

# Great Western Highway Upgrade:

## Priorities for active transport

SEPTEMBER 2022

REVISION A

ISSUED 26<sup>TH</sup> SEPTEMBER 2022

## Contents

<b>Foreword</b>	<b>1</b>
<b>What is planned?</b>	<b>2</b>
<b>Useful frameworks</b>	<b>3</b>
<b>Active travel plans for the Great Western Highway upgrades</b>	<b>4</b>
<b>Recommendations for the Great Blue Mountains Trail</b>	<b>6</b>
<b>Medlow Bath</b>	<b>7</b>
<b>Recommendations for Medlow Bath</b>	<b>8</b>
<b>Conclusion</b>	<b>9</b>
<b>References</b>	<b>9</b>

## Foreword

We thank Transport for NSW for the opportunity to discuss active transport linkages and opportunities in relation to the Great Western Highway (GWH) Upgrade Program.

Bicycle NSW joins the Blue Mountains Cycling Safety Forum (BMCSF)'s call for a holistic approach to planning active transport networks within the Blue Mountains LGA. The timely construction of this vital corridor connecting Sydney and the Central West needs to be fully integrated and balance the increased movement of freight with community and visitor needs for liveability.

In most areas, the proposed design for the duplication of the GWH between Katoomba and Blackheath (known as 'GWHD East') offers a unified approach in terms of balancing community and visitor needs alongside ensuring the safety, directness, coherence, amenity and comfort of cyclists and pedestrians. This is achieved through reduced traffic speeds through Medlow Bath town centre, separation of cyclists from traffic, and providing adequate road shoulders.

We share community and BMCSF's safety concerns in relation to sections of Medlow Bath where there are no road shoulders over the railway bridge, and support a range of alternatives that would improve safety, accessibility and amenity for pedestrians and cyclists. In keeping with the TfNSW Movement and Place Framework and Future Transport Strategy 2056, we strongly support 'off-highway shared paths which connect to town centres, schools, railway stations, popular trail heads for mountain biking and bushwalking and provide safe highway crossings for cyclists and pedestrians.' (BMCSF 2022)

Separating local and tourist traffic from through traffic and freight would also preserve the environment, heritage, liveability, and tourist economy of this iconic place. For future planning purposes, this may necessitate revisiting the plan to extend the tunnel network to link Katoomba with Lithgow with an underground high-speed motorway, thereby allowing Medlow Bath to thrive as part of the Upper Blue Mountains premier tourism destination, without the heavy traffic corridor.

In preparing this submission, we acknowledge the detailed contributions of BMCSF. Members' detailed knowledge of the local area, heritage, demographics and travel behaviour, along with their commitment to safety and accessibility, has given depth to the input from Bicycle NSW.

This discussion paper shall examine what is offered for active travel for people living in and visiting the Blue Mountains. There are some great plans for cycling and walking that will be enabled by the highway upgrades alongside opportunities for improvement.

Bicycle NSW has been the peak bicycle advocacy group in NSW for 47 years, and has over 30 affiliated local Bicycle User Groups. Our mission is to *'make NSW better for all bicycle riders'* from 8 to 80 years of age, and we support improvements to facilities for pedestrians and cyclists. We advocate for new cycling routes that provide connections to jobs, schools and services for daily transport and recreation trips. Bike riding provides a healthy, congestion-reducing, low-carbon form of travel that is quiet, efficient and attractive for all ages with the correct infrastructure design.

## What is planned?

The Great Western Highway Upgrade Program is an \$8 billion (\$4.5 billion currently committed) combined State and Federal infrastructure project to duplicate the Great Western Highway between Katoomba and Lithgow. The 34 km corridor is regarded by Infrastructure Australia as a priority initiative due to its unique significance as a combined national freight and tourism corridor (TfNSW 2022).

Average daily traffic volumes in the corridor vary from around 15,000 to 20,000 vehicles per day near Katoomba. The high proportion of heavy vehicles (between 12 per cent and 24 per cent) 'reflects the fact that the Great Western Highway link to the Central West carries 18,800 tonnes of freight per day (10,300 towards Sydney and 8,500 towards the Central West)' (TfNSW 2022). As population density in Sydney and the Central West increases, so shall the need for increased freight. In order to accommodate this growth in mixed traffic, the stretch of road from Katoomba to Lithgow will be widened from two lanes to four.

Whilst the increase from two lanes to four may temporarily reduce congestion, it will also absorb latent demand for travel. There will be no medium- or long-term impact on the increasing freight task without offsets, such as incentives to move freight onto rail. We know from induced demand - the dynamic in behavioural economics proven repeatedly since the 1960s (Mann 2014) - that increased traffic lanes for vehicles will increase traffic congestion. It is therefore imperative that 'the NSW Government (invests), with Commonwealth contributions, in rail upgrades and intermodal facilities to shift more of the freight task onto the rail network to support rapid transit freight movements' (BMCSF 2022, p.5). This may involve provision of more passing loops, freight consolidation hubs and economic incentives.

Better still, and in keeping with the Future Transport 2056 concept of a '30-minute city', strategic planning must enable the Central West and Central Tablelands 'to grow regional population centres or develop hubs for people to work and live. Such planning should include a very fast train connection to Sydney. This will also assist in ensuring that growth in the GWH corridor through the Blue Mountains can be managed sustainably' (BMCSF 2022, p.3)

The importance of an integrated plan for GWHD East that balances increased movement along this strategic corridor with the socioeconomic, environmental and cultural significance of 'place' is outlined in Future Transport 2056.

## Useful frameworks

### Future Transport 2056

Recent innovative thinking within the NSW Government around 'place' has superseded 70 years of car-centric planning that focused on movement to the detriment of community, urban amenity, walkability, public health and air quality. Future Transport 2056 and the current TfNSW frameworks guiding major infrastructure projects strive to seek a **much better** balance between *movement* and *place* by adopting an integrated approach.

### Movement and Place

The concept of 'Movement and Place' underpins Future Transport 2056. It is a planning framework that ensures 'movement' and 'place' are considered together as part of a 'place-based' approach to the planning, design, delivery and operation of transport networks...and puts the community at the centre of transport planning and delivery' (p. 89). Movement and Place takes a cross-governmental integrated approach to planning and no longer considers roads and movement in isolation to community needs. This approach is required to coordinate, build and maintain active transport infrastructure associated with the GWH duplication.

The **Road User Space Allocation Policy** and **Providing for Walking and Cycling on TfNSW Projects Policy** (TfNSW 2022) are integral to support TfNSW movement and place thinking which seeks to prioritise walking and cycling in infrastructure delivery.

### Future planning means encouraging mode shift towards sustainable transport

'Planning for the future means preserving suitable options for future uses and travel behaviours. It also means improving the way we integrate land use management, demand for travel and utilisation of all transport assets to optimise safety and performance, and maximise carrying capacity as passenger and freight volumes grow.' (p. 88-94) Walking and cycling and public transport will play a key role in reducing congestion and mode shift away from private car travel.

### Build the 30-minute city

'Realising the 30-minute city will require a sustained and staged investment program to protect corridors and then develop an **integrated** transport system that includes city-shaping, city-serving and centre-serving corridors and strategic freight networks. It will also require more efficient use of the current network to reduce travel times and meet customer demand.' (p.126) The 30-minute city will support Central Western and Central Tablelands communities upstream of the GWH, thereby building resilience into the project.

### Supporting the Western Parkland City with more public transport

'The developing Western Parkland City (comprising the Blue Mountains) will require investment in the mass transit network to shape a sustainable urban form and grow jobs, and support 30-minute access to centres by public transport' (p. 129).

## **Towards Net Zero requires a mode shift away from private car use**

'To encourage more people out of their cars we need to continue to make walking and public transport more attractive options' (p. 147). New and emerging service models, such as car sharing and automated shuttles, need space on the transport network.

## **Social sustainability and accessibility**

It is essential to ensure that transport contributes positively to society, the environment and the economy. An accessible public and active transport network will mean more choice for people with mobility constraints and will make travel easier for everyone, whatever their age, ability or personal circumstances (p.161).

For all of the above reasons, the Great Western Highway upgrades must enhance rather than detract from its role as a key movement corridor for the Blue Mountains region.

## **Active travel plans for the Great Western Highway upgrades**

### **Recommendations for local bicycle networks**

Bicycle NSW and BMCSF recommend investment in addition to the \$4 million pledged by NSW Government.

Our recommendations for active transport include:

- Complete the network of local connections to destinations in the Eastern Escarpment (Glenbrook and Knapsack areas). This includes connections from Tunnel Gully, and the proposed Blue Mountains City Council Glenbrook Tunnel Cycleway, to the Nepean River, which has in principle support from government<sup>1</sup>.
- Reduce speed on the local road network to enable a shared space for on-road cycling (see 30km/h on local streets)
- Deliver new shared paths and routes connecting town centres with local streets, shops, schools and parks.
- Future upgrades of the GWH must include off-highway shared paths, safe road shoulders and traffic-free zones for the middle sections of this active transport / tourism network.
- The River to Mountains Cycling Plan will inform a master plan for the area to be developed by the Blue Mountains City Council. The masterplan will tie into the Eastern Escarpment Plan which incorporates public recreation in Knapsack Reserve.

To this end, Bicycle NSW supports the current application from by BMCC for WestInvest grant funding for the development of a cycling network and would encourage the NSW Government to provide ongoing support to the Council and community stakeholder organisations such as the BMCSF to develop active transport and also recreational off-road cycling networks and trails.

### **The proposed Katoomba to Blackheath Cycleway**

The Upper Mountains Cycleway, planned alongside the GWHD East between Katoomba and Lithgow, aims to provide a safe and separated walking and cycling network along the corridor that will enjoy

bushland amenity. It should also be considered as part of the NSW Government's planned trans-mountains cycling and pedestrian network, the Great Blue Mountains Trail, outlined in Sydney's Green Grid Strategy. This would connect major town centres from Penrith to Blackheath. It is supported by the Premier's Priority for a Better Environment which includes Greener Public Spaces. Project drivers identified by BMCSF include:

- Public health and wellbeing
- Promotion of green access corridors connecting Blue Mountains communities with Western Parklands City
- Improved liveability, walkability and access to key Blue Mountains destinations for locals and visitors.
- Zero cost transport options for all members of the community which bridges the social equity gap which currently exists.
- Sustainable economic growth for Blue Mountains and neighbouring regions will be promoted by establishing a quality pedestrian and cycling network linking the Nepean district with Blackheath. Improved active transport promotes the area locally and nationally whilst reducing susceptibility to tourism market shocks internationally.
- The incorporation of existing cycleway network infrastructure between the Nepean River and Glenbrook from the existing RiverWalk shared path.
- The incorporation of existing GWH transport corridor and Crown land reserves including the heritage rail tunnel near Glenbrook.

### **30km/h on local streets**

Residential streets form a critical part of any active travel network. 30 km/h speed limits reduce the need for separate bicycle infrastructure on local residential roads. 30 km/h is the optimal speed limit to allow people driving and cycling to share the road safely and has become a standard speed limit in many parts of the world. All single lane roads in Spain have been under a 30km/h limit since May 2021 and 30% of UK residents live in 20mph areas.

The Western Australian Department of Transport has rolled out several 'bicycle boulevards' using residential streets as part of its Safe Active Streets programme. Lower speed limits are an important building block for Vision Zero, an approach to road safety launched in Sweden in 1994 with the simple premise that no loss of life is acceptable. The key policies include prioritizing low urban speed limits, pedestrian zones, physical separation between bicycle and car traffic, data-based traffic enforcement and behaviour-change education.



## Recommendations for the Great Blue Mountains Trail

The Great Blue Mountains Trail (GBMT) in its current form is not fit for purpose as a viable bike path. The proposal by TfNSW to replace large sections of the GBMT with a new cycleway and integrate and upgrade other parts is very welcome. A number of suggestions for improvement of the trail put forward by BMCSF are supported by Bicycle NSW, and we anticipate their adoption by TfNSW. These include more direct routes from Old Bathurst Rd to Foy Rd, with easier gradients.

Bicycle NSW supports the following further recommendations by BMCSF:

- **Integrate new and existing cycleways** with a concrete or asphalt surface which is smooth and gravel free.
- **Open Coachhouse Lane for active travel.** Provide a seamless connection to the new service road / cycle path off Coachhouse Lane at Medlow Bath by adopting an alternative access route using Crown land, create access to / from the Station Street signals crossing (a more seamless and direct route to Coachhouse Lane to complement the lifts at the railway station) and connect the service road at the eastern tunnel portal to Blackheath utilising the gentler gradient of the GWH corridor (Figure 1).



Figure 1: GWH, Coachhouse Lane to Railway Parade and bridge, Medlow Bath (Source: TfNSW)

- **Make Foy Avenue safe for active travel.** BMCSF recommends appropriate road surface and/or road-side signage to demonstrate the road is a shared space. Commence the cycleway before the intersection at Foy Ave and the Highway to (i) separate motor vehicles, pedestrians and cyclists and

(ii) signal the line of path for cyclists crossing the intersection to the cycleway on the Delmonte Road side.

- **Make Medlow Bath Bridge safe for mixed traffic.** Medlow Bath Bridge has no road shoulders which raises the risk for on-road cyclists. This is a major safety concern and we support recommendations by BMCSF for 1.5m wide road shoulders each way with a slipway 'leading off the no traffic lane before the bridge into Station Street.' This would include signage directing cyclists to the lights where they could reconnect with the road shoulder to continue to Blackheath (BMCSF Submission 2022, p. 11)
- **Support access from old Bathurst Road to Explorers Road** on the railway side of existing Great Western Highway including safer crossings.
- **Close Delmonte Ave and Bellevue Crescent to cars.** Eliminating motor vehicle access to residential backyards from the cycleway and safe crossing treatments at intersections with Bellevue Crescent would improve cyclist safety and preserve the life of the infrastructure.
- **Recommended locations for lighting:** Old Bathurst Rd to cycleway start; Interpretation/ Heritage area; Explorers Road crossing of existing highway (direct route); Under and around the twin carriage way bridge area; Foy Ave (including the intersection of the Great Western Highway and Foy Ave); Between Bellevue Cres intersection and through to Coachhouse Lane; Any sharp bends or hazards (BMCSF Submission 2022, p. 8)

## Medlow Bath

Medlow Bath is a unique place of national, historic and economic importance. Sitting on a mountainous spur, Medlow Bath attracts repeat visits and encourages people to linger and soak in the natural beauty. The Blue Mountains receives on average 4.4 million visitors supporting \$169 million in annual local supply chain revenue (BCC 2021). Many travel through and stop in Medlow Bath. The median age of people living in the Blue Mountains is 44. Children aged 0 - 14 make up 18.2% and ages 65 and over make up 19.7% of the population (ABS 2022). At either end of the human developmental scale, the ability to move about freely and safely is essential for community health and wellbeing and a fundamental human right. Many aspects of the proposed GWH upgrades will benefit these aims:

- Enhanced public transport facilities including new kiss-and-ride and indented bus bays which would provide a safe location for customers to transfer between modes
- A new shared use path (SUP) for pedestrians and cyclists which would also help to improve safety, as well as promote better health and encourage tourism by enhancing connections to existing trails.
- A new pedestrian bridge, stairs and lifts, minimising potential for pedestrian/vehicle conflicts and providing an accessible path across the highway.

The upgraded highway will be able to support longer, heavier vehicles that are able to transport more freight per vehicle (REF p. 22). This will be achieved through upgraded intersections at Bellevue



Crescent and the Hydro Majestic Hotel with new turning lanes, a U-turn bay, signalisation, lane markings and signage. As discussed however, building more roads never solves the traffic problem. Longer term movement and place solutions aligned to Future Transport 2056 require a strengthening of capacity along the rail corridor and increased provision for active transport.

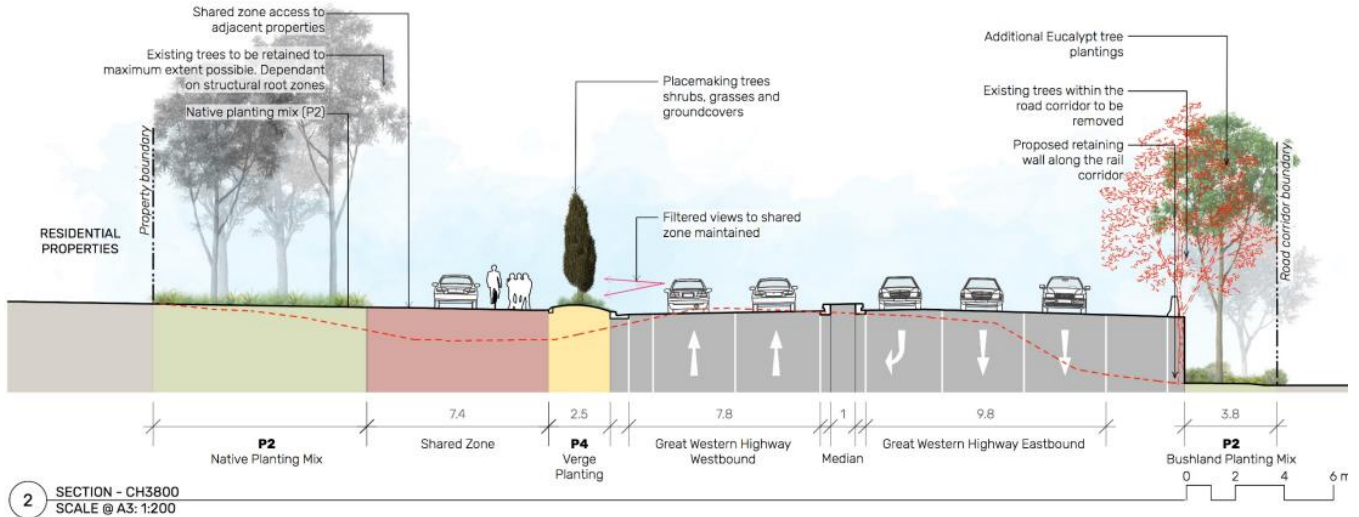


Figure 2: Typical cross section within the southern portion of proposal – north of Bellevue Crescent showing shared zone and right hand turn lane. (REF p. 46)

## Recommendations for Medlow Bath

A whole-government approach is required to future proof and better manage Blue Mountains transport networks. This should account for the strategic importance of the state road network for moving freight and the Blue Mountains LGA as a place of cultural and economic importance to NSW.

- **The rail network** needs to be upgraded to remove increasing freight volumes from the road network. Provision for bicycles rolled onto trains (and not boxed) make rail travel accessible and attractive for bicycle tourism and commuters.
- **The railway bridge** widened in 2002 anticipated a duplication of lanes through Medlow Bath. At that time there was no movement and place framework governing TfNSW projects. As discussed, the bridge will need treatment contiguous with the kerb-side redevelopments for Medlow Bath. It will also need road shoulders accessible to cyclists.
- **The proposed pedestrian bridge** across the high street leading to the Hydro Majestic would be more accessible and convenient with a curvilinear bike ramp as proposed by BMCSF. This would enable cyclists to negotiate the crossing without having to dismount.



Figure 3: Proposed footbridge over the duplicated GWH at Medlow Bath (TfNSW/ [Community Analytics](#))

## Conclusion

Bicycle NSW supports the aim of balancing the future needs of the Blue Mountains region whilst making the road network safer and more accessible for all users. As population increases, so will the importance of having a fully integrated active transport strategy alongside a fast and efficient rail network. All new road infrastructure, in line with the Movement and Place framework, must prioritise and allocate space for public transport, walking and cycling. This is not only essential for reducing congestion and CO<sub>2</sub> emissions but also for improving public health, and socioeconomic resilience in communities.

We welcome planned improvements to the Great Blue Mountains Trail (GBMT) and the establishment of a fit-for-purpose and coherent bicycle network linking communities in the Upper Blue Mountains. This will make an enormous difference to the lives of locals and visitors allowing them to move safely and comfortably separated from road traffic. For this to be successful, we ask TfNSW to continue consulting with BMCSF and Bicycle NSW on their recommendations for the GBMT and active transport links between Katoomba, Blackheath and Medlow Bath and Medlow Bath with respect to street treatments, signage, lighting and reduced speeds.

## References

1. TfNSW 2022, The Great Western Highway Upgrade Program, from Katoomba to Lithgow Project, Executive Summary, The Great Western Highway Upgrade Program, from Katoomba to Lithgow Project
2. Mann, A. 2014, Jun 17. Wired. What's Up With That: Building Bigger Roads Actually Makes Traffic Worse <https://www.wired.com/2014/06/wuwt-traffic-induced-demand/>
3. Blue Mountains cycle Safety Forum 2022, Medlow Bath Upgrade REF and Concept Design Submission <https://www.bmcsf.org/post/bmcsf-calls-for-a-holistic-approach-to-planning-active-transport-networks-in-blue-mountains-lga>

4. NSW Government, Future Transport 2056 [Online 1/4/2020] <https://future.transport.nsw.gov.au/plans/future-transport-strategy/futuretransport-greater-sydney>, Points 3-5
5. NSW Government, Providing for Walking and Cycling in Transport Projects Policy CP21001, <https://s23705.pcdn.co/wp-content/uploads/2021/02/providing-for-walking-and-cycling-in-transport-projects-policy.pdf>
6. NSW Government, Road User Space Allocation Policy CP21000, [Online as at 19/2/2021] [www.transport.nsw.gov.au/system/files/media/documents/2021/road-user-space-allocation-policy.pdf](http://www.transport.nsw.gov.au/system/files/media/documents/2021/road-user-space-allocation-policy.pdf)
7. Sydney's (West) Green Grid Strategy <https://www.governmentarchitect.nsw.gov.au/projects/sydney-green-grid#:~:text=The%20Sydney%20Green%20Grid%20is,biodiversity%20and%20ensure%20ecological%20resilience>.
8. REF 2021, Great Western Highway- Medlow Bath, Review of Environmental Factors, <https://media.caapp.com.au/pdf/wu7kij/dd83160b-6f4f-4254-9ab2-cbccff19d28f/Review%20of%20Environmental%20Factors.pdf>
9. Blue Mountains City Council 2021, Blue Mountains tourism profile, <https://www.bmcc.nsw.gov.au/sites/default/files/docs/Blue%20Mountains%20Remplan%20Tourism%20Profile%202021.PDF>
10. ABS 2016, Blue Mountains all-persons quickstats, Australian Bureau of Statistics, <https://www.abs.gov.au/census/find-census-data/quickstats/2016/SED10011#:~:text=The%20median%20age%20of%20people,up%2019.7%25%20of%20the%20population.&text=Of%20people%20in%20Blue%20Mountains%20aged%2015%20years%20and%20over,were%20either%20divorced%20or%20separated>

---

<sup>i</sup> See Ministerial response to BMCSF, Your Ref: 01549118