bega valley shire council

Tathra to Kalaru Bike Track

Community Meeting
27 August 2018

Agenda

1. Overview of Bega Valley Bike Plan Objectives
2. Stage 1 - Tathra to Kalaru Bike Design Considerations
3. Tathra Segment – Alignment Options
4. Response to identified Community Concerns
5. Address specific Community feedback

CAN QUESTIONS PLEASE WAIT UNTIL THE END

Key Dates & Milestones

2014 – Bega Valley Bike Plan adopted by Council

2015, September - Bega Tathra Safe Ride submit a petition to Council to explore options for funding the Tathra to Kalaru and Kalaru to Bega off-road bike path, as identified in the Bega Valley Bike Plan.

2016 , October - Council resolved for a report to be prepared investigating connecting Tathra – Jellat Jellat with a bike/pedestrian path with cost estimations for inclusion in Council's forward planning considerations.

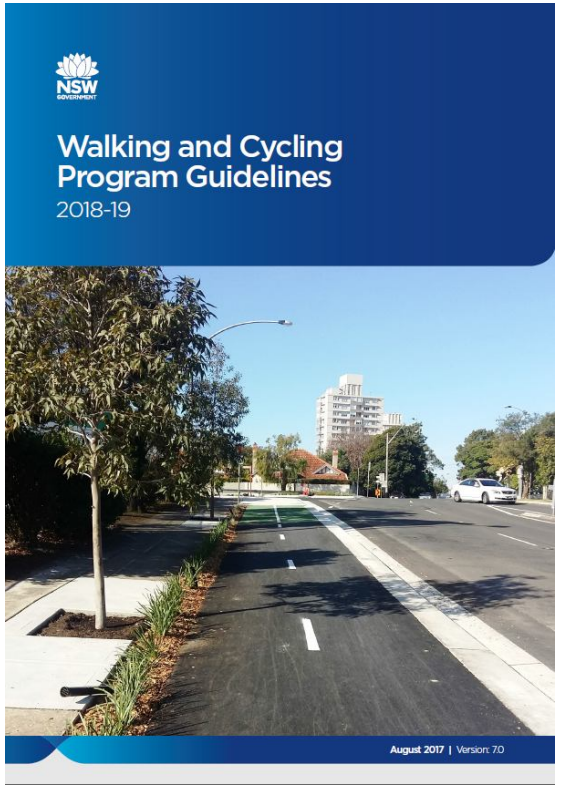
2017 , March - Council submit application to the RMS for the Active Transport Funding for the consultation, scoping and design to connect our major settlements through shared path infrastructure which includes connecting Tathra and Bega.

2017 , September – Council obtain a $3,000,000 grant from NSW Government under the 2017/2018 Active Transport project for:

"***Design and Construction 4.6km bike track between Tathra & Kalaru***."

NSW Gov Walking & Cycling Program Guidelines 2018-19

- Infrastructure projects must specifically involve the construction of new infrastructure.
- Eligible projects are new infrastructure assets on the local and regional road network which address a missing link.
- Maintenance work or recreation-based proposals are not eligible.
- The guidelines specifically exclude footpaths and facilities primarily for a recreation purpose.
- Projects should also comply with relevant Australian Standards and Roads and Maritime technical directions as well as be consistent with Austroads and other relevant guidance e.g. Planning Guidelines for Walking and Cycling, NSW Bicycle Guidelines.



'working with councils to make walking & cycling a more convenient, safe & enjoyable transport option.'

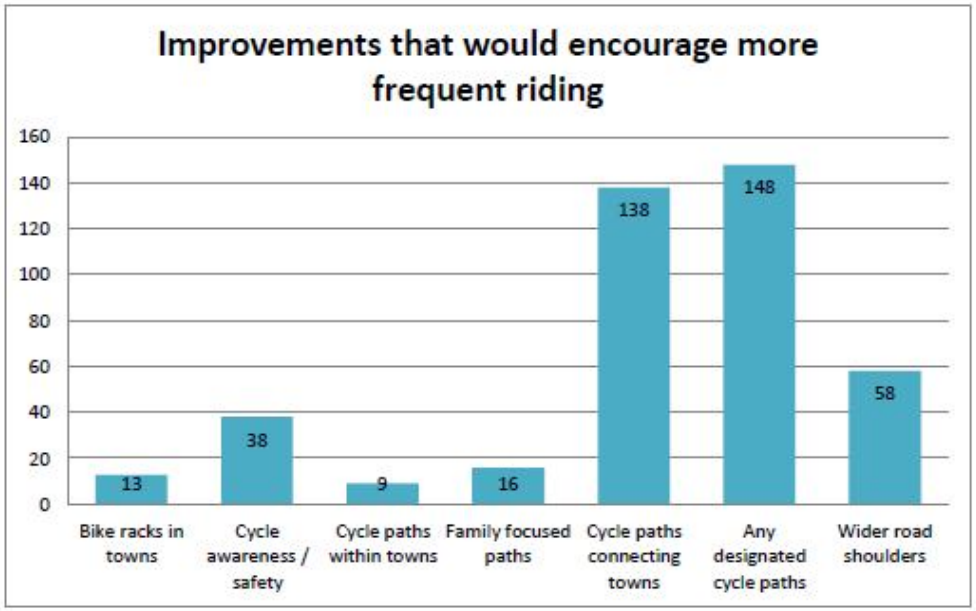
Bike Valley Bike Plan

'it is essential that cyclists of all ages and abilities feel safe and comfortable.'

Key Goals

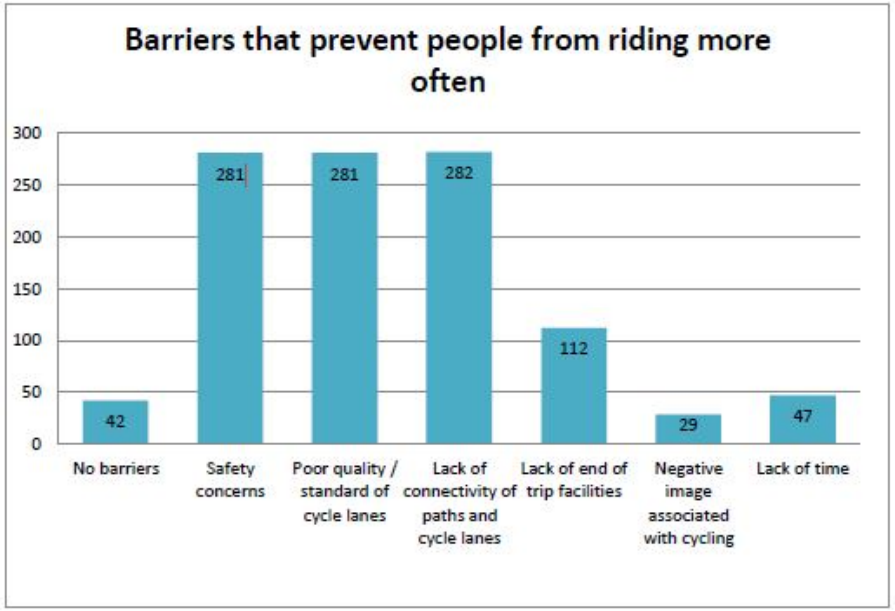
- ✓ Provide and manage a safe and enjoyable cycling experience through practical network development with improved facilities, connectivity and continuity.
- ✓ Raise safety awareness and education amongst cyclists and road users.
- ✓ Support and advocate cycling as an alternate mode of transport and recreation opportunity throughout the Shire.
- ✓ Communicate, promote and fund cycling and related facilities to user groups and the community.
- ✓ Improve and advocate bicycle tourism and economic opportunities.

Bike Valley Bike Plan

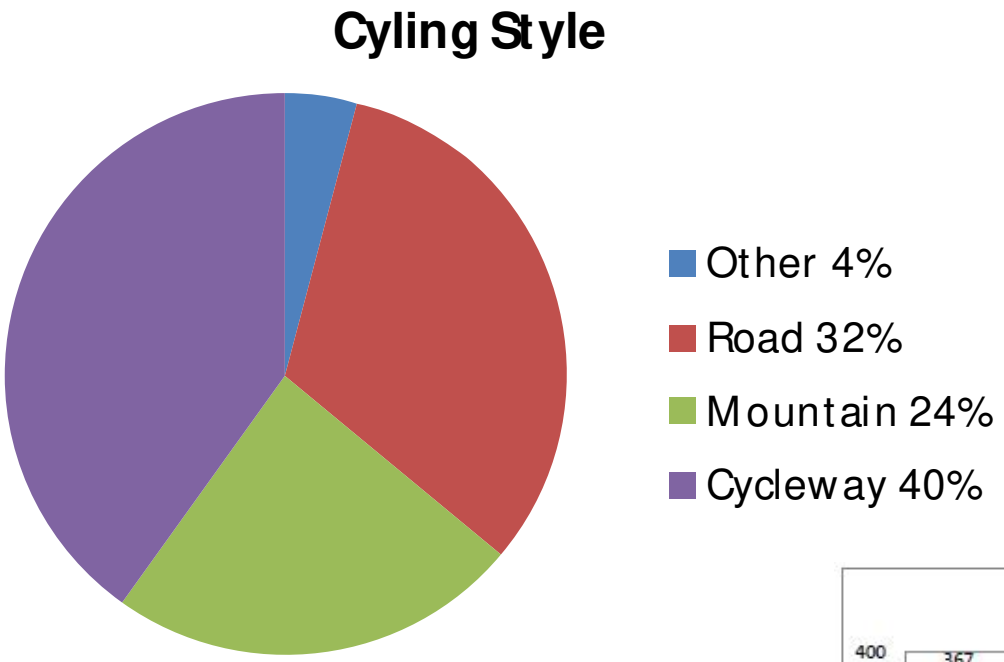


'improvements that would encourage people to ride relate back to continuity, connectivity and ability to ride along a desired route'

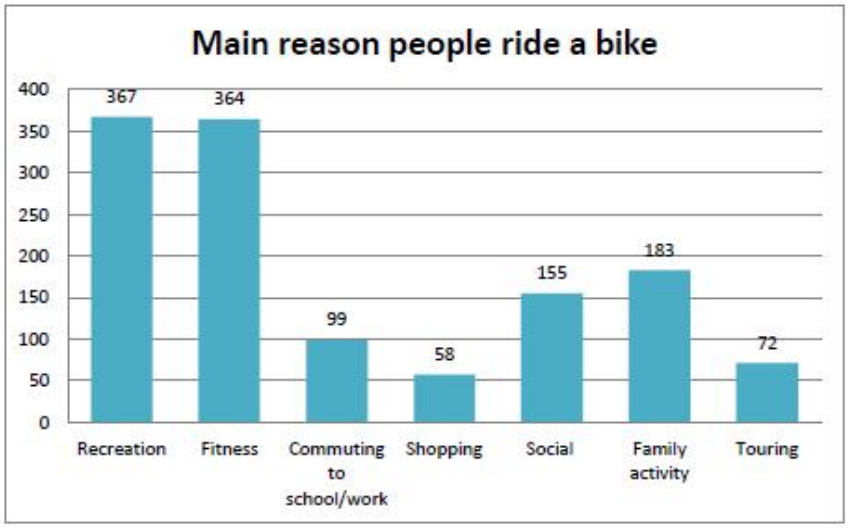
'The majority of the cyclists in the Shire prefer to use cycle ways in preference to on road cycling'



Bike Valley Bike Plan



'The less confident group of riders will be a target group as Council strive to increase their confidence and ability to cycle to preferred destinations'

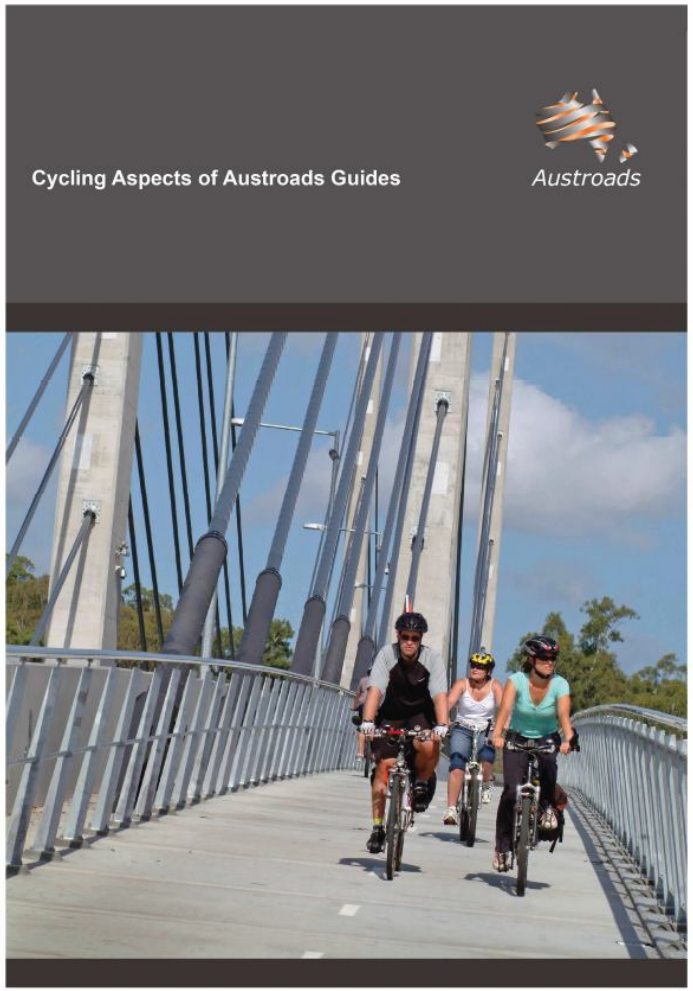


Standards and Design Guides

Austroads is the primary source in which Councils design decision are based.

The 3rd edition of Cycling Aspects of Austroads Guides was published in June 2017.

The publication contains information that relates to the planning, design and traffic management of cycling facilities and is sourced from Austroads Guides, primarily the Guide to Road Design, the Guide to Traffic Management and the Guide to Road Safety.



Design Philosophy

'The purpose of a bicycle network is to enable cyclists of a wide range of abilities and experience to move safely and conveniently to chosen destinations via suitable desire lines'

Route feature	Comments
Safety	Minimal risk of traffic-related injury, low perceived danger, space to ride, minimum conflict with vehicles.
Coherence	Infrastructure should form a coherent entity, link major trip origins and destinations, have connectivity, be continuous, signed, consistent in quality, easy to follow, and have route options.
Directness	Route should be direct, based on desire lines, have low delay through routes for commuting, avoid detours and have efficient operating speeds.
Attractiveness	Lighting, personal safety, aesthetics, integration with surrounding area, access to different activities.
Comfort	Smooth skid-resistant riding surface, gentle gradients, avoid complicated manoeuvres, reduced need to stop, minimum obstruction from vehicles.

Cyclists and their Trips

Goal – 'to accommodate a range of rider experience and skill levels'.

For example, a shared-use path may be provided to allow primary and secondary students to cycle in an environment separated from motor vehicles and yet the same road may have an on-road bicycle lane for more experienced riders.

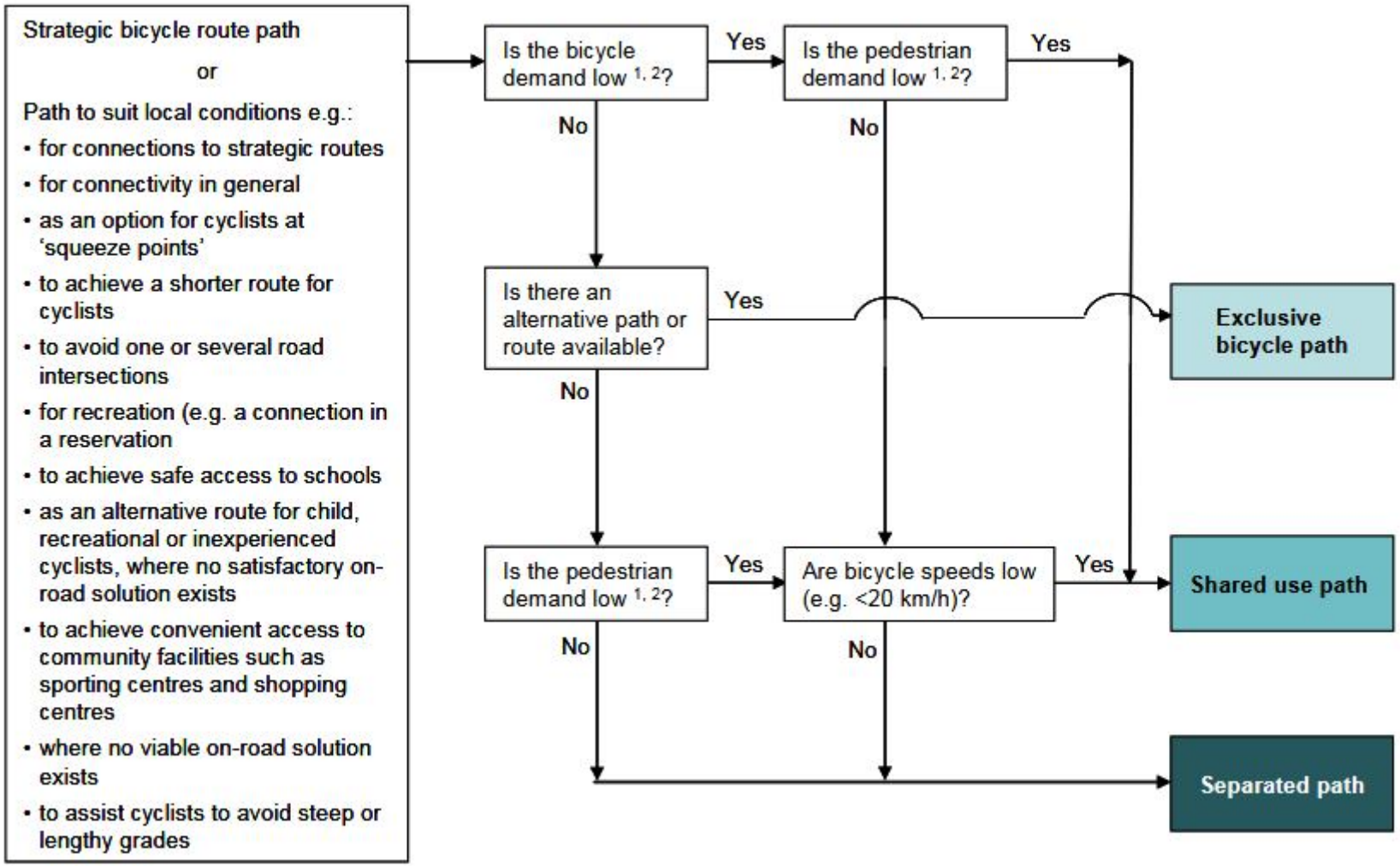
Category	Rider characteristics	Riding environment
Primary school children	Cognitive skills not developed, little knowledge of road rules, require supervision.	Off-road path, footpath (where permitted) or very low volume residential street.
Secondary school children	Skill varies, developing confidence.	Generally use on-road facilities or off-road paths where available.
Recreational	Experience, age, skills vary greatly.	Desire off-road paths and quiet local streets, avoid heavily trafficked routes, more experienced will prefer to use road system for long journeys.
Commuter	Vary in age, skill and fitness, some highly skilled and able to handle a variety of traffic conditions.	Some prefer paths or low-stress roads, willing to take longer to get to destination, others want quick trips regardless of traffic conditions, primarily require space to ride and smooth riding surface, speed maintenance.

Cyclists and their Trips

Immature - Primary school student, cognitive skills not developed.
Little or no understanding of road rules.
Requires supervision
Separation from motor vehicles is more important than speed
Novice - Secondary school student or Beginner adult rider
Skills are basic. Will seek separation from motor vehicles.
Desire off-road paths, but can manage occasional crossing of roads with varying traffic conditions
Separation from motor vehicles is more important than speed
Intermediate - Advanced secondary school student or Average adult rider
May seek separation from motor vehicles or may be comfortable in mixed traffic environments
Separation from motor vehicles or speed may be important to different riders

For the above user groups – 'Shared paths and separated paths & footpaths (where permitted) are the preferred path treatment'

Choice of type of path

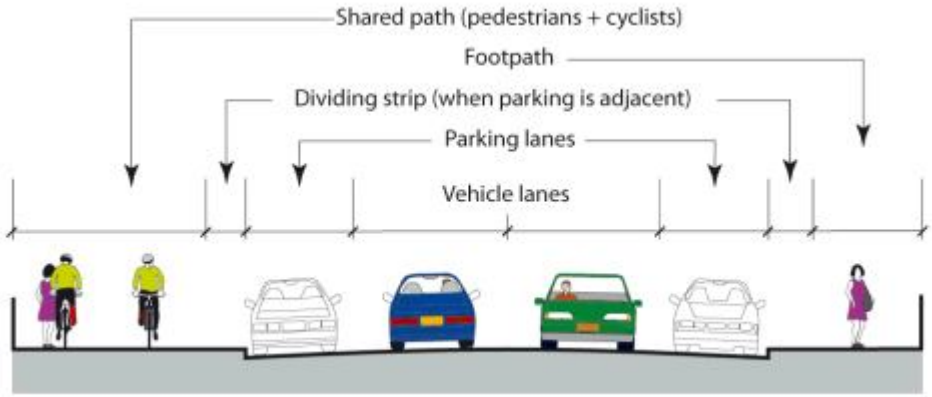


Shared Use Path

A shared path is where pedestrians and cyclists share the same path space.

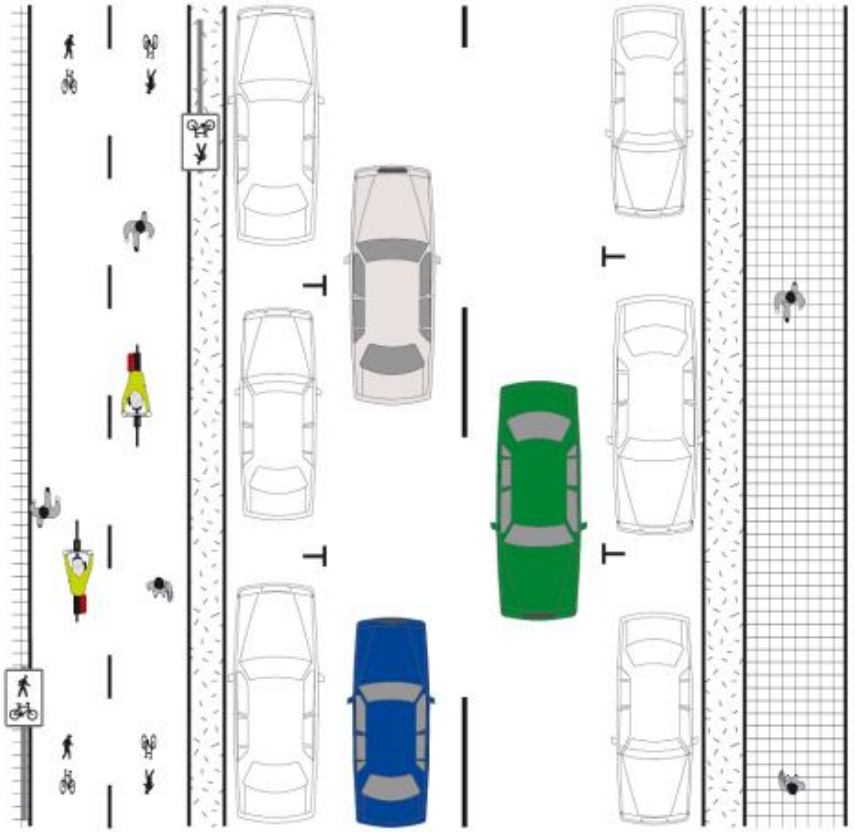
A shared path may be appropriate where demand exists for both a pedestrian path and a bicycle path but where there is a low number of pedestrians or cyclists.

Used for a variety of purposes including recreation, local access and providing feeder links between high capacity paths.



'Appropriate where a demand for pedestrian & cyclist use exists, but low volumes.'

Shared Use Path

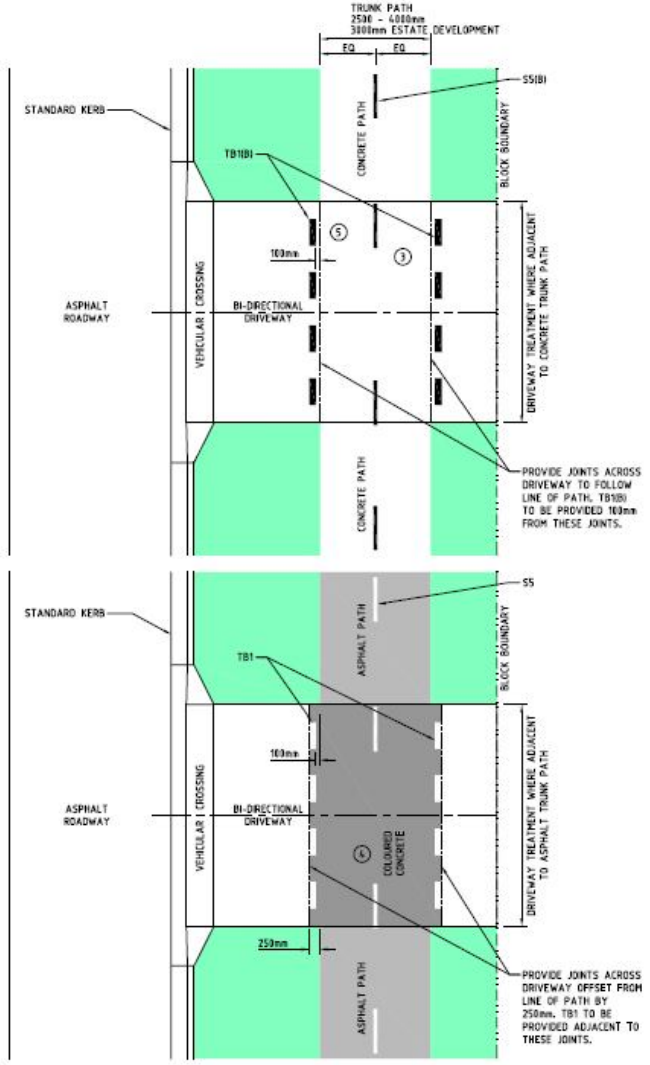


Shared paths have a variety of users who display various characteristics.

Which include differences in speed, space requirements, age, user expectation (as some users expect exclusive or priority use) and predictability (e.g. cyclists, pedestrians walking dogs, in-line skaters, and skateboard riders).

'Bicycle riders must keep left and give way to pedestrians on shared paths'

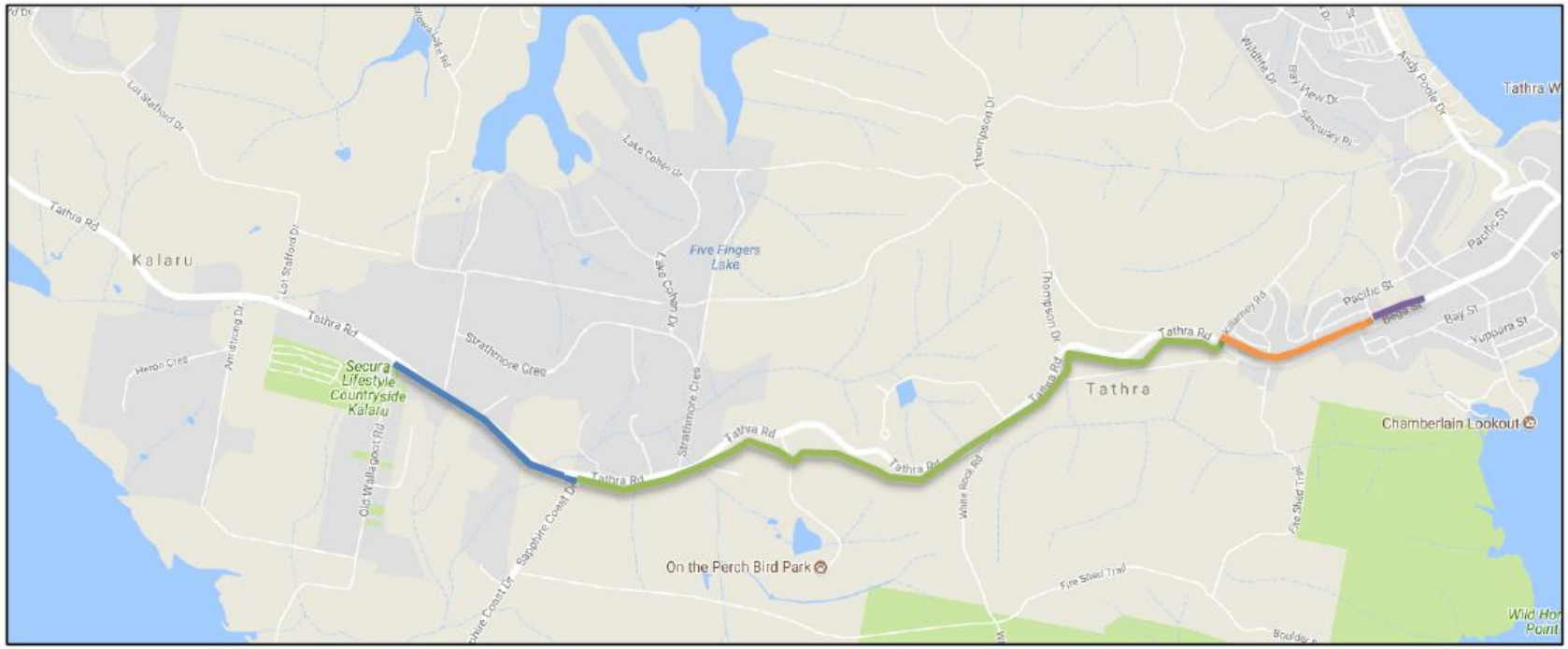
Shared Use Path



MAIN OR LOCAL COMMUNITY ROUTE CROSSING RESIDENTIAL DRIVEWAYS WITH 5 OR LESS CAR PARKING SPACES

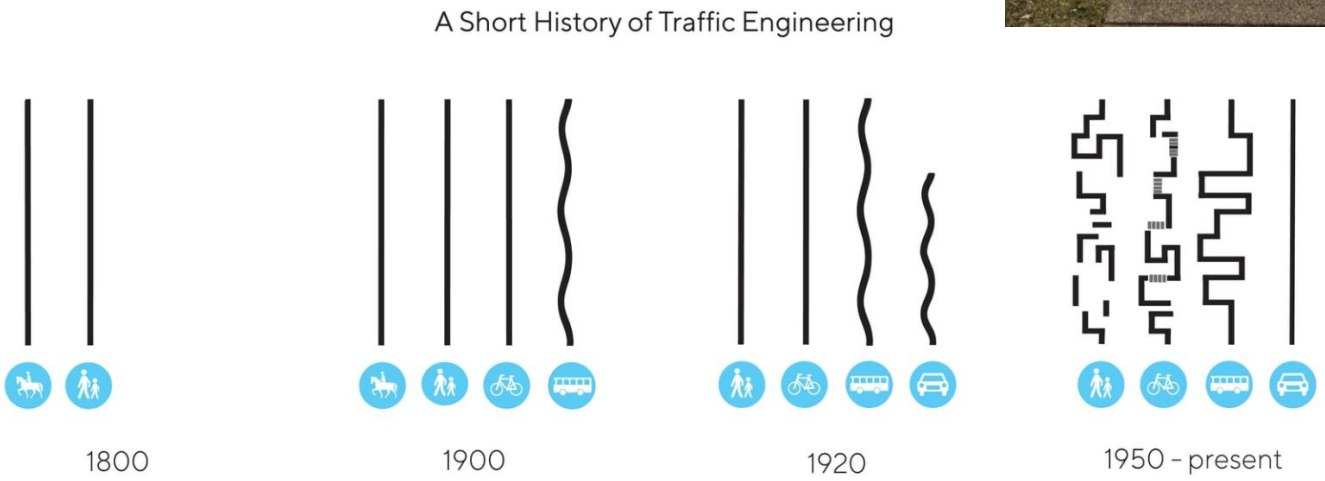
RETROFIT ONLY (8)

Tathra-Kalaru Overall Alignment



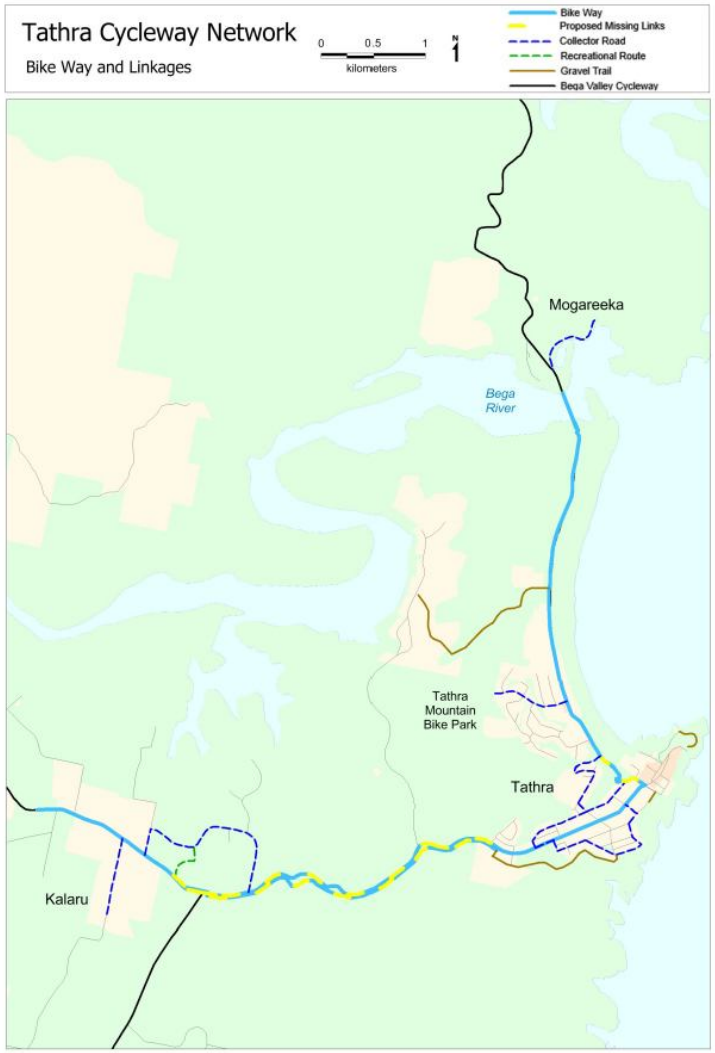
Tathra Footpath Network

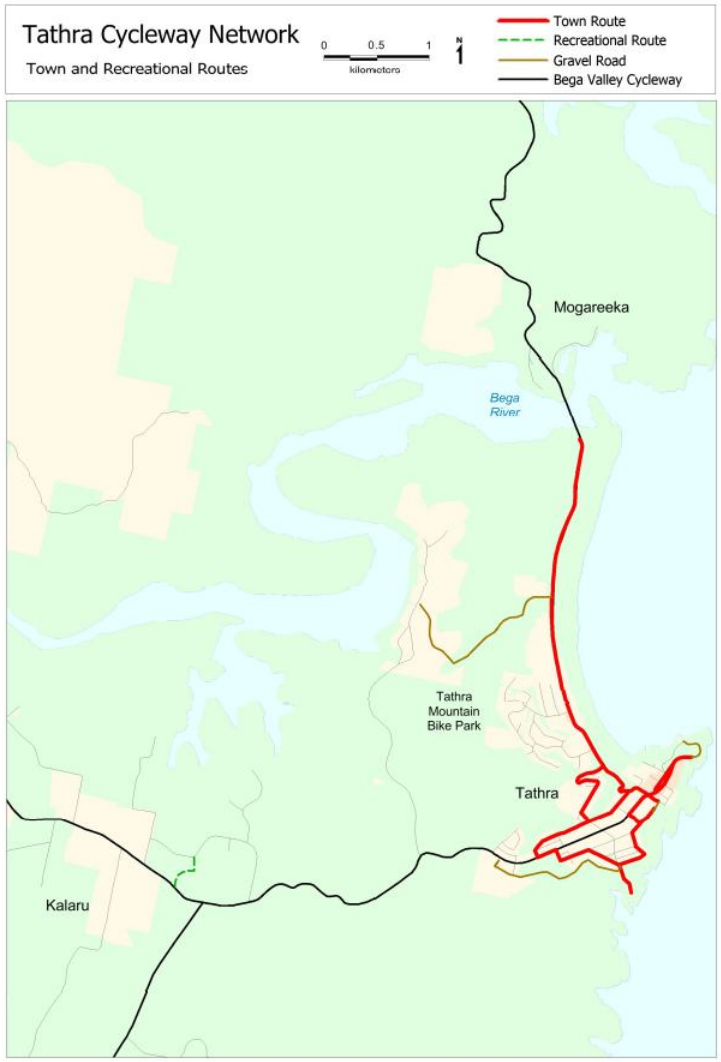
Bega St – Public School to War Memorial and Andy Pool Drive



Tathra Cycleway Network

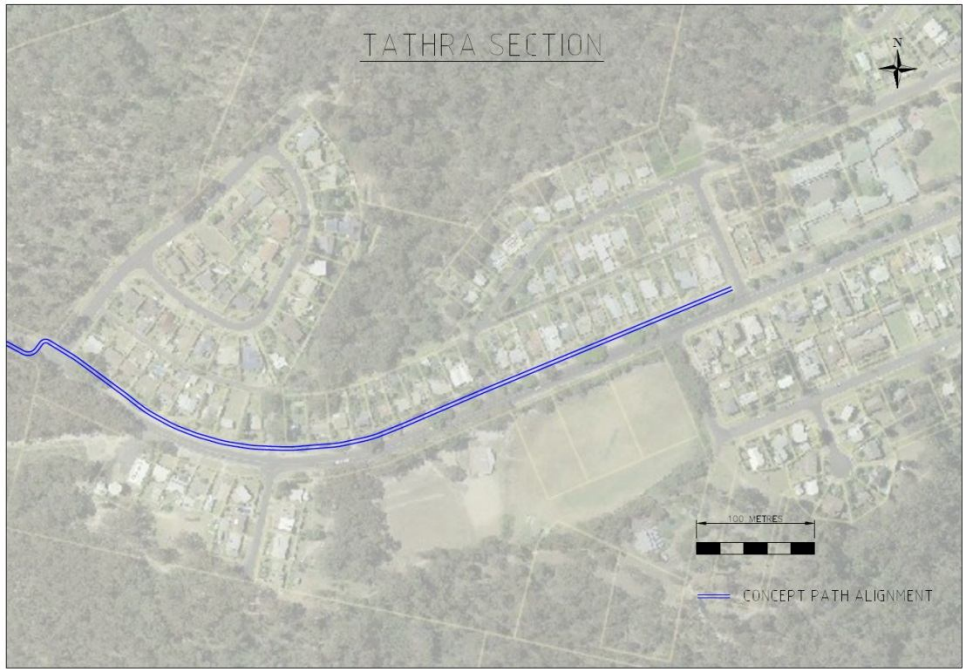
Bega Valley Bike Plan 2014



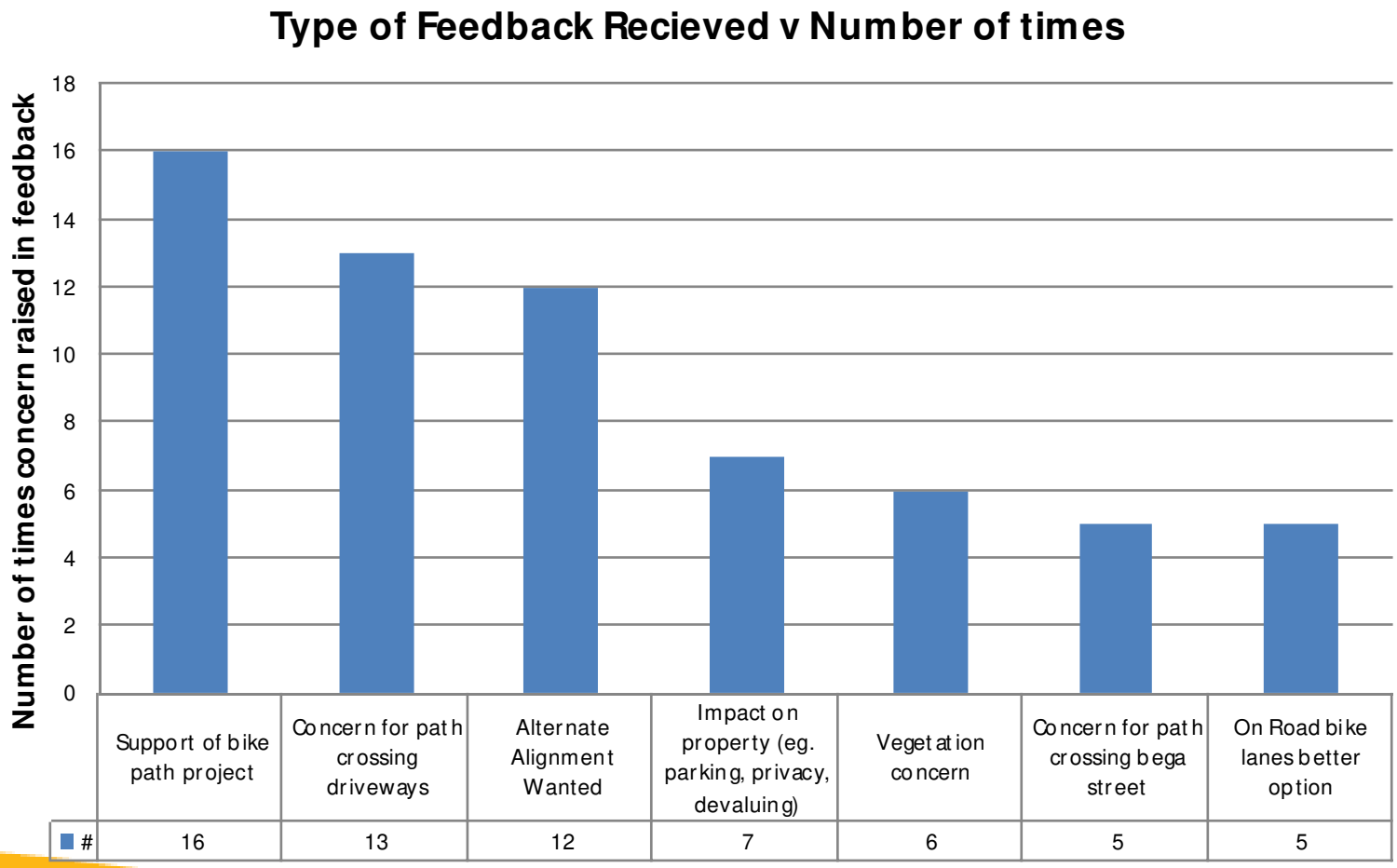


Tathra Path Alignment

Bega Valley Bike Plan 2014



Recent Community Feedback



Alignment Objectives

How to Encourage Use?

Direct - based on desire lines & shortest route

Pleasant – integration with surrounding & aesthetically pleasing

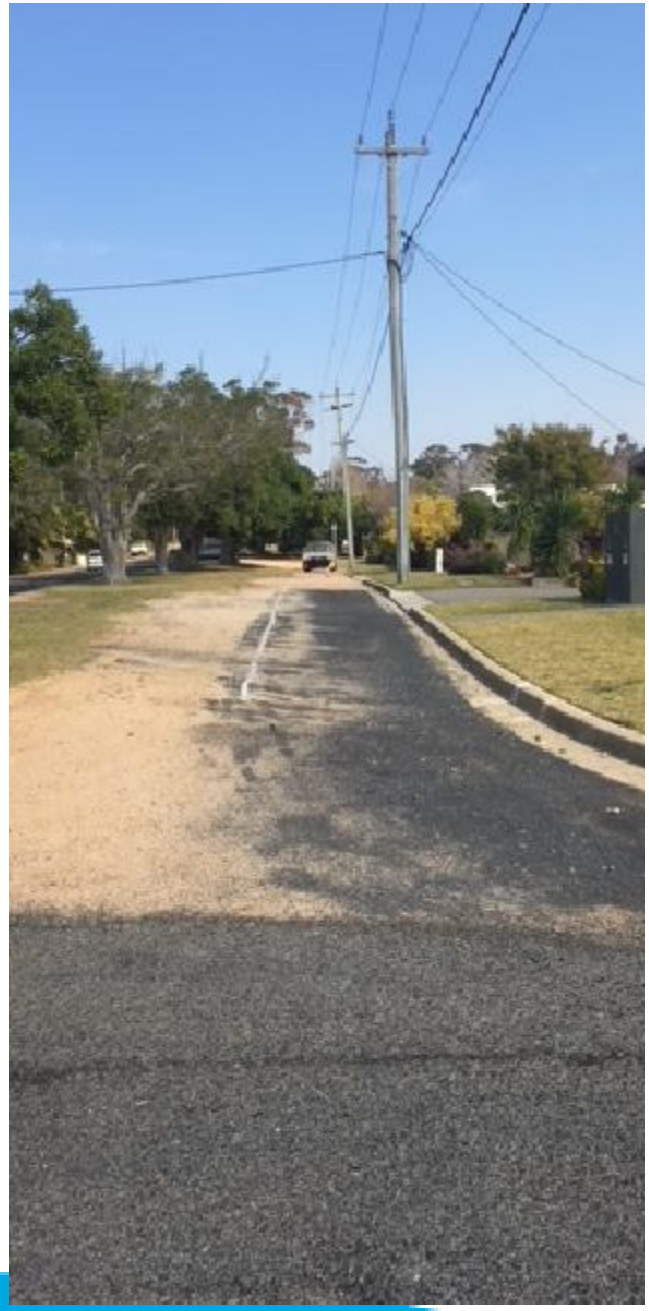
Continuous - Close to houses and points of interest and links to desirable locations

Secure & Safe – Designed to meet intended users needs

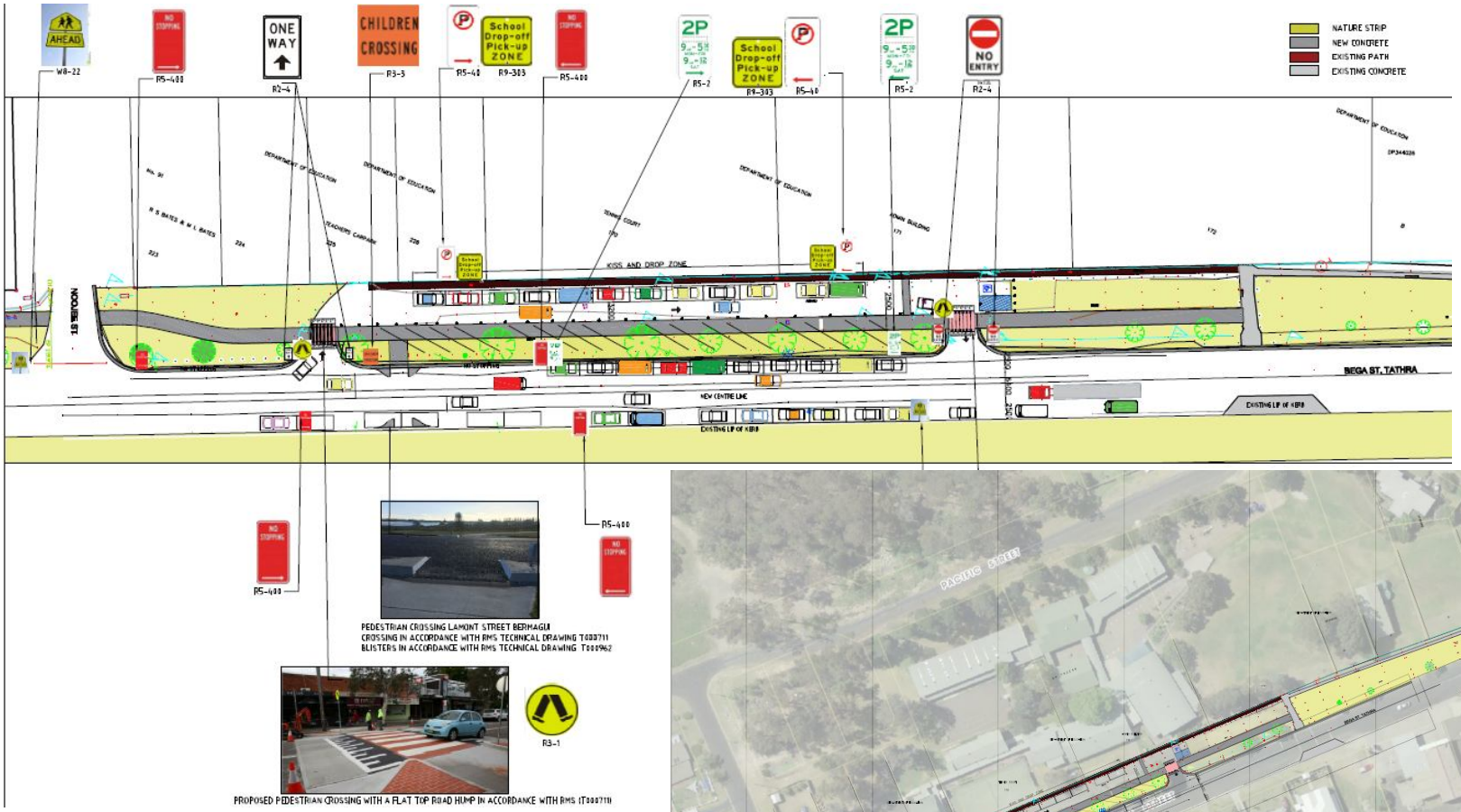
Other considerations

- ✓ Cost Efficient – Construction and Whole of Life Costs
- ✓ Environmental Impacts
- ✓ Incorporate Future Plans (ease of future connection & success)

'Encourage walking and cycling to be the mode of choice for short local trips'



Tathra Public School



'Over the last 20yrs the proportion of children driven to school in NSW has doubled to more than 50%, while the share of children walking & cycling has almost halved to about 20%'

Factors Influencing Alignment

Path location	Factors for consideration
Adjacent to a kerb	• In many cases is the only option because of the road reserve width available. • Offers the best visibility of path users to drivers reversing out of their properties, particularly where high screen walls exist at the boundaries. • Will be used in two directions and allows cyclists to run off the path and ride against the flow of motor traffic on the road pavement. Overseas experience has shown wrong-way movements to be a major problem (Cross & Fisher 1977). • May result in parked cars being a hazard to pedestrians and cyclists due to the opening of vehicle doors into the path (refer also to Section 5.5.1). • May result in persons entering and exiting parked cars being put at risk due to the proximity of bicycle movements to the cars (refer also to Section 5.5.1). • Follows the longitudinal profile of the kerb and is therefore generally cheaper to construct because of reduced earthworks. • May be preferred by abutting landowners in terms of privacy and nature strip disruption. • May result in the effective path width being reduced by kerb returns (however, the use of AS 1428.1:2009 style side ramps would be of some assistance at driveways or the path profile being adversely affected at the cross over. • If wide, may be viewed as detracting from the appearance of the streetscape and may imply a higher speed environment. • Is less pleasant because of traffic noise, fumes and speed, and perhaps the splashing of water from gutters. • May be relatively unaffected by the presence of fences varying in height and type, or having sharp or exposed edges or protrusions.

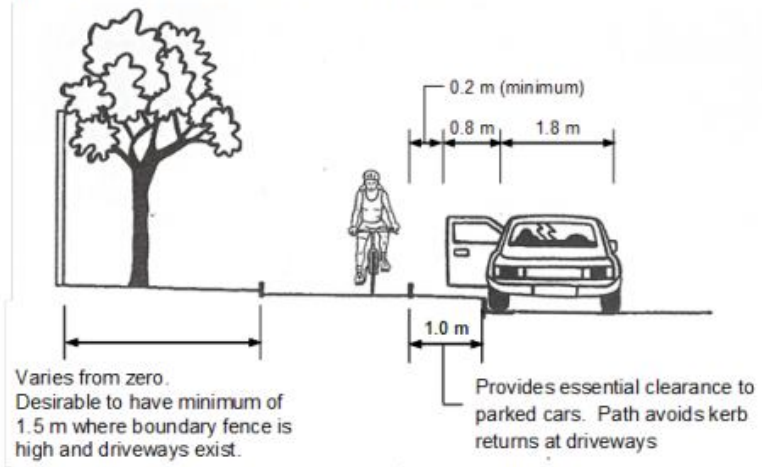
Factors Influencing Alignment

Path location	Factors for consideration
Adjacent to a property boundary	• Provides a more pleasant environment and is perceived to be safer. • May limit visibility of path users to drivers reversing out of driveways, or to drivers turning left from the abutting carriageway, where path users are beyond the driver's peripheral vision. • Does not necessarily follow the kerb profile and may result in steeper gradients or be more costly to construct. • May be viewed as having a lower negative visual impact on the street than a kerbside path. • May be unacceptable to abutting land owners. • Is more efficient for the mail service, if the nature strip is very wide. • Should preferably be deviated to a location at least one car length back from road intersections, adjacent to which the path crosses, to facilitate passage behind a queued car. • Allows space for garbage bins to be accommodated clear of the path and for pit lids for utilities to be located outside of the path surface. Locating pits within paths should be avoided as the lids can create an uncomfortable ride and constitute a trip hazard for pedestrians.

Factors Influencing Alignment

- Where practicable, paths in urban arterial road related areas be located with adequate clearance from both road traffic and the property line so that adequate sight distance is achieved for vehicles and pedestrians leaving driveways.
- It is necessary for the path to be located with sufficient distance from the kerb that it enables driveways to be formed without adversely affecting the profile of the path, necessary road furniture to be located near the kerb and errant cyclists to recover without encroaching onto the road.

Figure 5.8: Location of path in road reserve



Bega Street Road Reserve

- Road reserve is 30m wide
- Current road width is on average 11m wide (sealed section)
- On the Northern side of the road the verge width from road to property boundary is approx. 15m on average
- Southern side of the road the verge width from road to property boundary is approximately 5m on average
- Northern side provides better connection to the existing path network and the public school down to the town centre and provide the greatest amenity for a variety of road users

Bega Street Path Alignment Options

Northern Side of Road

Option 1 - North side of trees (closer to the property boundary)

- It is the widest & clearest section of road reserve available & most suited to the Shared Path alignment.
- Maximise separation from road to path (a desirable safety outcome).
- Less risk to fig trees during construction
- Out of all options, considered to be the safest and provide the best public amenity.
- Most efficient use of the road reserve and provides the greatest benefit to the wider community.

Bega Street Path Alignment Options

Northern Side of Road

Bega Street Path Alignment Options

Northern Side of Road

Option 2 – South side of trees (closer to the road)

- Reduction of road width to achieve minimum standards
- Loss of on street parking lane
- Increased risk of damage to path from tree roots
- Increased risk of damage to trees due to construction
- Ideally would require 11m from tree centre line to road centre line, currently there is only 8m.

Bega Street Path Alignment Options

Option 3 - South Side of Road – Lawrence Park

- Result in the loss of angled parking in front of Lawrence Park
- Will impact on residents on the Southern Side where the path crosses their property
- Moves the path challenges to other side of street with much narrower verge
- Less separation from path to road than other shared path options
- Impacts of trees remains the same or greater than other options
- Potential to lose several of the large established gum trees along the road

Bega Street Path Alignment Options

Option 4 - On Road Cycle Path

- Caters only for experienced cyclists
- Not suitable for vulnerable road users
- Increases risks of vehicle traffic issues
- Backing out of driveways risk still remains
- Does not cater for pedestrians, prams, wheelchairs and mobility scooters
- Does not achieve the outcome of the current project scope

Safety - Road Safety Audit

As part of the funding agreement a Level 3 Road Safety Audit has been commissioned on the Bicycle Path from Kalaru to Tathra.

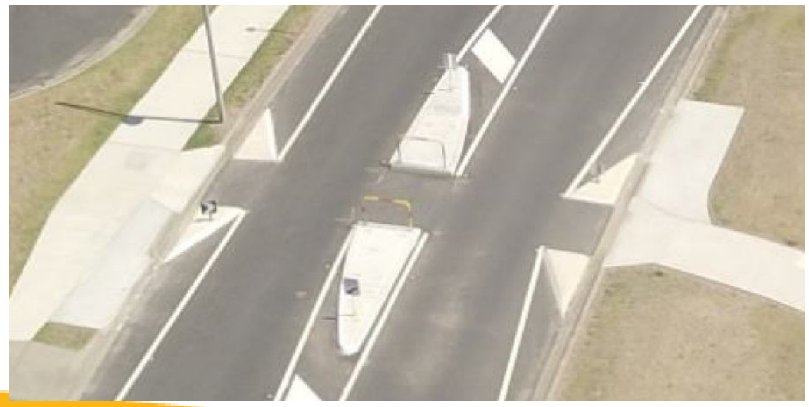
Purpose

- ✓ Identify relevant risks to all road & shared path users with respect to the proposed shared path
- ✓ Identify potential hazards due to the proposed path intersections with roads

Key findings Tathra Section

Stage 3 – Tathra Section					
Hazard	**Question**	**Frequency**	**Severity**	**Level**	**Priority**
4.3.1 - Location of Tathra Road (Bega Road) Crossing	How often would a collision occur between a vehicle and a cyclist crossing Tathra Road due to limited sightlines	Occasional	Serious	High	B
4.3.2 - Driveways - Sightlines	How often would a vehicle exiting a residential driveway collide with a cyclist or pedestrians	Occasional	Serious	High	B
4.3.3 - Parked Cars	How often would a cyclist collide with a vehicle parked adjacent to the path	Occasional	Serious	High	B
4.3.4 - Warning Signs (Give-way) on approach to road crossings	How often would a cyclist cross a road without giving way leading to a collision with a vehicle	Occasional	Serious	High	B
4.3.5 - Overhanging Tree Branches & Vegetation	How often would a cyclist collide with an overhanging tree branch or vegetation	Probable	Limited	Medium	C
4.3.5- Poor Illumination of Path	How often would a cyclist collide with a tree or other trackside object due to limited nighttime vision	Occasional	Minor	Medium	C
4.3.7 - Maintenance Strategy – Debris on Track / Foliage Growth	How often would debris on the track surface cause a rider to crash or come off their bike	Probable	Minor	High	B
4.3.8 - Likelihood of Pavement Rising by Tree Root Networks	How often would pavement degradation of the path surface cause a rider to crash or come off their bike	Probable	Minor	High	B

Crossing of Tathra Road



Issue

The crossing location for the bicycle track crossing of Tathra Road is proposed to be west of Killarney Road.

This location provides less than adequate sight distances and eastbound vehicle approaching the crossing will first see the southern end of the crossing whilst still in the 80 km/h zone

Mitigation

Increase the 50km/h zone in an Westerly direction to lower approach speeds. (Dependent on RMS)

Improve sightlines for the eastbound approach, through means such as removing vegetation.

Provision of a bicycle and pedestrian refuge at the location of Tathra Road crossing.

This will also acts as town entry statement to assist in slowing traffic and increasing driver awareness.

Driveway Sightlines

Issue

Residential driveway crossovers along Bega Street produce multiple potential sightline issues for vehicles exiting residential driveways due to the location of trees and shrubs at the boundary and in the road reserve

Mitigation

The removal or trimming of vegetation surrounding the path that will restrict sightlines for vehicles entering and exiting driveways.

Where possible, have a minimum 1.5m separation from the path and property boundary, especially in front of residential lots with significant vegetation to ensure adequate sightlines are achievable.

Driveway Sightlines

Design Principles:

- Controls to improve safety:
  - Improve sight (clear obstructions)
  - Locate path in optimal location.
  - * "*Paths with driveways and side streets intersecting frequently are only suitable for low cycling speeds.*"

    * Quote from Austroads.

Figure 7 Plan View of Model Crossover Design

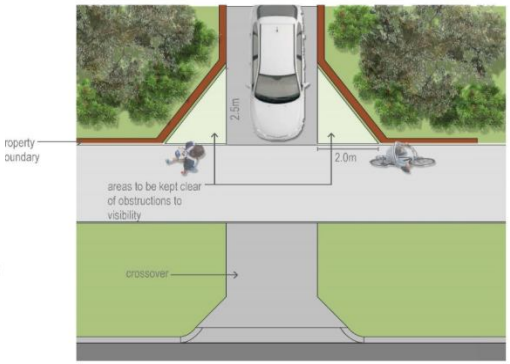
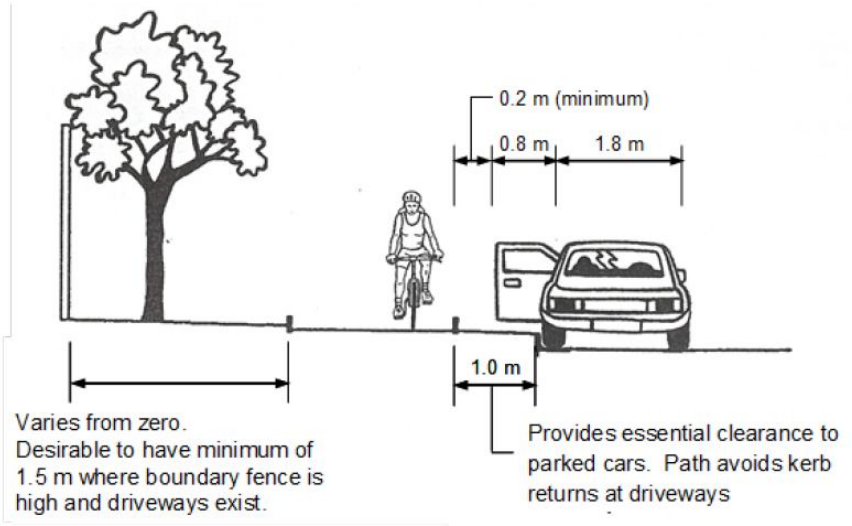
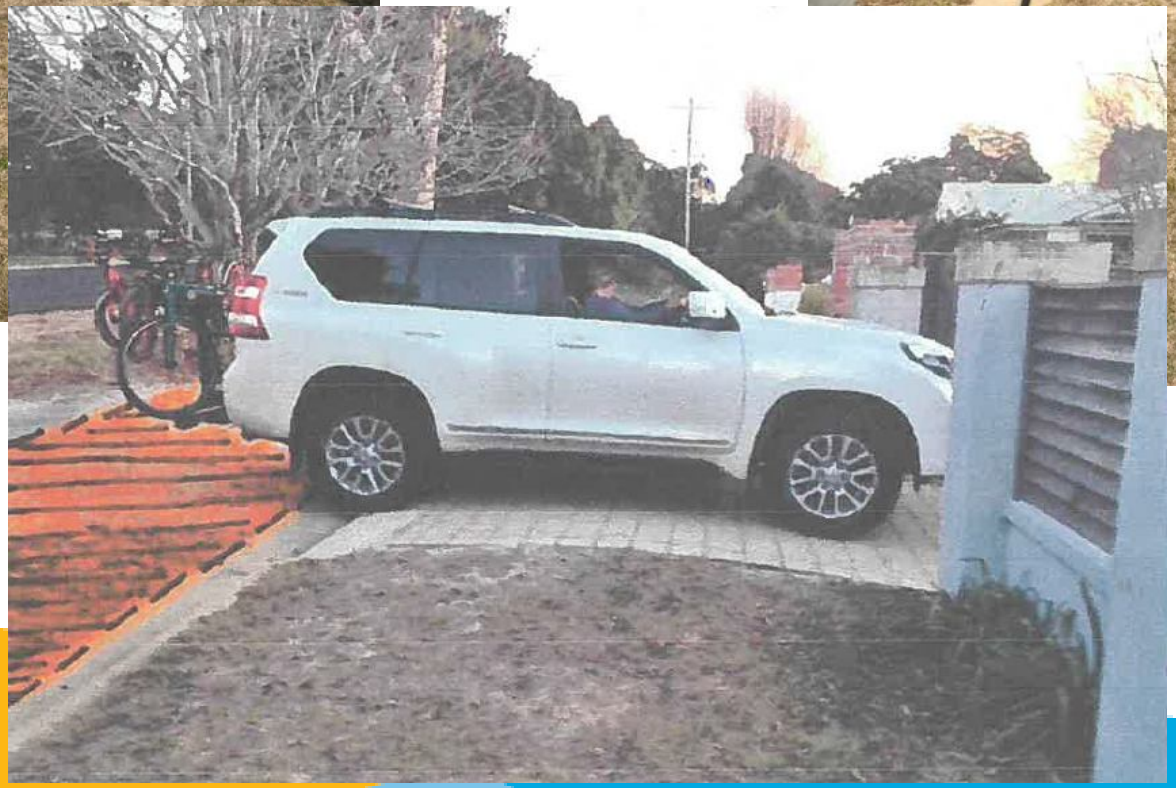
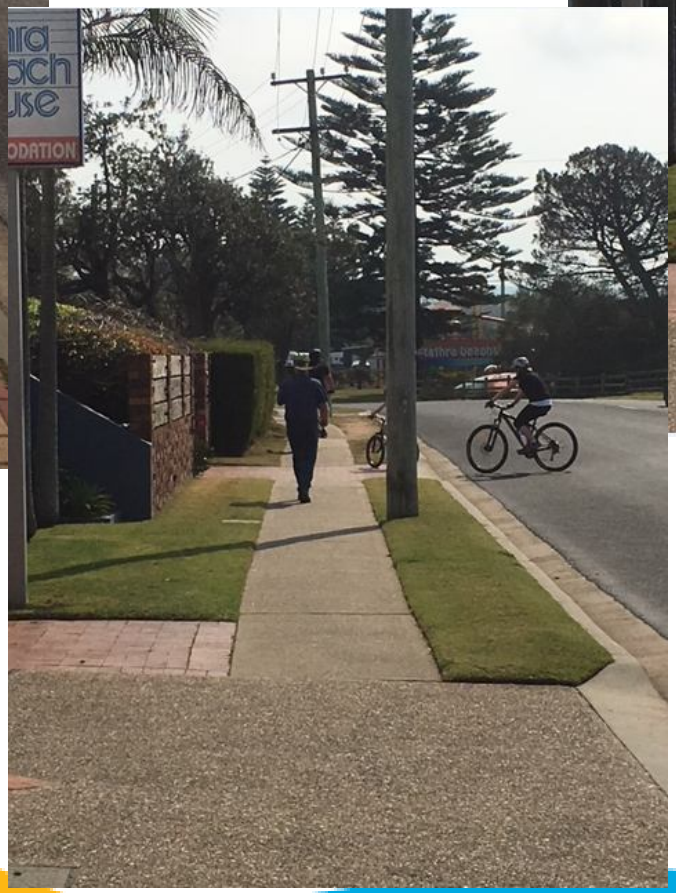


Figure 2 Minimum Pedestrian Sightlines

Figure 5.8: Location of path in road reserve

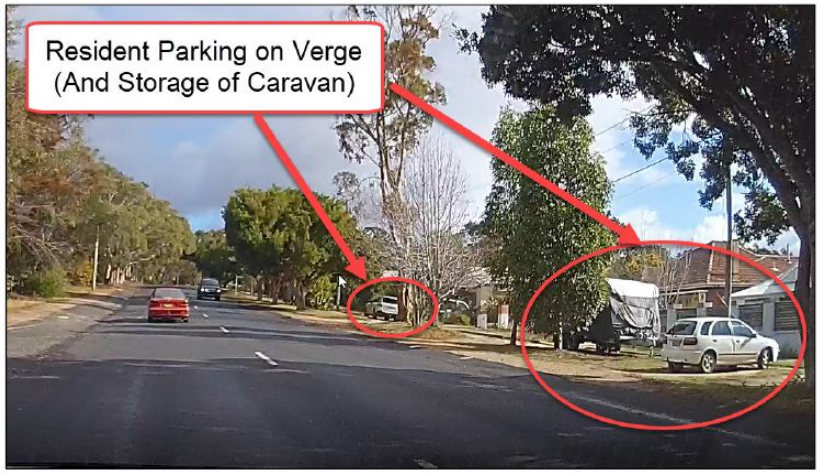







Tathra
beach
house

Parked Cars on Verge



Issue

Residents utilise the verge to park vehicles and may continue to do so after the construction of the path.

Parked vehicles restrict sight distance at some locations and/or present an obstacle to pedestrians and cyclists.

Mitigation

Provision of an on street parking lane to encourage residents to utilise on-street car parking.

Formalisation of driveways and crossover to standardise residents parking on driveways and not the verges

Road Crossings – Give Way

Issue

Cyclists & pedestrians on approach to the crossings of Killarney Road, Spurling Lane, Koorilla Street or Noojee Street failing to 'Give-Way' to other vehicle traffic.

Mitigation

Installation of '*Give-Way*' signage for cyclists and pedestrians at all road intersections with the path.

Installation of '*Watch For*' signage for vehicles at all road intersection with the path.

Vegetation Impacts

Issue

The proposed path is surrounded by significant vegetation, potential issues that may arise

- Low Hanging Branches
- Build-up of debris including sticks, leaves & sediment
- Growth of grasses & shrubs over the path.
- Tree root networks of adjacent trees can cause the lifting & cracking of the path

Mitigation

Initially removal of any low hanging branches (under 2.2m) over the path.

Pruning and removal of vegetation as required and installation of tree root barriers where appropriate.

Development of a regular annual maintenance strategy including foliage and branch maintenance

Questions

Thankyou for your time

Post Meeting – Community Feedback

Alternative Path Alignment Solutions

1. Through/bordering Lawrence Park
2. Behind Lawrence Park (existing track)
3. On Pimms Lane & Spurling Lane
4. On side of road like Pambula Beach path

What is the difference between a footpath and shared path?

Community perception is that there is a major difference between the two assets, stating the main difference as the **Speed** of cyclists travelling on a shared path.

General Comments:

A feeling that safety concerns were not addressed
A feeling that the risk outweighs benefit
A feeling the preferred alignment is a 'done deal'
A feeling that community wasn't consulted on the Tathra alignment
Overwhelmingly the community is supportive of the bike path

Post Meeting – Alignment Options

Post Meeting – Alignment Options

Spurling/Pimms Lane (735m)	Bega Street - On Road (675m)	Bush Track (1020m)
Shared road with both vehicles & cyclists utilising the road	Shared road with both vehicles & cyclists utilising the road	Separated path requires road crossing of Bega Street
Driveway crossing (rear lane access) of over 40 properties with poor site lines	Driveway crossing issue will still exist	Attractive option but less direct and relatively remote. Already an existing option
Does not cater for the immature and novice cyclists	Does not cater for the immature and novice cyclists	Would cater for all cyclists user groups
Require acquisition of Crown Land Reserve	No land acquisitions required and wholly within road reserve	Acquisition required of private, crown and council lands
Does not cater for other road users (pedestrians, prams mobility devices)	Does not cater for other road users (pedestrians, prams mobility devices)	Caters for other users but less direct route and would have limited usage
Not as direct as Bega Street Option to reach Public School	Most direct route to reach Public School	Over 50% longer than Bega Street and varying gradients
When compared with Bega Street options not as safe, attractive, direct or coherent should be considered as alternate existing option only	Existing & viable option but does not provide alternate options or encourage less confident users & could be considered in addition to the shared path option	This is already an existing option for cyclists & does not improve the Cycle network & potentially be under utilised if it is formalised into a shared path

Post Meeting – Alignment Options

Bega Street - South Side "Road Edge" (710m)	Bega Street - South/North + Lawrence Park (720m)
Separated Shared Path – noting limited road verge width so close to traffic lane	Separated Shared Path for Road edge – located off the road edge in sections
Crosses 10 driveways along Bega Street (noting not all have vehicle access onto Bega St) Crosses 2 intermittent high volume crossings (Fire Shed & Lawrence Park) Crosses 2 Bus Stops	Crosses 6 driveways along South of Bega Street (noting not all have vehicle access onto Bega St) Crosses 2 intermittent high volume crossings (Fire Shed & Lawrence Park) Crosses 2 Bus Stops Crosses 8 driveways along North of Bega Street
Road Crossings: 3 - Reservoir, Tomigee & Bega St	Road Crossings: 2 – Reservoir and Bega Street
Located wholly within the road reserve but issues with width of available verge in sections	Land Agreement with Lawrence Park required and vegetation clearing required
Loss of parking along Lawrence Park	Limited loss of parking along Lawrence Park
Caters for target cyclist users & for other road users (pedestrians, prams mobility devices)	Caters for target cyclist users & for other road users (pedestrians, prams mobility devices)
Direct and logical option to reach the Public School	Direct and logical option to reach the Public School & allows for connection into Lawrence Park
When compared with North Side of Bega St & Lawrence Park Option not as safe and attractive due to proximity of path to road edge & properties	Attractive and viable option and considered to be equal to North Side of Bega St option.

Post Meeting – Alignment Options

Bega Street - North side (685m)
Separated Shared Path – maximises separation between shared path and road for the entirety of the path.
Crosses 32 driveways along Bega Street (noting not all have vehicle access onto Bega Street and many have rear lane access) due to the wide verge adequate site lines can be achieved.
Road Crossing: 5 - Tathra Road, Killarney, Spurling, Koorilla & Noojee (all at giveway t-road intersections with the exception of Tathra Road crossing).
Located wholly within the road reserve and makes best usage of the existing road reserve for community purpose.
No nett residential loss of parking amenity on the road verge as a on street parking lane will be created.
Caters for target cyclist users & for other road users (pedestrians, prams, and mobility devices).
The most direct and logical option to reach the Public School without being on the road.
An attractive and viable option and equal to the Bega Street (South/North + Lawrence Park) option. However it is considered to be the most efficient use of the road reserve and provides the greatest benefit to the wider community and therefore the preferred alignment option.

Post Meeting – Next Steps

- Council Staff will continue collating community feedback and ensuring all feedback is considered against the current design.

- The Tathra segment is still in concept design phase the Tathra Alignment Options will be presented to Council and the community will be advised of the outcome.

- Council will be shortly tendering the Kalaru Segment of the Bike Track and aims to have the tender completed and construction started for this segment by Christmas.

- The remainder of the bike track design is progressing and the land acquisition issues are being worked through and pending the resolution hope to have the works out to tender prior to Christmas

Post Meeting – References

The following reference materials where considered during the design of the proposed alignment.

Bega Valley Bike Plan:
https://www.begavalley.nsw.gov.au/cp_themes/default/page.asp?p=DOC-SVG-65-50-31

Austroad Design Guidelines - Guide to Road Design Part 6A: Pedestrian and Cyclist Paths:
https://www.onlinepublications.austroads.com.au/items/AGRD06A-09

Austroad Design Guidelines – Cycling Aspects of Austroads Guides:
https://www.onlinepublications.austroads.com.au/items/AP-G88-17

Active Transport Grant Funding Guidelines:
http://www.rms.nsw.gov.au/business-industry/partners-suppliers/lgr/active-transport/index.html

Planning Guidelines for Walking and Cycling, NSW Bicycle Guidelines:
http://www.rms.nsw.gov.au/business-industry/partners-suppliers/documents/technical-manuals/nswbicyclev12aa_i.pdf

Post Meeting – Safety References

The following reference materials were considered regarding the safety of the proposed alignment

Australian Government – Australian Transport Safety Bureau (2006)
Deaths of cyclists due to road crashed
ATSB Road Safety Report July 2006
https://infrastructure.gov.au/roads/safety/publications/2006/pdf/death_cyclists_road.pdf

Australian Government - Department of Infrastructure and Transport
Child pedestrian safety: 'Driveway deaths' and 'low speed vehicle run-overs', Australia, 2001-10
https://bitre.gov.au/publications/2012/files/is_043a.pdf

Australian Government - Bureau of Infrastructure, Transport and Regional Economics
Australian cycling safety, 2015
https://bitre.gov.au/publications/2015/is_071.aspx
Pedestrians and road safety, 2015
https://bitre.gov.au/publications/2015/is_070.aspx
Road Safety Statistics
https://bitre.gov.au/statistics/safety/index.aspx

Austroad report drafted by Sinclair Knight Merz
Eady, Jo & Daff, Malcolm (2012)
Cycling on higher speed roads
Austroads publication AP-R410-12
https://bicyclensw.org.au/wp-content/uploads/2012/07/cycling-on-higher-speed-roads.pdf

Post Meeting – Safety References

The following reference materials were considered regarding the safety of the proposed alignment

Centre for Accident Research and Road Safety, Queensland
Haworth, Narelle L. & Schramm, Amy J. (2011)
Adults cycling on the footpath: What do the data show?
Australasian Road Safety Research, Policing and Education Conference, 6-9 November 2011, Perth Convention Centre, Perth, WA.
https://eprints.qut.edu.au/49906/

Clendon, J (2016)
Footpath Cycling Submission
https://www.parliament.nz/resource/mi-NZ/51SCTIR_EVI_51DBHOH_PET68936_1_A519070/2b147d537b9941221da2ddd6762fd970e954f2b5

Tavener Research
Jansen, Connie (2009)
Study of Bicyclist and Pedestrian Safety on Shared Paths
http://roadsafety.transport.nsw.gov.au/downloads/rta_ped_bicycle_report_2010.pdf

World Health Organisation (2013)
Pedestrian Safety: A road safety manual for decision makers and practitioners
http://www.who.int/roadsafety/projects/manuals/pedestrian/en/