

Bells Line of Road: upgrade vs new construction of Expressway

The RTA should apply its standard strategy of one road for access and one for mobility to the west.



Upgrading the existing Bells Line would provide two access roads over the Blue Mountains and provide little, if any, relief for the already over stretched and hugely expensive Great Western Highway.

A new, preferably class 6R road (divided carriageway with four or more lanes), over Bells Line would improve safety on the most dangerous transport corridor in NSW, and provide the same standard of mobility to the west that is currently enjoyed to the north, south west and south of Sydney.

What is the function of the Bells Line of Road?

The RTA states that road function should address the needs of:

- Mobility - the movement of people and goods.
- Access - the ability to enter/exit land use adjacent to the road. (RTA, 2008)

The existing Bells Line is one of two road links between the Central West of NSW and Sydney. The other link is the Great Western Highway which is very much a mixed function road, providing both mobility and access to the major Blue Mountains centres of Blaxland, Springwood, Hazelbrook, Wentworth Falls, Katoomba, Blackheath and Mount Victoria as well a number of smaller centres, before linking up with Lithgow at the western end.

By comparison Bells Line is much more focused on mobility, providing a linkage between the Central West of NSW and Sydney. The Central West statistical division has a population of 183,000, far outweighing the population of the small villages along Bells Line, most of which have populations well below 2,500.

Is the Bells Line of Road safe?

Safety is always a prime consideration in road travel. The table below shows the Bells Line has a much higher rate of crashes and casualties per 100 Million Vehicle Kilometres Travelled (100MVKT) than all other highways in the NRMA report. There IS a basis for the safety concerns about Bells Line often expressed by people in the Central West.

2000-2002 Accident Rates NSW Major Routes per 100MVKT*

	Crashes	Casualties
Bells Line Road	65.5	39.0
Great Western Hwy	51.3	30.8
Pacific Highway	26.9	19.2
Princes Highway	37.0	23.5
Hume Highway	18.3	10.9
Sturt Highway	17.9	14.4
Mitchell Highway	21.7	13.5
Mid-Western Hwy	18.7	11.5
F3 Freeway	23.9	10.8

(NRMA, 2010)

* These are the most recent MVKT statistics available. The RTA is currently recalculating MVKT using more recent crash statistics.

Is the existing Bells Line of Road at the appropriate rating in the RTA Road Network Management Hierarchy given its traffic volumes and function?

Answer: No

Bells Line is currently rated Class 3R in the RTA Road Network Management Hierarchy (RTA, 2008). A Class 3R road typically has Average Annual Daily Traffic (AADT) of 4,500 vehicles including 500 heavy vehicles and speed limits of between 80-100 kms/hr (RTA, 2008). The Bells Line carries 3,000 to 4,000 AADT vehicles along its central length which is consistent with its rating (RTA, 2010).

However, a significant amount of traffic, that would normally be expected to use Bells Line in its mobility function, is diverted to the Great Western Highway (or even broader diversions through Goulburn or Newcastle). The diversion is the consequence of:

- Safety concerns about Bells Line; and
- Constraints associated with vertical and horizontal alignment (that is crests and curves) meaning that B Doubles longer than 19 metres are not permitted to use the Bells Line Road (Sinclair Knight Merz, 2009).

Diversion has contributed to traffic flows on the Great Western Highway of 25,000 to 30,000 AADT (RTA, 2010). This is well above 10,000 AADT, the traffic flow associated with the Great Western Highway's 4R rating (RTA, 2010). Based on traffic flow, the Great Western Highway should be class 6R, but this is not possible given its mixed function of access and mobility. A 6R typically has limited access to improve mobility.

Therefore, the Bells Line of Road is NOT fulfilling its mobility function with consequent significant problems on the Great Western Highway.

Is Bells Line of Road a Special Case?

Answer: Yes.

- The RTA has generally adopted the successful strategy of one road for access and one road for mobility in most of the busy transport corridors within Sydney, and those linking Sydney with other major centres or regions (RTA, 2008). However the RTA has not adopted this strategy for the corridor linking Sydney with the economically important Western region of NSW.
- The Great Western Highway has traffic volumes that warrant a 6R classification, however the access function required by the community of the Blue Mountains means that this road CAN NEVER achieve a 6R mobility function.

The attempt to achieve this dual function of access and mobility with very high traffic volumes has resulted in great expense for comparatively little result. The cost aspect of the Great Western Highway is further exacerbated by the need to compensate existing property owners or to preserve buildings of heritage value or the views of existing residents.

It is reported that, in one case, such considerations resulted in one kilometre of road widening costing \$82 million (pers. com. Office of Gerard Martin MP).

- The RTA strategy of trying to combine access and mobility in the Great Western Highway, while neglecting Bells Line, is flawed and is associated with great expense but little if any improvement in mobility for Western NSW.



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