Executive summary

The NSW Government has provided $4.1 million to plan for the future upgrade of Bells Line of Road between Bell and Lithgow to improve safety and travel conditions.

Roads and Maritime Services sought feedback between 15 February to 21 March 2016 on the proposed upgrade to Chifley Road including improvements to the Scenic Hill section and replacement of the road bridge over the railway line at Clarence.

The work would address recommendations provided in the Bells Line of Road Corridor Improvement Program and deliver benefits to road users through improved road safety, more reliable travel times and improved freight access and efficiency.

We delivered about 4,600 project updates to residents and key stakeholders in the Lithgow and Blue Mountains local government areas and provided information about the project on the Roads and Maritime website.

We received a total of 12 submissions during the consultation period. Of these submissions, four were in support or conditional support of the proposal, seven were neutral and one did not support the proposal. The main comments received included concerns about other sections of Chifley Road not proposed to be upgraded, consideration of other road users and biodiversity impacts.

Next steps

Roads and Maritime would like to thank everyone who took the time to consider our proposal and provide feedback. We have considered the comments received and provided our responses.

We will proceed with the proposal as proposed and finalise the concept design and environmental assessment. We will display the concept design and Review of Environmental Factors for this proposal in late 2016.

We will continue to keep the community informed of the proposal as it progresses.
Introduction

1.1. Background

The NSW Government has provided $4.1 million to plan for the future upgrade of Bells Line of Road between Bell and Lithgow to improve safety and travel conditions.

Bells Line of Road is a State road which runs from North Richmond on the north-western outskirts of Sydney to Bell (at the intersection with the Darling Causeway). At this point it becomes Chifley Road which then goes to Clarence and into Lithgow on the western side of the Blue Mountains. The Bells Line of Road is one of two routes westward from Sydney (the other is the Great Western Highway via Katoomba).

Chifley Road has a poor crash history and does not meet current road standards and guidelines in a number of areas. In 2012, the Australian and NSW governments completed a long-term strategic plan for the Bells Line of Road corridor to identify improvement work and set priorities for the next 20 years and beyond. The plan recommends safety and traffic improvements for the existing route.

The Chifley Road upgrade is focused on opportunities in the western section of the Bells Line of Road corridor between Bell and Lithgow.

1.2. The proposal

The proposed upgrade to Chifley Road includes improvements to the Scenic Hill section and replacement of the road bridge over the railway line at Clarence.

Key features of the proposed Scenic Hill upgrade include:

- Widening and upgrading Chifley Road
- Providing an additional one kilometre descending lane
- Installing median barriers and improving drainage
- Improving the alignment for the final corner or bend
- Improving access to the Ex-Prisoner of War Memorial on Chifley Road, Lithgow.

Key features of the proposed upgrade of the road bridge over the railway line at Clarence include:

- Replacing the existing bridge over the Main Western Railway line
- Widening and realigning Chifley Road to connect to the new bridge
- Improving the alignment for the curve east of the existing bridge
- Upgrading the intersection of Chifley Road and the road into Clarence Colliery.

This work would address recommendations provided in the Bells Line of Road Corridor Improvement Program. The work would also benefit road users by improving road safety, providing more reliable travel times and improving freight access and efficiency.

We have included maps to explain each section of the proposal.
1. Consultation approach

1.1. Consultation objectives

We consulted with the community in February and March 2016 to:

- Seek feedback to help guide our future decision making and design
- Build a database of interested community members with whom we can continue to engage during the proposal’s development.

1.2. How consultation was done

We sought feedback between 15 February and 21 March 2016. Community members and stakeholders were encouraged to provide their feedback and make comments via mail, email or phone contact with the project team. Our consultation tools were:

Table 1 – How consultation was done

| Project Update – Have your say February 2016 (Appendix A) | Delivered to about 4600 residents and key stakeholders in the Lithgow and Blue Mountains local government areas (consultation distribution area map, Appendix B). |
| Bells Line of Road – Chifley Road upgrade webpage http://www.rms.nsw.gov.au/projects/sydney-west/bells-line-of-road/chifley-road-upgrade.html | Information about the project was also made available via the Roads and Maritime internet site. |

2. Consultation summary

2.1. Overview

There were a total of 12 submissions received during the consultation period.

Of these submissions, four were in support or conditional support of the proposal, seven were neutral and one did not support the proposal.

The main comments received included concerns about other sections of Chifley Road not proposed to be upgraded, consideration of other road users and biodiversity impacts. Comments received also suggested changes to the proposal and requests for further information.
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<tr>
<th>Category</th>
<th>Matters raised</th>
<th>Roads and Maritime response</th>
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<tbody>
<tr>
<td>Clarence cuttings</td>
<td>The section of Chifley Road through the Clarence cuttings, east of the road bridge over the railway line, is considered unsafe and should be included in the upgrade.</td>
<td>Roads and Maritime investigated a number of upgrade opportunities for Chifley Road between Bell and Lithgow in 2014 to allow for strategic assessment and prioritisation of projects should funding become available. One of the upgrade opportunities included widening the narrow former railway cuttings east of Clarence to provide an 80 km/h design standard and new road drainage. Preliminary investigation of widening the Clarence cuttings found a number of constructability and environmental constraints due to the surrounding landscape as well as a comparatively high cost and low road user benefit. Following the strategic assessment and prioritisation of upgrade opportunities for Chifley Road, widening of Clarence cuttings was considered to be of a lower priority than the Scenic Hill proposal and the road bridge over the railway line at Clarence proposal and is therefore considered outside the scope of the proposed work. The Scenic Hill proposal and the road bridge over the railway line at Clarence proposal have been selected to deliver the necessary improvements to safety and travel conditions for Chifley Road.</td>
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<tr>
<td>Valley View Road</td>
<td>The intersection of Chifley Road and Valley View Road at Dargan is unsafe and does not provide adequate school bus stopping provisions. The intersection should be upgraded.</td>
<td>Roads and Maritime investigated a number of upgrade opportunities for Chifley Road between Bell and Lithgow in 2014 to allow for strategic assessment and prioritisation of projects should funding become available. During those investigations Roads and Maritime also developed a package of high value safety work that could use any remaining funds following construction of the Scenic Hill proposal and the road bridge over the railway line at Clarence proposal. Proposed high value safety work would include improvements to the intersection of Chifley Road and Valley View Road at Dargan, as well as a number of intersection improvements, overtaking lane extensions, pavement widening and safety barrier installation. However, this work is subject to funding being available and does not form a primary part of the proposed upgrade work at this stage.</td>
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| Other intersections and accesses | The service road at Dargan is in poor condition and informal property accesses to Chifley Road are unsafe given the 80 km/h speed limit.                                                                                                                                                                                                                                                                                                                                                                                   | The service road at Dargan and informal property accesses fall outside the scope of this proposal.  
The condition of the service road at Dargan should be discussed in further detail with Lithgow City Council who has responsibility for maintaining local roads and tracks. Roads and Maritime recommends the safest access to Chifley Road should be via Valley View Road, not the service road.  
Roads and Maritime will share this feedback with Lithgow City Council.                                                                                                                                                                                                                                                                                                           |
|                                | The intersection of Chifley Road and Petra Avenue at Clarence does not provide adequate sight-distance to the west for vehicles entering Chifley Road from Petra Avenue.                                                                                                                                                                                                                                                                                                                             | Roads and Maritime investigated a number of upgrade opportunities for Chifley Road between Bell and Lithgow in 2014 to allow for strategic assessment and prioritisation of projects should funding become available. During those investigations Roads and Maritime also developed a package of high value safety work that could use any remaining funds following construction of the Scenic Hill proposal and the road bridge over the railway line at Clarence proposal.  
While the proposed high value safety work did not specifically consider improvements to the intersection of Chifley Road and Petra Avenue at Clarence, this intersection would be considered in any future investigation and development subject to funding being available.                                                                                                                                                                  |
|                                | Access into Dargan Creek Reserve from Chifley Road is unsafe and requires improvement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | The access into Dargan Creek Reserve including the nearby railway maintenance access roads would be considered during the design of the road bridge over the railway line at Clarence proposal.  
Where possible, the access roads would be consolidated to minimise environmental impacts. All access roads would be designed to relevant design standards including *Austroads Guide to Road Design* (Austroads, 2009) and the Roads and Maritime supplements to the Austroads Guide.                                                                                                                                                                       |
<p>|                                | Access to the Clarence/Dargan Rural Fire Brigade premises is in poor condition and unsafe.                                                                                                                                                                                                                                                                                                                                                                                                                  | The access to Clarence/Dargan Rural Fire Brigade premises falls outside the sections of Chifley Road covered by this project. The condition of property owner access to Chifley Road is the responsibility of the property owner.                                                                                                                                                                                                                      |</p>
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<td></td>
<td>The intersection of Chifley Road and Clarence Colliery Road is essential to the Clarence Colliery and Hanson Quarry operations, and residents of Newnes Junction. Impacts to this intersection and users should be minimised.</td>
<td>Roads and Maritime acknowledge the importance of the intersection of Chifley Road and Clarence Colliery Road to the Clarence Colliery and Hanson Quarry operations and residents of Newnes Junction. Chifley Road and Clarence Colliery Road would remain open to traffic throughout the construction work. However, some short-term work under traffic control or lane closure would be required during traffic switches, safety barrier work and asphalting. Clarence Colliery and Hanson Quarry operations and associated heavy vehicle movements would be considered within the proposal staging and traffic management plans. In addition, Roads and Maritime will keep Clarence Colliery, Hanson Quarry and local residents informed of work and staging during construction to minimise impact.</td>
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<tr>
<td>Cyclists</td>
<td>Concerns about cycling access and safety on Chifley Road due to the narrow road width or narrow shoulder width.</td>
<td>The Scenic Hill proposal and the road bridge over the railway line at Clarence proposal would provide consistent widened shoulders on both sides of the road. We propose to provide two metre wide shoulders for single lane carriageways or one metre wide shoulders for dual lane carriageways. Cyclist access along upgraded sections of Chifley Road would be via these shoulders. This represents a significant increase in safety for cyclists compared to the current situation.</td>
</tr>
<tr>
<td>Biodiversity</td>
<td>The location of the upgrade is known to contain a number of threatened plant species which should be considered in the design development and environmental assessment.</td>
<td>Targeted plant surveys by RPS Australia East Pty Ltd carried out between October and December 2015 are being used to guide future decision making, design and environmental assessment of the proposed upgrade to Chifley Road. The surveys identified the extent of the endangered plant species, <em>Acacia meiantha</em>, close to the proposed upgrade of the road bridge over the railway line at Clarence. We propose replacing the existing bridge, and widening and realigning to the north of the existing road which would avoid the <em>Acacia meiantha</em>. The Review of Environmental Factors for the proposal would also include management measures to safeguard against inadvertent impact during construction. Targeted surveys for the threatened <em>Persoonia hindii</em> and <em>Derwentia blakelyi</em> have also been carried out. Both species were not detected while the targeted surveys were completed, even though they were carried out at the appropriate time. The Review of Environmental Factors for the proposal would include management measures should these species or other unexpected threatened species be identified before or during construction.</td>
</tr>
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| **Design changes**             | Suggestion of an alternative upgrade of Scenic Hill that would remove the unsafe | Roads and Maritime has considered a number of upgrade options in developing the Scenic Hill proposal including an option that removes a number of the existing tight bends and provides a straighter alignment to a minimum 60 km/h design standard.  
While this option would also meet road user safety objectives for the project, it was not considered further due to:  
• Significant earthwork and high geotechnical and construction risks  
• Significant visual and environmental impacts  
• A high cost estimate and uncertainty that funding would become available when compared to other options that would be consistent with the existing road corridor and also meet road user safety objectives for the project. |
| 1 comment                      | bends and provide a long-term solution to road safety.                        |                                                                                                                                                                                                                                                                                        |
| **Further information request**| The respondent requested information about the construction completion date.   | It is anticipated construction for the proposal would be completed by early 2020, subject to approval and funding availability.  
The final bend at Scenic Hill has a very tight (about 25 metres) radius and a high crash rate (16 crashes over the last five years) over a distance of about 100 metres. The vertical grade on the inside edge line of the bend is about 20 per cent with the vertical grade on the centreline of the bend being about 12 per cent.  
The back to back nature of the final bend at Scenic Hill and corner around the Ex-Prisoner of War Memorial and associated steep grades also does not allow adequate drainage of the road during periods of rainfall.  
The Scenic Hill proposal would improve the existing grade by two to three per cent and the curve radius would be improved to 40 metres. In addition, the road drainage would be improved with a new pit and pipe system with shallow and standard guttering and concrete-lined catch drains. This would minimise the associated safety hazards described above. |
<p>| 2 comments                     | The respondent requested information about how the alignment for the final corner |                                                                                                                                                                                                                                                                                        |
| or bend on Chifley Road at Scenic Hill would be improved. |                                                                                                                                                                                                                                                                                        |</p>
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<tr>
<td>Strategic need 1</td>
<td>Justification to why the road bridge over the railway line at Clarence is being upgraded as opposed to Great Western Highway bridge over the railway line at Mount Victoria.</td>
<td>The upgrade to Chifley Road is being developed through the Bells Line of Road Corridor Improvement Program to address the poor crash history and generally poor horizontal and vertical alignment and narrower than standard lane and shoulder widths compared to similar roads. The replacement of the existing road bridge over the railway line at Clarence is also required due to the bridge’s existing poor condition and post and chain wire safety barriers which do not meet current standards. The long-term upgrade of the Great Western Highway between Mount Victoria and Lithgow includes a new highway alignment to the eastern side of the Mount Victoria Village (bypassing the existing road bridge over the railway line). This alignment is included in the overall concept design for the Great Western Highway between Mount Victoria and Lithgow which was completed in 2013. Due to funding constraints, the Australian and NSW governments agreed in 2012 on a revised package of upgrades to improve safety and travel conditions between Katoomba and Lithgow. This decision addressed recommendations from an independent review of the upgrade of the Great Western Highway west of Katoomba. Accordingly, the current Mount Victoria Village safety upgrade project focuses on the most effective use of available funds to deliver necessary safety improvements through the corridor. The independent review recommended the long-term upgrade corridor of the Great Western Highway be included in the Blue Mountains Local Environmental Plan 2015. This would allow work to proceed should additional funding become available. Roads and Maritime would consult with council, stakeholders and the broader community if a decision is made to progress the long-term upgrade proposal.</td>
</tr>
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</table>
3. Next steps

Roads and Maritime would like to thank everyone who took the time to consider our proposal and provide feedback. We have considered the comments received and provided our responses.

We will proceed with the proposal as proposed and finalise the concept design and environmental assessment. We will display the concept design and Review of Environmental Factors for this proposal in late 2016.

We will continue to keep the community informed of the proposal as it progresses.
Bells Line of Road/Chifley Road Upgrade

February 2016

The NSW Government has provided $4.1 million to plan for the future upgrade of Bells Line of Road between Bell and Lithgow to improve safety and travel conditions.

Roads and Maritime Services has started development of a concept design for this upgrade and is seeking early feedback until Monday 21 March 2016. We would like the community and stakeholders to provide feedback on our proposal and information you have about this stretch of road, so we can use it to help guide our future decision making and design.

Bells Line of Road is a State road which runs from North Richmond on the north-western outskirts of Sydney to Bollat (at the intersection with the Darling Causeway). At this point it becomes Chifley Road which then goes to Clarence and into Lithgow on the western side of the Blue Mountains. The Bells Line of Road is one of two routes westward from Sydney (the other is the Great Western Highway via Katoomba).

Chifley Road has a poor crash history and does not meet current new road standards and guidelines in a number of areas. Roads and Maritime is developing upgrades in response to crashes and alignment improvements through the Bells Line of Road Corridor Improvement Program.

Upgrades to Chifley Road would include:

- Improvements to the Scenic Hill section
- Replacement of the road bridge over the railway line at Clarence.
**Project benefits**

The main benefits of the proposal include:
- Improve road safety
- More reliable travel times
- Improved freight access and efficiency

Key features of the Scenic Hill proposal include:
- Widening and upgrading of Chifley Road
- An additional one kilometre descending lane
- Median barriers and improving drainage
- Improving alignment for the final corner or bend
- Improving access to the Ex-Prisoner of War Memorial on Chifley Road, Lithgow

Key features of the road bridge over the railway line at Clarence proposal include:
- Replacing the existing bridge over the Main Western Railway line
- Widening and realigning Chifley Road to connect to the new bridge
- Upgrading the intersection of Chifley Road and the road into the Clarence Colliery.

**Other projects being delivered in this area**

**Bells Line of Road Corridor Improvement Program**

In 2012, the Australian and NSW governments completed a long term strategic plan for the Bells
Line of Road corridor to identify improvement work and set priorities for the next 20 years and beyond. The plan recommends safety and traffic improvements for the existing route.

Since the program was developed two overtaking lanes have been constructed and opened to traffic. The first over taking lane was 940 metres long and located 7.5 kilometres west of Kurrajong Heights, between Pattersons Ridge Fire Trail and Glenara Road. The second was four kilometres west of Kurrajong Heights.

There are currently 10 proposed sites for improvements on the Bells Line of Road between Kurrajong Heights and Bell during the next four years.

In November 2015 work began on two overtaking lanes, the first will be one kilometre long, eastbound of Glenara Road and Pittmans Road, Kurrajong Heights. The second overtaking lane will be a 700 metre long, westbound overtaking lane about 100 metres west of Berambling Crescent, Berambling.

Richmond Intersection Improvements

Richmond Intersection Improvements Stage 1 was completed in October 2015 with work including:

- Widening the intersection to allow for a dedicated right turn lane from Kurrajong Road into Old Kurrajong Road for motorists travelling south
- Providing a dedicated left turn lane from Old Kurrajong Road into Kurrajong Road including a westbound acceleration lane.

Roads and Maritime wrote to the community to request feedback on Stage 2 work in October 2015. As part of Stage 2 work, Roads and Maritime is proposing to upgrade the intersections at Bells Line of Road and Grose Vale Road, North Richmond and March Street and Bosworth Street, Richmond.

The consultation period was scheduled to close on Wednesday 14 October however, due to a high interest in the work, Roads and Maritime extended the consultation period into November. The community will be informed of the closing date for comments separately.
For more information about these projects, contact our delivery partner on 1800 332 660 or email enquiries_nsw@downermouchel.com

What’s happening now?
Planning for the proposed Bells Line of Road/Chifley Road Upgrade has started. As part of our work, Roads and Maritime will be carrying out field investigation work along the road corridor.

What happens next?

- Initial development
- Concept design and environmental assessment – 2015/2016
- Display of the review of environmental factors – mid late 2016
- Approval to proceed
- Detailed design*
- Construction

*Subject to project approval and funding availability

Have your say
We would like to talk with the community and get your feedback on the proposed Bells Line of Road/Chifley Road Upgrade. Your comments will be considered and used to help guide future decision making and design.

You can provide your feedback to the Bells Line of Road/Chifley Road Upgrade by:

- Emailing ChifleyRoadUpgrade@rms.nsw.gov.au
- Writing to the Bells Line of Road/Chifley Road Upgrade project team, Roads and Maritime Services, PO Box 973, Parramatta NSW 2124

We are inviting feedback until **Monday 21 March 2016**.

For further information about the Bells Line of Road/Chifley Road Upgrade contact the project team on 8849 2470 or email ChifleyRoadUpgrade@rms.nsw.gov.au Information about the project is also available at www.rms.nsw.gov.au, search for Bells Line of Road/Chifley Road Upgrade.
Appendix B – Consultation distribution area

Scenic Hill

Road bridge over rail line at Clarence