8. Conclusion

This chapter provides the justification for the proposal taking into account its biophysical, social and economic impacts, the suitability of the site and whether or not the proposal is in the public interest. The proposal is also considered in the context of the objectives of the EP&A Act, including the principles of ecologically sustainable development as defined in Schedule 2 of the Environmental Planning and Assessment Regulation 2000.

8.1 Justification

The proposal is needed to provide a safer and more efficient link between Central West NSW and the Sydney Motorway Network for freight, tourist and general traffic.

An upgrade of the Great Western Highway between Katoomba and Lithgow can be supported by reference to several strategic planning and policy documents including *NSW Future Transport Strategy* 2056 (TfNSW, 2018a) and the *NSW Freight and Ports Plan* (TfNSW, 2018b). The proposal has been reviewed against and is found to be consistent with relevant strategic plans.

Average daily traffic volumes in the corridor vary from around 20,000 vehicles per day near Katoomba to around 8,500 vehicles per day towards Forty Bends, and are growing between one to 1.7 per cent per annum. There is a relatively high proportion of heavy vehicles along the corridor (between 12 and 24 per cent) and this 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).

Upgrading to dual carriageway would provide travel time savings for all traffic users and would largely maintain those savings well into the future. Without an upgrade, travel times would worsen, while congestion would deteriorate to unacceptable levels.

The current performance of the corridor constrains access for freight infrastructure from the Central West to Sydney which would include the proposed Parkes National Logistics Hub and the Inland Rail Program.

As part of a staged upgrade program, the Medlow Bath proposal aims to deliver benefits consistent with Great Western Highway Upgrade Program objectives. The proposal would also provide safe and equitable access to the Medlow Bath Station platforms and to the pedestrian network surrounding the station, where it does not currently meet key requirements of the DSAPT or the DDA.

Through the design and environmental assessment process TfNSW has concluded that out of the options considered the preferred alignment for the Katoomba to Medlow Bath zone is the existing road corridor as it best meets the proposal objectives and development criteria for the proposal.

8.2 Objects of the EP&A Act

Table 8-1: How the proposal aligns to the objects of the EP&A Act

Object	Comment
1.3(a) To promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources.	The proposal would promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources. An integrated design is proposed that fits with the existing high visual qualities, ecology and character of Medlow Bath and the Blue Mountains setting. In addition, the proposal would contribute to the functionality of public spaces and enhance local and regional connectivity.
1.3(b) To facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment.	One of the proposal objectives is to maintain and enhance the local amenity and character and protect environmental and cultural assets. The proposal would improve active transport and local traffic connectivity along and across the corridors. As well as preserve local heritage assets and enhance local amenity and character through sensitive urban design. Ecological sustainable development is addressed in Section 8.2.1.
1.3l To promote the orderly and economic use and development of land.	The proposal forms part of the overall Great Western Highway Upgrade between Katoomba and Lithgow. One of the key objectives of the proposal, aligned with the Great Western Highway Upgrade Program objectives, is to improve the ability to drive regional economic development and freight productivity. The proposal would provide four lanes with dedicated turn lanes to separate heavy vehicle flow from locally turning traffic. The proposal would promote the orderly and economic use and development of land for the Blue Mountains region and along the freight transport corridor.
1.3(d) To promote the delivery and maintenance of affordable housing.	Not relevant to the proposal.
1.3l To protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats.	Section 6.1 addresses the biodiversity assessment for the proposal and identifies appropriate mitigation and management measures to avoid, minimise and mitigate potential impacts to threatened and other species of native animals and plants, ecological communities and their habitats.
1.3(f) To promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage).	The proposal would minimise impacts to the integrity of heritage sites, significant trees and cultural values of the community within the proposal. Environmental assessment addressing potential impacts and appropriate mitigation and management measures to preserve non-Aboriginal heritage and Aboriginal heritage and promote the sustainable management of built and cultural heritage is discussed in Section 6.7 and Section 6.8.
1.3(g) To promote good design and amenity of the built environment.	One of the key features of the proposal is the construction of a new pedestrian bridge that connects Railway Parade, Medlow Bath Station and new indented bus bays on both sides of the Highway in line with Transport Access Program requirements. The design of the pedestrian bridge and other features of the proposal would be sensitive to the locality to promote good design and amenity to the built environment.
1.3(h) To promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants.	One of the proposal objectives is to reduce actual and perceived safety risks. The proposal would separate traffic flows and user groups, upgrade objectives and provide safer facilities. Also, trees that have reached their end of life would be removed to address the risk of falling trees along the highway and rail corridor.

Object	Comment
	The proposal would also make network provisions for emergency services and provide safe continuous access to transport services.
1.3(i) To promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State.	Not relevant to the proposal.
1.3(j) To provide increased opportunity for community participation in environmental planning and assessment.	The community and relevant other key stakeholders have been consulted throughout the strategic and concept design of the proposal, assisting to shape the proposal to address the needs of the community. Consultation would be ongoing throughout detailed design and during construction of the proposal. Community involvement in the proposal is discussed in Chapter 5.

8.2.1 Ecologically sustainable development

Ecologically sustainable development (ESD) is development that improves the total quality of life, both now and in the future, in a way that maintains the ecological processes on which life depends. The principles of ESD have been an integral consideration throughout the development of the project.

ESD requires the effective integration of economic and environmental considerations in decision-making processes. The four main principles supporting the achievement of ESD are discussed below.

The precautionary principle

The precautionary principle deals with reconciling scientific uncertainty about environmental impacts with certainty in decision-making. It provides that where there is a threat of serious or irreversible environmental damage, the absence of full scientific certainty should not be used as a reason to postpone measures to prevent environmental degradation.

This principle was considered during route options development (refer to Chapter 2). The precautionary principle has guided the assessment of environmental impacts for this REF and the development of mitigation measures. Specialist studies were incorporated to gain a detailed understanding of the existing environment and identify best practice environmental mitigation and management measures to minimise environmental risks.

Intergenerational equity

Social equity is concerned with the distribution of economic, social and environmental costs and benefits. Inter-generational equity introduces a temporal element with a focus on minimising the distribution of costs to future generations.

The economic benefits in the form of freight efficiency and development potential for surrounding areas for the current and future generation were identified. In addition, benefits that the project provides to current and future generations of local communities and the surrounding region that would maintain or enhance the health, diversity and productivity of the environment were identified.

Conservation of biological diversity and ecological integrity

Preserving biological diversity and ecological integrity requires that ecosystems, species and genetic diversity within species are maintained.

Landscape strategy was developed and implemented which reflected the structure and species of locally endemic flora to ensure that biological diversity in the local area is maintained. Also, site selection criteria were established for construction phase facilities that include minimising native vegetation clearance.

Improved valuation, pricing and incentive mechanisms

The principle of internalising environmental costs into decision making requires consideration of all environmental resources which may be affected by the carrying out of a project, including air, water, land and living things.

Environmental issues were considered as key matters in the route selection process and in the economic and financial feasibility assessments for the project. The value of the project to the community in terms of improved safety was recognised.

Mitigation measures for the avoidance, reuse, recycling and management of waste during construction and operation are to be implemented.

8.3 Conclusion

The proposed Great Western Highway Upgrade at Medlow Bath is subject to assessment under Division 5.1 of the EP&A Act. The REF has examined and taken into account to the fullest extent possible all matters affecting or likely to affect the environment by reason of the proposed activity.

This has included consideration (where relevant) of conservation agreements and plans of management under the NPW Act, biodiversity stewardship sites under the BC Act, wilderness areas, areas of outstanding value, impacts on threatened species and ecological communities and their habitats and other protected fauna and native plants. It has also considered potential impacts to matters of national environmental significance listed under the Commonwealth EPBC Act.

A number of potential environmental impacts from the proposal have been avoided or reduced during the concept design development and options assessment. The proposal as described in the REF best meets the project objectives but would still result in some impacts on non-Aboriginal heritage, landscape character and visual impact, noise and vibration, soils and water, contamination, traffic and transport. Safeguards and management measures as detailed in this REF would ameliorate or minimise these expected impacts. The proposal would also improve road safety and reduce travel times. On balance the proposal is considered justified and the following conclusions are made.

8.3.1 Significance of impact under NSW legislation

The proposal would be unlikely to cause a significant impact on the environment. Therefore it is not necessary for an environmental impact statement to be prepared and approval to be sought from the Minister for Planning and Public Spaces under Division 5.2 of the EP&A Act. A Biodiversity Development Assessment Report or Species Impact Statement is not required. The proposal is subject to assessment under Division 5.1 of the EP&A Act. Consent from Council is not required.

There would be no significant impact on any other aspect of the environment. Therefore it is not necessary for an environmental impact statement to be prepared and approval to be sought from the Minister for Planning and Public Spaces under Division 5.2 of the EP&A Act. The proposal is subject to assessment under Division 5.1 of the EP&A Act. Consent from Council is not required.

8.3.2 Significance of impact under Commonwealth legislation

The proposal is not likely to have a significant impact on matters of national environmental significance or the environment of Commonwealth land within the meaning of the EPBC Act. A referral to the Australian Department of Agriculture, Water and the Environment is not required.

This REF has been prepared to meet the requirements of the EPBC Act strategic assessment approval for TfNSW Division 5.1 road activities. A referral to the Australian Department of Agriculture, Water and the Environment is not required.