## 8. Sustainability

The Transport for NSW's environment and sustainability policy (2020) provides strategic direction to fulfil 'a duty to undertake our activities in the interest of the greater good, moving beyond compliance, and being a genuine leader in environment and sustainability performance'.

The Policy provides a clear commitment 'to delivering transport which contributes to economic prosperity and social inclusion in an environmentally responsible and sustainable manner, consistent with the Future Transport Strategy 2056'.

Supporting the policy is the Transport Sustainability Plan (Transport, 2021e) that sets out sustainability objectives relevant to transport projects. Table 8-1 details the sustainability themes and objectives of the plan and describes how the overall proposal meets those objectives.

Table 8-1: Sustainability Plan 2021 focus areas and goals

Sustainability	Sustainability goal	Proposal response
focus area	, 3	
Respond to climate change	Net zero emissions by 2050     Consider climate change risks in all decisions	Transport's G36 Environmental Protection specifications for construction will require contractors to demonstrate energy-efficient and time-efficient methods for handling and transporting materials and operation of plant. This would typically include reducing idling time, reducing the length of haulage routes by sourcing material locally and considering using a sustainable energy alternative for temporary lighting during night-work. This would minimise energy use and reducing greenhouse gas emissions during construction of the proposal.
		During operation, the proposal would reduce congestion during peak periods, thereby reducing idling time and consumption of fuels in vehicles. Ongoing energy consumption for the proposal would be for Intelligent Transport Systems and minimal street lighting.
		The provision of the improved active transport network would encourage more active transport users to travel between Katoomba and Blackheath.
		The proposed drainage system has been developed with sufficient capacity to account for any changed in localised flood intensity caused by higher intensity of rainfall due to climate change.
		Widening the highway would also improve access to natural disasters such as bushfire.
Protect and enhance biodiversity	No net loss of biodiversity	The development of the design has avoided and minimised impacts on threatened biodiversity by largely remaining within the existing road infrastructure corridor. Ongoing design development will further investigate potential opportunities to reduce direct footprint impacts. Residual impacts on threatened biodiversity will be offset (refer to Section 6.3.5). Transport is considering a parcel of land which may be suitable to meet its biodiversity offset requirements as well as provide compensatory land for the national park revocation. This offset land could be protected as part of the Blue Mountains National Park in
Improvo	- Davalan a airaular	perpetuity.  The proposal would minimise the environmental impacts identified in
Improve environmental outcomes	Develop a circular economy for Transport by designing waste and pollution out and keeping products and materials in use	Chapter 6 through the proposed management measures identified in Section 7.2.
		The cut and fill earthwork requirements for this proposal are relatively minor. Transport's detailed design process under specification PS311 Environment Design and Compliance involves the development of a Material Re-Use and Management Plan to identify strategies of 'avoid', 'reduce', 'reuse' and 'recycle' materials.

Sustainability focus area	Sustainability goal	Proposal response
	Reduce     environmental     impacts of projects     and operations	The proposal would also rehabilitate the existing pavement, where possible rather than removing it to go to landfill. Re-use of other 'waste' materials could include reusing vegetation cleared on site in mulch or for re-snagging waterways. Re-use of recycled materials would support the development of a circular economy.
		Dust generation is common during construction and dust suppression management measures will be implemented by the construction contractor so that they comply with Transport's G36 Environmental Protection specifications.
		The operational drainage design would result in a beneficial effect to water quality. Operational water quality treatments would be further investigated during detailed design in accordance with Transport's Water Sensitive Urban Design guidelines and in consultation with Blue Mountains City Council.
Procure responsibly	<ul> <li>All suppliers meet the standards in Transport Supplier Sustainability Charter</li> <li>Social and environmental outcomes included in all procurement decisions</li> <li>Go beyond minimum compliance targets in Aboriginal Procurement Policy</li> </ul>	<ul> <li>Responsible procurement will be carried out adopting the following initiatives:</li> <li>All tendered procurement would include non-price selection criteria that assesses relevant sustainability and social procurement measures.</li> <li>Implementing the Aboriginal Participation in Construction Policy.</li> <li>Where possible, procuring from small and medium-sized enterprises Aboriginal business and Australian Disability enterprises.</li> <li>Monitoring the supply chain to identify and address issues related to poor labour practices.</li> <li>Supporting local suppliers to minimise haulage distances of construction material when feasible.</li> </ul>
Partner with communities	<ul> <li>Always leave a positive legacy for communities as a result of projects</li> <li>Enable, apply and report on community engagement</li> </ul>	When operational, the proposal would have positive impacts on the Blue Mountains community. The proposal includes improved active transport links for the community. The provision of the upgraded active transport trail between Katoomba and Medlow Bath and new active transport trail within the Medlow Bath to Blackheath section would improve active transport connectivity between these townships. This would also connect the bus stops within the proposal area with sites of recreational, cultural and heritage value.
		The proposal would also leave a positive legacy for the Blue Mountains community by:  improving road safety (by widening the Great Western Highway, upgrading intersections and improving the alignment)  improving freight productivity  reducing congestion  enhancing locations with Aboriginal and non-Aboriginal heritage
		value through interpretation and urban design features.  Urban design has been integrated into the design development of the proposal and will continue through the detailed design process.  Appendix G includes the Urban Design report for the concept design.
Respect culture and heritage	<ul> <li>Aboriginal culture is integrated and preserved</li> <li>Acknowledging and incorporating culture through stories, examples, and best practice</li> </ul>	The proposal would have an impact on several non-Aboriginal heritage items (refer to Section 6.4.3). However, the existing heritage interpretation area on Nellies Glen Road would be retained and enhanced to display the Aboriginal and non-Aboriginal heritage of the area. This would allow better connection between the disparate heritage items and story of the cultural significance of Pulpit Hill, not just focusing on the former Explorers Tree. This area would be developed as part of the Great Western Highway Upgrade Program

Sustainability focus area	Sustainability goal	Proposal response
		heritage interpretation strategy, in consultation with the Blue Mountains City Council, Heritage NSW, Aboriginal knowledge holders and the local community.
		Aboriginal cultural heritage has been assessed in consultation with Aboriginal representatives. The proposal is not expected to have an impact on Aboriginal cultural heritage. Urban design principles and objectives for the proposal include the acknowledgment and response to Aboriginal values and places in the broader landscape; and for the consideration of interpretation of the heritage areas along the corridor (refer to Section 2.3.3).
		Transport is currently engaging with specialist heritage consultants GML Heritage and Balarinji Indigenous Design and Strategy to engage stakeholders in developing a cultural interpretation strategy across the Great Western Highway Upgrade Program – Katoomba to Lithgow. This cultural interpretation strategy would look to interpret both Aboriginal and non-Aboriginal heritage along the highway alignment and recognise the Aboriginal cultural significance of the region.
		The Pulpit Hill heritage interpretation area would be further developed as part of the Great Western Highway Upgrade Program cultural interpretation strategy, in consultation with the Blue Mountains City Council, Heritage NSW, Aboriginal knowledge holders and the local community.
Align spend and impact	All decisions     consider value     created from     sustainability     alongside financial     analysis	The proposal would provide a four-lane divided carriageway with dedicated turn lanes, which would improve freight productivity and reduce congestion. As a result, it would improve the ability for regional economic development in the Blue Mountains and Central West and Orana regions through improved road and freight connection between these regions and Sydney.
	Reduce whole of life costs for the transport network	The proposal would improve traffic flow during traffic incidents and emergencies by providing safe, continuous access to transport services.
Empower customers to make sustainable choices	Use customer journeys to inform, engage and inspire more sustainable practices and demonstrate Transport's progress	The proposal provides for active and public transport in accordance with Transport for NSW's draft Providing for Walking and Cycling in Transport Projects Policy. The proposal would re-establish and extend the existing shared use paths and provide appropriate access to existing bus stops in the study area. In doing so, it would encourage customers to use active and public transport when travelling between the townships of Katoomba, Medlow Bath and Blackheath.