

Where the pathway may have other limitations such as cross fall, gradient, width of path, or condition of path these can impact on whether a pram ramp can be installed to meet Australian Standards. In some instances it may be preferable to install a pram ramp further from an intersection in order to achieve a safe road crossing.

Each site will have its individual characteristics and limitations and there will not be a one-size-fits-all design solution.



Table 4 Classification of Pedestrian Facilities for Crossing Roads

Classification	Objectives	Treatments
General Crossing Treatments (physical pedestrian aids)	To increase the safety of pedestrians by use of physical aids within the roadway to reduce conflict or degree of hazard that exists between vehicles and pedestrians and simplify decisions for pedestrians and drivers	pedestrian refuge island traffic island median, splitter island with pedestrian gap kerb extensions Safety Zone pedestrian fencing speed control device
Time Separated (Traffic Controlled) Facilities Note: the Shire has few roads where volume of traffic and numbers of pedestrians warrants this treatment.	To minimise conflict between pedestrians and vehicles by allocating short time periods for use of a section of road alternately between pedestrians and vehicles	pedestrian (zebra) crossing children’s crossing pedestrian actuated signals pelican crossing signals with pedestrian phases – such as intersection of Smith and Belgrave Streets Kempsey
Grade (spatially) Separated Facility	To increase the safety of pedestrians by eliminating conflict with vehicles	subway and bridge pedestrian mall
Integrated facilities	To create an environment where pedestrians and vehicles share existing road space in an unsupervised manner	warning signs Shared Zone School Zone Local Area Traffic Management (LATM) treatments (such as Smith St shopping precinct Kempsey) lighting

Adapted from: AUSTRROADS Guide to Road Design 2009

## 11.1 Shared Paths

Shared bike-pedestrian paths are normally designed as 2m wide paths with no separation lines. This is normally sufficient to address shared use in relatively low volumes of use. Paths which have a higher level of shared usage and /or which are to be used by mobility impaired pedestrians should be wider at a minimum of 2.5m with a separation line encouraging users to keep to the left.

## 11.2 Walking Distances

It is important to be realistic about the distances people are prepared to walk to a particular pedestrian node when identifying and prioritising pedestrian routes. Those who must rely on walking and public transport should be given a level of priority within the network design and implementation.

In determining walking distances, consideration has been given to existing guidelines and prevailing physical conditions. The study area is benefitted with a mild climate so extremes of weather, other than flooding, do not significantly impact on the decision making process. AUSTRROADS suggests that the practical limit for most non-recreational trips is 1.5km and 4km for recreational trips.

## 12. SCHEDULES OF PROPOSED TREATMENTS

The Schedules of Proposed Treatments detail all items of new construction as well as upgrading of existing facilities where identified. The works have been costed using current unit rates which do not take into account terrain or underground services or other unknowns that may be peculiar to a particular location.

The listed items have been prioritized and acknowledge feedback from the community. In addition to the prioritization methodology identified in Sections 8, 9 and 10 The Methodology for Assessment of Asset Priorities was used to demonstrate the robustness of the decision making process. This system is based on assessing four factors:

**Risk** – where the level of change in risk generated by the action is measured, and the risk can be social, economic or environmental. The risk rating for this LGA's footpaths is assessed as Moderate and Low and a change from Moderate to Low risk generates a score of 25

**Nuisance** – focuses on the way a person's quality of life is impacted by the failure to undertake works. The level of Nuisance has been assessed as ranging from High, Moderate and Low. The scores generated for this factor range from 60, 40, and 25.

**Serviceability** – looks at how well the asset meets the service that the community needs from it. This factor takes into account the range of uses as well as the designed function. Most of our footpaths were designed for pedestrians walking and possibly pushing prams. This is no longer the only use for our footpath network and hence the score for this item is only Moderate, as our footpaths often cannot be fully utilized by all the potential users. If the action taken can move this rating from Moderate to High the score generated is 40.

**Level of Benefit** – is the number of user benefits that will be provided by the action. This number is annualized so different asset classes can be prioritized. Council does not have good measurements for pedestrian usage of footpaths at this time.

The detail of this process can be found in the Asset Management Plan at Appendix G.

Additionally the Items in the Schedule of Works have been programmed from one to seven years then over seven years. This has been colour coded in the Schedules as the highest priority items for the first Five Years in Red, Seven Years Green and More than Seven Years Blue. The timing assumes an annual budget of \$100,000 with projects costing the amount listed in the schedule. If applications for grant funding are successful the schedule will be brought forward so that more items are undertaken sooner.

The Schedules of Proposed Treatments are at Appendix E, F, G and H.

## **13. CONSTRAINT AND OPPORTUNITIES**

### **13.1 Constraints**

Constraints to walking in urban areas are:

- Topography including steep grades, uneven ground, rivers and creeks,
- Main traffic streets and roads particularly where high speeds prevail or there are few gaps in the traffic flow,
- Railway lines, utility easements, and
- Low amenity or perception of unsafe locations

The lack of footpaths and appropriate safe crossing facilities are the major constraint to walking both in established areas and in newer areas.

For those with disabilities there are many barriers, depending on the nature of the disability. It must be remembered that most seniors, especially those over 75 years of age, suffer from some form of disability, usually less agility and poorer eyesight and hearing.

Heavy vehicles no longer constitute a significant portion of traffic on our major roads due to the Bypass, however delivery trucks and vans and logging trucks continue to use Belgrave Street, Elbow Street and River Street in Kempsey and West Kempsey, and delivery trucks and vans use Crescent Head Road at South Kempsey and Gregory Street at South West Rocks. A route such as these becomes a barrier for pedestrian users such as the very young, the aged and mobility impaired.

### **13.2 Opportunities**

The starting point for building a pedestrian network and encouraging more walking in urban areas is:

- Any existing continuous off-road and shared pedestrian/bike paths,
- Existing crossing points, and
- Open space or park areas and open field sporting facilities where paths can be constructed as short cuts or for recreational walking.

## **14. POTENTIAL FUNDING SOURCES**

Once the PAMP is finalised there are opportunities to apply for grant funding from different sources. The RMS has a number of funding programs that particularly focus on pedestrian facilities, rather

than footpaths. The Public Reserves Management Fund has been successfully applied for to construct footpaths in Crown Reserves that Council is the trustee for.

Council's own rating derived funding may be used for footpath, kerb and gutter, and pedestrian facilities maintenance or new works where the priority is assessed as high and there is an overwhelming benefit to the community in terms of safety and accessibility.

## **15. MONITORING AND IMPLEMENTATION**

Identified works can be undertaken when funding is made available. This will occur over a period of years consistent with the asset and service provision priorities of the Council. To comply with an RMS request a three year program and a five year program will be developed.

A key process in reviewing the 2003 PAMP was to inspect the locations which were identified in the Schedule of Works at that time. In all, 115 items were inspected in the Kempsey area and 57 items in South West Rocks. The data from these inspections and all the entries that will be added from the adopted PAMP, are included in the Council's infrastructure asset inspection and defect management system, which will ensure that they continue to be monitored and considered for maintenance intervention/renewal.

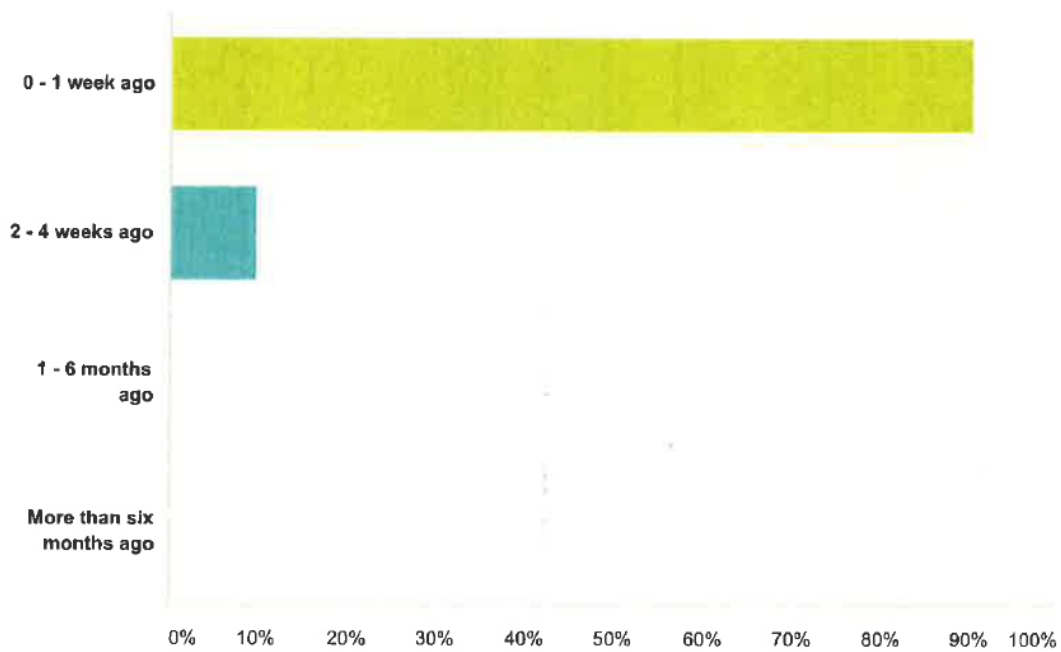
It is anticipated that the progress of the Works Schedule will be assessed each year and that this document will be reviewed in its entirety after five years.

Appendix A - Summary of Survey Data

PAMP 2016

**Q1 When was the most recent time you used the footpath in the Kempsey Shire?  
(either by walking, pushing a pram or using a wheelchair or mobility scooter)**

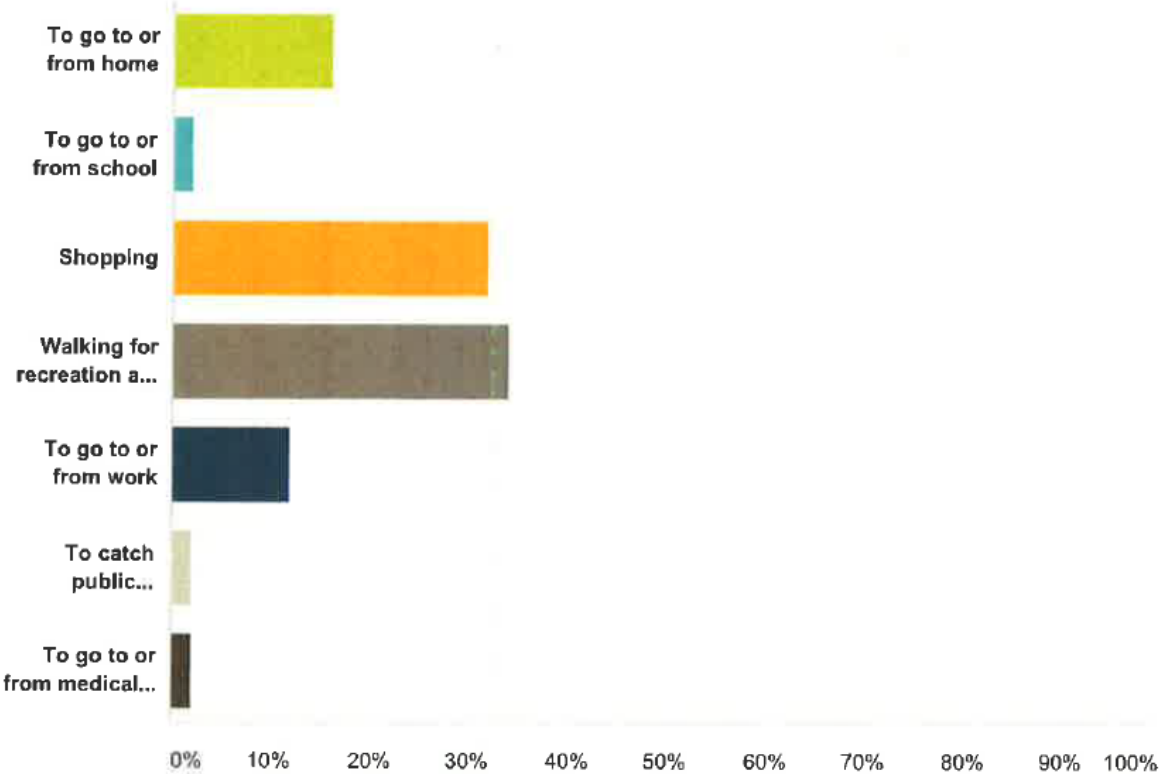
Answered: 51 Skipped: 5



Answer Choices	Responses	Count
0 - 1 week ago	90.20%	46
2 - 4 weeks ago	9.80%	5
1 - 6 months ago	0.00%	0
More than six months ago	0.00%	0
<b>Total</b>		<b>51</b>

## Q2 What is the most common reason for you to use the footpaths in the area?

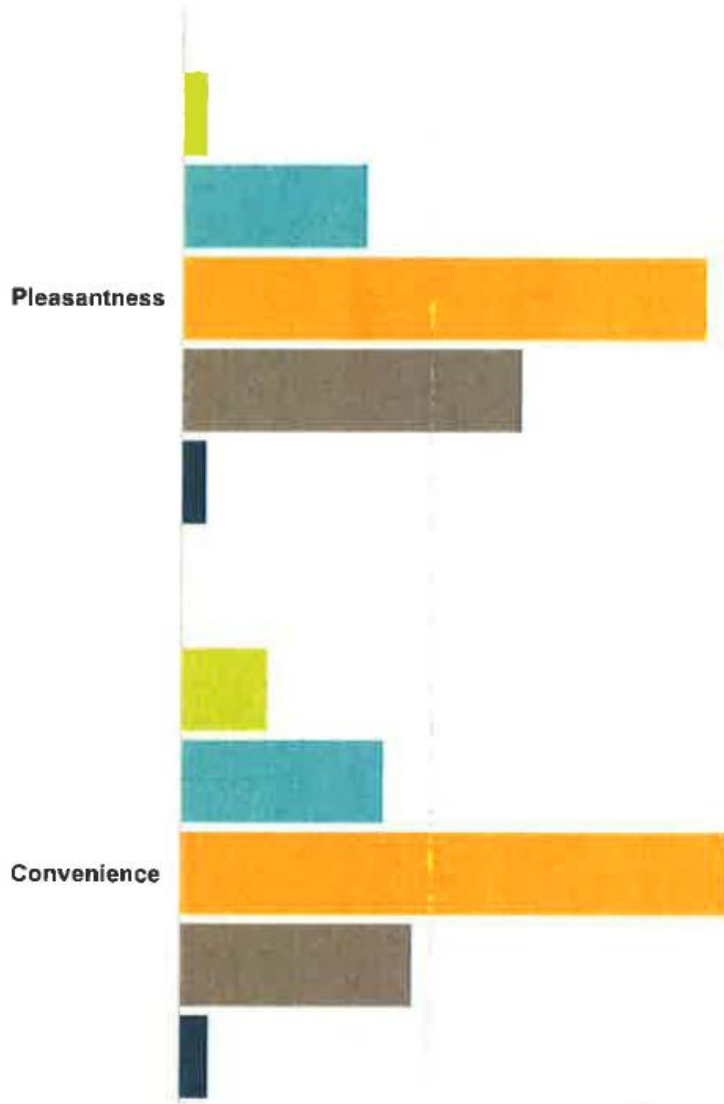
Answered: 50 Skipped: 6

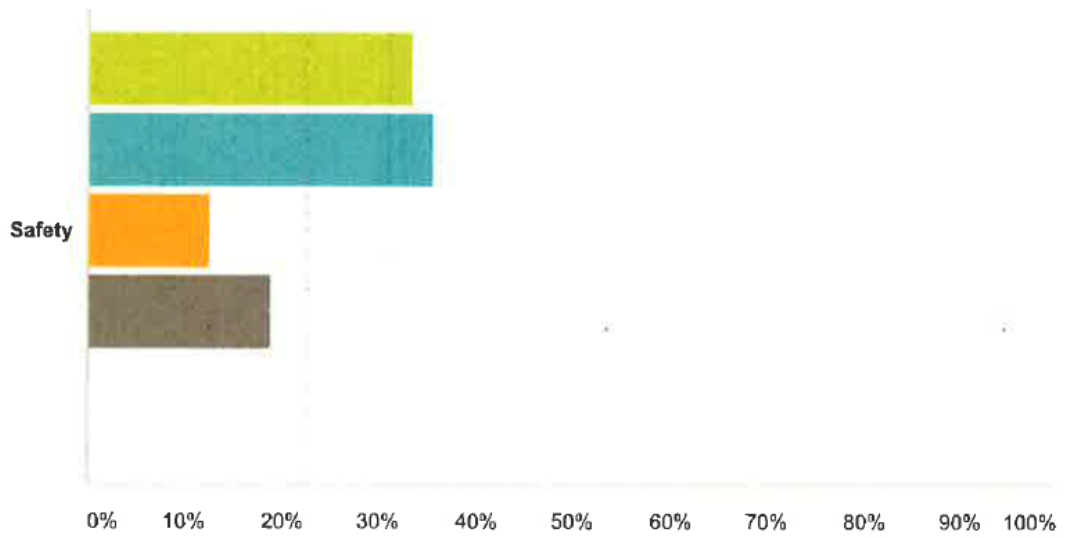


Answer Choices	Responses
To go to or from home	16.00% 8
To go to or from school	2.00% 1
Shopping	32.00% 16
Walking for recreation and fitness	34.00% 17
To go to or from work	12.00% 6
To catch public transport	2.00% 1
To go to or from medical facilities	2.00% 1
<b>Total</b>	<b>50</b>

### Q3 How do you rate the footpaths and walking environment in the Shire in terms of;

Answered: 55 Skipped: 1





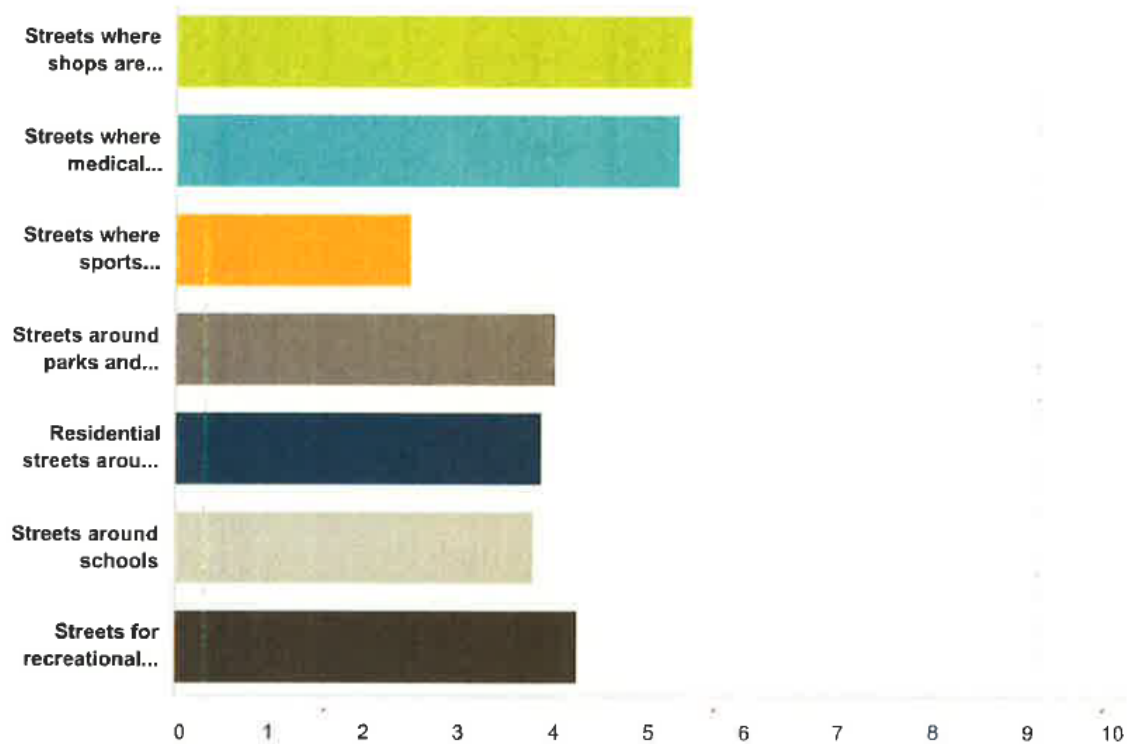
■ Not at all satisfactory   
 ■ Not very satisfactory   
 ■ Somewhat satisfactory  
■ Satisfactory   
 ■ Very satisfactory

	Not at all satisfactory	Not very satisfactory	Somewhat satisfactory	Satisfactory	Very satisfactory	Total
Pleasantness	2.38% 1	16.67% 7	47.62% 20	30.95% 13	2.38% 1	42
Convenience	7.89% 3	18.42% 7	50.00% 19	21.05% 8	2.63% 1	38
Safety	33.33% 16	35.42% 17	12.50% 6	18.75% 9	0.00% 0	48



**Q4 When you think about being a pedestrian in the Kempsey Shire and getting around using footpaths and streets level access, what type of areas are most important for you to be able to access safely? Rank the list below in order of importance to you, 1 being the most important.**

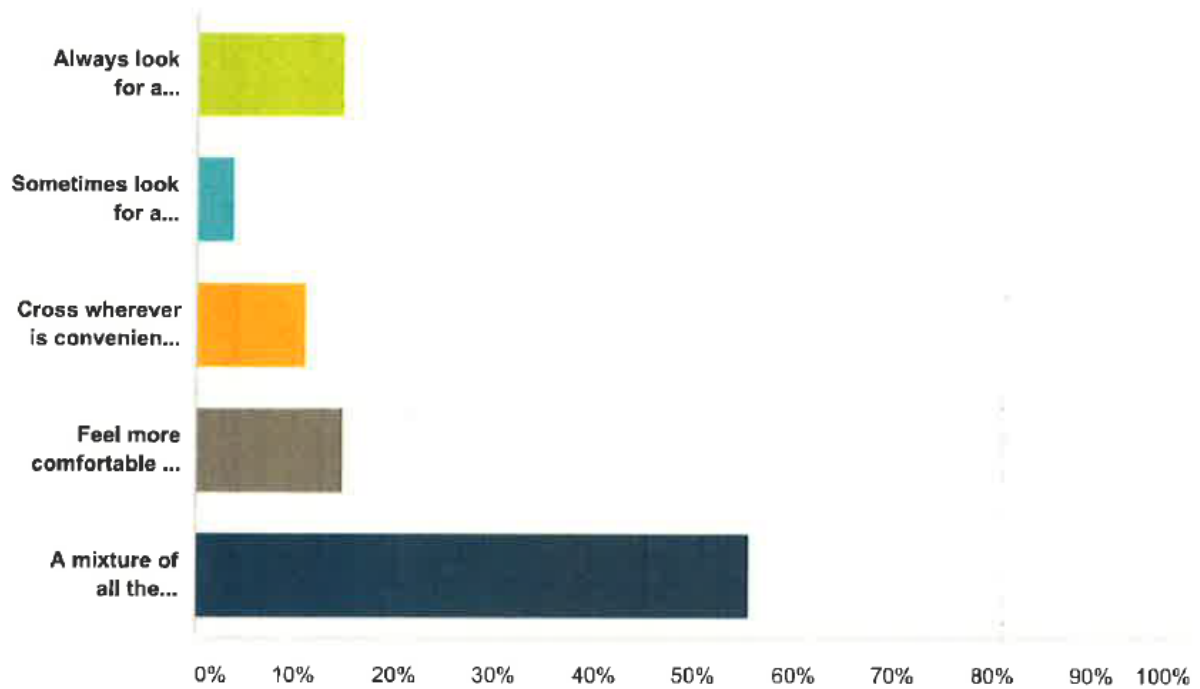
Answered: 51 Skipped: 5



	1	2	3	4	5	6	7	Total	Score
Streets where shops are located	35.71% 15	21.43% 9	16.67% 7	11.90% 5	7.14% 3	4.76% 2	2.38% 1	42	5.43
Streets where medical facilities and hospitals are located	25.00% 10	32.50% 13	17.50% 7	7.50% 3	7.50% 3	10.00% 4	0.00% 0	40	5.30
Streets where sports facilities are located	0.00% 0	8.57% 3	2.86% 1	11.43% 4	20.00% 7	20.00% 7	37.14% 13	35	2.49
Streets around parks and reserves	7.50% 3	12.50% 5	15.00% 6	27.50% 11	20.00% 8	10.00% 4	7.50% 3	40	4.00
Residential streets around my home	17.95% 7	7.69% 3	10.26% 4	20.51% 8	10.26% 4	17.95% 7	15.38% 6	39	3.87
Streets around schools	10.26% 4	15.38% 6	15.38% 6	7.69% 3	17.95% 7	17.95% 7	15.38% 6	39	3.77
Streets for recreational walking	26.19% 11	7.14% 3	14.29% 6	11.90% 5	11.90% 5	14.29% 6	14.29% 6	42	4.24

## Q5 When you think about crossing a major road as a pedestrian do you...Select the behaviour most common to you.

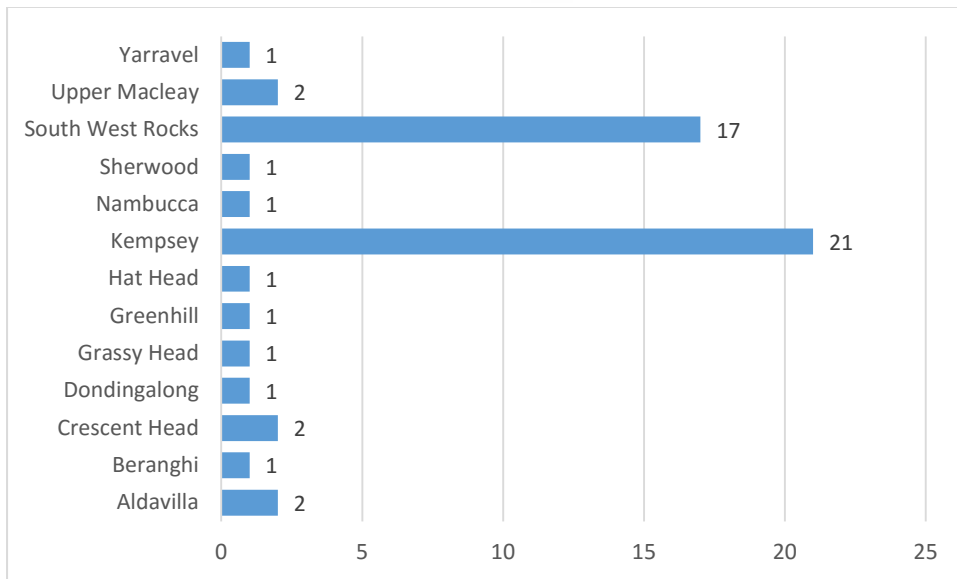
Answered: 54 Skipped: 2



Answer Choices	Responses
Always look for a pedestrian crossing or lights and cross there	14.81% 8
Sometimes look for a pedestrian crossing or lights and cross there	3.70% 2
Cross wherever is convenient to where I need to go regardless of any traffic controls	11.11% 6
Feel more comfortable if I only have to go halfway and there is somewhere safe to wait	14.81% 8
A mixture of all the behaviours above	55.56% 30
<b>Total</b>	<b>54</b>

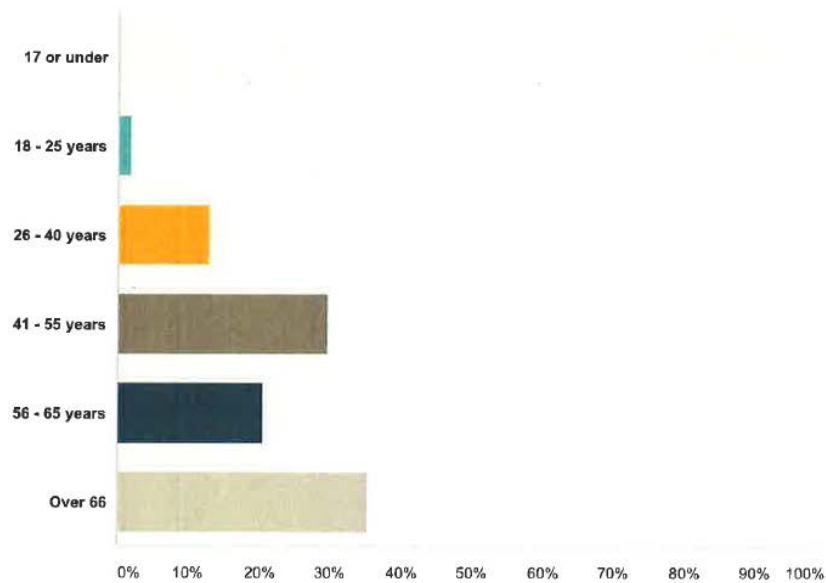
## Q7 Which area of the Shire do you live in?

Answered: 54 Skipped: 2



## Q8 Which age group are you in?

Answered: 54 Skipped: 2



Answer Choices	Responses	Count
17 or under	0.00%	0
18 - 25 years	1.85%	1
26 - 40 years	12.96%	7
41 - 55 years	29.63%	16
56 - 65 years	20.37%	11
Over 66	35.19%	19
<b>Total</b>		<b>54</b>

## Appendix B - Extracts from Written Submissions

Concern	Location	Other	Considered in PAMP
ramps inadequate	Gregory Street/Gordon Young Drive		Y
ramps inadequate, also tactile indicators	Gregory Street/McIntyre Street, Baldwin Street, Landsborough Street, Paragon Avenue	<i>AustRoads' Guide to Road Design - Part 6A: Pedestrian and Cycle Paths.</i>	Y
ramps inadequate	Gregory Street/Gordon Young Drive, Elizabeth Street to school , roundabout Gregory Street/Belle O'Connor Street, Steve Eagleton Drive, McIntyre Street and Mitchell Street. The Entrance has no access generally.	Steve Eagleton Drive has Community Health Services - no access until halfway up, McIntyre Street route to Country Club, Golf Club, Pool etc,	Y
ramps inadequate, mobility scooters not catered for	Gregory Street/Gordon Young Drive, Belle O'Connor Street, Elizabeth Street to Paragon Avenue, roundabout Phillip Drive/Francis Harris Close		Y
footpaths and ramps inadequate, and	Gregory Street/Gordon Young Drive, Landsborough Street to Elizabeth Street, Landsborough Street to Paragon Avenue	no path on eastern side,	Y
motor scooters not catered for	Gregory Street west side	Community Hall to Catholic Church	Y
	Gregory Street in front of Nursing Home		Y
	Gregory Street/Frank Cooper Street	ramp too steep	Y
	Brighton Park path OK	ends at Phillip Drive roundabout	Y
	new estates in general	sadly lacking in footpaths	Y
footpaths and ramps inadequate	Gregory Street/Gordon Young Drive, Landsborough Street, Simpson Street then Mitchell Street, and outside BiLo,		Y
	Phillip Drive roundabout to Waiabar Avenue south side		Y
footpaths and ramps inadequate	Phillip Drive roundabout to Waiabar Avenue south side		Y

<b>Concern</b>	<b>Location</b>	<b>Other</b>	<b>Considered in PAMP</b>
footpaths and ramps inadequate	Arthur Street/Bruce Field Street intersection		N
footpaths and ramps inadequate	Gregory Street/Landsborough Street		Y
footpaths and ramps inadequate	Gregory Street opposite Primary School		Y
footpaths and ramps inadequate	Gregory Street/Gordon Young Drive		Y
	Phillip Drive/Sportsmans Way		Y
Rocks cycling: cycle paths, shared pedestrian paths	South West Rocks generally		Y
footpath obstructions, children affected	Jeffery and Rawson Streets, Smithtown	obstruction not specified	Y
bicycles, pedestrians, mobility scooters use same facilities	Shire generally, bicycles should not be excluded		N
requirements of mobility scooters need to be ascertained	survey did not address any vital concerns of mobility scooter drivers		Y
lack of footpaths, dead end footpaths, ramps too steep or not there, road markings with lanes too narrow for scooters and cars sharing, surfaces that are uneven, broken and dangerous	general problems at South West Rocks relating to footpaths		Y
high volume and dangerous areas that require attention ASAP	corner Gregory Street Gordon Young Drive in all directions		Y
high volume and dangerous areas that require attention ASAP	area around Country Club, Phillip Drive and Sportsmans Way		Y

Concern	Location	Other	Considered in PAMP
Safety issues experienced at St Joseph's School	<p><b>Pedestrian Crossing:</b> Most of the parking available for the school is across the double yellow lined Kemp Street. A significant safety risk as it becomes very busy at the end and start of school. A pedestrian crossing is very much needed. Please advise if this is possible in the near future and if not advise what barriers exist to the crossings installation. <b>Footpath:</b> Footpath around the school is in a poor state and is a trip hazard to staff, parents and students. Request footpath be widened and repaired to a standard that makes it fit for purpose. <b>Bus Stop:</b> current location of bus stop a concern. When buses are at the bus stop they block vision of oncoming traffic to both pedestrians crossing the road and drivers pulling out of car parks. Request a traffic management review of current situation with view to moving bus stop closer to the corner of Kemp and Wide Streets with the installation of a turn in bay and shelter.</p>		Y
Footpath access corner of Main Street and Reserve Road Crescent Head	Footpath has sunk and is an issue for people on wheelchairs, bikes and strollers		N

## Appendix C - Summary of Survey Comments

<b>Are there specific streets or issues that you would like to see fixed to make pedestrian access safer and more convenient? Issues might include uneven footpaths, obstructions, poor lighting, lack of ramps or footpaths that are missing or too narrow.</b>	<b>Which area of the Shire do you live in?</b>	<b>Which age group are you in?</b>
I live in a rural area. I often use the pedestrian/cycle path between Reserve Road at Grassy Head and Stuarts Point Road. I strongly support the development of other such paths, particularly the proposal for one from Stuarts Point to Fishermans Point. (I note that such paths do not appear to be included in the 2003 PAMP.)	Grassy Head	Over 66
Willawarrin definitely needs a safe crossing for children to cross the road to access playing fields and general store as well as homes. At the moment there is a pathway that starts at no real location and ends at no real location/destination. There is currently nothing in place that allows children a safe crossing area and something as simple as a crossing would make a big difference.	Mooneba	26 - 40 years
Uneven footpaths. Missing footpath at school crossing on opposite side of road (Bellbrook).	Bellbrook	
All of the above. Shared paths throughout South West Rocks so walkers, cyclists and people on mobility scooters could all share paths and be safe away from car traffic.	South West Rocks	41 - 55 years
I would like to see extra time allowed for pedestrian crossing from the Coles complex over to Smith St as I never feel safe there.	South West Rocks	Over 66
North side of North Street from Cochrane Street to Railway Crossing and beyond. Quite a few local residents walk along here - but no proper footpath, and North Street narrows considerably towards the railway crossing so as to be rather unsafe for walkers especially since the grass on sides is extremely long and there is a gully. Crossing the railway line is extremely unsafe. A foot crossing could be put across the line on north side.	Kempsey	Over 66
Middleton Street South Kempsey, pedestrian crossing at Queen Street very dangerous. A garden that is low level instead of waist high grass at the middle of the crossing would make a huge difference. A walkway south of the school along Queen Street to South Street would be sensational, or at least a pedestrian bridge over the creek between Reginald Ward Street and Nance Road. Crossing in front of Kempsey South Public school needs encroachments either side to narrow that part of the road. 29 Middleton Street is a vacant corner block on Queen Street with overgrown lawn - a path or program of mowing would significantly increase pedestrian safety.	South Kempsey	26 - 40 years

<b>Are there specific streets or issues that you would like to see fixed to make pedestrian access safer and more convenient? Issues might include uneven footpaths, obstructions, poor lighting, lack of ramps or footpaths that are missing or too narrow.</b>	<b>Which area of the Shire do you live in?</b>	<b>Which age group are you in?</b>
Corner Gregory Street and Gordon Young Drive footpaths on Gregory Street from there, either way, are useless, too narrow, too steep, broken up or non- existent. I ride a motor scooter.	South West Rocks New Entrance area	Over 66
I would like to see more time allowed for pedestrians crossing from the Coles Complex over to Smith Street as I never feel safe there.	South West Rocks	Over 66
Footpath along South West Rocks Road to Old Station Road	Kempsey	41 - 55 years
Lighting and footpath along Sea Street side of Kempsey High School	Dondingalong	41 - 55 years
More footpaths and walking areas along the river	Greenhill	41 - 55 years
Lack of appropriate parking and crossing places - having no footpaths where I live	Easy Kempsey	56 - 65 years
Cochrane Street has no footpath from Cedar Place to Broughton Street. This street is very dangerous for walking as the gutters are damaged by trucks and the grass areas are uneven and not maintained. It is virtually impossible to push a pram on this street.	West Kempsey	41 - 55 years
Opposite Greenhill school is a disaster - slopes down to river, cracks, overgrown, needs tending. And on the other side - there is a large tree that needs cutting back/overgrown. Lady with wheelchair needs access and general public. Same footpath is covered with weeds mainly privet - Council keeps killing the natives. Slope of gutters to driveway too steep for small cars.	Harold Hughes Place	Over 66
Footpath leading into carpark in Verge Lane (near fruit shop)	Kempsey	56 - 65 years
Most big paver areas are uneven in town and a big trip hazard	Yarravel	Over 66
free up the footpath in front of the garage which is always blocked 5days a week by cars awaiting repairs in Elbow street not far from Council Chambers	Kempsey	26 - 40 years
Uneven footpaths. I know friends that have scooters have problems with access and uneven footpaths	South West Rocks	Over 66
Smith Street not sharing pedestrian crossing	East Kempsey	Over 66



<b>Are there specific streets or issues that you would like to see fixed to make pedestrian access safer and more convenient? Issues might include uneven footpaths, obstructions, poor lighting, lack of ramps or footpaths that are missing or too narrow.</b>	<b>Which area of the Shire do you live in?</b>	<b>Which age group are you in?</b>
Lord Street, safer pedestrian from skate park to shop - needs a crossing, Lord Street - bottom the road is too small and there is no footpath, just long grass near top of the rails	East Kempsey	18 - 25 years
There are many shops in the main street which have a step entry. This disadvantages those with increased mobility needs and parents with prams. Shop owners should be encouraged to modify this access.	West Kempsey	26 - 40 years
Elbow Street, River Street uneven footpaths - the whole lot is a night mare and has been for many years	West Kempsey	56 - 65 years
A footpath is most desperately needed for Cavanagh's passengers to alight from the bus onto a solid surface in Sea Street opposite the old Police Station. At present there is just grass, which can be slippery and muddy when wet.	West Kempsey	56 - 65 years
Every main street in West Kempsey - Elbow and River Streets especially the southern ends of both streets. All the issues listed above are applicable to both streets	WEST Kempsey	Over 66
Large sections of South West Rocks have been neglected for a considerable period of time, despite being a major contributor to rates. Need to spend some money here rather than Smith Street.		41 - 55 years
Fix footbridges across Back Creek and Saltwater Creek.	South West Rocks	26 - 40 years
The footpath on Stuart Street needs to go to both ends. There needs to be a footpath along the full length of Eden Street and Tozer Street, especially along the edge of the flood levy. A lot of paths around town are uneven and have trip hazards.	Beranghi	41 - 55 years
Footpath on western side of Tozer Street, between the Customer First Centre and Marsh Street ( it's very surprising the council hasn't fixed this, being so close to their chambers)	West Kempsey	Over 66
The wonderful walking/bike riding path along the creek is not being utilised as much as it should be. People still constantly walk and bike on the narrow Gap Road which is extremely dangerous. Perhaps signage making the path more evident would help?	Hat Head	41 - 55 years
There are a lot of very uneven footpaths which are a trip hazard	Sherwood	56 - 65 years

<b>Are there specific streets or issues that you would like to see fixed to make pedestrian access safer and more convenient? Issues might include uneven footpaths, obstructions, poor lighting, lack of ramps or footpaths that are missing or too narrow.</b>	<b>Which area of the Shire do you live in?</b>	<b>Which age group are you in?</b>
I have reported many times the state of the footpath in Lord Street, East Kempsey for the last 2 years. Nothing has been done despite the accidents on this stretch from 15 Lord Street down to 7 Lord Street. Walking to the bridge on the Western side needs to be made nicer, move the horrible fence to make it wider for pedestrians.	East Kempsey	41 - 55 years
Gregory Street, South West Rocks needs a footpath from the Coles shopping centre to Spencers Creek Bridge. There are a number of elderly people living in this area who use mobility aids or scooters. The people using scooters ride on the road and the people with mobility aids cannot walk in this area at all. It would also be better for recreation walkers in this area to have a footpath as this would encourage more people to walk.	South West Rocks	56 - 65 years
Lack of footpaths and not enough lighting in my area	West Kempsey	26 - 40 years
The busy intersection of Gregory Street/Gordon Young Drive, South West Rocks is crossed daily by many residents and visitors and is dangerous. A pedestrian island halfway would both assist with pedestrian safety and help to slow down traffic near the school.	South West Rocks	56 - 65 years
The footpath along Bissett Street, East Kempsey between No. 43 and 47 is in very bad repair and is a hazard to the elderly and mothers pushing prams. Another section near 11 Bissett Street, which Council repaired a couple of years ago has been undermined by run-off again, causing a potential hazard.	Kempsey	41 - 55 years
Landsborough Street between Gregory Street and the car park. Both ends of this section of footpath have protruding rocks and tree roots making it extremely difficult for the many elderly people to walk safely to the main area of the village. I would think this was a main area of concern and should be addressed as soon as possible	South West Rocks	Over 66
Need pedestrian bridge across to Coles Supermarket from Belgrave Street. Better exit from Woolworths fuel station to traffic lights.	Aldavilla	Over 66
Uneven footpaths, poor lighting along Phillip Drive and in places no definition as to where the road / cycleway begins. Request continuation of cycleway around the corner of Cardwell Street to allow bike riders / pedestrians to access road to Trial Bay Gaol beach. thanks	South West Rocks	41 - 55 years

<b>Are there specific streets or issues that you would like to see fixed to make pedestrian access safer and more convenient? Issues might include uneven footpaths, obstructions, poor lighting, lack of ramps or footpaths that are missing or too narrow.</b>	<b>Which area of the Shire do you live in?</b>	<b>Which age group are you in?</b>
An extension of the bikeway on Gordon Young Drive to connect to Gregory Street and continuing into Gregory Street as far as the school pedestrian crossing. This is a very dangerous corner for both young and older people to manipulate.	South West Rocks	Over 66
The lack of a footpath from Gordon Young Drive to the school pedestrian crossing, the pedestrian crossing itself, the footpath from the school to the town centre and many of the ramps along that same route as well as several ramps around the town itself	South West Rocks	Over 66
major trouble is severe lack of safe ramps on most paths, which are broken up, or ramps are in shocking state of disrepair	Kevin Hogan Place, South West Rocks	Over 66
The path along the back of the houses along Phillip Drive, South West Rocks are very rough and narrow with branches growing over the paths which also heads back along the Sportmans Way and Landsborough Street which is also had the sections come apart creating trip hazards.	South West Rocks	41 - 55 years
I have worked at the Adventist School on Crescent Head Rd for 12 years and for 12 years have written letters to NSW Transport when students have been denied free bus travel because they live close enough to school to walk. The letters always state that the walking route is too dangerous because of the narrow road and lack of footpath. A bicycle lane would benefit many Kempsey Adventist School students. The most important and needed area is between the Macleay Valley Way/Crescent Head Road intersection and the Adventist School.	Aldavilla	26 - 40 years
Nearly all the streets that we choose to walk with our group there is something wrong with the footpath. I would like to see the footpaths carry on further than they do especially the River Park footpath, like going on further behind Woolworths and Big W. The path along Eden Street could be extended past the playing fields as at the moment the grass is long and I'm afraid doesn't get mowed very often, going under the railway bridge is dangerous because we have to walk on the road before we are able to walk up Kemp Street or go further on (no footpath) up Tozer Street past the bus depot. We need more ramps for people who have a walker. Most of the pathways are either too narrow or uneven. We need walkways like South West Rocks have and Port Macquarie have for the pedestrian and walking groups.	Tabrett Street West Kempsey	Over 66
Footpath along North/Kemp Streets	West Kempsey	41 - 55 years

<b>Are there specific streets or issues that you would like to see fixed to make pedestrian access safer and more convenient? Issues might include uneven footpaths, obstructions, poor lighting, lack of ramps or footpaths that are missing or too narrow.</b>	<b>Which area of the Shire do you live in?</b>	<b>Which age group are you in?</b>
<p>1. Footpaths that lead to a dead end are the most common problem. Clearly the people who wrote the survey have little idea of local conditions. 2. Lack of ramps and ramps which are obviously unsafe. 3 Lack of maintenance leading to broken paths and disjointed paths. 4 All of the other faults occasioned by a council that has no interest in maintenance of the facilities nor any inclination of improving the facilities. The report from 2003 elicited no response or any activity, clearly indicating that council has no interest in this vital infrastructure, and is not concerned about the safety of its citizens or law suits that may arise from its negligent attitude. Over \$60k spent on this survey after the neglected 2003 survey is indicative of the 'couldn't care less' attitude of this council. NOTE: Your survey was not tested; Question 3 cannot be answered in full. More slackness!</p>	<p>South West Rocks</p>	<p>Over 66</p>
<p>Linking/connecting footpaths so there is an extended safe network for people to walk. Linkage between Central and West Kempsey; greater access through linked pathways along the beautiful Macleay River please. Riverside Park is an excellent starting/finishing point.</p>	<p>Crescent Head</p>	<p>56 - 65 years</p>
<p>There is no footpath along Crescent Head Road along the corduroy from the subdivision at Neville Morton Drive to the village. There are many children and families who cannot walk or ride bikes a short 3 km into the village because it is not safe. Given the childhood obesity epidemic, this is inexcusable.</p>	<p>Crescent Head</p>	<p>41 - 55 years</p>
<p>Sea Street pedestrian crossing near the Courthouse. When crossing from the railway side vision to the right (down the hill along Sea Street) is often blocked by parked vehicles.</p>	<p>Nambucca</p>	<p>56 - 65 years</p>
<p>1. Access to pathways from McNiven's Estate where I live, is difficult - have to walk on busy roads.2. Access to Headland from Horseshoe Bay car parks. 3. Footpath along Phillip Drive and between Country Club roundabout (a good one) and Brighton Park is very uneven with uplifting concrete panels. 4. All subdivisions should have to include footpaths.</p>	<p>South West Rocks</p>	<p>66+</p>
<p>Many paths in South West Rocks have uneven drainage pits, limited access for prams and mobility units. I think mainly Gregory Street between the school and town. Pedestrian/school crossing is apparently Priority 2 which I do not understand. Approx 30-40% of drivers do not stop and some travel at a speed at which they could not stop if necessary.</p>	<p>South West Rocks</p>	<p>66+</p>

## Appendix D - List of References

Ageing and Disability Policy 2014 Kempsey Shire Council

Ageing 2022 Kempsey Shire's Action on Ageing Strategy 2009 -2012 Kempsey Shire Council (4.2.2, 4.2.4, 4.2.6

Local Environmental Plan 2013

Development Control Plan 2013

Section 94 Contribution Plan

Section 94A Contributions Plan South West Rocks

Kempsey and South West Rocks Pedestrian Access Mobility Plan 2003

AUSTROADS Guide to Road Design 2009, Part 4 Intersections and Crossings  
Part 6A Pedestrian and Cyclist Paths

Australian Standard 1742 manual of uniform traffic control devices

Australian Standard 1742.10 Pedestrian Control and Protection

Australian Standard 1742.13 Local Area Traffic Management

Australian Standard 1742.9 Pedestrian and Bicycle

Australian Standard 1428 Design for access and mobility

How to Prepare a Pedestrian Access and Mobility Plan, Roads and Traffic Authority 2002

Council Asset Management Strategy 2013

Community Infrastructure Asset Management Plan 2013

Appendix E - Schedule of Proposed Treatments Kempsey

KEMPSEY PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
<b>BELGRAVE STREET:</b>	regional			Kempsey					
		Kemp St	Stuart St	Full Length	traffic management options proposed to address pedestrians crossing over to playing field, to skate ramp and to open space system	parking lane line markings to narrow road and slow traffic	M Yr 6	120.00	600
						kerb extensions of which 2 are at existing crossings, the rest traffic management	H Yr 2	9,000	18,000
				East of Memorial Ave	crossing to swimming pool	pedestrian refuge with kerb blisters	H Yr 2	19,000	19,000
				west of Holman St	crossing to skate park	pedestrian refuge with kerb blisters, ramp not to spec	H Yr 3	9,000	9,000
<b>BISSETT STREET:</b>	regional			East Kempsey					
				At Innes St	School route	Pedestrian Refuge	H Yr 1	9,000	9,000
<b>BLOOMFIELD STREET:</b>	local collector			South Kempsey					
				At Prince St pedestrian crossing point on Bloomfield St, east of railway overpass	School route, subject of grant funds	Pedestrian Refuge	H Yr 5	8,000	8,000
				At Railway St Pedestrian crossing point on Bloomfield, west of railway overpass	School route, subject of grant funds	Pedestrian Refuge	H Yr 5	8,000	8,000
				at Albert St intersection, eastern side	School route	Pedestrian Refuge	H Yr 5	8,000	8,000
<b>BROUGHTON ST:</b>	local collector								
		River St	Tozer St	north side along Cemetery boundary	seniors, school route, gap in connectivity	new footpath 1.2 m, 224 m long	L	120	26,880

KEMPSEY PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
<b>COCHRANE STREET:</b>									
	local collector			North Kempsey					
				At North St on Cochrane St		Splitter Island with Pedestrian Gap	L	9,000	9,000
				north of Leith St	Opposite Aged Care Home to bus stop	Pedestrian Refuge with grab rail	L	9,000	9,000
		Tabrett St	Kemp St	West Side	school route	New Footpath (1.2m), 500 m	L	120	60,000
		North St	Kemp St	Pavement Line Marking	unconstrained travel speeds	Paint Parking Lanes and centreline	H Yr 1	120.00	15,000
<b>EDEN ST:</b>									
	local								
		Verge St	Tozer St	following river and behind sorting fields	recreation route and link between Kempsey CBD and West Kempsey CBD	Shared path 2m wide, 0.8 kms long	L	180.00	144,000
<b>GILL STREET:</b>									
	local collector			East Kempsey					
				East of Innes St	school route & heavy vehicle bypass route to South West Rocks direction	Pedestrian Refuge	H Yr 2	9,000	9,000
<b>KEMP STREET:</b>									
	local collector			North Kempsey					
				as close as possible to Gladstone St underpass	school, shopping & recreation route requires crossing over Kemp St	Pedestrian Refuge	L	9,000	9,000
		Cochran e St	North Street	full length, west side	school, shopping & recreation route, mobility scooters	footpath, shared 2 m, 1.62 kms	L	180	291,600
<b>LEITH STREET:</b>									
	local			North Kempsey					
		River St	Tozer St	North Side	seniors route, retirement village	New Footpath (1.2m), 320 m long	L	120	38,400
		Tozer St	Sea St	North Side	seniors route, school route	New Footpath (1.2m), 300 metres long	H Yr 4	120	36,000

KEMPSEY PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
<b>MIDDLETON STREET:</b>	local collector			South Kempsey					
		Macleay Valley Way	West Street	full length on north side	Main pedestrian spine through South Kempsey with shop, school routes and bus route. Link footpaths, replace pram ramps	New Footpath (1.2m)	L	120	127,200
		Queen St		intersection	pedestrian crossing made unsafe due to grassed areas	replace grass with hard surface (concrete) 12 m	H Yr 1	180	2,160
<b>NORTH ST</b>	local collector								
		River St	Kemp St	full length west side, less short piece of existing footpath	seniors route, school route, link to Kemp St and West Kempsey shopping	New footpath 1.5m wide, 2.3 kms long	L	135	310,500
<b>POLWOOD STREET:</b>	local			North Kempsey					
				At River St on Polwood St	seniors route	Pedestrian Refuge with blisters	M Yr 6	9,000	9,000
					seniors route	grab rail on refuge	M Yr 6		
		River St	Tozer St	South Side	seniors route and Hospital access	New Footpath (1.2m)	M Yr 6	120	27,600
		Tozer St	Sea St	North Side	seniors route and Hospital access	New Footpath (1.2m)	M Yr 7	120	36,000
<b>QUEEN STREET:</b>	local collector			South Kempsey					
		Middlet on St	Harry Boyes Ave	West Side south from Middleton	school route	New Footpath (1.2m)	L	120	14,400
				opposite primary school	school route	Pedestrian Refuge with blisters	L	9,000	9,000
<b>RIVERBANK</b>	N/A								
		end Forth St	Geoffrey Debenham St	route along riverbank behind Big W and Woolworths	recreational route to link with existing leading to Riverside Park	New wide footpath 1.5 m, 385 m long	L	135	51,975
<b>RIVER STREET</b>	arterial			North Kempsey					
		Brought on St	Spooners Ave		recreation, shopping, seniors route	New Footpath (1.2m), 2.3 kms long	L	120	276,000
		Forest Lane	Gordon Lane	north side	gap in existing footpath	New Footpath (1.2m) and 165 m long	L	120	19,800



KEMPSEY PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
<b>SEA STREET:</b>									
	local collector			North Kempsey					
				North of Neville Everson on Sea St	crossing to tennis courts	Pedestrian Refuge	L	9,000	9,000
				North of Polwood St on Sea St	safer access at wide intersection	Splitter Island with Pedestrian Gap	L	9,000	9,000
				South of Polwood St on Sea St	safer access at wide intersection	Splitter Island with Pedestrian Gap	M Yr 7	9,000	9,000
				North of Wide St on Sea St	safer access at wide intersection	Splitter Island with Pedestrian Gap	M Yr 7	9,000	9,000
				North of Marsh St on Sea St	safer access at wide intersection & to service school route	Splitter Island with Pedestrian Gap	L	9,000	9,000
				South of Marsh St on Sea St	safer access at wide intersection & to service school route	Splitter Island with Pedestrian Gap	L	9,000	9,000
				North of Kemp St on MFC	reduce crossing area for pedestrians	Pedestrian Refuge & 2 Kerb Blisters	L	9,000	9,000
		North Street	Kemp St		to define travel lanes and narrow a wide straight road	Paint Parking Lanes and Centreline	H Yr 3	120.00	25,200
<b>SHERWOOD RD:</b>									
	local collector			North Kempsey					
		River St			reduce crossing area for pedestrians	Pedestrian Refuge	L	9,000	9,000
		Hillview Drive	90m east of Hillview Drive	East of Hillview Drive	Missing Section of Shared Path	Shared path	L	180	16,200
<b>SULLIVAN STREET</b>									
	local			East Kempsey					

KEMPSEY PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
		Rudder St	Washing on St	South Side	school route	New Footpath (1.2m)	L	120	62,400
<b>TOZER STREET</b>	local			North Kempsey					
				north of Leith St	seniors and school route	Splitter Island with Pedestrian Gap	M Yr 7	9,000	9,000
		North St	Broughton St	East Side	seniors route to Polwood then school route				
		Broughton St	Short St	East Side	school route	New Footpath (1.2m), 1.6 kms long in total	L	120	192,000
				North & south of Polwood	seniors route to bowling club	Splitter Islands with Pedestrian Gap	M Yr 6	9,000	9,000
				North & south of Short St		Splitter Islands with Pedestrian Gap	H Yr 3	9,000	9,000
				North & south of Wide St	primary school route	Splitter Island with 2 Kerb Blisters	L	9,000	9,000
				North & south of Marsh St	primary school route	Splitter Island with 2 Kerb Blisters	L	9,000	9,000
<b>WIDE STREET:</b>	local			North Kempsey					
				West of Tozer St		Splitter Island with 2 Kerb Blisters	H Yr 3	9,000	9,000
				West of Sea St		Splitter Island with 2 Kerb Blisters	H Yr 3	9,000	9,000
<b>Total</b>							H Yr 1 H Yr 2 H Yr 3 H Yr 4 H Yr 5		26,160 46,000 61,200 36,000 24,000
<b>Total</b>							M Yr 6 M Yr 7		46,200 63,000
<b>Total</b>							L		1,739,355

Appendix F - Schedule of Proposed Treatments South West Rocks

SOUTH WEST ROCKS PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
<b>ENTRANCE STREET:</b>	local								
				At Rudder St		Pedestrian Refuge plus 2 Pram Ramps	L	19000	19,000
<b>GILBERT CORY STREET:</b>	Local collector								
				At Gordon Young	school route	Splitter Island with pedestrian gap	H Yr 2	8000	8,000
<b>GORDON YOUNG DR RUDDER ST:</b>	Local collector								
		Ocean St	Gilbert Cory St	South Side	school route	New Shared Path (2m), 300m	L	180	54,000
				Near Tourist Park entry	seniors route	Pedestrian Refuge	L	8000	8,000
				At Gilbert Cory	near walkway from Tahlee Close	Pedestrian Refuge	H Yr 2	8000	8,000
<b>GREGORY STREET:</b>	regional								
				North of Fig Tree Lane	seniors route from caravan park	Pedestrian Refuge & kerb blisters plus grab rail on refuge	H Yr 1	19000	19,000
		Gordon Young Dr	Arthur St	West Side	school route	New Footpath (1.2m), 330 m long	M Yr 7	120	39,600

SOUTH WEST ROCKS PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
				At Gordon Young Dr Intersection south side		Pedestrian Refuge & 2 Kerb Blisters, including retaining wall structures to provide adequate width	H Yr 1	19000	19,000
		Arthur St	Simpson St	west Side	school route	New Footpath (1.2m), 310m	L	120	37,200
		Arthur St	Simpson St	Near Bus Shelter	school route	Pedestrian Refuge	H Yr 1	9000	9,000
		Belle O'Connor St	Spencers Creek Rd	West Side		New Footpath (1.2m), 130 m long, in front of shopping centre	H Yr 5	120	15,600
		Belle O'Connor St	Spencers Creek Rd	Existing Pedestrian gap in centre median	shopping crossing route to BiLo	Kerb Blister on east kerb	H Yr 2	5000	5,000
		Belle O'Connor St	Spencers Creek Rd	Existing Pedestrian gap in centre median	shopping crossing route to BiLo	pedestrian warning signs for motorists x 2	H Yr 2	250	500
		Spencers Creek Rd	Arakoon Rd	west Side		New Footpath (1.2m), 760 m long	L	120	91,200
				30m north of Cooper St W	near bus shelter	Pedestrian Refuge	L	9000	9,000
		Fig Tree Lane	Arakoon Rd	At all Footpath crossings	on both sides. Coordinate with footpath construction	Australian Standard Pram Ramp, 36 existing need to be demolished and installed to Standard. Need to stage works and prioritise	H, M 6 per year for six years \$12,000/yr	2000	72,000
<b>HILL STREET:</b>	local								

SOUTH WEST ROCKS PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
		Gregory St	Mitchell St	South Side	school route	New Footpath (1.2m), 250 m long	H Yr 3	120	30,000
		Mitchell St	Short St	South Side	school route	New Footpath (1.2m), 250 m long	H Yr 4	120	30,000
		Short St	Goolagong Cres	Across Open Space area	school route	New Footpath (1.2m), 500 m long	L	120	60,000
				over water channel in open space	school route	small bridge crossing	L	4000	4,000
<b>LANDSBOROUGH ST:</b>	local collector								
		Gregory St	Mitchell Street	Opposite Library & Car Park	wide street with through traffic	Pedestrian Refuge plus 2 Pram Ramps	M Yr 6	12200	12,200
				At Mitchell St		Pedestrian Refuge, Pram Ramps & Kerb Blisters	M Yr 6	22200	22,200
				At Memorial St		Pedestrian Refuge	L	9000	9,000
				At Memorial St		Pram Ramps & Kerb Blisters	L	13200	13,200
		Gregory St	Mitchell St	North Side		New Footpath (1.2m), 360 m long	L	120	43,200
		Gregory St	Short St	South Side		New Footpath (1.2m), 650 m long	L	120	78,000
<b>LIVINGSTONE STREET:</b>	local								
		Prince of Wales Ave		East of Prince of Wales Ave	crossing point to beach	Pedestrian Refuge	H Yr 4	9000	9,000

SOUTH WEST ROCKS PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
		Gregory St	Memorial Ave		high level of pedestrian crossing traffic	40km/k zone signs entry/exit, 4	H Yr 4	250	1,000
		Gregory St	Memorial Ave			40km/k zone pavement markings	H Yr 4	300	1,200
<b>MCINTYRE STREET:</b>	local								
		Gregory St	Short St	South Side		New Footpath (1.2m),660 m long	L	120	79,200
				At Mitchell St		Pedestrian Refuge	L	9000	9,000
<b>MEMORIAL STREET:</b>	local								
				At Livingstone St		Pedestrian Refuge	H Yr 5	9000	9,000
				At Livingstone St		Kerb Blister	H Yr 5	5000	5,000
				At Landsborough St		Pedestrian Refuge	H Yr 5	9000	9,000
				At Landsborough St		Pram Ramps & Kerb Blisters	H Yr 2	13200	13,200

SOUTH WEST ROCKS PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
<b>MITCHELL STREET:</b>	local								
		Paragon Ave	Simpson St	full length West Side	Alternate route for cars and pedestrians to Gregory St - operates as a local collector	New Footpath (1.2m), 1200 m long	L	120	144,000
				At Landsborough St		Pedestrian Refuge	L	9000	9,000
				At Landsborough St		Pram Ramps & Kerb Blisters	L	13200	13,200
				At McIntyre St		Pedestrian Refuge	L	9000	9,000
				At McIntyre St		Pram Ramps & Kerb Blisters	L	13200	13,200
<b>OCEAN DRIVE:</b>	local								
		Intersection - Gregory St		East of Gregory St On Ocean Drive		10 km/hr Shared Zone Speed Control Raised Threshold	L	3000	3,000

SOUTH WEST ROCKS PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
<b>OCEAN STREET:</b>	local								
		Intersection - Rudder St		At Rudder St On Ocean St		Pedestrian Refuges both sides of intersection	L	9000	18,000
		Intersection - Rudder St		At Rudder St On Ocean St		Australian Standard Pram Ramp, 4	L	1600	6,400
<b>STEVE EAGLETON DRIVE</b>	local								
		intersection with Gregory St	Community Health Centre	extend existing footpath		New footpath 1.2 m wide, Mainly in front of undeveloped block but total length 0.16 kms long	H Yr 1	155	14,800
<b>STURT STREET:</b>	local								
		Intersection - Hill St		At Hill St	school route	Pedestrian Refuge	H Yr 5	9000	9,000
<b>PHILLIP DRIVE:</b>	local collector								
		Sportsman Way	Middle Footbridge	South side	extend shared path to edge of built up area	New Footpath 2m wide, 500 m long	L	180	90,000
		Sportsman Way	Wongarl Ave	East of Sportsman Way		Pedestrian refuge and pram ramps	H Yr 2	12200	12,200
				near Wongarl Ave	crossing point to off road path system & beach	pedestrian refuge & kerb extensions	H Yr 5	19000	19,000



SOUTH WEST ROCKS PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
		roundabout	Waianbar Av		seniors, recreational and shopping route	no paths or pram ramps, extend path south side, 1.2 m, 500 m long	L	120	60,000
		Cardwell St	Arakoon	Northern side	recreational, link with existing	shared path 2m wide, 1 km	L	180	180,000
<b>WEST SIDE OF GOLF COURSE</b>									
		Belle O'Connor	Hill St		recreational	shared bike/pedestrian path (2m wide), 1300 m	L	180	234,000
<b>SPORTSMAN WAY</b>									
	Local								
		Phillip Drive	Sportsground Carpark		link existing	shared bike/pedestrian path (2m wide), 40 m long	H Yr 4	180	7,200
<b>BACK CREEK PATH</b>									
	Off road								
		car park at Back Creek Entrance	Gordon Young Dr	via Fig Tree Lane, and Back Creek to boat ramp, then to Gordon Young Dr	recreational	New Shared Path 2 m wide. Subject of previous grant application. 1.43 kms long, road crossing at Gordon Young Drive, 2xbike racks, 3xsigns	L		423,660
<b>Total</b>							H Yr 1 H Yr 2 H Yr 3 H Yr 4 H Yr 5		73,800 58,900 42,000 60,400 78,600

SOUTH WEST ROCKS PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
Total							M Yr 6 M Yr 7		46,400 39,600
Total							L		1,717,460

Appendix G - Schedule of Proposed Treatments Crescent Head and Stuarts Point

<b>CRESCENT HEAD PAMP TREATMENTS</b>									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
<b>Crescent Head Rd</b>	regional								
		Belmore St	Neville Morton Drive	along Crescent Head Rd north side	shared path to link estate to CH Village and provide an interesting recreational route	shared path 2m wide 3.1 kms	L	\$180	558,000
<b>Belmore St</b>	local collector								
		along Belmore St	Lake St	extend existing footpath on Belmore St		footpath 1.2 m wide, 0.2 kms long	L	\$120	24,000
<b>Crescent Head CBD</b>									
		Main St	Rankine St	Gaps in existing footpaths	High visitation area Rankine connects car park	Footpath 1.2 m Wide, 0.15 kms long	L	\$120	18,000
<b>Total</b>							L		600,000
<b>PAMP TREATMENTS Stuarts Point</b>									
<b>Ocean Avenue</b>	sub arterial								
		Fourth St		intersection		construct pram ramps both sides to Standard	L	\$2,000	4,000
		Banksia St		intersection		construct pram ramps both sides to Standard	L	\$2,000	4,000
		Marine Pde		intersection		construct pram ramps both sides to Standard	L	\$2,000	4,000
<b>Total</b>							L		12,000

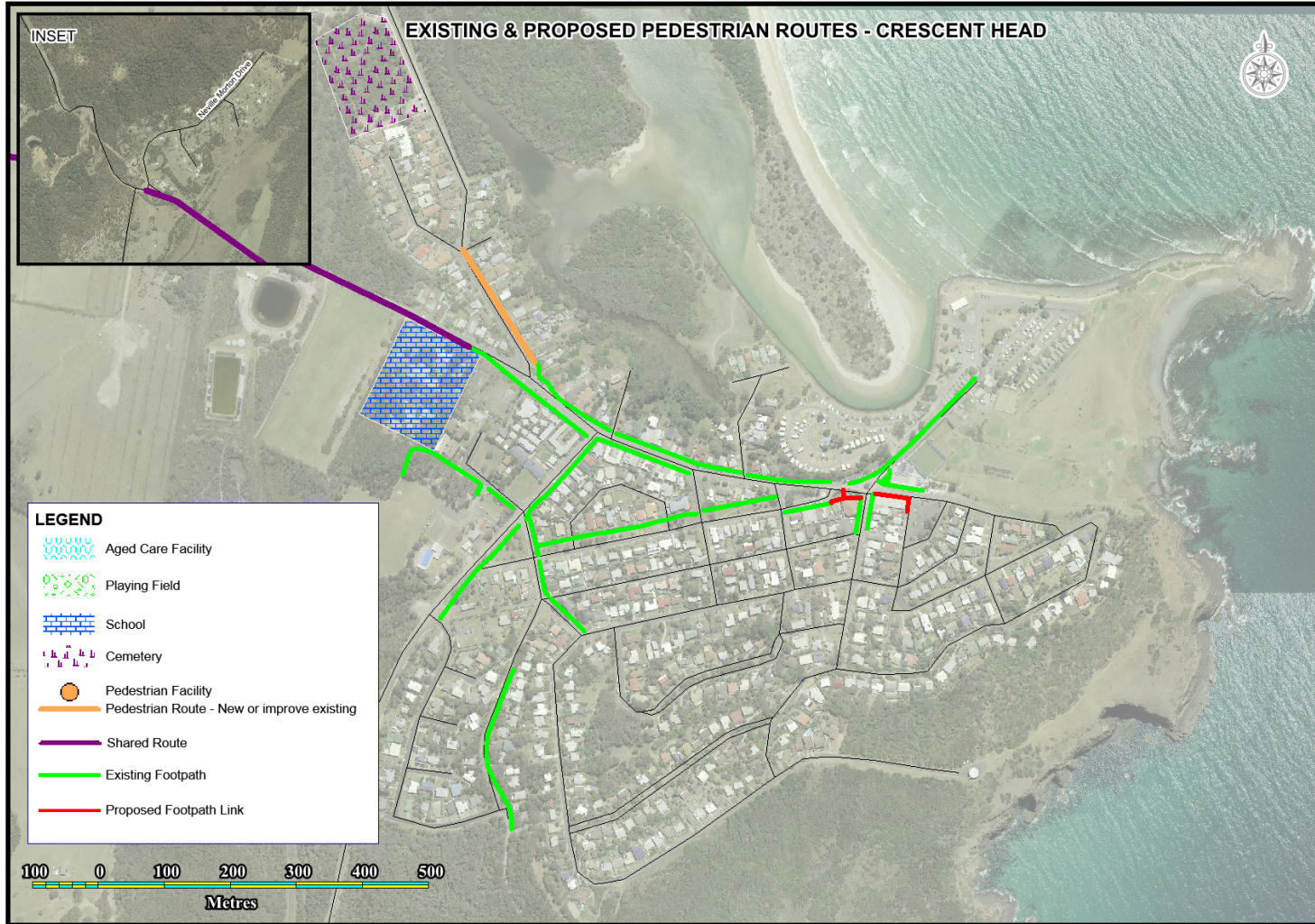
Appendix H - Schedule of Proposed Treatments Frederickton

FREDERICKTON PAMP TREATMENTS									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
<b>Macleay Valley Way</b>	regional								
		Macleay St, end of existing footpath	Great North Rd, start of existing footpath	northern end Frederickton	gap in pedestrian path to School	new pedestrian path 1.2 m, 100 m long	M Yr 6	\$120/m	12,000
<b>Macleay Valley Way</b>	regional								
		First Lane	Collombatti Rd	between Kempsey and Frederickton	shared bike/pedestrian path, previously subject of grant application	new shared path (2m) with small crossing treatments over Christmas Creek and Easter Creek and box culvert over Glenrock Drain. Includes fencing, signage and sections of safety rail. Shared path to be 2.5m wide to accommodate increased future use.	L		2,763,000
<b>Flanagan St</b>	Local collector								
		Great North Rd	end Flanagan St	west side	gap and route to Sporting fields	New Shared Path (2m), 0.5 kms	L	\$180.00	90,000
<b>Total</b>							M Yr 6		12,000
							L		2,853,000

Appendix I - Schedule of Proposed Treatments Smithtown and Gladstone

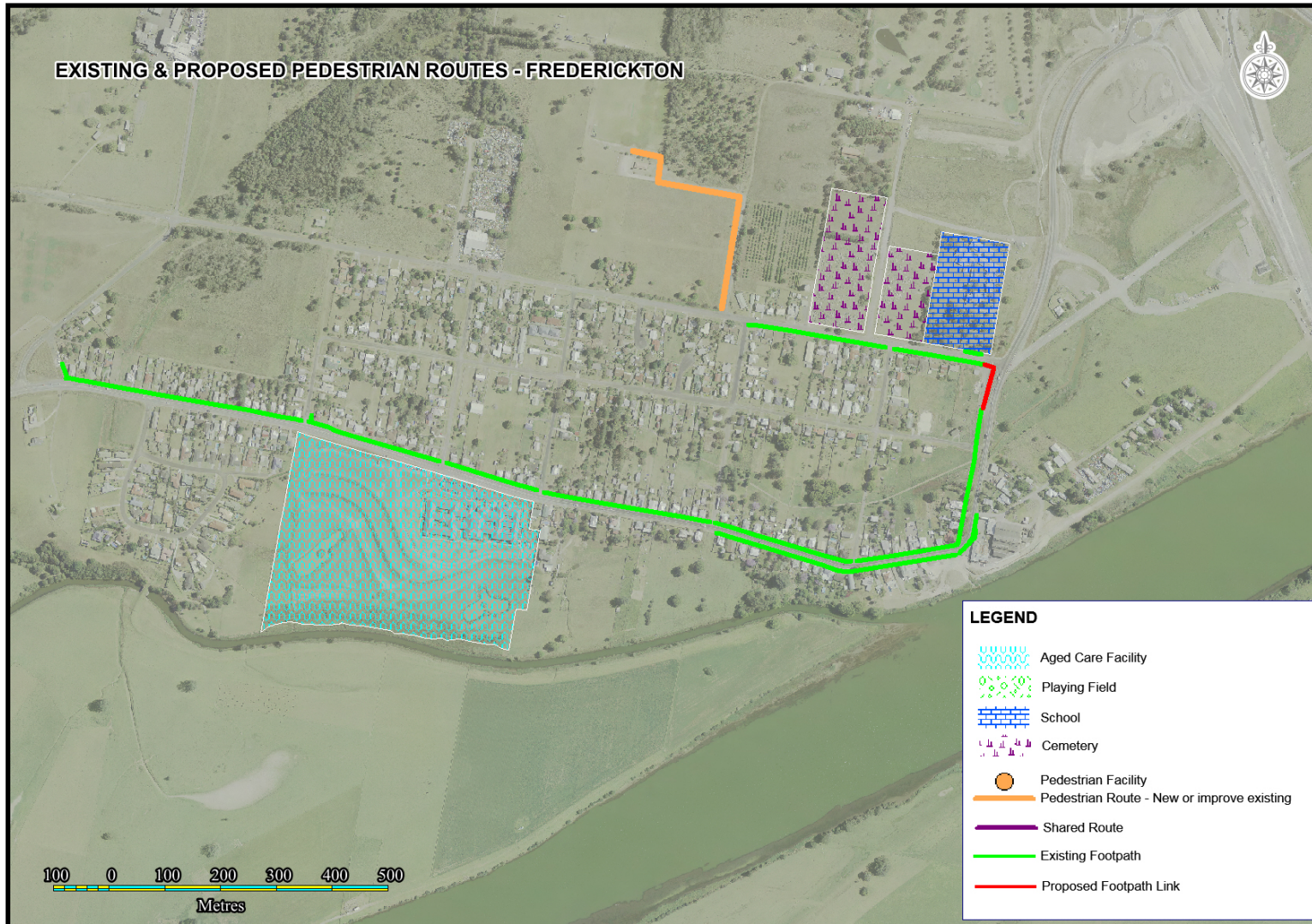
PAMP TREATMENTS SMITHTOWN AND GLADSTONE									
Street	Classification	From	To	Location	Comment	Treatment	Priority – High Medium Low	Unit Rate	Cost
<b>Jeffery St</b>	local								
		end	Rawson St	<b>Smithtown</b>	school route	Footpath 1.2 m, 370 m long	L	\$120	44,400
<b>Kinchela St</b>	Local								
		North St	just before bridge	<b>Gladstone</b>	gap in footpath connections connecting Gladstone and Smithtown	Footpath 1.2 m, 195 m long	L	\$120	23,400
<b>Macleay St</b>	Local								
		Kinchela St	Barnard St	<b>Gladstone</b>	link to sporting fields	Footpath 1.2m, 110 m long	L	\$120	13,200
<b>Total</b>							L		81,000

# Appendix J - Map of Proposed Routes for Crescent Head



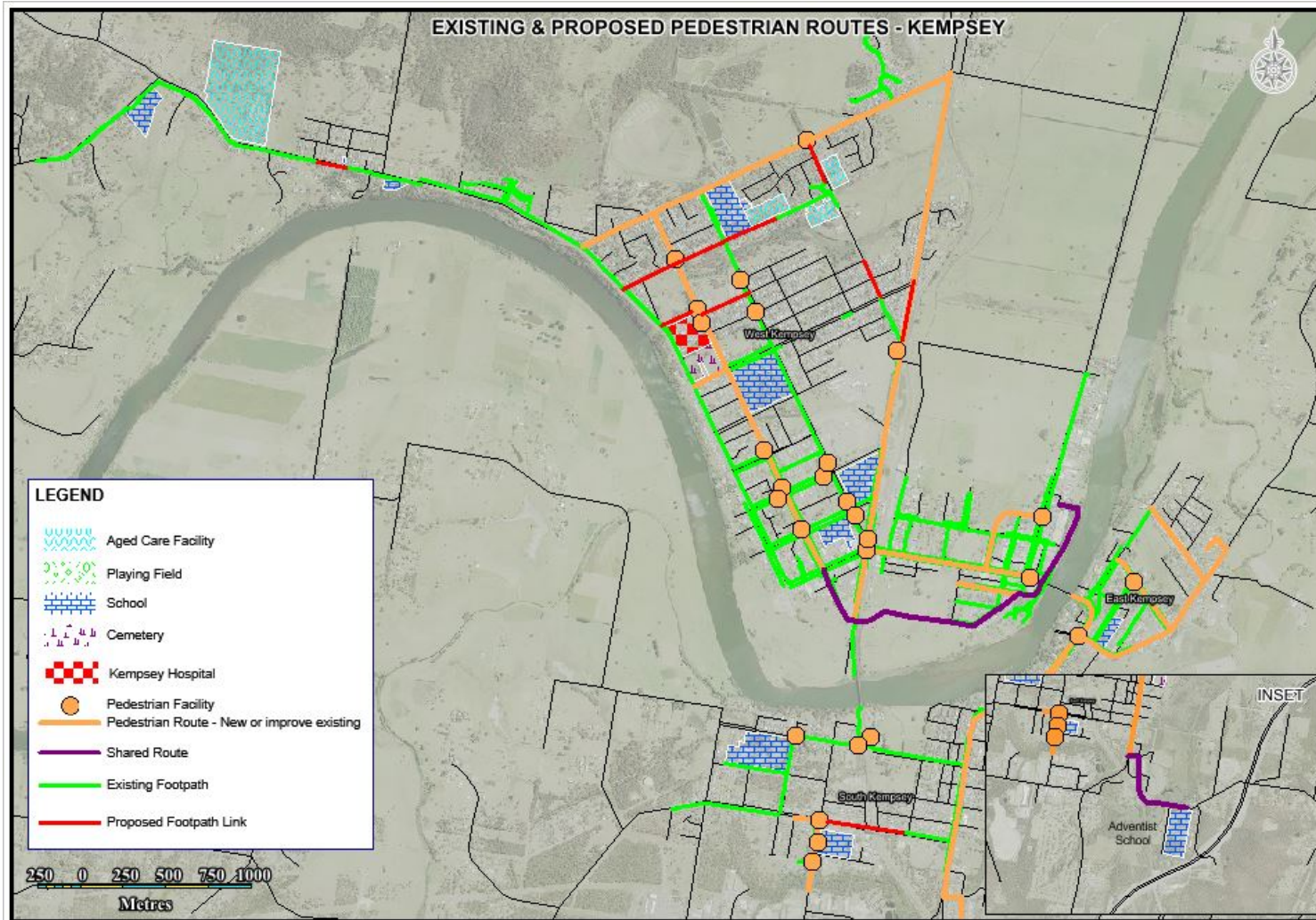


Appendix K - Map of Proposed Routes for Frederickton



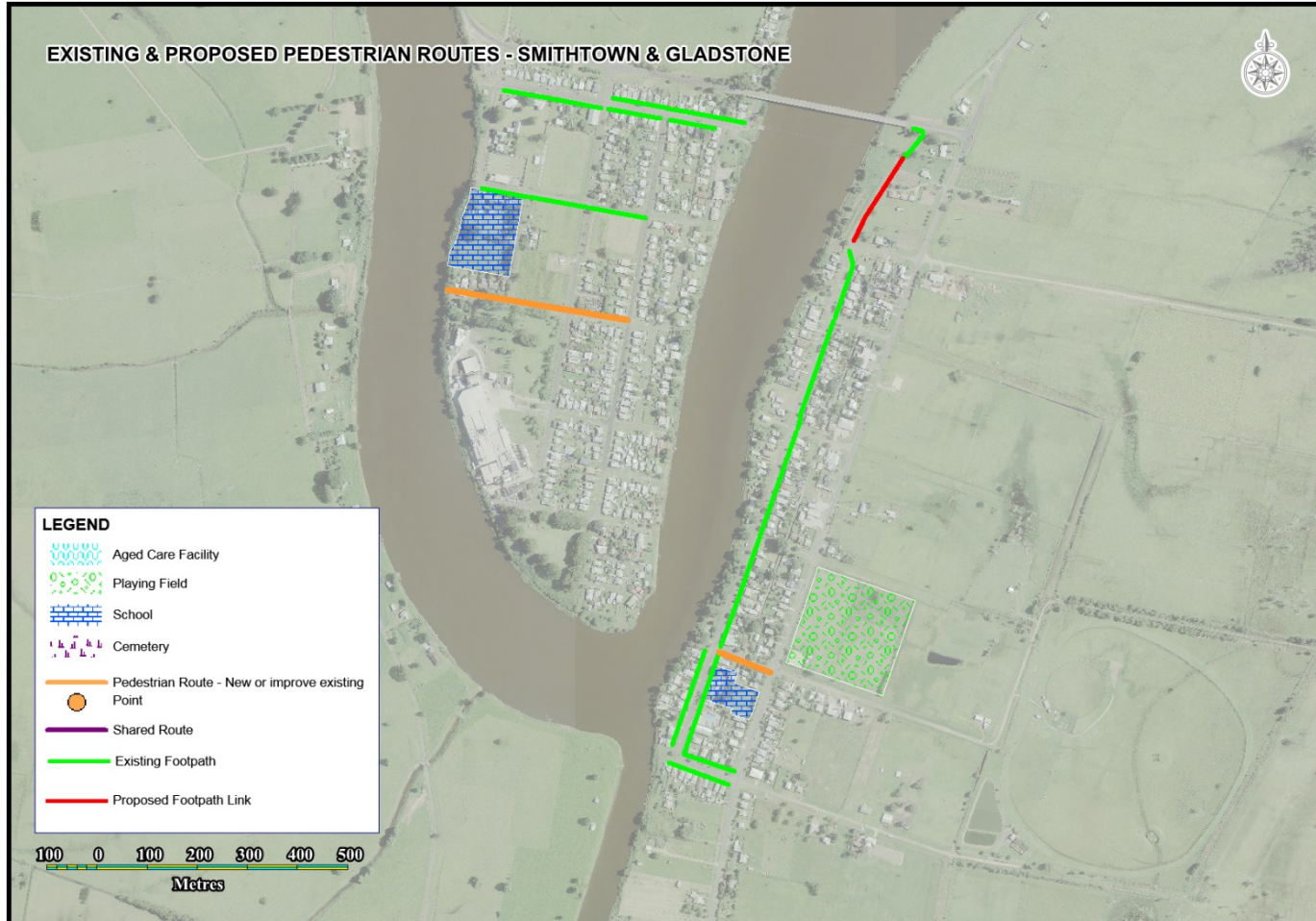


Appendix L - Map of Proposed Routes for Kempsey

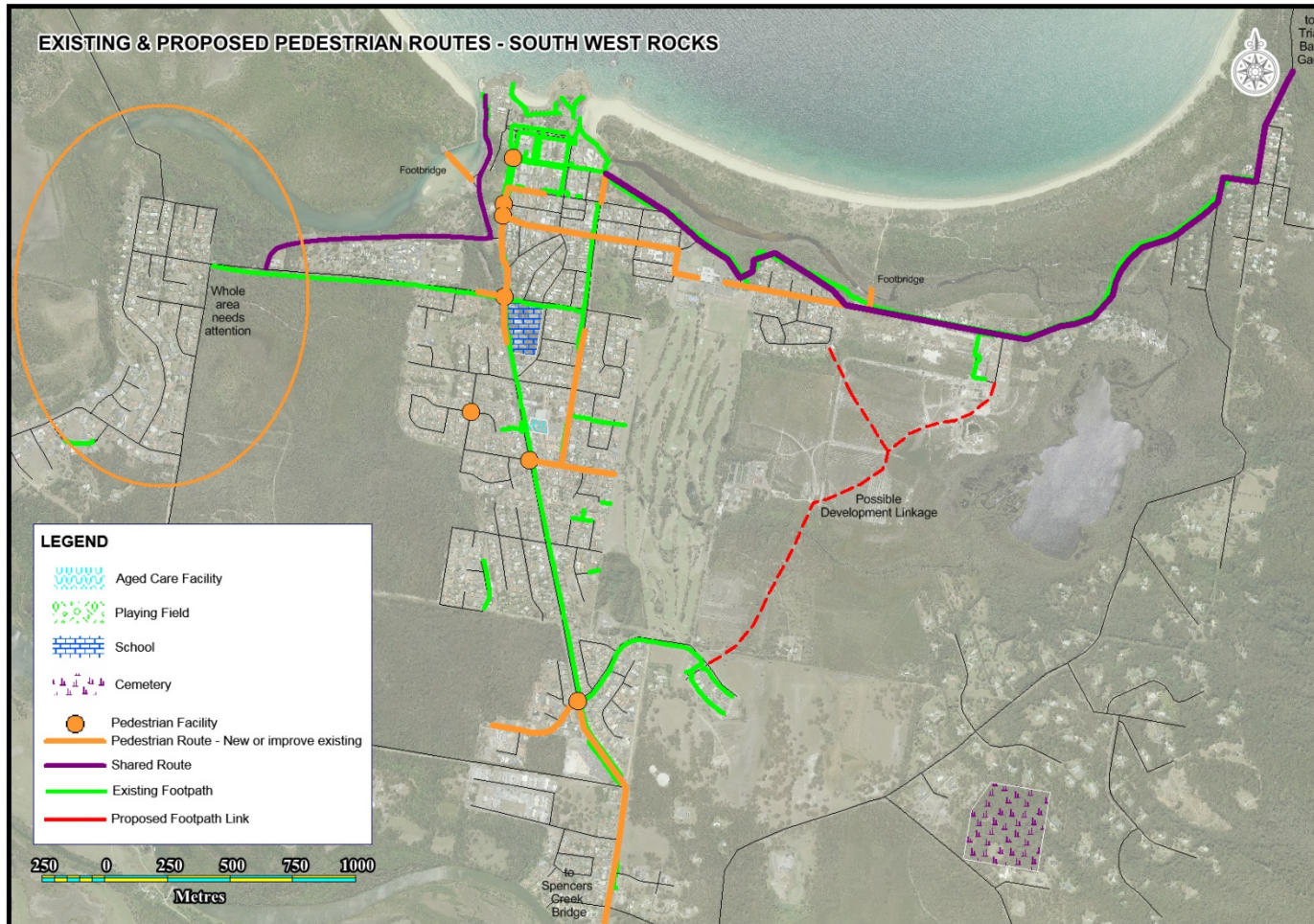




# Appendix M - Map of Proposed Routes for Smithtown and Gladstone



## Appendix N - Map of Proposed Routes for South West Rocks





Appendix Na - Map of Proposed Cyclepath along Back Creek at South West Rocks





Appendix O - Map of Proposed Routes for Stuarts Point

