

## 3 Community and stakeholder engagement

The purpose of the Bolivia Hill Upgrade's stakeholder engagement is to consult with the community and other stakeholders in relation to the investigation of options and the development of the preferred route option.

### 3.1 Stakeholder engagement overview

The project's stakeholder engagement was originally to be progressed over five consultation periods:

No.1 - Announcement of project and study area

No.2 - Preliminary route options and assessment methodology and selection criteria

No.3 - Route options development report

No.4 - Route selection report

No.5 - Preferred route option.

Consultation Period No.1 is complete and outcomes are reported in the Stakeholder Engagement Outcomes Report No. 1 in **Appendix B** and detailed herein.

**Chapters 7 to 10** describe the development and shortlisting of options, the development of the preferred option and the assessment process that led to the recommendation of a preferred route option. This process has meant that the project has progressed straight to consultation period No.5 – Preferred route option.

### 3.2 Engagement approach

Throughout the project, stakeholder engagement will be undertaken as follows:

- Stakeholder engagement planned to occur during key periods of the project development
- On-going incorporation of stakeholder engagement outcomes into project development
- Engagement will be tailored to effectively communicate with different stakeholder groups
- Stakeholder issues to be understood early in the project and where possible addressed.

The International Association for Public Participation (IAP2) Australasia Public Participation Spectrum is designed to assist with the selection of the level of participation that defines the public's role. The spectrum explains different levels of participation and their characteristics, depending on the goals, time frames, resources and levels of concern in the decision to be made. The spectrum sets out the 'promise' being made to the public at each participation level. The Bolivia Hill Upgrade project will engage stakeholders at the IAP2 Public Participation Spectrum levels of Inform and Consult.

### 3.3 Stakeholders

The Bolivia Hill upgrade stakeholders include anyone, including members of the local and regional community and organisations; that has a current or future interest in the project.

#### 3.3.1 Stakeholder identification

Identification of stakeholders was undertaken through:

- RMS project team providing known stakeholder contacts
- Discussions with RMS project team
- Discussions with Transport for NSW (TfNSW)
- Discussions with Department of Infrastructure and Transport (DoIT)
- Discussions with Tenterfield Shire Council and Glen Innes Severn Council
- Discussion with local stakeholders

- Contacts made by the project team by way of responses to the community updates and surveys, media releases, public displays etc.

**3.3.2 Key community and other stakeholders**

One hundred and twelve project stakeholders have been identified by, met with or contacted the project team throughout the first stage of consultation. These stakeholders are recorded in the Consultation Manager database for the project and grouped in the following categories:

- Residents
- Property owners
- Community groups
- Federal government
- State government
- Local government
- Transport operators
- Elected representatives
- Industry associations
- Media.

A list of project stakeholders is provided in **Appendix B**. The distribution of stakeholders by category is shown in **Figure 3-1**. The majority of project stakeholders were identified as residents.

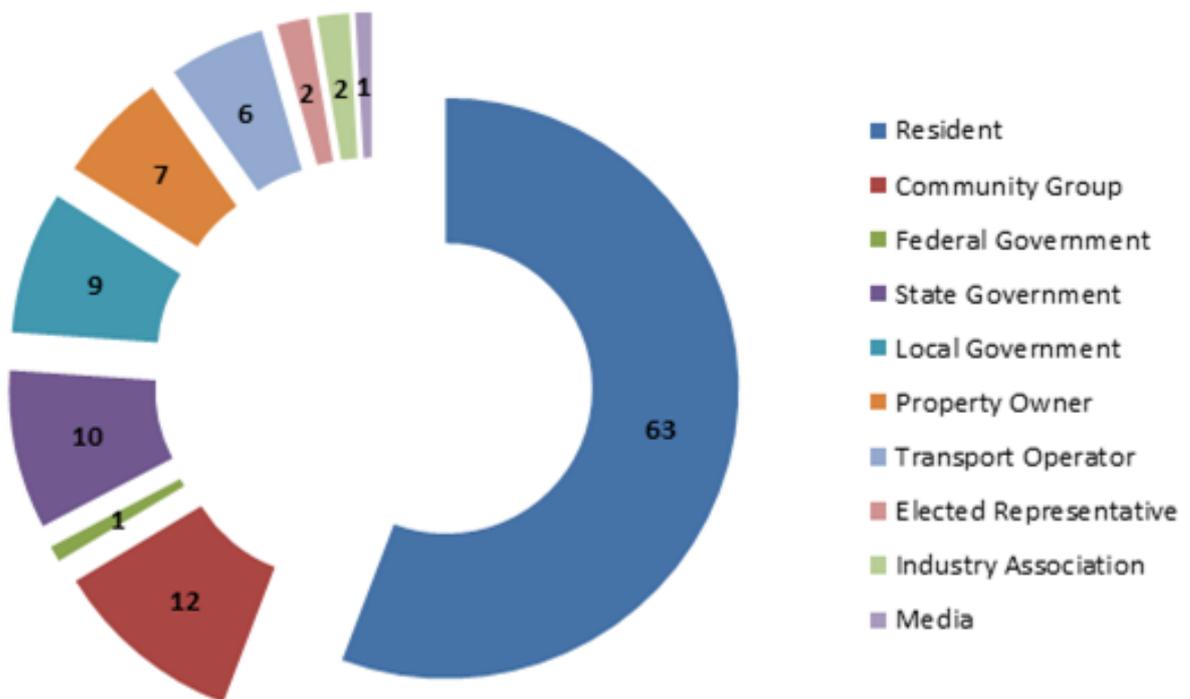


Figure 3-1 Project stakeholders by category of stakeholder

### 3.4 Stakeholder engagement activities

An overview of each of the stakeholder engagement activities carried out during consultation period No. 1 is provided below with the key outcomes from the consultation activities discussed in **Section 3.5**.

#### 3.4.1 Project website, 1800 number and project email address

##### 3.4.1.1 *1800 number and project email address*

A free call 1800 number (1800 024 535) and email address <boliviahill@cardno.com.au> were set up to allow the community and other stakeholders to speak with the project team at any time during the project. A member of the project team staffs the 1800 number and project email address during business hours to answer queries, provide project updates to callers and for the project team to collect further qualitative data, project information and feedback from community members. An out-of-hours answering service is also provided and all callers receive a call back from the project team within one business day.

##### 3.4.1.2 *Project website*

The project website was updated with project information including:

- An overview of the project
- Project team contact information: phone and email
- The public display poster
- The community survey.

#### 3.4.2 Public displays and communication materials

##### 3.4.2.1 *Information poster*

The project objectives and process information posters were printed and distributed, week commencing 1 October 2012, to a number of public venues in Tenterfield and Glen Innes as detailed in **Table 3-1**.

**Table 3.1 Information poster display locations**

Locations in the Tenterfield LGA	Locations in the Glen Innes Severn LGA
Tenterfield Council Customer Service	Glen Innes Severn Council Customer Service
Council Library	Council Library
Tenterfield Community Hub	Glen Innes Motor Registry
Rouse Street Medical Centre	United Petroleum Service – truck stop
Tenterfield Motor Registry	Visitor Centre
Tenterfield Local Post Office	Coach stop (arranged by visitor centre contact)
Tenterfield Bowling Club	McDonald's (arranged by visitor centre contact)
Tenterfield Visitor Centre	Community Centre

A copy of the public display material is provided in **Appendix B**.

#### 3.4.3 Media advertising

An advertisement was also placed in local newspapers to jointly announce the Tenterfield Bypass and Bolivia Hill Upgrade projects on 2 October 2012.

Advertisements were placed in local newspapers and on local radio stations in the fortnight before the sessions were held to advise interested public and other stakeholders of the community drop-in sessions.

### 3.4.4 Community update

The information poster was printed as an A3 leaflet for distribution to residents and businesses in Tenterfield, Glen Innes, Bolivia, Deepwater and Emmaville. The community updates were delivered via Australia Post's unaddressed mail service to over 4500 premises in the week commencing 29 October 2012.

A second community update was printed as an A4 flyers and distributed through key venues such as Council customer service areas, public libraries and motor registries in July 2013. The community update was also made available via the project website for download.

### 3.4.5 Community survey

A community survey was distributed to residents and businesses in Tenterfield, Glen Innes, Bolivia, Deepwater and Emmaville with the community update in the week commencing 29 October 2012. The purpose of the survey was to gain an understanding of known constraints and issues and to receive comments for consideration in the development of the route options. The survey also included information about the upcoming community drop-in sessions and the option to provide contact details and receive future information about the project.

Based on community feedback, the survey was also provided electronically on the Roads and Maritime Services (RMS) project website to facilitate the receipt of responses and to provide the broader community, regional community as well as road users from other areas (who had not received the update) the opportunity to comment on the project. The survey was made available for completion online in the week commencing 12 November 2012. The link to the survey was also provided to local councils in the New England area along with an electronic version of the community update with the request to provide a link from their website to the survey.

A copy of the survey is provided in **Appendix B**.

### 3.4.6 Community drop-in session

Community drop-in sessions were held in November 2012 to engage the local community in the project through communication of project information and receipt of their concerns and ideas. Members of the project team, including the project managers from RMS and Cardno, were on hand to answer questions from community members and listen to their feedback. The information poster was printed in A0 size for display and to use as a prop when describing the project. Details of the session dates, locations and attendance are provided in **Table 3-1** and **Table 3-2**.

**Table 3-1 Tenterfield community drop-in session**

Tenterfield	
<b>Date</b>	Wednesday 14 November, 2012
<b>Time</b>	2pm – 8pm
<b>Location</b>	Tenterfield Golf Club, Pelham Street, Tenterfield
<b>Project team attendees</b>	Gurjit Singh – RMS Project Manager Nick McTeigue – RMS Stakeholder Consultation John Rayment – Cardno Project Manager Larissa Miller – Cardno Stakeholder Consultation
<b>Community and other stakeholder attendance</b>	11

**Table 3-2 Glen Innes community drop-in session**

Glen Innes	
<b>Date</b>	Thursday 15 November, 2012
<b>Time</b>	2pm – 8pm
<b>Location</b>	Glen Innes Severn Learning Centre, Gray Street
<b>Project team attendees</b>	Gurjit Singh – RMS Project Manager Nick McTeigue – RMS Stakeholder Consultation John Rayment – Cardno Project Manager Larissa Miller – Cardno Stakeholder Consultation
<b>Community and other stakeholder attendance</b>	11

### 3.4.7 Stakeholder meeting

The project team met with Tenterfield Shire Council. The meeting was an opportunity to:

- Introduce the team
- Provide an overview of the project including:
  - Background to the project
  - The project program and current stage
  - Studies undertaken to date
  - Constraints mapping
- Discuss issues, constraints and opportunities for the project known to Council.

Meeting details are provided in **Table 3-3**.

**Table 3-3 Meeting with Tenterfield Shire Council**

Tenterfield Shire Council	
<b>Date</b>	Wednesday 14 November, 2012
<b>Time</b>	12:30pm – 1:30pm
<b>Location</b>	Tenterfield Shire Council, Rouse Street, Tenterfield
<b>Project team attendees</b>	Gurjit Singh – RMS Project Manager Nick McTeigue – RMS Stakeholder Consultation John Rayment – Cardno Project Manager
<b>Council attendees</b>	Dennis Gascoigne – Director Engineering Services Brian Murray – Deputy Mayor

While the project study area falls within the Tenterfield Shire Council’s local government area, the project team also met interested Glen Innes Severn Council staff informally at the community meeting in Glen Innes on 15 November 2012.

### 3.4.7.2 Letters to organisational stakeholders

Letters were sent to over 30 regional, state and national organisational stakeholders advising them of the project commencement, the project study area and the opportunity to contact the project team either by attending community drop-in sessions, or through the project 1800 number and project email address.

## 3.5 Outcomes of stakeholder engagement activities

The outcomes of key stakeholder engagement activities are outlined below with detailed responses provided in appendices as stated.

### 3.5.1 1800 number and project email address

The project has received nine phone calls to the free call 1800 number and 16 emails to the project email address, summarised in **Table 3-4**.

**Table 3-4 1800 number and project email address outcomes**

Issue	Detail	Number of phone calls/emails
Route location	<ul style="list-style-type: none"> <li>Property owner enquiring about proposed route location</li> <li>Interested in route options as purchasing property in the study area.</li> </ul>	2
Local knowledge	<ul style="list-style-type: none"> <li>To advise of the location of an angel statue close to the top of the hill.</li> </ul>	1
Media enquiry	<ul style="list-style-type: none"> <li>Tenterfield Star enquired about the project.</li> </ul>	1
Community update and survey and contact database	<ul style="list-style-type: none"> <li>Thank you for the delivery of the community update and survey</li> <li>To provide contact details</li> <li>Completion of the community survey</li> <li>To advise an issue with the project's online community survey*.</li> </ul>	7
Community drop-in sessions	<ul style="list-style-type: none"> <li>Advising attendance at community session</li> <li>Interested in the outcome of the community meetings as could not attend.</li> </ul>	3
Study or consultation process	<ul style="list-style-type: none"> <li>Enquiry about whether the project would include a Heritage Impact Statement</li> <li>Department of Industry requesting GIS file</li> <li>Question the stakeholder engagement approach and other elements of the project</li> <li>Local councils to arrange provision of a link to the community survey on their websites.</li> </ul>	11

*\*Note: The survey did not allow community members to complete the survey if they had selected the 'other' answer for two questions. This was rectified within a few hours.*

### 3.5.2 Community survey

The community survey requested both quantitative and qualitative data from respondents. Quantitative data was in the form of details about where the respondent resided, the type of road user that they identified as

and their frequency of travel on the New England Highway through Bolivia Hill. This was used to provide an understanding of the different types of road users.

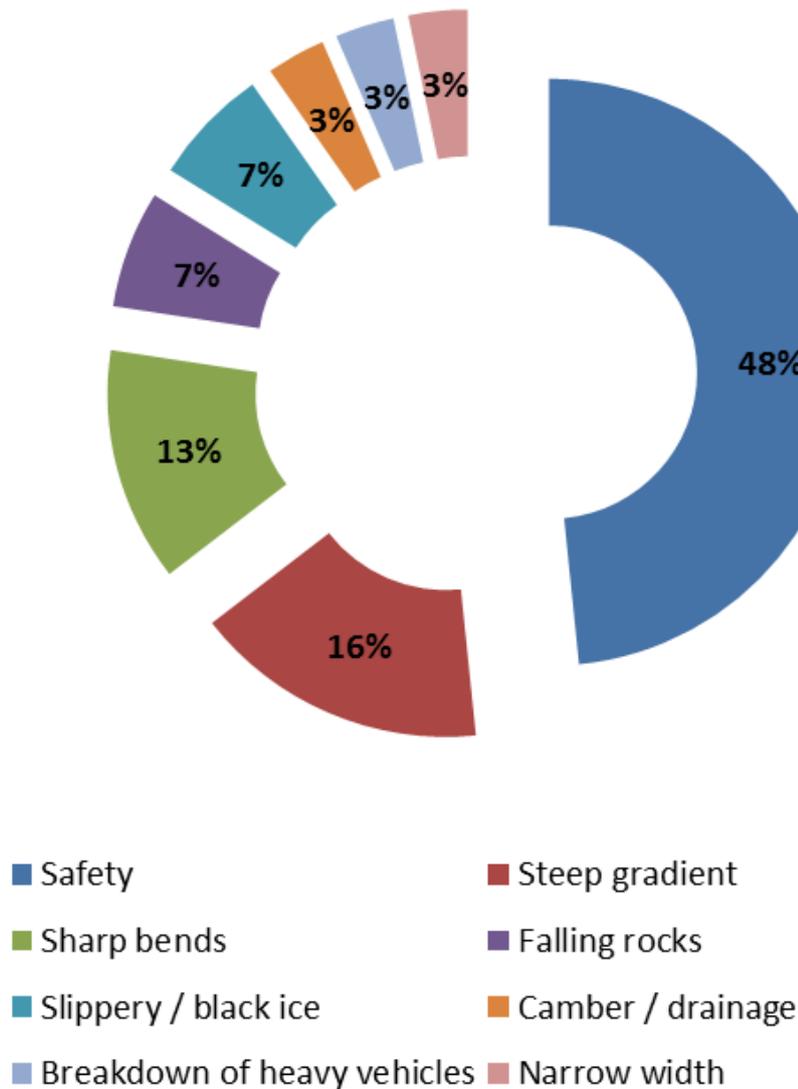
The survey also included a free text box to provide respondents with an opportunity to comment on any aspect of the project. Comments received included current road condition, general route option considerations for the road upgrade and specific route option proposals.

As at 26 November 2012, 64 survey responses had been received although not all respondents answered each question. There were 25 surveys from Tenterfield residents, 29 from Glen Innes residents, two from Bolivia residents, five from Deepwater and three from Emmaville.

Of the respondents, 45 identified themselves as commuters or other drivers of private vehicles, two bus or coach drivers and four truck drivers. Other respondents reported being property owners in the study area or other service providers such as mail courier.

### 3.5.2.1 Issues with the current road

Issues pertaining to the current road were raised 31 times, with issues ranging from general safety to the presence of black ice. Of the issues raised, safety was the biggest concern, with almost 50 per cent of issues raised related to the road’s safety performance with additional responses also reflecting specific safety concerns such as the danger of falling rocks and the steep gradient. The road’s steep gradient and sharp bends were also significant concerns for the community, as shown in **Figure 3-2**.



**Figure 3-2 Issues with the current road**

### 3.5.2.2 General route option considerations

There were 38 comments received on route option considerations received from community members and stakeholders. Comments focused on improving the road alignment, considering the need for environmental protection and widening the road. Comments received on route options are shown in **Figure 3-3**.

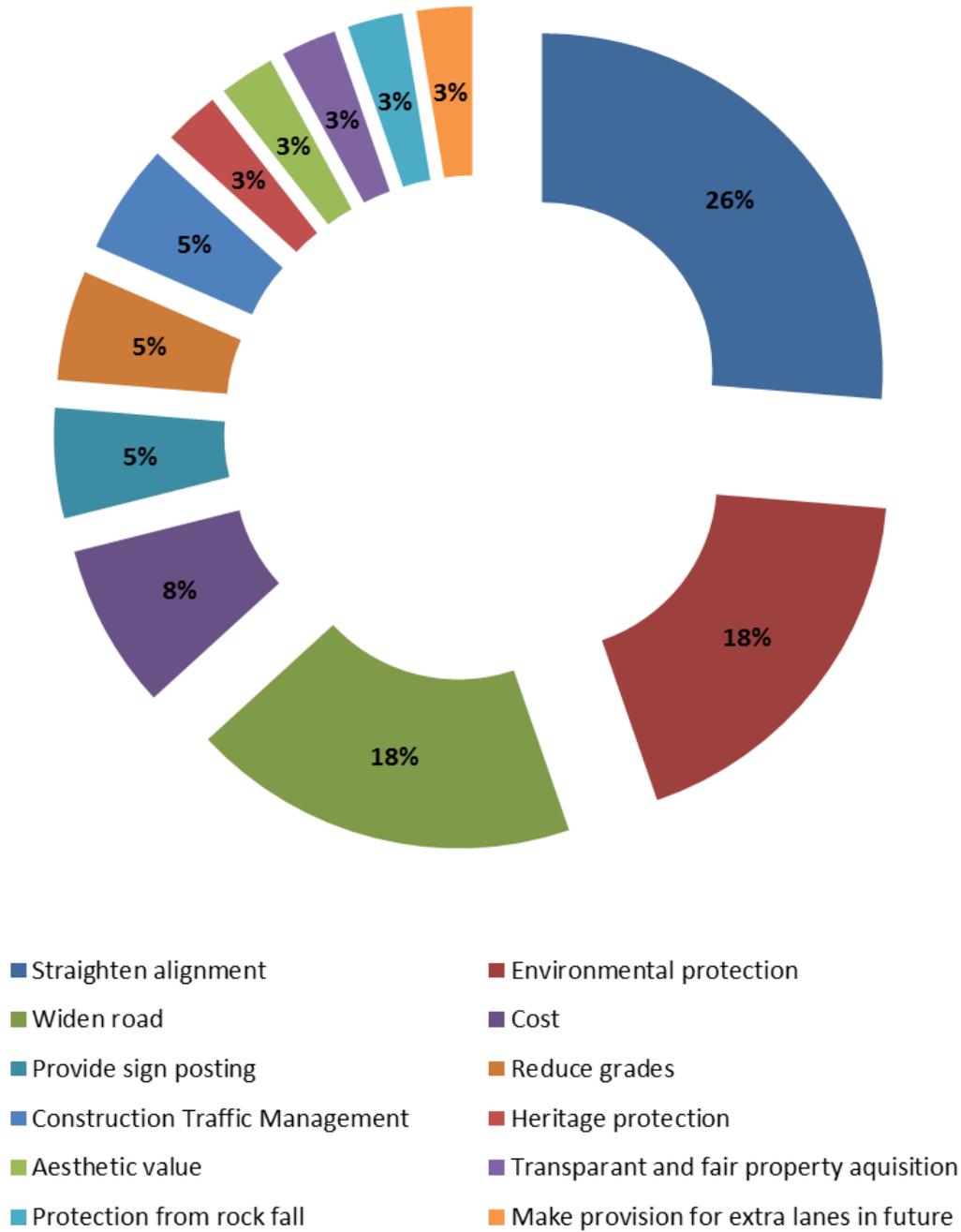


Figure 3-3 General route option comments

### 3.5.2.3 Specific route options proposed

There were 72 comments on specific route options received through the community survey. Of these, providing additional lanes (either an additional southbound lane, an additional northbound lane or providing three lanes) was popular along with the provision of a dual carriageway. Eight per cent of these suggestions involved using the existing route. There were similar levels of support for both following the railway line (seven per cent) and avoiding the railway line (six per cent). The specific route options proposed through the survey are shown in **Figure 3-4**.

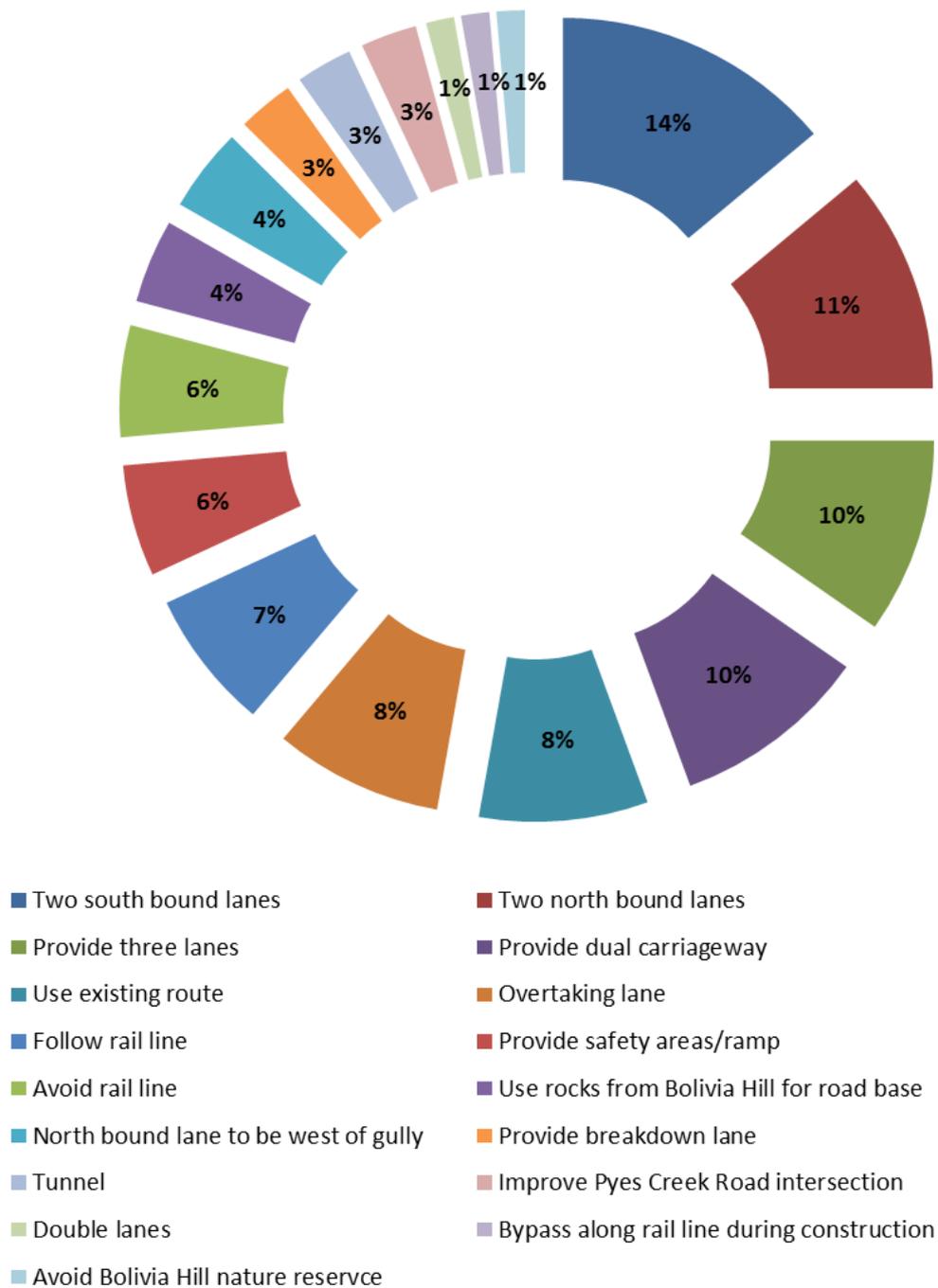


Figure 3-4 **Specific route option considerations**

### 3.5.2.4 Discussion

Respondents used the survey as an opportunity to raise concerns about the existing road’s safety performance, with a number of specific safety issues raised along with general concerns about safety. This community focus on safety demonstrates that the project objective to “improve road safety” is generally aligned with the community expectations for the project. Comments such as “I have travelled the road since young and still don’t like it!” and “road is dangerous” reflected the general attitude of comments about the existing road’s safety although there were two respondents that disagreed, one respondent commenting “Completely unnecessary.... Road is fantastic!”

A number of respondents to the community survey provided considerations for the development of the route options. Three of the top five general route option considerations provided relate to the project objective to

improve road safety, improve the horizontal and vertical alignment and widen the road. The project objective to “minimise the impact on the natural, cultural and built environment” was also supported by community members, 18 per cent of general route option considerations were focused on ensuring environmental protection with an additional three per cent requesting heritage protection.

Eight per cent of respondents that provided route option considerations noted that the cost of the proposed route should be taken into account; this reflects the fourth project objective of “Provide value for money” and demonstrates an understanding of the need for a route option that is cost effective. One respondent addressed the cost of the project from a different perspective stating “get on with the job, don’t waste \$6 million talking about it”.

The majority of comments from the community survey provided specific route option suggestions reflecting a valuable knowledge of the local study area. The comments ranged from straight-forward requests - for example the provision of : additional lanes; an overtaking lane; dual carriageway or a tunnel - to explicit locations such as use of the existing railway line or the provision of a northbound lane to the west of the existing alignment on the western side of the gully.

Several of the route option suggestions from respondents aligned with the project objective “to improve road transport productivity, efficiency and reliability of travel” such as provision of two southbound lanes or an overtaking lane and reduction of grades.

There was minimal objection to the project. Of the 64 survey responses, only two opposed it stating that funding for the road would be better allocated to other road projects. There was acknowledgment in some survey responses of the concurrent planning of the Tenterfield heavy vehicle bypass route. Six respondents in total also discussed support for the Tenterfield heavy vehicle bypass as part of their survey response with two clearly stating that the heavy vehicle bypass project was more important than the Bolivia Hill project.

Complete survey responses are provided in **Appendix B** along with any maps received from community members with route option suggestions.

### **3.5.3 Community drop-in sessions**

The community drop-in sessions in both Tenterfield and Glen Innes attracted few community attendees. Despite the low numbers, the community members that attended were generally very familiar with the project study area and able to provide significant information and local expertise that can be used by the project team in the development of route options. A number of property owners in and adjacent to the project study area, past and present, attended.

Key outcomes from the drop-in sessions are outlined below with a record of the feedback from the sessions provided in **Appendix B**.

#### **3.5.3.1 *Issues and concerns with the existing road***

Issues related to the existing road included the heavy vehicle use of the highway, in particular the possibility they could lose control on the downhill; safety; poor weather, including black ice; the danger of head-on traffic and the potential for rock fall from a landslide. Attendees largely recognised that the hill was dangerous and an upgrade would improve the safety conditions for drivers.

#### **3.5.3.2 *Route option considerations***

Attendees suggested opportunities and features for consideration in the development of route options including:

- use of the existing alignment
- provision of two lanes in each direction
- providing a passing lane for a cheaper option
- widening the existing roadway
- providing a tunnel
- using the existing railway line
- using fill from the higher side of the hill to fill the lower side, and

- splitting the road.

Suggested route options aligned overall with routes that were under investigation by the project team, with the exception of one suggestion to use the existing alignment for the uphill traffic and provide a separate downhill lane to the west of the existing roadway.

### **3.5.3.3 Environmental and heritage preservation**

Several session attendees discussed the need for environmental and heritage preservation within the project study area. Environmental issues raised included the fauna likely to be found in the area including black pigs, deer, large kangaroos and possibly koalas, the area's significant native flora and the extensive vegetation throughout the project study area. Heritage information provided included location of a cobblestone road close to the alignment of the old highway, the need for the project team to consult with the Moombahlene Local Aboriginal Land Council, the location of an old telephone line in the study area, details of the railway line construction and the legend of a local market gardener. Maps drawn by attendees to show the location of the old telephone line and the cobblestone road and a local heritage submission from the Bolivia Hill Association detailing the *Quin Chee* story are included in **Appendix B**.

### **3.5.3.4 Discussion**

As with the outcomes from the community survey, many of the concerns with the existing road related to safety, demonstrating support for the project objective "to improve road safety", reflecting the community's expectations for the project.

Route suggestions discussed at the community drop-in sessions ranged from large-scale options such as a tunnel to requests to minimise works required by using the existing alignment. The rationales given for suggestions that supported using the existing alignment were both to minimise the cost and to allow for environmental protection. This again aligns with the project objectives to "provide value for money" and "minimise the impact on the natural, cultural and built environment". As with suggestions from the community survey, several of the route option suggestions from the community were in line with criteria needed to meet the project objective "to improve road transport productivity, efficiency and reliability of travel".

Attendees at the community drop-in sessions were able to provide significant local knowledge, informing the development of the route options. These discussions about the locations of potential heritage items and the history of the area, including the construction of the railway line and past local characters and property owners, captured some pieces of Bolivia Hill's history and will assist the project to deliver on the project objective to minimise the impact on the cultural environment.

There was no objection to the project raised at either of the community drop-in sessions; support for the project was generally expressed. Attendees were either interested in proposed route options, able to share local knowledge or requested that options allow for environmental and heritage protection.

### **3.5.4 Meeting with Tenterfield Council**

The meeting with Council provided the project team with Council's perspective of the future traffic growth in the region; Council pointed to factors such as 'tree change', increasing 'grey nomad' travellers and the effort Council is expending to attract Queensland visitors that could drive increased traffic on the New England Highway through the project study area. Council requested that the Benefit Cost Ratio (BCR) assessment consider other drivers of growth in the region and not just the declining annual average daily traffic (AADT) trend. Council stated that it is possibly a socio-demographic issue instead of a traffic one. Council recognised the upgrade would be expensive.

Council's Director Engineering Services also proposed upgrading the existing alignment, noting that the vertical alignment is not as important as long as a southbound passing lane is provided.

Council's comments demonstrated an understanding of the need to provide a cost effective route option, in line with the project's objective of "value for money".

Complete minutes from the meeting with Tenterfield Shire Council are provided in **Appendix B**.

### 3.6 Accessing private property

Property owners within the study area received the following communication about the project:

- An addressed letter advising them of the commencement of the project and the study area, noting that their property may be within the project study area
- A letter requesting written permission to enter their land to undertake environmental and other investigations. This letter was accompanied by an RMS 'permit to enter' form and a flyer detailing the types of studies that may be carried out
- Follow-up phone calls to discuss property access and request the completed 'permit to enter' form.

All but one property owner within the study area provided permission for the project investigations to occur on their land.

### 3.7 Letter correspondence from stakeholders

The project received two letters from stakeholders in response to the project announcement letter sent in November 2012:

- Fisheries NSW, a branch of the NSW Government Department of Primary Industries, 26 November 2012. This letter outlined the environmental study requirements to facilitate appropriate assessment for the project including the standard minimum requirements for environmental assessment
- Mineral Resources Branch (MRB) of the Division of Resources and Energy, Department of Trade & Investment, Regional Infrastructure & Services, 6 December 2012. This letter provided detail of the mineral resource issues in the project study area including the potential geotechnical issues that might arise, particularly associated with granite-related mineralisation.

These letters are attached as part of **Appendix B**.

### 3.8 Incorporation into development of route options

Key issues, comments and recommended options from the stakeholder engagement period No. 1 have been reported to RMS and the wider project team used to inform the on-going development of the route options. Stakeholder comments have been considered to see whether and the extent to which they should be positively reflected in the options.

The engagement outcomes were distributed to the following project team leaders:

- RMS Project Manager
- RMS Stakeholder Engagement Manager
- Cardno Project Manager
- Cardno Environment Manager
- Cardno Road Designer
- Cardno Constructability Manager
- Cardno Traffic Engineer.

**Table 3-6** summarises the key issues, comments and recommended options raised and provides a comment from the relevant discipline leader on how it has been or will be considered in the development of the route options.

**Table 3-5 Consideration of engagement outcomes in route options development**

Issue/comment	Raised in	Addressed by	Consideration in route options development
Safety	Survey	Road design	Improving the road's safety is a key project objective.
Steep gradient	Survey	Road design	Improving road safety is a key project objective and an improved geometry standard is a critical criterion to this objective.
Sharp bends	Survey	Road design	Improving road safety is a key project objective and an improved geometry standard is a critical criterion to this objective.
Falling rocks	Surv/Sess	Road design	Geotechnical investigations are being undertaken and will assess the stability of the existing rocks. Rock fences shall be installed with any option.
Slippery / black ice	Surv/Sess	Road design	Improving road safety is a key project objective and an improved geometry standard is a critical criterion to this objective.
Camber / drainage	Survey	Road design	Improving road safety is a key project objective and an improved geometry standard is a critical criterion to this objective.
Breakdown of heavy vehicles	Survey	Road design	Widened shoulders (2.0 m) have been incorporated into all options to allow for breakdowns and through traffic to pass safely.
Getting caught behind HVs	Session	Road design	Traffic studies have shown that overtaking lanes are not required.
HVs losing control on way down	Session	Road design	Improving road safety is a key project objective and an improved geometry standard is a critical criterion to this objective.
Narrow width	Survey	Road design	Improving road safety is a key project objective and an improved geometry standard is a critical criterion to this objective, with travel lanes at 3.5 m wide and shoulders to 2.0 m.
Lack of safety areas	Survey	Road design	Safety areas will be considered in the detailed design stage.
Route is unsafe because it is two-way	Session	Road design	Improving road safety is a key project objective and an improved geometry standard is a critical criterion to this objective.
Community survey should be available to complete electronically	Email	Stakeholder engagement	The survey is now available electronically on the RMS website and can be accessed directly: <a href="https://www.surveymonkey.com/s/K27QMH9">https://www.surveymonkey.com/s/K27QMH9</a> .
The survey is basic and won't provide enough information	Email	Stakeholder engagement	This is a preliminary stage of the project and therefore only the most basic level of response from interested parties is being sought at present. As the project progresses more detailed information will be provided and it will be possible for respondents to make more specific and more detailed submissions.
The survey should have included Armidale, Uralla, Guyra and residents in these towns only read the Armidale Independent and Express - not the newspapers where the community sessions were advertised.	Email	Stakeholder engagement	We will liaise with all councils in the New England area to see if the project information and survey link can be added to their websites.
Queried the number of households in towns the received the survey via unaddressed mail.	Email	Stakeholder engagement	The delivery figure of 4,500 households was provided by Australia Post as the number of deliveries they would make to individual mailboxes in the areas we supplied to them as having to be covered.

Issue/comment	Raised in	Addressed by	Consideration in route options development
The volumes of heavy vehicles at Bolivia Hill compared with other highways in NSW.	Email	Traffic Engineer	RMS vehicle counts undertaken during October 2010 indicated an average daily vehicle count of 1,802 vehicles per day (bidirectional flow) through the project study area, of which heavy vehicles make up 26 per cent (approximately 470 vehicles per day). Cardno have recently commissioned traffic counts to be collected to determine if any change in volumes have occurred since the RMS data was collected. This data is reported in <b>Chapter 2 (Section 2.3)</b> . In comparison, it is noted that traffic flows along the Newell Highway range from 1,225 – 4,048 (approximately 37 per cent heavy vehicles) vehicles per day between the town centres. This indicates that the traffic flows at Bolivia Hill are in the lower percentile of average daily flows when compared to those along the Newell Highway. Cardno do not have access to detailed traffic flow data along the Pacific Highway.
Animals in the area include: koalas, black pigs, possibly deer, large kangaroos	Session	Environment	Fauna specialists have considered the impacts on potential fauna in the area. Flora and fauna specialists conducted a thorough ecology assessment, which included desktop and field surveys. The specific purpose of the field surveys involved the collation of information concerning: <ul style="list-style-type: none"> <li>fauna species which regularly utilise habitat within and adjacent to the corridor</li> <li>the location, extent and utilisation of any areas of suitable habitat for fauna species listed under the provisions of the Commonwealth's <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) and NSW's <i>Threatened Species Conservation Act 1995</i> (TSC Act).</li> </ul> The results of the survey updated initial constraints mapping and clearly identifies the locations of protected fauna, critical habitat, threatened species, populations, ecological communities and other relevant ecological constraints (eg wildlife corridors).
Cobblestone road – north of the site on old alignment of the highway.	Session	Environment	Noted. A heritage specialist (Niche Environment and Heritage) have considered the impacts on non-Aboriginal heritage in the area and have addressed these issues in a Non-Aboriginal Heritage Assessment report. If at any time during the course of the study there is a significant heritage item or place identified, all of the necessary studies will be conducted to comply with the requirements of the <i>Heritage Act 1977</i> and the <i>National Parks and Wildlife Act 1974</i> .
Council has a Heritage Committee – contact Toni Hull for information	Session	Environment	Noted. Niche Environment and Heritage contacted Council's Heritage Committee as part of their consultation process.
Consult with LALC	Session	Environment	Noted. Niche Environment and Heritage contacted the Moombahlene Local Aboriginal Land Council as part of their consultation process.
A property owner within the project study area expressed concern about ecologist investigations	Session	Environment	Ecology field studies will not be conducted on any property without prior owner consent. At present, fieldwork will not be undertaken at one property (LOT: 134 DP: 751487) as consent has not been provided.
This section of the railway line was the site of the first workers strike in the country	Session	Environment	The Desktop Heritage Assessment report has noted that a section of the main north railway line runs through the study area. Further a non-Aboriginal heritage investigation is to be completed as part of the next stage of the project, which will include: <ul style="list-style-type: none"> <li>Consulting with the local historical society</li> <li>Conducting further historical research focussing on the railway line</li> <li>Undertaking a site survey of proposed route options with representatives of the local historical society</li> <li>Assessing the significance of any identified heritage items</li> <li>Preparing a detailed non-Aboriginal heritage impact assessment that provides recommendations to mitigate any impacts the proposed highway upgrade may have on identified heritage items.</li> </ul> The heritage study was informed by the comment provided.
Preserve the angel statue (located close to the top of the hill), either leave in place or relocate it.	Surv/Sess	Environment	Noted. Heritage studies considered the impacts to the statue and if there are any impacts associated with the preferred option then necessary mitigation measures of the statue will be identified for the protection, which may include relocation.
There are trees throughout the project study area	Session	Environment	Noted.

Environment/heritage issues raised

Issue/comment	Raised in	Addressed by	Consideration in route options development
			Flora and fauna specialists considered the impacts on potential flora and vegetation communities in the area and have addressed these issues in specialist reports. Flora and fauna specialists conducted a thorough ecology assessment, including desktop and field surveys. The results of the field survey were used to inform the route option design process in order that impacts to vegetation can be avoided or minimised to the fullest.
Part of the nature reserve belonged to the Hamilton family	Session	Stakeholder engagement	Noted.
Old Telephone line in study area to the west of the current road alignment.	Session	Environment	Heritage specialists (Niche Environment and Heritage) considered the impacts on non-Aboriginal heritage in the area and addressed these issues in a Heritage Assessment report. If at any time during the course of the study there is a significant heritage item or place identified, all of the necessary studies to comply with the due diligence requirements of the <i>Heritage Act 1977</i> and the <i>National Parks and Wildlife Act 1974</i> .
'Hurry's Hill' – first settlers arrived at BH 1841.	Session	Environment	Heritage specialists (Niche Environment and Heritage) considered the impacts on non-Aboriginal heritage in the area and addressed these issues in a Heritage Assessment report. If at any time during the course of the study there is a significant heritage item or place identified, all of the necessary studies to comply with the requirements of the <i>Heritage Act 1977</i> and the <i>National Parks and Wildlife Act 1974</i> will be conducted.
Quin Chee story: Chinese man – left wife in china and was never reunited. He had a market garden.	Session	Environment	Heritage specialists (Niche Environment and Heritage) considered the impacts on non-Aboriginal heritage in the area and addressed these issues in a Heritage Assessment report. If at any time during the course of the study there is a significant heritage item or place identified, all of the necessary studies to comply with the requirements of the <i>Heritage Act 1977</i> and the <i>National Parks and Wildlife Act 1974</i> will be conducted.
Project area included a stock route, to the west of the current road alignment.	Session	Environment	Heritage specialists (Niche Environment and Heritage) considered the impacts on non-Aboriginal heritage in the area and addressed these issues in a Heritage Assessment report. If at any time during the course of the study there is a significant heritage item or place identified, all of the necessary studies to comply with the requirements of the <i>Heritage Act 1977</i> and the <i>National Parks and Wildlife Act 1974</i> will be conducted.
Project area has significant native flora	Session	Environment	<p>Noted.</p> <p>Flora and fauna specialists considered the impacts on potential flora and vegetation communities as part of the route options assessment. Flora and fauna specialists conducted a thorough ecology assessment, which included desktop and field surveys. The results of the field survey updated constraints mapping and clearly identifies the locations of protected flora and fauna, critical habitat, threatened species, populations, ecological communities and other relevant ecological constraints (eg wildlife corridors).</p> <p>A detailed description of all vegetation communities encountered during the survey with supporting information has been documented. The conservation significance of each community has been identified at a national, state and local level, with specific consideration given to the known or likely representation in adjacent protected areas such as National Parks, Conservation Areas, State Forests and Reserves managed under the <i>National Parks and Wildlife Act 1974</i>. A description of the condition of each vegetation community, including a qualitative description of extent of disturbance, and level of weed infestation has been provided. Possible mitigation measures may include:</p> <ul style="list-style-type: none"> <li>• The provision of offsets/compensatory habitat in accordance with National and State regulation guidelines</li> <li>• The location and design of fauna over or underpasses</li> <li>• Specific design criteria (ie fencing, culverts and culvert furniture etc.) in accordance with RMS policies and guidelines.</li> </ul>
Query regarding a Heritage Impact Statement would be prepared for the project	1800 number	Environment	Heritage specialists (Niche Environment and Heritage) conducted a thorough heritage assessment, including desktop and field surveys. If at any time during the course of the study there is a significant heritage item or place identified, all of the necessary studies to comply with the requirements of the <i>Heritage Act 1977</i> and the <i>National Parks and Wildlife Act 1974</i> will be undertaken, which may include a Heritage Impact Statement.
A Glen Innes Heritage Study exists.	Session	Environment	Heritage specialists (Niche Environment and Heritage) considered all available documents/report relating to the study area for the heritage assessment, including this identification.

Issue/comment	Raised in	Addressed by	Consideration in route options development																						
Straighten alignment	Survey	Road design	Improving road safety is a key project objective and an improved geometry standard is a critical criterion to this objective.																						
Environmental protection	Surv/Sess	Environment	The importance of the environmental values of the area is acknowledged by the study team, and environmental studies and assessments were carried out in parallel with the development of route options. This approach enables key environmental constraints to be identified and for impacts to be avoided through the modification of designs wherever possible, and is considered preferable to alternative approaches where design precedes the environmental assessment, and the opportunity to modify designs to avoid impacts can be lost.																						
Widen road	Surv/Sess	Road design	Improving road safety is a key project objective and an improved geometry standard is a critical criterion to this objective.																						
Cost/value for money	Surv/Sess	Road design	Value for money is a key project objective.																						
Provide sign posting	Survey	Road design	Sign posting will be considered in the detailed design stage.																						
Reduce grades	Survey	Road design	Improving road safety is a key project objective and an improved geometry standard is a critical criterion to this objective.																						
Construction Traffic Management: If Pacific Hwy is closed where to NE Hiway (sic)? If Newell Hiway is closed where to NE Hiway (sic)?	Surv/Sess	Traffic engineering	If the project progresses to construction, a construction traffic management plan will be prepared to manage changes to the road's operation. The New England Highway will remain operational throughout any construction works.																						
Route option comments NE Hiway (sic) with very little upgrade and traffic has increased by 75% in last 5 years.	Survey	Traffic engineering	<p>The chart shows the Average Annual Daily Traffic (AADT) for the New England Highway through the project study area providing an indication of the annual changes in traffic volumes from preceding survey years to the latest available figures. It can be seen that there has been a continuous decline in average traffic volumes at an increasing rate since 1998, with only a minimal increase of 105 vehicles experienced between 2010 and 2012.</p> <table border="1"> <caption>AADT COUNTS FOR BOLIVIA HILL - NORTH OF PYES CREEK ROAD</caption> <thead> <tr> <th>Year</th> <th>AADT</th> </tr> </thead> <tbody> <tr><td>1980</td><td>1750</td></tr> <tr><td>1984</td><td>1950</td></tr> <tr><td>1988</td><td>3050</td></tr> <tr><td>1992</td><td>2850</td></tr> <tr><td>1996</td><td>3150</td></tr> <tr><td>2000</td><td>3300</td></tr> <tr><td>2004</td><td>2850</td></tr> <tr><td>2008</td><td>2650</td></tr> <tr><td>2010</td><td>2550</td></tr> <tr><td>2012</td><td>3050</td></tr> </tbody> </table>	Year	AADT	1980	1750	1984	1950	1988	3050	1992	2850	1996	3150	2000	3300	2004	2850	2008	2650	2010	2550	2012	3050
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Heritage protection	Survey	Environment	Heritage specialists (Niche Environment and Heritage) conducted a thorough heritage assessment, including desktop and field surveys. If at any time during the course of the study there is a significant heritage item or place identified, all of the necessary studies to comply with the requirements of the <i>Heritage Act 1977</i> and the <i>National Parks and Wildlife Act 1974</i> will be undertaken, which may include a Heritage Impact Statement.																						
Consider/maintain aesthetic value	Surv/Sess	Environment	Noted. Environmental assessments of the preferred option will consider the impacts to landscape and aesthetic value, and will propose the necessary mitigation measures for protection.																						
Transparent and fair property acquisition	Survey	Stakeholder Engagement	Potential property acquisition will be conducted by RMS through a process of consultation and negotiation that aims for a mutually acceptable property value.																						
Protection from rock fall	Survey	Road design	Geotechnical investigations are being undertaken and will assess the stability of the existing rocks. Rock fences shall be installed with any option.																						
Make provision for extra lanes in future	Survey	Road design	Traffic studies have shown that two northbound lanes are not required.																						

Issue/comment	Raised in	Addressed by	Consideration in route options development
Two southbound lanes	Surv/Sess	Road design	Traffic studies have shown that two southbound lanes are not required.
Two northbound lanes	Surv/Sess	Road design	Traffic studies have shown that two northbound lanes are not required.
Provide three lanes	Surv/Sess	Road design	All options have been designed for a three lane configuration.
Provide dual carriageway	Surv/Sess	Road design	Traffic studies have shown that two northbound lanes are not required. A dual carriageway cross section was developed and used for all options at the early stage of the study, and was not considered value for money.
Use existing route	Surv/Sess	Road design	The use of the existing route is being considered for southbound traffic only with a northbound lane constructed independently west of the existing alignment.
Overtaking lane	Survey	Road design	Traffic studies have shown that overtaking lanes are not required.
Follow rail line	Surv/Sess	Road design	Due to existing topography, this is not achievable. This would also impact the nature reserve.
Provide safety areas/ramp	Survey	Road design	Safety areas and locations will be considered in the detailed design stage.
Avoid rail line	Survey	Road design	Rail line has been avoided in all shortlisted options.
Use rocks from Bolivia Hill for road base	Surv/Sess	Constructability	Material won from excavation at Bolivia Hill is suitable for use in road embankments.
Northbound lane to be west of gully	Surv/Sess	Road design	The use of the existing route is being considered for southbound traffic only with a northbound lane constructed independently west of the existing alignment.
Split the road, use the little ridge between existing road and the creek bed	Session	Road design	The use of the existing route is being considered for southbound traffic only with a northbound lane constructed independently west of the existing alignment.
Provide breakdown lane	Survey	Road design	Two metre wide shoulders have been provided. This allows ample space for vehicles to pull off the main carriageway safely.
Tunnel	Surv/Sess	Road design	Tunnel has been considered, however, due to cost of construction in granite this is not viable, and would not provide value for money.
Improve Pyes Creek Road intersection	Surv/Sess	Road design	Intersection designs will be considered in the detailed design stage.
Double lanes	Survey	Road design	Traffic studies have shown that two lanes are not required for traffic in either direction.
Bypass along rail line during construction	Survey	Road design	Due to existing topography, this is not achievable. This would also impact the nature reserve.
Avoid Bolivia Hill Nature Reserve	Survey	Road design	Nature Reserve avoided in all options.

Specific route option comments

### **3.9 Next steps**

The next period of stakeholder engagement will commence in August 2013 to display the recommended preferred route option.

This period of stakeholder engagement will include:

- Public display
- Community update
- Public meeting and feedback
- Project website, 1800 number and project email address
- Media advertising.