

Transport
for NSW

Sydney to Central West Corridors

White Paper





Acknowledgement of Country

Transport for NSW acknowledges the Traditional Custodians of the lands on which we work and live. We pay our respects to Elders past and present and celebrate the diversity of Aboriginal peoples and their enduring cultures and connections to the lands and waters of New South Wales.

The Sydney to Central West alignment traverses the traditional lands of the Darug, Gundungurra, and Wiradjuri Nations. These ancient travelling routes and Songlines have long played a vital role in connecting people to place and place to people.

Encompassing the Greater Blue Mountains World Heritage Area, listed in 2000 with UNESCO World Heritage for its exceptional natural and Aboriginal values, this includes hundreds of ancient rock engravings, ceremonial sites, and artifacts that reflect thousands of years of continuous cultural practice.

Stretching from the mountains to the sea, these pathways weave through complex landscapes, open grasslands, and interconnected water systems. The corridors contain significant cultural heritage, including ancient rock engravings, ceremonial grounds, and archaeological evidence of continuous cultural practice.

For millennia, Aboriginal peoples have travelled these routes for trade, ceremony, and cultural exchange. Today, many of our modern transport corridors – rail lines, roads, and water crossings – follow these same Songlines, trade routes, and ceremonial paths that have guided movement across Country for tens of thousands of years.

Transport for NSW is committed to honouring Aboriginal peoples' cultural and spiritual connections to land, waters, and seas, and to recognising their rich contributions to society. We strive to embed respect for Country and culture in all aspects of our planning and delivery.

Above: Sunrise over the Three Sisters and Mount Solitary in the Blue Mountains National Park, Katoomba © Filippo Rivetti, Destination NSW

Cover: Family enjoying Govetts Leap Lookout, Blackheath © Destination NSW

Minister's foreword



The Sydney to Central West corridors play a vital role in connecting people and places, from the edge of Western Sydney to the heart of regional NSW, and those who have chosen to

make their home in the spectacular Blue Mountains region. Long before roads and vehicles, these same paths were walked by Aboriginal peoples for thousands of years, connecting Country, families, trade and stories. Today the Great Western Highway and Bells Line of Road continue that connection, carrying with them the stories, livelihoods and journeys of all who travel across them.

These east-west routes are much more than transport corridors, they are lifelines and the lifeblood of the communities, businesses and industries that rely on them every day. They link people to opportunity and to each other by foot, by wheel and by will, across some of the most breathtaking and challenging landscapes in Australia.

Travel across the Sydney to Central West corridors can be broadly grouped into three overlapping categories: through movement, in-and-out movement, and local intra-regional movement, with each serving a distinct function, supporting community life, connecting regions, or facilitating statewide and interstate flows. Together, they shape how people and goods interact with the network.

This White Paper sets out our response to the challenges and opportunities facing the corridors now and into the future.

It reflects what we have heard from local councils and communities, who have all made it clear that a coordinated, community-focused approach is needed. They have told us that we must do more to manage congestion, improve safety, support growing populations, and protect the identity of the villages and landscapes that make this region so unique.

The Blue Mountains and Central West are growing and changing. More people are visiting iconic destinations like the Three Sisters and Scenic World. Freight movements are increasing, especially as Western Sydney expands, and the opening of the Western Sydney International Airport will only accelerate demand. At the same time, we know many communities along the corridors, particularly in the mountains and smaller towns, face limited access to active and public transport, ageing infrastructure, increasing congestion and increased vulnerability to natural disasters like floods, landslides and bushfires.

Recognising the benefits and limitations of the Greater Blue Mountains World Heritage Area, the Government is committed to delivering solutions that reflect the realities of these places. That does not mean reliance on big infrastructure projects, although those are important, but also smarter, faster, and more targeted improvements that address safety, reliability and equity. It means recognising that roads must serve people first, and that resilient, inclusive, and place-based planning is essential to delivering lasting outcomes.

Above all, it means planning for everyone. When we plan with Aboriginal people, and for the needs for all communities, those who live here, travel through or care deeply for Country, we make decisions that honour the past and create a better future. When we get that right, we get all of it right.

This White Paper outlines a vision and a path forward. It is grounded in collaboration, shaped by local voices, and driven by the belief that our transport system should work for everyone, whether you are a local family heading to school, a freight driver crossing the mountains, or a visitor exploring one of NSW's most treasured landscapes.

The Hon. Jenny Aitchison, MP
NSW Minister for Roads and
Minister for Regional Transport

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Executive summary

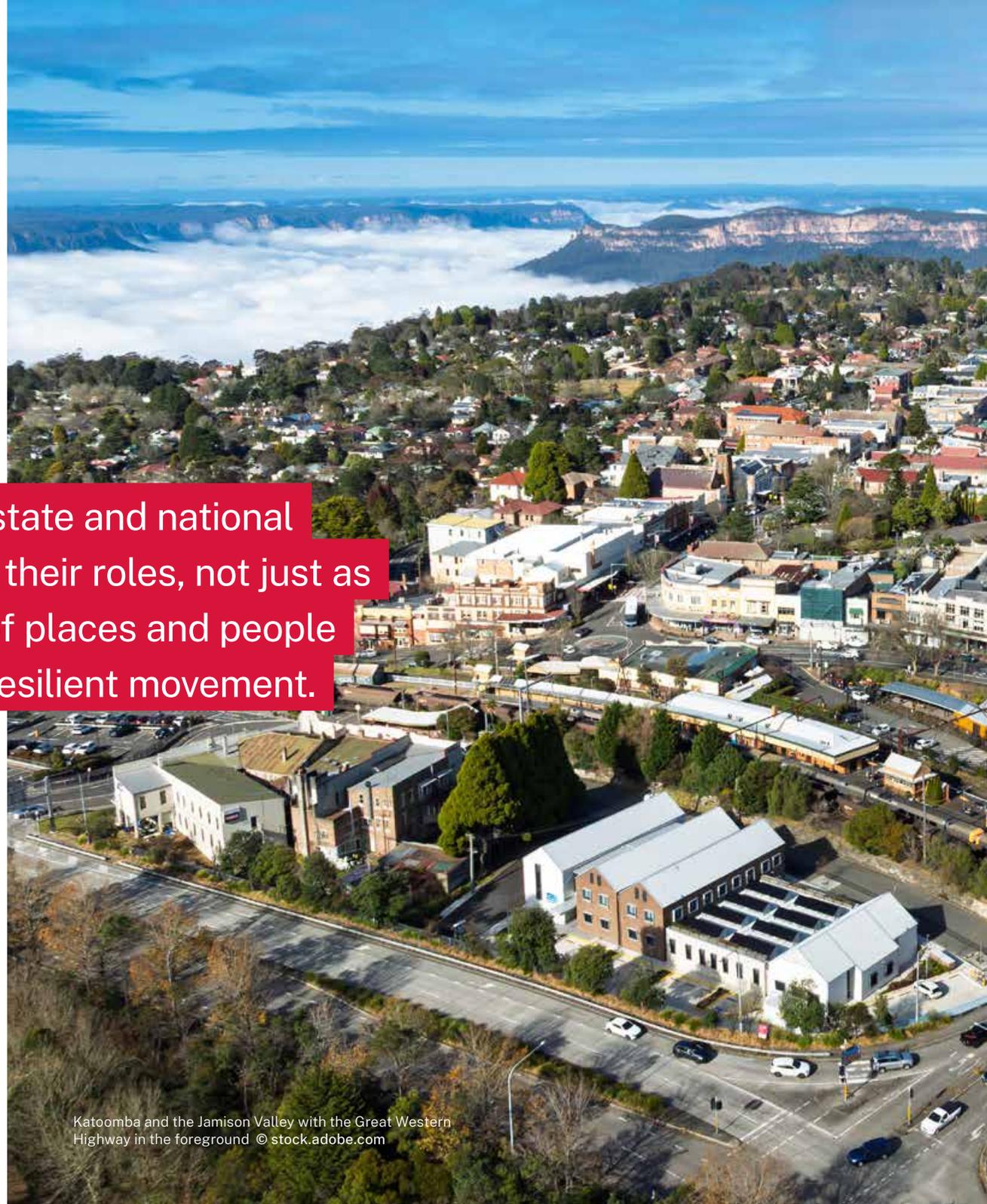
The Sydney to Central West Corridors White Paper (the White Paper) presents a strategic response to the growing transport challenges along the Great Western Highway and Bells Line of Road, two nationally significant east–west corridors linking Western Sydney, the Blue Mountains, and the Central West.

These corridors support daily local travel, regional connectivity, freight movement, tourism, and access to critical services and economic centres.

Recognising the corridors' local, state and national significance, we have reimagined their roles, not just as infrastructure, but as a network of places and people connected by safe, reliable, and resilient movement.

To guide this work, Transport for NSW (Transport) undertook a rapid corridor assessment to consolidate previous planning, recent technical investigations, and targeted engagement with local councils and key stakeholders to develop a White Paper which would:

- define a clear vision for the corridors
- understand the communities, places and current transport conditions
- identify key challenges and opportunities
- outline short, medium and long-term priorities that respond to the needs of people, industry and visitors across the corridors.



Katoomba and the Jamison Valley with the Great Western Highway in the foreground © stock.adobe.com

Emerging challenges

The White Paper identifies a range of pressing and interrelated issues including:

- a growing and ageing population. The study area is home to 166,000 people (2021), projected to reach 178,500 by 2041. The proportion of residents aged 65 and over is expected to rise from 16 per cent to 21 per cent, increasing demand for accessible and safe transport options
- an increasing number of people requiring disability support. The proportion of residents needing assistance is growing, particularly in Lithgow, Bathurst, and Penrith, highlighting the importance of accessibility and inclusive transport planning to support an ageing and increasingly health-challenged population
- limited public transport and high car dependency. In many car-reliant towns and villages, where 94 per cent of households own at least one vehicle, there is a need for greater travel choice and better connections between modes
- different roles and pressures across the two corridors. The Great Western Highway is the primary east-west link between Western Sydney and the Central West, a high capacity commuter and freight route carrying up to 45,000 vehicles a day near Lapstone and Springwood and 24,000–30,000 through Bathurst. The Bells Line of Road, by contrast, carries lower volumes (2700–7000 vehicles a day), and serves a distinct role as a local connector and tourism route, and provides critical network resilience when the Great Western Highway is disrupted



Visitors on the Scenic Railway in the Blue Mountains © Destination NSW

- peak period congestion and pinch points. During peak periods and public holidays, traffic volumes exceed what the roads can support, particularly at locations along the Great Western Highway, frustrating road users
- tourism growth and network capacity. Increasing visitation to iconic sites like the Three Sisters, Scenic World, Jenolan Caves, Zig Zag Railway and Hartley Historic Site and major events such as Bathurst 1000, Elvis Festival, Yulefest and Winter Magic Festival combined with the opening of the Western Sydney International Airport, place a growing strain on limited parking and access infrastructure
- freight growth and network reliability. Expansion of Western Sydney's logistics and construction sectors is driving demand across the corridors, while agricultural freight and food supply chains depend on reliable east-west connections through the region
- network resilience and safety risks. The corridors remain vulnerable to landslides, floods, bushfires and snow. Between 2020 and

2024, unplanned incidents closed the Great Western Highway between Katoomba and Blackheath more than two times annually and at least once in one direction between Mount Victoria and Hartley (Victoria Pass) more than 20 times per year¹. Limited safe pull-over areas, particularly along the Bells Line of Road and Victoria Pass, add to the safety challenge. North Richmond, Kurrajong and Bilpin also communities rely on the Bells Line of Road as an extended detour route to connect to Sydney when the Hawkesbury River is in flood

- movement and place conflicts. In the eastern section of the corridors, through traffic competes with local access in densely-settled villages and town centres, affecting safety, amenity and liveability
- environmental and heritage sensitivity. Much of the corridor passes through or alongside national parks and heritage landscapes, requiring careful planning to balance safety, capacity, and connectivity of village character and natural assets.

¹ Transport for NSW, 2025, Live Traffic NSW historical data

Our vision

Our vision for the two corridors is a network tailored to the people who use it, and the unique and treasured places it connects.

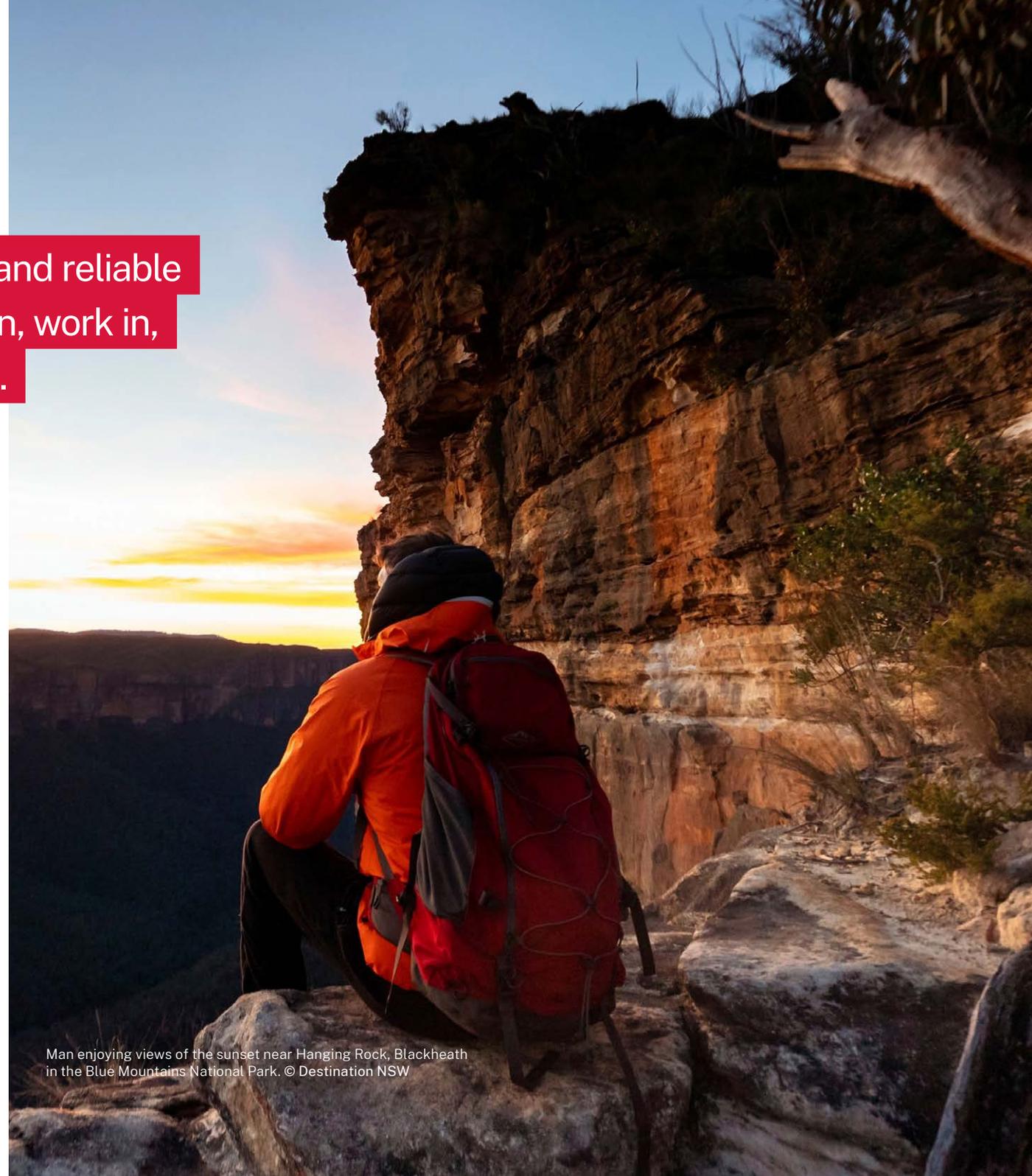
It will support safe, seamless and reliable movement for those who live in, work in, visit or travel through the area.

It is a network and a suite of services that enable thriving communities, strengthen local economies and deliver meaningful outcomes.

We will achieve this through a focus on three core outcomes:

1. Support thriving, liveable communities with road networks that reflect local character and minimise environmental and heritage impacts.
2. Provide safe and reliable road corridors that ensures dependable access for every customer, under all conditions, every day.
3. Unlock regional potential and boost the NSW economy with efficient, sustainable connections between Sydney, the Blue Mountains and the Central West.

This vision is grounded in using road space in a considered and meaningful way, recognising that movement exists to connect people and places. It includes improving safety, freight efficiency, expanding public and active transport options, and reducing car dependency where possible.



Man enjoying views of the sunset near Hanging Rock, Blackheath in the Blue Mountains National Park. © Destination NSW

What we need to address

There are four interrelated issues that need a tailored approach to address effectively, they are: safety, accessibility, resilience and capacity. Each of these factors influence the others, and together they play a critical role in ensuring the transport network can support future growth by:

- improving safety through the safe system approach, focusing on reducing road trauma, monitoring performance, and embedding technology and innovation, underpinned by collaboration with key State agencies and local councils, and evidence-based decision making
- improving accessibility by installing new signs and wayfinding tools, co-design fit for purpose transport services with Aboriginal communities to ensure they are culturally appropriate. Efforts will also focus on expanding transport choices for residents, enhancing multimodal options, and strengthening local transport connections to better link communities with key destinations
- building resilience will require coordinated, cross-agency action to respond to both long-term challenges (such as freight growth, climate variability, tourist peaks) and sudden shocks (such as natural disasters or digital failures). Keeping the corridors moving through disruption is critical to regional and state resilience
- increasing capacity through travel demand management to remode, retime, remove, reroute or reduce trips, as well as targeted infrastructure and service improvement programs.



Concrete pipes at Kelso to Raglan Upgrade construction site, Great Western Highway

Our approach

Our approach puts people and place first, with a clear planning hierarchy that prioritises people, then place, then movement. All initiatives must be grounded in delivering meaningful outcomes for the communities and industries they serve.

Collaboration is central to success. Progress requires close coordination across government, councils, industry and community. By working in partnership with local stakeholders, we can build capacity, co-design solutions, and deliver more integrated, locally tailored outcomes.

We have considered a broad range of levers, beyond traditional road duplication, to build more vibrant, inclusive and resilient corridors.

While major infrastructure upgrades remain part of the long-term solution, they are costly and require significant lead times to plan, fund and deliver.

This White Paper therefore proposes a staged and incremental approach, combining high-impact, quicker-delivery initiatives with longer-term planning for future investment. This includes:

- targeted safety and resilience upgrades
- improvements to rest areas and emergency stopping infrastructure
- better public and active transport connections
- clearer travel information and signage
- support for community-led transport solutions.

Key directions

The initiatives for the Great Western Highway and Bells Line of Road corridors are a direct response to the region’s transport challenges, future land use changes, and evolving community needs. They are designed to deliver on the corridors’ vision and objectives through a staged, evidence-led program of investment that strengthens safety, resilience, capacity, and access.

Initiatives are grouped under these four themes and sequenced to build on one another, starting with early, low-cost actions that improve understanding and community outcomes, progressing to moderate interventions that enhance safety and resilience, and culminating in longer-term infrastructure improvements that expand capacity and unlock regional potential.

As shown in Figure 1, this stepped approach provides a clear pathway from understanding to action. It balances immediate community benefits with the groundwork needed for future investment. The initiatives are not committed projects but actions for further investigation, collaboration, and investment planning. Together, they reflect a shared commitment to working with local communities, councils, and stakeholders to shape inclusive, connected, and resilient corridors that support thriving, liveable places and a stronger regional economy.

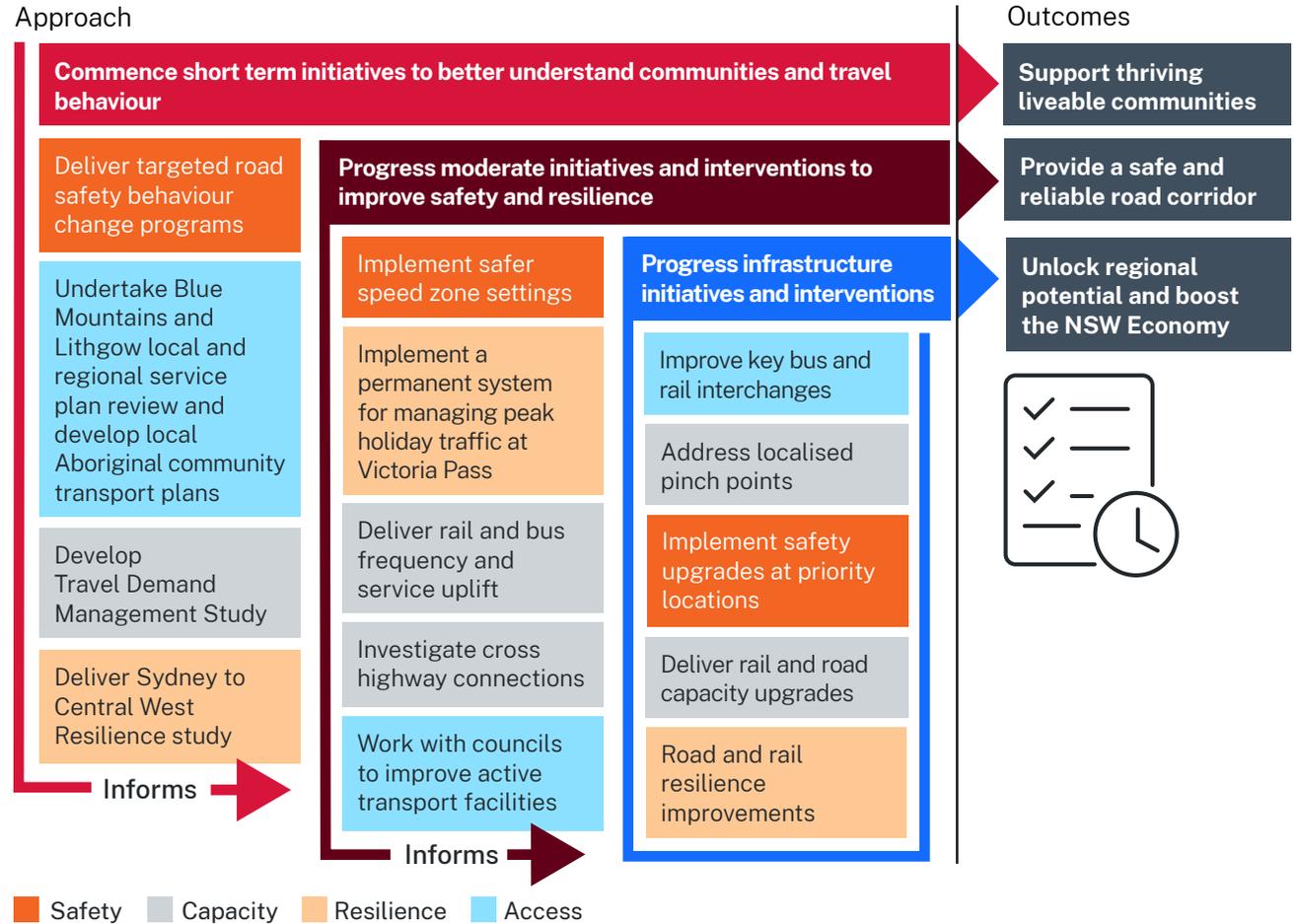


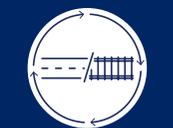
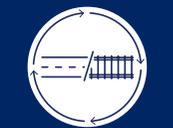
Figure 1. A stepped approach to delivering our three core outcomes

Initiatives

The top initiatives that the NSW Government will progress to realise the vision and meet the outcomes are outlined in Table 1.

Table 1. Top Sydney to Central West initiatives

Theme	Main Connecting NSW Priority	Initiative
Safety	 <p>Towards zero trauma</p>	Plan and deliver Bells Line of Road safety improvements program targeting a range of improvements including realigning curves, improvements to signage and delineation, fauna crossings, intersection upgrades and improving heavy vehicle rest areas.
	 <p>Towards zero trauma</p>	Improve safety and efficiency of the Hawkesbury Road interchange with Great Western Highway at Springwood by developing options to reduce traffic queues impacting the highway and local access to and from Winmalee.
	 <p>Towards zero trauma</p>	<p>Continue working with councils to identify and support the development of preferred local alignments of a network of high-quality cycleway corridors separated from vehicle traffic to broaden the attractiveness and improve the safety of cycling for access to key villages and transport. Initial locations include:</p> <ul style="list-style-type: none"> • Emu Plains to Glenbrook • Faulconbridge to Woodford • Bullaburra to Wentworth Falls • Mount Victoria to Medlow Bath.
	 <p>Enable whole-of-government outcomes</p>	Support the national economy: Identify and implement opportunities to support the safe and efficient movement of higher productivity heavy vehicles across the mountains on the Great Western Highway, as identified in the NSW Heavy Vehicle Access Policy. This may include decoupling facilities, access trials, freight access changes and freight safety performance behavioural program.

Theme	Main Connecting NSW Priority	Initiative
Resilience	 <p data-bbox="376 336 517 376">Restore reliability and build resilience</p>	<p>Prepare the transport network for shock and stresses: Work in partnership with federal, State and local government and transport operators to develop a Sydney to Central West resilience study to understand current network vulnerabilities to shock and stresses.</p>
	 <p data-bbox="376 560 517 600">Restore reliability and build resilience</p>	<p>Improve time reliability during peak periods: Implement a permanent system for managing peak holiday traffic at Victoria Pass.</p>
Capacity	 <p data-bbox="398 783 495 823">Towards zero trauma</p>	<p>Investigate opportunities to separate cross highway movements for local traffic and active transport to improve travel times and safety through and within Blue Mountains villages.</p> <p>Cross highway connectivity priority locations:</p> <ul data-bbox="573 794 1760 1034" style="list-style-type: none"> • Blackheath (Govetts Leap Road/Bundarra Street plus railway level crossing of Main West Line) • Glenbrook (Wascoe Street/Fletcher Street) • Blaxland (Layton Avenue/Hope Street) • Blaxland (Wilson Way) • Katoomba (Parke Street/Civic Place).
	 <p data-bbox="360 1198 533 1238">Enable whole-of-government outcomes</p>	<p>Support freight productivity and plan to improve safety, efficiency and resilience for all road users by working with Infrastructure Australia and the Australian Government to develop a preferred future corridor to bypass key freight and traffic pinch points:</p> <ul data-bbox="573 1150 1525 1230" style="list-style-type: none"> • Mount Victoria and Blackheath urban area traffic and heritage pinch points • Victoria Pass and River Lett Hill freight pinch points.
	 <p data-bbox="383 1422 510 1461">Transition to net zero emissions</p>	<p>Increase the frequency of rail services between the Central West and Sydney: Investigate service frequency increases in the short term to allow better day-return connectivity within the region, and to Sydney, making rail a convenient, useful and reliable travel option for a greater range of journey purposes. Connectivity with coach and local bus services will also be enhanced.</p>

Theme	Main Connecting NSW Priority	Initiative
Access	 <p data-bbox="376 336 517 376">Reduce transport disadvantage</p>	<p>Improve transport outcomes for local Aboriginal communities: Develop local Aboriginal transport and services plans co-designed in partnership with Aboriginal community controlled organisations including LALCs, Aboriginal medical services and community transport providers to identify and deliver the best fit transport services for Aboriginal people for all trip purposes including health, employment, education and to places of significance.</p>
	 <p data-bbox="376 560 517 600">Reduce transport disadvantage</p>	<p>Improve transport choices for local communities: Start investigations and planning for a range of short and medium-term improvements to bus and coach services in Bathurst, Lithgow and the Blue Mountains (including shuttle type services) to provide better connectivity to services, health, education, employment, recreation, and other transport modes.</p>
	 <p data-bbox="360 783 533 823">Enable whole-of-government outcomes</p>	<p>Support the national economy: Work with federal, State and local government to improve multimodal transport connections for people and freight to Western Sydney International Airport.</p>



Definitions

The longer-term outcomes or responses identify how Transport can address the challenges for the Hunter region through implementation of policy, delivering services or infrastructure. Triggers could lead to a change in priorities for the longer term or reprioritise an initiative to bring it forward in time.

Term	Definition
80th percentile	The value below which 80 per cent of the data in a dataset falls.
Active transport	Includes walking, using a wheelchair or mobility aid, cycling and micromobility.
AusRAP	Australian Road Assessment Program.
CBD	Central business district.
Central West and Orana Regional Plan 2041	The Central West and Orana Regional Plan 2041 developed by Department of Planning, Housing and Infrastructure sets a 20-year framework, vision and direction for strategic planning and land use to ensure regions have the facilities they need to continue to be vibrant places for people to live, work and visit.
Central West and Orana Strategic Regional Integrated Transport Plan	The Central West and Orana Strategic Regional Integrated Transport Plan is being developed for the Central West and Orana region to support integrated land use and transport planning in the region for the next 20 years.
Crime Prevention Through Environmental Design (CPTED)	A multidisciplinary approach to crime prevention that uses urban and architectural design and the management of built and natural environments.
DPHI	Department of Planning, Housing and Infrastructure
Freight	Goods or cargo transported by heavy vehicles, light commercial vehicles (such as vans and utes), cycle couriers, rail, aircraft, or ships.
Fatal and serious injury (FSI)	In the context of road safety, fatal means a crash for which there is at least one person who dies within 30 days from injuries received in a road traffic crash, where serious injury means a person injured in a road crash who needed to be admitted to hospital and who didn't die within 30 days of the crash.
High productivity vehicles	Truck and trailer combinations that provide the ability to move freight more efficiently.
LGA	The local government area which is administered by a Council.
Local strategic planning statement (LSPS)	Prepared by council, an LSPS sets out the planning priorities which meet their community's needs and deliver key state and regional planning objectives. It sets out a 20-year vision for land use in the local area, the shared community values to be maintained and enhanced, and how future growth and change will be managed in line with the special characteristics which contribute to local identity.

Term	Definition
Micromobility	Devices similar in size and speed to bicycles with or without a motor, such as a scooter or skateboard.
NSLS	National Service Level Standards for Roads is a draft national framework that categorises roads based on their function and customer expectations for that category of road.
OCHRE plan	OCHRE stands for Opportunity, Choice, Healing, Responsibility, Empowerment. The OCHRE plan aims to strengthen the relationship between government and Aboriginal Communities in NSW.
Oversize overmass vehicle (OSOM)	A heavy vehicle that is carrying or specifically designed to carry a large indivisible item.
PBS Level 1	Performance based standards for heavy vehicles. PBS Level 1 vehicles are up to 20 metres long and have a 50.5-tonne mass limit, including A-double and truck-and-dog vehicles.
PBS Level 2	Performance based standards for heavy vehicles. PBS Level 2 includes Level 2A vehicles of up to 26 metres long and 65 tonnes, and Level 2B vehicles of up to 30 metres long and 68.5 tonnes.
Renewable energy zone (REZ)	Renewable energy zones group new wind and solar power generation into locations where it can be efficiently stored and transmitted across NSW. They combine: <ul style="list-style-type: none"> • new renewable energy infrastructure, including generators such as solar and wind farms • storage such as batteries and pumped hydro • high-voltage transmission infrastructure.
Special Activation Precinct (SAP)	Special Activation Precincts bring together planning and investment support services to deliver industrial and commercial infrastructure in six dedicated areas of regional NSW. The services allow businesses to establish and grow with confidence, providing more local jobs and driving economic growth. The creation of special activation precincts is part of the NSW Government's 20-year economic vision for regional NSW.
Sydney to Central West corridors (the corridors)	Great Western Highway and the Bells Line of Road and associated local networks.
Transport	Transport for NSW.
Travel demand management	Travel demand management is the application of targeted, people-oriented and data-led strategies to influence demand on transport networks. It uses the 'four Rs' approach to influence our customers to: <ul style="list-style-type: none"> • remode (change modes) • retime (change travel time) • reroute (change routes) • reduce (remove a journey where a task can be done remotely).

Term	Definition
TZP (travel zone projections)	<p>Transport for NSW provides projections of population and dwellings at the small area (Travel Zone or TZ) level for NSW. The latest version is Travel Zone Projections 2024 (TZP24), released in January 2025.</p> <p>The projections are developed to support a strategic view of NSW and are aligned with the NSW Government common planning assumptions.</p>
UNESCO	United Nations Educational, Scientific and Cultural Organisation.
Western City District Plan	The Western City District Plan developed by the former Greater Sydney Commission guides the implementation of the Greater Sydney Region Plan at a district level.
Western Parkland City	<p>Western Parkland City is defined under the <i>Environmental Planning and Assessment Act 1979</i> comprises the land in the following local government areas:</p> <ul style="list-style-type: none"> • Blue Mountains • Camden • Campbelltown • Fairfield • Hawkesbury • Liverpool • Penrith • Wollondilly.
White Paper	A comprehensive corridor assessment that provides in-depth information and insights on the challenges and opportunities of the Great Western Highway, Bells Line of Road and associated local networks. It is written to inform future investment decisions on the corridors.

01 Starting with Country

1.1 Connection with Country

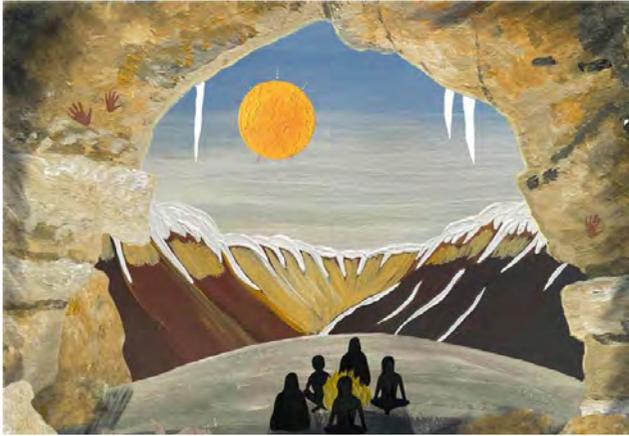
Aboriginal people and communities throughout the Sydney to Central West corridors have a rich continued history of living with and shaping their environment. This connection with Country remains prominent throughout the cultural landscape, including trade routes, ceremonial sites and knowledge of traditional land management techniques such as cultural burning.

The traditional heritage and land management reflects a profound understanding and connection with Country, contributing to its biodiversity and resilience.

Across the Sydney to Central West corridors, there are recognised important places that hold significant spiritual, cultural and environmental significance. Some examples of notable places accessed from the corridors include the following which are also displayed on Figure 2:

- the Blue Mountains World Heritage Area
- connections to the Blue Mountains National Park and the Wollemi National Park
- the Gully in Garguree (Katoomba), a culturally important site that serves as a significant landmark
- Bells Line of Road connecting the Hawkesbury River to the Blue Mountains
- the Red Hands Cave in Glenbrook, a significant site with rock paintings and handprints made with natural ochre
- Euroka Clearing, 'Nye Gnorang' is located within the Blue Mountains National Park and is a significant cultural site because of the continued sacred connection to First Nation peoples. This site has been visited for thousands of years for cultural ceremonies, and to pass on cultural knowledge to younger generations
- the Walls Cave in Blackheath, an important shelter and occupation site providing evidence for human habitation in the Blue Mountains for thousands of years
- Kings Tableland in Wentworth Falls, a highly significant sacred site
- the Three Sisters in Katoomba, a well-known landmark with deep cultural significance for First Nations people and is featured in Dreamtime stories of the area. It is a major tourist attraction within the Blue Mountains today

Man starting a fire for a Smoking Ceremony

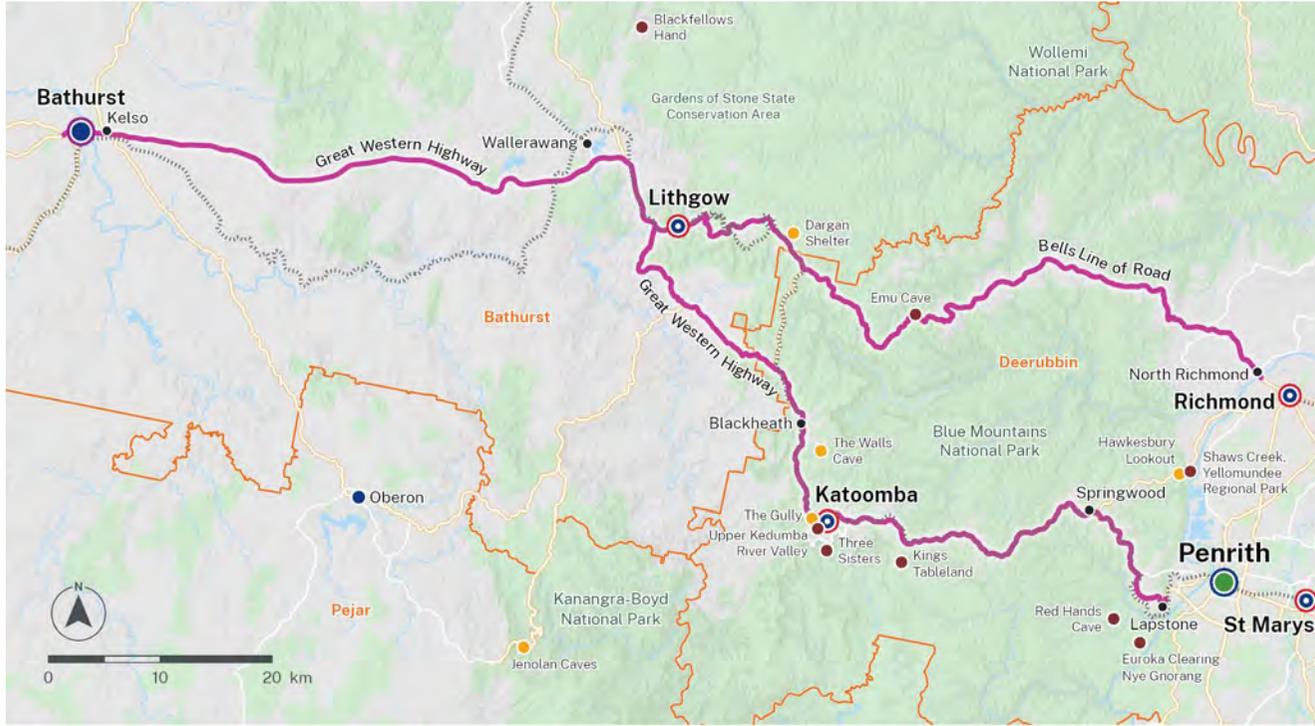


An artwork by Dharug artist Leanne Watson Redpath imagining what Dargan Shelter looked like in the Ice Age

- Dargan Shelter,² a high altitude cave near Lithgow, where human occupation first occurred around 20,000 years ago during the last ice age
- the Jenolan Caves, a very significant site with deep cultural significance for First Nations people and their Dreamtime stories
- the Hawkesbury Lookout rock art, which records the heritage, history and traditions of First Nations peoples of the area.^{3, 4}

The Greater Blue Mountains World Heritage Area, where the Sydney to Central West corridors traverse, is rich in landmarks and environmental features that are not just physical sites but are also highly valued living systems that support culture and community. These sacred landscapes embody the First Nations people’s knowledge, traditions and stories.

Aboriginal people continue to maintain a strong sense of place and connection with Country, and believe that if we care for Country, it will care for us.



KEY

Metropolitan cluster	Railway line	Declared Aboriginal place
Regional city	State road	Other significant place
Strategic centre	Regional road	Local Aboriginal Land Council (LALC)
Centre	Study area alignment	
Locality		

Source: Declared Aboriginal places from NSW DCCEEW, LALC from NSW Aboriginal Land Council / NSW Spatial Services.

Figure 2. Significant First Nation Sites in, adjacent and near to the corridors.

This requires Country to be planned for throughout the process of design and development while Planning with Country as another important aspect to be considered when co-designing plans that interact with Country, place and people.

Providing a space for genuine early planning approaches for the Sydney to Central West corridors can build capacity and pathways for knowledge sharing between Aboriginal and non-Aboriginal communities, helping to connect people to Country and Country to people, bringing the whole of community along on the journey while integrating historical information for us all to travel safer and learn.

2 Australian Museum, *Dargan Shelter: Oldest human occupied Ice Age site found in the Blue Mountains*
 3 NSW Government, *Environment and Heritage - State Heritage Inventory* [accessed 27 June 2025]
 4 Mackay, R (2015) *The Contemporary Aboriginal Heritage Value of the Greater Blue Mountains*. Chapter 3 in *Values for a new generation: Greater Blue Mountains World Heritage Area*. Greater Blue Mountains World Heritage Area Advisory Committee. [accessed 31 October 2025]

1.2 Aboriginal outcomes

The NSW Government is committed to the National Agreement on Closing the Gap, which is underpinned by the belief that when Aboriginal people have a genuine say in the design and delivery of policies, programs and services that affect them, there are better life outcomes through five reform areas:

- Formal partnership and shared decision making.
- Building the community-controlled sector.
- Transforming government organisations.
- Shared access to data and information at a regional level.
- Employment, business growth and economic prosperity.

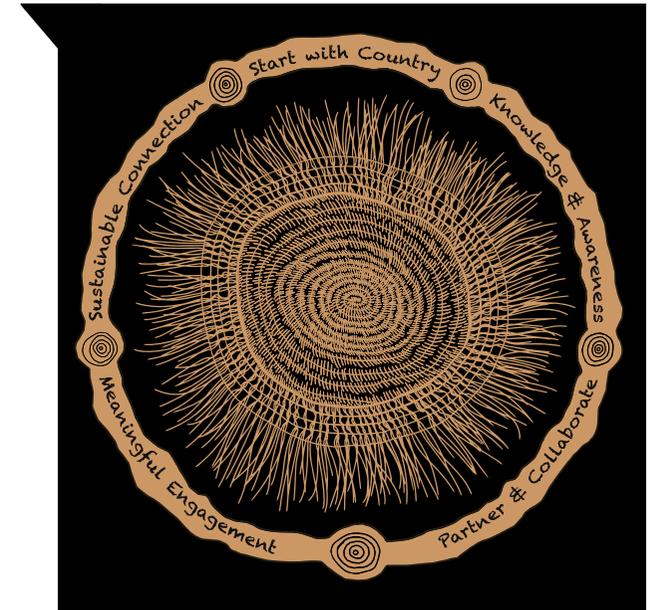
Transport for NSW's Reconciliation Action Plan acknowledges that in the creation of our transport infrastructure and networks, we recognise and value the importance of connecting to Country, and we will monitor and report progress against this as part of developing the Aboriginal Outcomes Framework. There are four key areas for transport outcomes:

- Aboriginal people are connected safely to the economy and socially, through transport solutions.
- Our Country is healthy and strong through transport planning and place making.
- Aboriginal economic independence is supported by Transport.
- Transport drives transformative action to deliver systemic change.

Aboriginal people have been saying for a long time that there is a need for change in the way governments work with them to improve their lives. Transport values the input from Elders and other traditional knowledge holders who possess this information about Country so that it can inform strategic transport planning, while sensitively working in partnership with Aboriginal people. This is supported by the community-led OCHRE plan, which stands for 'opportunity, choice, healing, responsibility and empowerment'. We acknowledge that, at different times, organisations may not have the resources to participate actively.

This White Paper was informed by formal engagement and workshops with Aboriginal representatives conducted for the broader Draft Central West and Orana Strategic Regional Integrated Transport Plan and engagement conducted during the development of the Great Western Highway Upgrade between Katoomba to Lithgow. Transport will engage closely with Aboriginal representatives as initiatives progress.

Figure 3 Planning with Country provides a pathway to deliver Aboriginal Outcomes and to equip our practitioners with the cultural competency and tools to engage and advocate for ways that they can respond to changes and new directions in planning policy to deliver better outcomes for our Aboriginal communities across NSW through a set of guidelines with five principles.



The circular journey of connection through each of the equally valued **5 Principles of Success**, shared through the collaboration, demonstrates the combined strength and resilience of community and Country and their reliance on each other for success.

Figure 3. The woven representation of Planning with Country
© Feather Flower Creative (design by Natalia Baechtold)

02 About the White Paper

2.1 Purpose

The Sydney to Central West corridors are defined by two critical east–west road links: the Great Western Highway and the Bells Line of Road. These are the only continuous road corridors connecting Greater Sydney to the Central West, traversing the Blue Mountains, Lithgow and Bathurst regions. Together, they support local access, regional connectivity, and long-distance movement for people and freight, serving both as strategic transport routes and local main streets through towns and villages. This dual function brings both complexity and opportunity in how these roads are planned, managed and invested in.

The Great Western Highway is the primary strategic link between Sydney and the Central West.

It forms part of both the NSW state road network and the National Land Transport Network, and supports a mix of freight, commuter, visitor and local trips along its 202-kilometre alignment. It connects key centres including Springwood, Katoomba, Lithgow and Bathurst, and has been subject to incremental upgrades over the past two centuries – most recently with the staged duplication since 1998 between Emu Plains and Katoomba.

Great Western Highway passing through Aunty Joan Cooper Bridge at Leura © stock.adobe.com



The Bells Line of Road, including Chifley Road, is a secondary route that links North Richmond to Lithgow.

While carrying lower volumes, the Bells Line of Road plays a vital resilience role – offering an alternative to the Great Western Highway during incidents or closures – and supports local movement and access across the Hawkesbury and upper Blue Mountains.

In June 2024, the NSW Government commissioned Transport for NSW to deliver the Sydney to Central West Corridor White Paper, a strategic corridor-wide assessment of the Great Western Highway and Bells Line of Road between Lapstone and Bathurst. This work responds to the pause of the previous Great Western Highway Upgrade Program and a joint request from Infrastructure Australia and the Australian Government for a comprehensive review to inform future investment. The Great Western Highway Upgrade Program proposed to duplicate the Great Western Highway between Katoomba and Lithgow including an 11-kilometre-long tunnel bypassing Blackheath, Mount Victoria and Victoria Pass, three key pinch points for traffic and freight. While this is an ambitious and high-cost solution, the NSW Government has paused to assess the broader transport challenges in connecting across the Blue Mountains from Western Sydney through to Lithgow as the gateway to the Central West and on to the regional city of Bathurst.

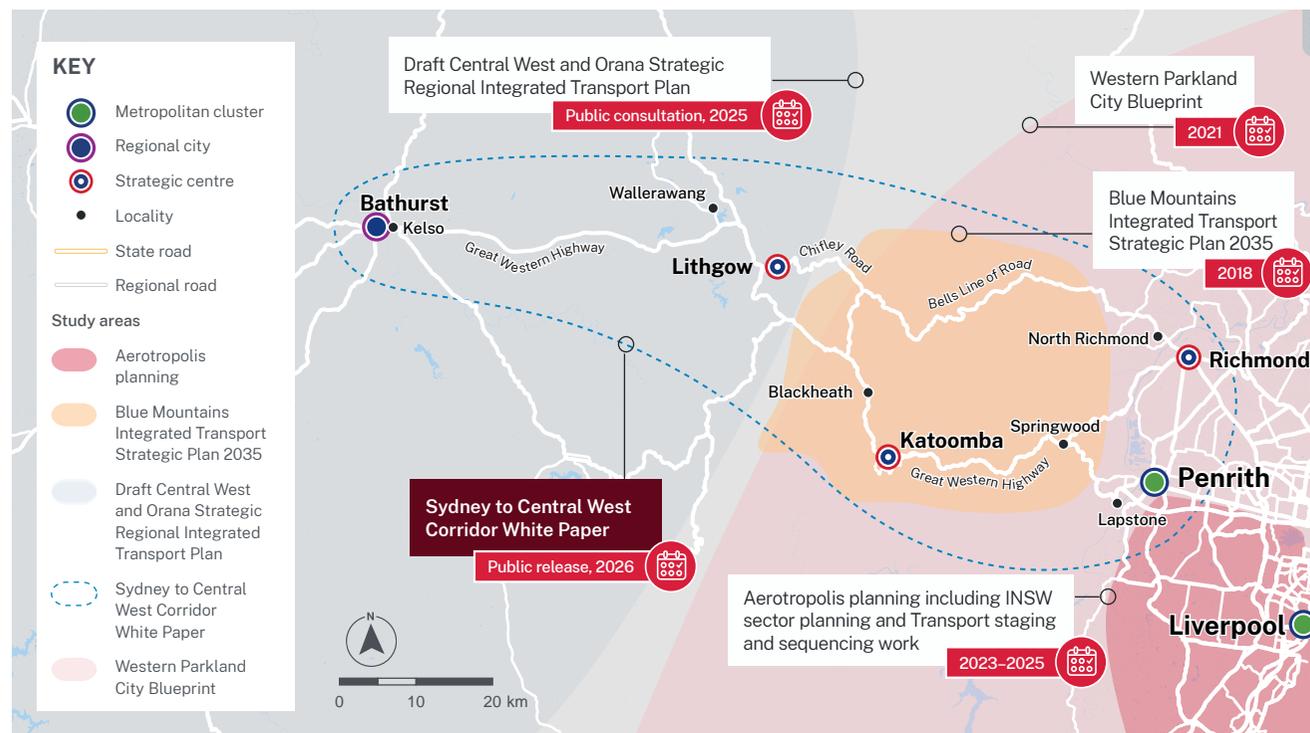


Figure 4. Planning work leveraged for data, insights and alignment in the White Paper

The White Paper aims to:

- consolidate previous studies, planning work and investment proposals
- respond to emerging transport and land use pressures along the corridors
- provide an updated view of performance, capacity and safety of the corridors
- consider the role of the corridors in supporting freight, passenger, public and active transport
- apply movement and place principles to guide investment
- define a sequenced program of short, medium and long-term actions.

By focusing on the three core movement types – through movement, in-and-out movement, and local movement – the White Paper will help untangle competing demands across the corridors and ensure it remains safe, resilient, and fit for purpose for the communities and industries it supports. The planning work leveraged in the White Paper is shown in Figure 4.

2.2 Extent

The Sydney to Central West White Paper examines two nationally significant east-west road corridors – the Great Western Highway and Bells Line of Road – which form the only continuous road links between Greater Sydney and Western NSW. These corridors, span diverse landscapes, traverse four local government areas, and serve critical roles in local access, regional connectivity, freight, tourism, and long-distance travel.

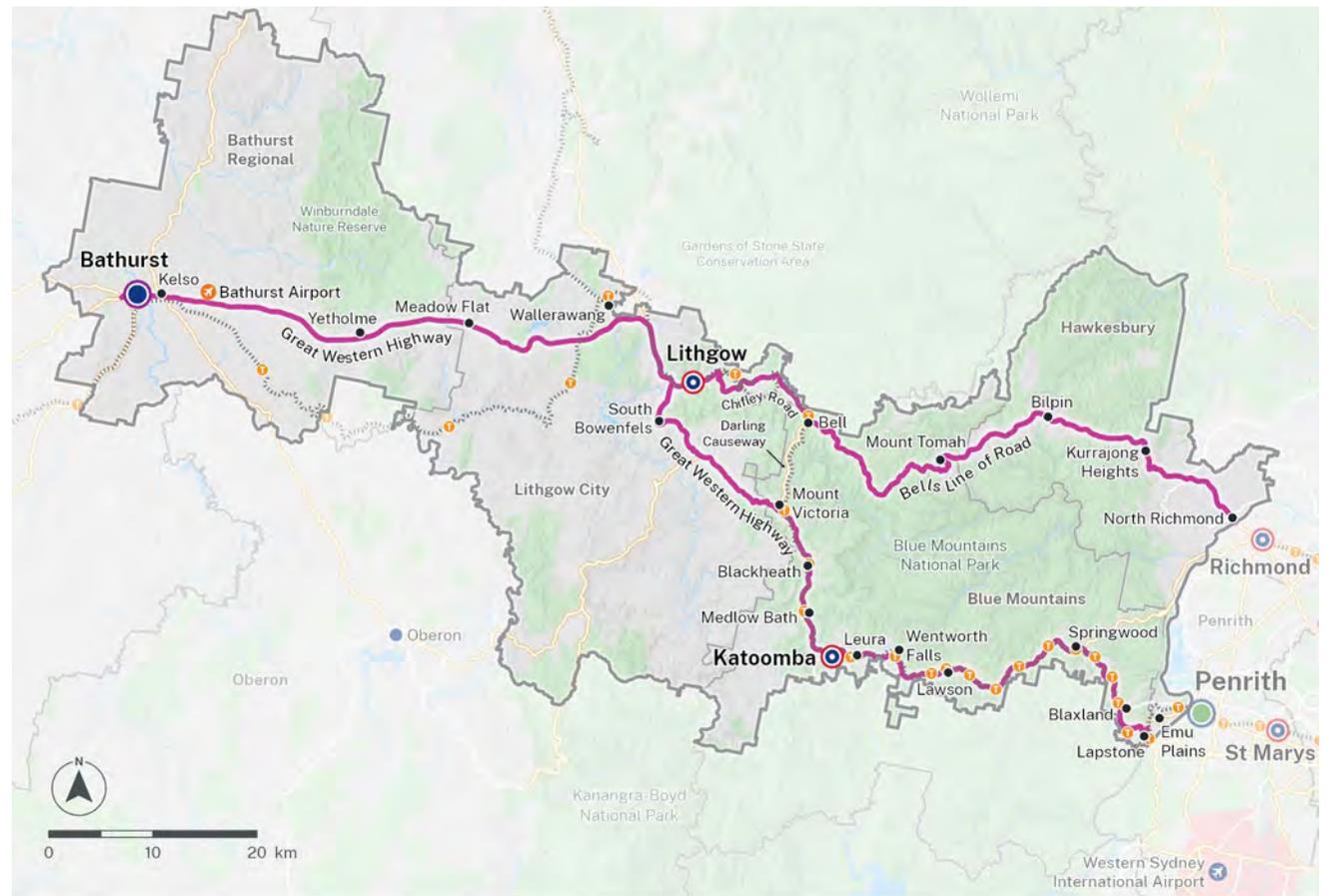
Study area definition

The study area is based on Transport for NSW travel zones that align with the Great Western Highway and Bells Line of Road, incorporating a 100-metre buffer on either side. It extends from Bathurst in the west to the Nepean River in the east, as shown in Figure 5.

Blue Mountains

Within the Blue Mountains, the two east-west corridors serve as vital transport spines.

The Great Western Highway is the principal arterial route,⁵ connecting the major centres of Blaxland, Springwood, Lawson, Wentworth Falls, Leura, Katoomba, Medlow Bath, Blackheath and Mount Victoria. It supports a mix of commuter, visitor, and local trips but is physically constrained by steep terrain and adjacent national park land.



KEY

	Metropolitan cluster		Locality		State road		Study area
	Regional city		International airport		Regional road		Local government area
	Strategic centre		Regional airport		Study area alignment		Western Sydney Aerotropolis
	Centre		Railway line and station				

Figure 5. Sydney to Central West study area

The Great Western Highway within the Blue Mountains is typically understood in two sub-regions:

- lower Blue Mountains (Emu Plains to Springwood) – more suburban in character, with strong ties to Greater Penrith and Western Sydney
- upper Blue Mountains (Lawson to Mount Victoria) – a series of distinctive villages with tourism, heritage, and environmental value.

To the north, the Bells Line of Road, including Chifley Road, provides an alternative rural link⁴ from North Richmond through Kurrajong Heights, Bilpin and Mount Tomah to Bell, reconnecting with the Great Western Highway at Mount Victoria via Darling Causeway and Lithgow. It is more rural and scenic in character but plays an essential secondary role for freight, resilience, and tourism.

The study area includes all relevant sections within Blue Mountains and Hawkesbury LGAs.

Central West

West of the Blue Mountains, the Great Western Highway functions as a rural highway,⁴ supporting both freight movement and local access.

From Mount Victoria, the road descends into the Hartley Valley, South Bowenfels and Lithgow, a major gateway to the Central West. The Castlereagh Highway connects to the Great Western Highway at Lithgow and extends northwest through Mudgee and Coonabarabran, eventually reaching Walgett near the Queensland border. Beyond Lithgow, the Great Western Highway connects smaller communities including Wallerawang, Meadow Flat and Yetholme before reaching Bathurst, a major regional city for education, health, services, and industry. At Bathurst, the highway branches into the Mitchell and Mid Western highways, extending further west and south-west.

This section supports regional freight, tourism, and economic growth. The study area covers Lithgow and Bathurst LGAs.



The Bells Line of Road passing the Bilpin Fruit Bowl

Western Sydney

Western Sydney is included as the eastern anchor of the corridors, recognising the critical interface between metropolitan and regional NSW.

The area is experiencing rapid urban and economic transformation, with major population growth in Penrith and St Marys, and the emergence of the Western Sydney International Airport and Aerotropolis. These changes are expected to increase pressure on both corridors, particularly for freight, commuter, and inter-regional movement.

The study area includes the relevant section of Penrith LGA and draws on regional insights across Western Sydney.

Western Sydney International Airport

Western Sydney International (Nancy-Bird Walton) Airport is a landmark infrastructure project that will unlock significant economic and connectivity benefits for Western Sydney and the Blue Mountains. It will serve as a gateway to global markets and a catalyst for regional development, supporting industries such as advanced manufacturing, freight and logistics, and education.⁶

The surrounding Western Sydney Aerotropolis spans 11,200 hectares, with over 5000 hectares rezoned for employment, and is projected to support up to 120,000 new jobs by 2061, primarily in manufacturing, technology, research, training and education, freight and logistics, agribusiness, and mixed-use development.⁷

The airport itself will initially accommodate 10 million passengers and 220,000 tonnes of freight annually, with long-term capacity increasing to 82 million passengers and 1.8 million tonnes of freight by 2061.⁸

To meet forecast travel demands to the airport and aerotropolis, the following key transport links are being delivered:

- M12 Motorway – direct road access to the airport from the M7 and surrounding arterial roads including Elizabeth Drive, The Northern Road, Bringelly Road, Mamre Road, Werrington Arterial Road, and Ross Street/Great Western Highway intersection.⁷
- Sydney Metro – Western Sydney Airport line – 23 kilometre link from St Marys to the Aerotropolis Core, with stations at St Marys, Orchard Hills, Luddenham, Airport Business Park, Airport Terminal, and Aerotropolis.⁹
- Fifteenth Avenue, Elizabeth Drive upgrades, and enhanced Western Sydney Bus Services – improving connectivity from Penrith, Campbelltown, Liverpool, and the Blue Mountains.⁵

These investments will ensure efficient access for residents and businesses across Western Sydney and the Blue Mountains to help realise the full economic potential of the Western Sydney International Airport and the Western Sydney Aerotropolis.⁶

⁶ Infrastructure NSW. State Infrastructure Strategy 2024–25

⁷ Infrastructure NSW. Aerotropolis Sector Plan

⁸ Australian Government. Western Sydney Airport Project Overview

⁹ NSW Government. Sydney Metro – Western Sydney Airport



2.3 Planning context

2.3.1 Historical context

Pre-colonial history

The Sydney to Central West corridors traverse Country of enduring cultural, spiritual, and historical significance to First Nations peoples. One very significant Songline that weaves throughout Australia is the Seven Sisters Songline depicted in the Blue Mountains is the Three Sisters. Long before colonial settlement, the routes now known as the Great Western Highway and Bells Line of Road followed established Songlines – intricate networks of intertwined knowledge and stories that map the journeys of ancestral beings and connect sacred sites across the landscape.

The Great Western Highway aligns with a major Songline extending from Sydney Harbour through the Blue Mountains and into the Central West, reflecting deep cultural and trade connections between the Dharug, Gundungurra, and Wiradjuri peoples, as well as others who traversed the ranges for ceremony, seasonal movement, and kinship ties.¹⁰ These routes were passed down through oral tradition, star maps, and teaching,

forming part of First Nations' sophisticated navigational systems that remain vital to cultural identity and land stewardship.

Across the Sydney to Central West corridors, there are recognised important places that hold significant spiritual, cultural and environmental significance. Please refer to [1.1 Connection with Country](#) for the detailed list and figure of First Nation Sites.

Post colonial history

With colonisation, early European settlers and explorers relied heavily on these established Aboriginal pathways to traverse the Great Dividing Range. The Great Western Highway, one of the earliest formalised road corridors in New South Wales, was built directly along many of these ancient routes. Its alignment, particularly between Emu Plains and Bathurst, continues to follow these early paths and colonial engineering efforts that responded to steep gradients and environmental constraints.

Songlines

The Songlines of the First Nations peoples are intricate ancient pathways that trace the journeys of ancestral spirits as they created the oceans, earth, animals and plants and constitute a vital aspect of life. The Songlines are composed of an invisible but intricately interconnected network of routes across NSW with important and sacred sites being marked with routes leading in between sites.

Star Maps

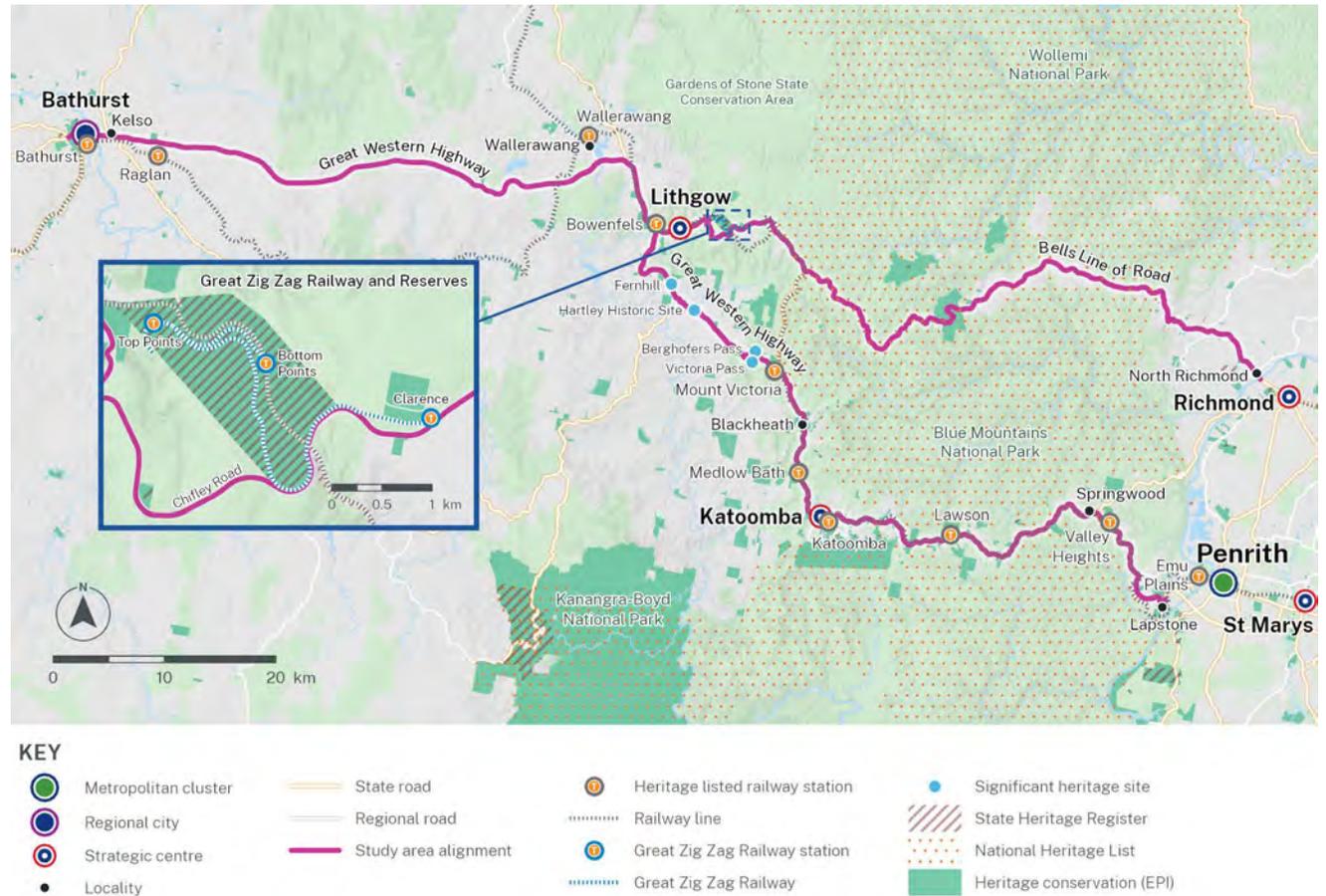
Many communities in Australia tell stories of 'star maps' and navigational techniques that would aid in the travel between communities. To teach these star maps, instructions were laid in the songs taught from traveller to traveller. These relate closely to Songlines, Dreaming and educational tracks woven into Country. Songlines are an essential part of the Aboriginal spirituality and hold intangible cultural value. They link pathways and routes between meeting places, ceremonial sites and significant areas.

¹⁰ Gapps, S. (2021). Gudyarra: The first Wiradjuri war of resistance – the Bathurst war, 1822–1824. NewSouth Publishing, page 28.



The corridors have played a central role in the development of post-settlement NSW, connecting Sydney to agricultural, resource, service and tourism economies in the Central West. They now host a dense concentration of colonial and European settler heritage sites, many of which are State or locally listed and located directly along or adjacent to the road corridors (see Figure 6). Key examples include:

- Hartley Historic Site – including the Mount Victoria Convict Stockade, built in the early 1830s to support road construction over Victoria Pass
- Zig Zag Railway and reserves – a pioneering rail solution to steep terrain near Lithgow, now a heritage attraction on the Bells Line of Road
- Fernhill Inn – a mid-19th century staging post for travellers between Sydney and the western goldfields
- Mount Victoria and Berghofers Pass – historic road alignments largely unchanged since the 1930s, with significant heritage constraints
- six heritage-listed railway stations – located along the Great Western Highway, often anchoring local centres and demonstrating historic interdependence between rail and road transport.



Source: Environmental Planning Instrument (EPI) heritage from NSW DPHI, State Heritage Register from NSW DCCEEW, National Heritage List from Australian Government DCCEEW.

Figure 6. Heritage constraints around the corridors

Understanding this layered history is essential to corridor planning. These routes are more than just vital east-west connections – they are places of deep cultural identity and evolving infrastructure legacy.

As investment planning progresses, careful management of both Aboriginal cultural values and European heritage assets is critical to respecting the corridors' past while ensuring a safe and resilient future.

2.3.2 Land use

Land use across the Sydney to Central West corridors is shaped by both state-level strategic planning and local government priorities. The Department of Planning, Housing and Infrastructure (DPHI) leads the overarching land use strategy, guiding regional growth and development. Key documents – including the Central West and Orana Regional Plan 2041 and the Western City District Plan – recognise the importance of corridor upgrades to support future travel demand and enhance connectivity across Greater Sydney and regional NSW.

The emergence of the Western Sydney International Airport and surrounding Aerotropolis precinct is expected to significantly reshape movement and land use in the eastern part of the study area. These developments will stimulate population growth, strengthen economic ties to the Central West, and increase visitor travel through the Blue Mountains and into regional centres. A resilient and robust connection is a key economic driver for improved commuter access.

At the local level, councils set more targeted land use directions through their local strategic planning statements (LSPS). These LSPSs all reflect the unified need for better transport connectivity from Penrith to



Part of the Open Streets program at Bathurst © Pat Greer

Bathurst and the Hawkesbury, with specific priorities of each local government area (LGA), including:

- Penrith LGA – managing population growth and enhancing east–west and north–south transport links, including to the Western Sydney International Airport¹¹
- Hawkesbury LGA – improving access and connectivity to support growing peri-urban communities¹²
- Blue Mountains LGA – focusing on sustainable tourism, heritage protection, and environmental preservation¹³
- Lithgow LGA – diversifying its economic base, supporting industrial activity, and enhancing transport connections¹⁴
- Bathurst LGA – accommodating new housing and population growth while upgrading infrastructure to support economic and social needs¹⁵

¹¹ Penrith City Council, Local Strategic Planning Statement, March 2020

¹² Hawkesbury City Council, Local Strategic Planning Statement, January 2021

¹³ Blue Mountains City Council, Local Strategic Planning Statement, March 2020

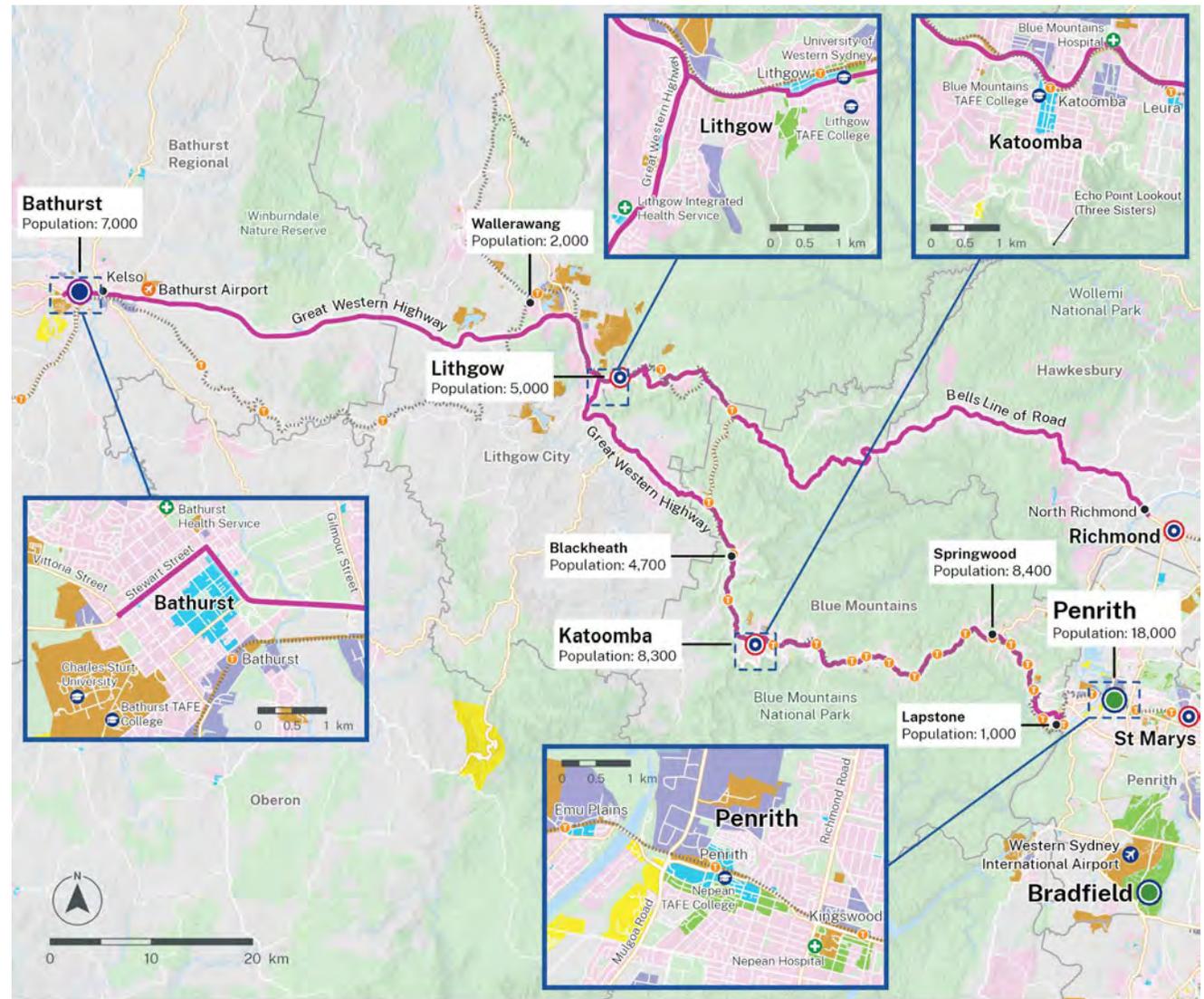
¹⁴ Lithgow City Council, Local Strategic Planning Statement, June 2020

¹⁵ Bathurst Regional Council, Local Strategic Planning Statement, July 2020

Land use patterns along the Great Western Highway are closely aligned with the Blue Mountains rail line, particularly where the two run in parallel. Urban development generally extends on both sides of the highway in these areas. Where the highway and rail diverge, development is more concentrated along the highway, underscoring the dominant influence of road access in shaping settlement and travel behaviour.

By contrast, the Bells Line of Road traverses largely rural and environmentally sensitive areas. Its alignment is dominated by National Parks and nature reserves, particularly around Mount Tomah and Bilpin, with only limited residential development around Kurrajong Heights and North Richmond. The surrounding land uses reflect its function as a lower-capacity, scenic road with limited development present. If the road network is more resilient, there may be an opportunity for an increase in appropriate housing along Bells Line of Road.

Figure 7 shows the land use zoning surrounding the study area.



Source: Key land use extents derived from land zoning (May 2025) from NSW DPHI, population values (rounded to nearest hundred) from ABS 2021 Census for Suburbs and Localities (SAL) based on place of usual residence.

Figure 7. Key land uses around the corridors

2.3.3 Transport

Transport for NSW sets the strategic direction for the state's transport system and leads the planning, regulation, and delivery of transport infrastructure and services across NSW. This includes managing the movement of people and freight via road, rail, public transport, point to point transport, community transport, walking, cycling, and emerging mobility modes. Through strong partnerships with industry and other government agencies, Transport ensures a safe, efficient, and integrated network that meets the needs of communities and businesses.

Our approach is people-focused and place-based, considering whole-of-journey mobility rather than mode-by-mode solutions. This reflects the broader role of transport in supporting liveable communities, vibrant local centres, and access to essential services and goods.

At the national level, Infrastructure Australia recognises the Great Western Highway as a route of strategic significance, supporting east-west freight and economic growth. Its assessments emphasise the need for a fit for purpose highway that can accommodate high productivity vehicles and expanded freight by rail. However, it also acknowledges the highway's physical constraints – particularly through the Blue Mountains – and the impact this has on freight efficiency and network resilience.¹⁶ At a state level, Infrastructure NSW also recognises key challenges for our road and rail networks including ageing infrastructure, maintenance liability and environmental impacts.¹⁷



A sign on the Great Western Highway at Katoomba giving travel distances to nearby towns © stock.adobe.com

Local councils emphasise the importance of balancing movement and place across the corridors. Their priorities include managing freight and through traffic while supporting local access, amenity, and safety. They also highlight the need to leverage connectivity to Greater Sydney and the Central West, respond to seasonal fluctuations from tourism and events, and preserve local character.

Over several years, Transport has been delivering the Great Western Highway Upgrade Program aimed at improving safety and reliability for residents, commuters, tourists and freight operators. In 2023, safety improvement upgrades between Katoomba and Lithgow have been delivered, with safety works at Blackheath also completed.

More recently, a number of upgrade projects on Great Western Highway are underway, including:

- the Australian and NSW Government co-funded Medlow Bath upgrade, including a new pedestrian bridge and road widening, to reduce congestion and improve safety and accessibility
- the Australian and NSW Government co-funded Little Hartley upgrade, widening the highway from Mid Hartley Road to Coxs River Road to two lanes in each direction to reduce congestion and improve safety and accessibility
- slope repair work on the Great Western Highway between Fairy Bower Road and Victoria Falls Road at Mount Victoria, as a result of natural disasters.

Transport works closely with councils, the Australian Government, Infrastructure NSW, and other partners to align land use and transport planning.

¹⁶ Infrastructure Australia, 2022 Regional Strengths and Infrastructure Gaps, December 2022

¹⁷ Infrastructure NSW State Infrastructure Plan 2024–25

The delivery of transport infrastructure within the Sydney to Central West corridors is shaped by a suite of federal, State, and local plans, policies and legislation, as summarised in Table 1.

Table 2. Relevant land use and transport legislation, strategies and plans that inform the corridor assessment

Planning scale	Land use legislation, strategies and plans	Transport legislation, policies, strategies and plans
State and federal	<p><i>Biodiversity Conservation Act 2016</i></p> <p><i>Crown Land Management Act 2016</i></p> <p><i>Environmental Planning and Assessment Act 1979</i></p> <p><i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i></p> <p><i>Federal Native Title Act 1993</i></p> <p><i>Heritage Act 1977</i></p> <p><i>Local Land Services Act 2013</i></p> <p><i>Native Title (New South Wales) Act 1994 No 45</i></p> <p>State Environmental Planning Policy (Transport and Infrastructure) 2021</p> <p>Disaster Adaptation Plans</p> <p>Housing 2041 – NSW Housing Strategy</p> <p>Industrial Lands Action Plan</p> <p>Low and Mid-Rise Housing Policy 2024</p> <p>National Agreement on Closing the Gap 2020</p>	<p><i>Passenger Transport Act 1990</i></p> <p><i>Passenger Transport Act 2014</i></p> <p><i>Roads Act 1993</i></p> <p><i>Transport Administration Act 1988</i></p> <p>2026 Road Safety Action Plan</p> <p>Active Transport Strategy</p> <p>Connecting NSW Strategy</p> <p>Cycleway Design Toolbox 2020</p> <p>Design of Roads and Streets Manual</p> <p>Future Energy Strategy</p> <p>Guide to Traffic Impact Assessment 2024</p> <p>Healthy Streets Framework</p> <p>Movement and Place Framework</p> <p>Net Zero and Climate Change Policy 2023</p> <p>Network Planning in Precincts Guide 2022</p> <p>NSW Electric and Hybrid Vehicle Plan</p> <p>NSW Freight and Ports Plan 2018–2023</p> <p>NSW Heavy Vehicle Policy: Safe, sustainable and productive road freight 2024</p> <p>NSW Public Spaces Charter</p> <p>Planning for Culture</p> <p>Providing for Walking and Cycling in Transport Projects Policy 2021</p> <p>Regional and Outer Metropolitan Cycling and Micromobility Plan 2025–2035</p> <p>Road User Space Allocation Policy</p> <p>Safe Systems approach</p> <p>State Infrastructure Strategy 2022</p> <p>Towards Net Zero Emissions Freight Policy</p> <p>Walking Space Guide 2020</p> <p>Women’s Safety Charter for the Public Domain</p>

Planning scale	Land use legislation, strategies and plans	Transport legislation, policies, strategies and plans
Region and city	Central West and Orana Regional Plan 2041 Western City District Plan	Central West and Orana Strategic Regional Integrated Transport Plan Western Parkland City strategic Cycleway Corridors
Local or precinct	<i>Local Government Act 1993</i> Local strategic planning statements (LSPS) Local environmental plans (LEP) Place strategies Structure plans Local housing strategies Masterplans	Blue Mountains Integrated Transport Strategic Plan 2035 Transport management and accessibility plans Local active transport plans



Echo Point Lookout at Katoomba © stock.adobe.com

2.3.4 Strategic alignment

The White Paper aligns with NSW Government priorities, the Connecting NSW Strategy and provides a coordinated transport response to regional and district land use planning led by the Department of Planning, Housing and Infrastructure (DPHI). It directly supports the implementation of strategic plans across both the Western City District and Central West and Orana regions.

Better connecting the Central West to Sydney is critical to the economic and regional development of communities along the corridors and surrounding areas. The Great Western Highway from Sydney across the Blue Mountains to Bathurst is one of Australia's most historic roads and it is the primary road network link connecting Central West NSW to Sydney for freight, tourist and general traffic. The Great Western Highway also connects to centres beyond Bathurst such as Orange, Parkes and Dubbo and facilitates travel to, from and through the Central West to the Blue Mountains, Sydney and beyond.

Planning for the Sydney to Central West corridors will shape how priority growth areas – such as Greater Penrith to Eastern Creek, and the Western Sydney Aerotropolis – connect with regional NSW, influencing future demand, access, and economic opportunity along the corridors.

As shown in Figure 8, the White Paper bridges the gap between regional strategic intent and corridor-level investment decisions. It ensures transport planning is grounded in local evidence and movement needs while aligning with broader goals around sustainability, economic development, and liveability.

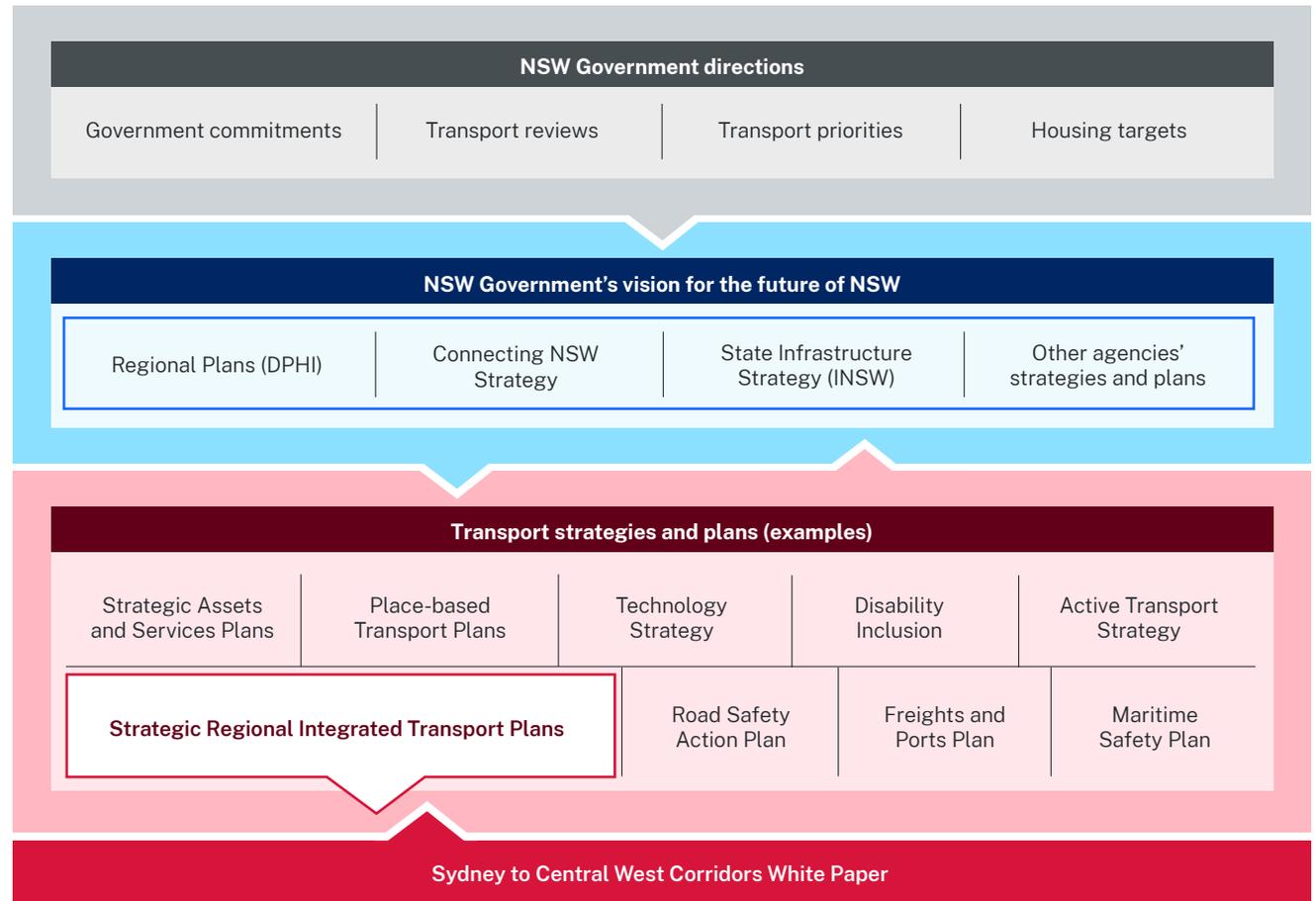


Figure 8. Strategic alignment of the Sydney to Central West Corridors White Paper



2.4 Stakeholder engagement

2.4.1 Engagement to date

The White Paper builds on extensive engagement conducted through previous corridor-focused planning, including the [Great Western Highway Upgrade Program](#) and the [Draft Central West and Orana Strategic Regional Integrated Transport Plan](#). This foundation reflects both formal consultation processes and Transport's ongoing collaboration with local councils, community groups and regional stakeholders.

Targeted engagement for the White Paper focused on stakeholders with strategic insight into corridor function and constraints. These included local Members of Parliament, Infrastructure Australia, the Central West NSW Joint Organisation of Councils, and councils along both the Great Western Highway and Bells Line of Road. These partners provided critical perspectives on local priorities, performance gaps and future needs.

Input from Transport's internal experts – community engagement, freight, active transport, asset management, transport planning, network coordination and environmental specialists – also shaped the White Paper's understanding of on the ground challenges and opportunities. Their knowledge helped ensure the corridor assessment is practical, up to date and aligned with policy and operational realities.

Engagement with Aboriginal representatives through the Draft Central West and Orana Strategic Transport Plan laid an important foundation, with additional consultation with



Looking over Blackheath to Govetts Leap © stock.adobe.com

Blue Mountains Aboriginal communities to occur as part of implementation. Cultural heritage, identity and Country remain central considerations throughout the corridors' planning process.

Across all engagement activities, several themes consistently emerged. Stakeholders highlighted the importance of:

- improving safety for general traffic and freight movements
- enhancing resilience and reliability, particularly in response to extreme weather and emergency events
- providing better rest areas for freight operators
- supporting active and public transport, especially at key nodes

- protecting environmental and heritage values, particularly near national parks and water catchments
- addressing the supporting role of Bells Line of Road.

Stakeholders also called for a stronger integration of freight, tourism and rail planning and emphasised the need for equitable investment, ensuring both through travellers and local communities benefit from infrastructure upgrades.

This feedback provides a strong foundation for the White Paper's recommendations and future investment planning, ensuring the strategy reflects both the diversity and complexity of the corridors' transport task.

03 Vision for the corridors

3.1 Transport vision

Our vision for the corridors is a network tailored to the people who use it, and the unique and treasured places it connects. It will support safe, seamless and reliable movement for those who live, work, visit or travel through the area. It is a network and a suite of services that enable thriving communities, strengthen local economies and deliver meaningful outcomes.

This vision is grounded in using road space in a considered and meaningful way that reflects Transport's broader role in shaping communities, not just supporting movement.

It includes improving freight efficiency and safety, expanding public and active transport options, and reducing car dependency.

Sunrise at the Blue Mountains National Park © stock.adobe.com



Recognising its local, state and national significance, the vision for the Sydney to Central West corridors is for a transport network that reflects and responds to the communities it connects – supporting safe, seamless and reliable journeys for residents, visitors, and businesses alike. This vision is grounded in the understanding that road corridors are more than movement channels – they are places that shape the character, sustainability and economic strength of the regions they pass through and connect. Achieving this vision means managing road space in a way that supports vibrant local communities, protects heritage and environmental values, enables efficient freight access, and expands travel choices through better public and active transport connections.

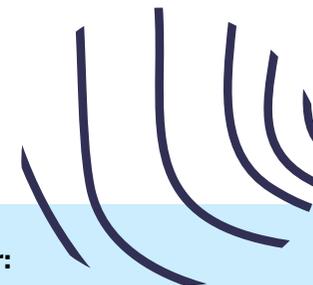
To deliver this, three core outcomes will guide future planning and investment across the corridors:

- Support thriving, liveable communities with road corridors that reflect the needs and character of local neighbourhoods, while minimising environmental and heritage impacts.
- Provide safe and reliable road corridors that ensure dependable access under all conditions, for every customer, every day.
- Unlock regional potential and boost the NSW economy with efficient and sustainable transport links between Sydney, the Blue Mountains and the Central West.

3.2 Strategic regional integrated transport objectives

The strategic regional integrated transport plans (SRITP), being delivered across the nine DPHI regions in regional NSW, set out a long-term vision to guide planning and investment in a way that reflects the unique needs and aspirations of each region. While each plan is shaped by regional priorities, all SRITPs share a consistent set of high-level objectives that promote safe, equitable, and sustainable transport outcomes for regional communities.

In developing the White Paper, these shared objectives have provided an important strategic bridge between regional and metropolitan planning. In particular, the objectives have been used to align the priorities of the Central West and Orana SRITP with the corridor-focused analysis of this White Paper – ensuring a consistent, place-based approach across the Blue Mountains, Lithgow and Bathurst.



The following objectives have shaped the development of this White Paper:

- **Starting with Country:** All investment in the transport network, services, policy and technology takes a Country-centred approach.
- **Access to transport for all:** An equitable transport network that provides a range of travel choices to all people living, working in or visiting the Blue Mountains and Central West region.
- **Well-located housing and successful places:** Support the delivery of well-located housing, successful places and local amenity for communities along the Sydney to Central West corridors.
- **A safe transport network:** Improve safety for every customer and reduce fatal and serious injuries on the transport network.
- **A thriving and diversifying economy:** An efficient transport network to support a diversifying and growing economy, including tourism and freight movements, while preserving the distinctive character and environment of villages and scenic landscapes.
- **Reliable and resilient network:** Reduce the impact of transport network shocks and stresses to service and network interruptions, respond to congestion, natural disasters, special events and traffic incidents and proactively plan for future impacts.
- **Net zero emissions:** Contribute to achieving the emissions reductions targets as outlined in the Net Zero and Climate Change Policy.

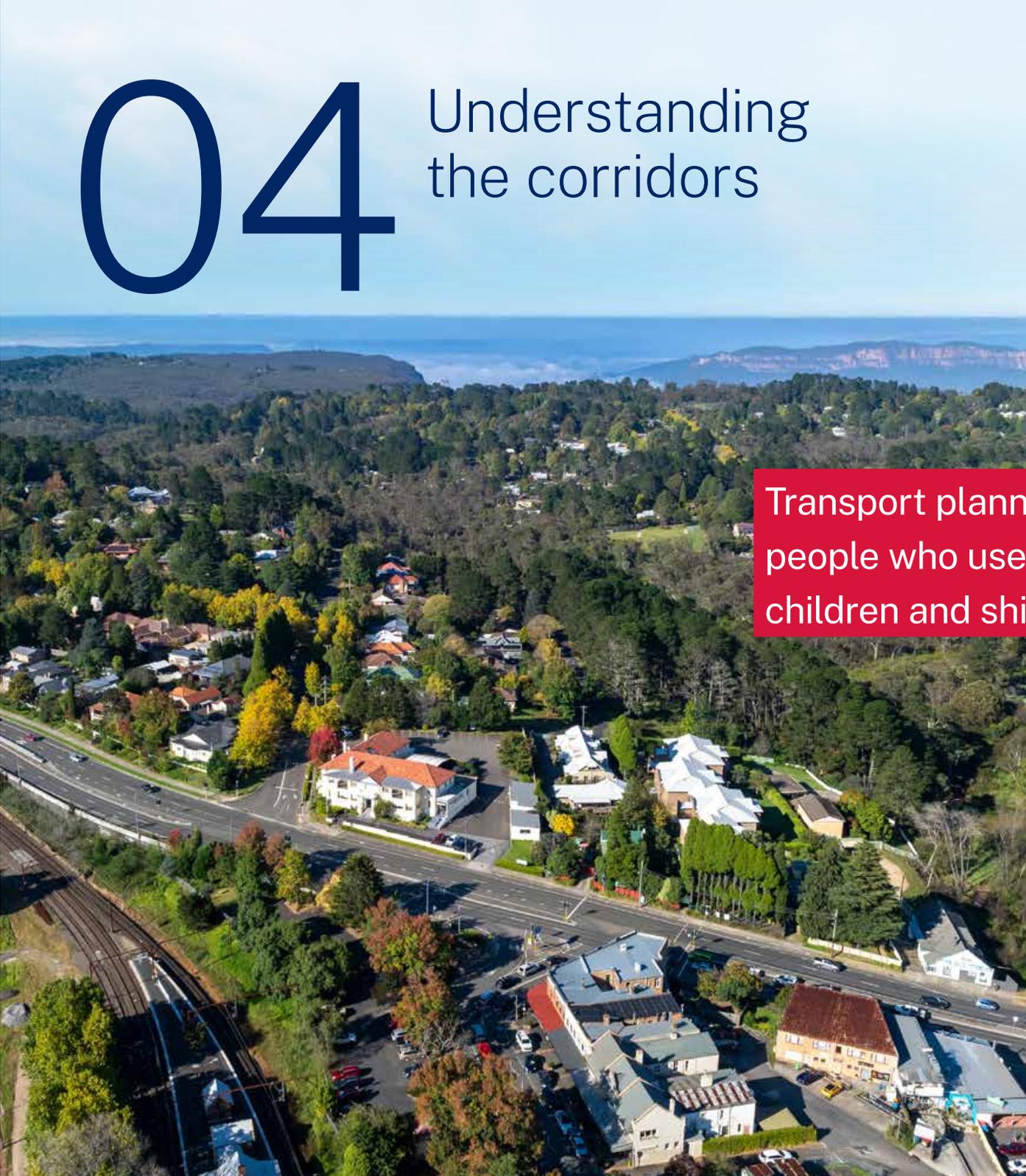
04 Understanding the corridors

A strong understanding of the people, places, environment, and travel patterns along the Sydney to Central West corridors, along with the deep connection of First Nations peoples to Country is critical for effective transport planning. By examining settlement pattern and diverse community needs, we can identify specific challenges and opportunities for the Great Western Highway and the Bells Line of Road, ensuring future investment is aligned with community priorities, economic growth, and the broader goals of safety, connectivity and sustainability.

Transport planning must focus on the diverse people who use the corridors, from school children and shift workers to older residents.

These corridors serve communities with varied transport needs shaped by culture, income, ability and life stage. Designing inclusive, flexible, and safe transport options across all modes require a deep understanding of how people move and embedding accessibility and equity into every transport decision. The demographic profile of the study area is shown in Figure 9.

The Great Western Highway running through the township of Wentworth Falls with Jamison Valley in the background © stock.adobe.com



4.1 People and places

4.1.1 People

First Nations

The study area is situated on the traditional lands of the Dharug, Wiradjuri, and Gundungurra First Nations peoples, who have been custodians of this Country for thousands of years. These communities maintain strong cultural ties of the land, waterways, and sacred sites across the region. According to the 2021 Census, First Nations-identifying residents represent approximately six per cent of the combined population in the five LGAs, higher than the NSW average of four per cent. Notably, the proportion of First Nations population is higher in Bathurst and Lithgow LGA, at eight per cent and ten per cent respectively, and a little lower in the Blue Mountains LGA at approximately three per cent.¹⁸

Incorporating an understanding of Aboriginal communities into transport helps maintain respectful access to culturally significant sites and ensure transport services meet the modern needs of First Nations peoples to access nearby educators, opportunities and jobs. This approach supports an inclusive and equitable transport network that protects cultural heritage and strengthens connection to Country through providing safe, reliable, and culturally sensitive mobility options.

Population projection

Between 2021 and 2041, the study area is expected to grow from approximately 166,000 people to 178,500, representing an increase of approximately 8 per cent. However, growth will be uneven. Populations in Bathurst East and Richmond-Clarendon within the study area are forecast to grow by 37 per cent and 24 per cent respectively, while areas such as Katoomba-Leura and Springwood are expected to remain relatively stable.¹⁹ These variations will drive different pressures on local infrastructure and shape how and where transport services need to respond.

Ageing population

Demographic change is also influencing how people travel. The corridors' population is ageing, with residents aged 65 and over projected to make up 21 per cent of the population by 2041, up from 16 per cent in 2021.

According to projections, the total population of residents over 65 is expected to increase from approximately 69,000 in 2021 to approximately 97,000 in 2041 across the five LGAs within the corridors. In 2021, the Penrith LGA had the lowest proportion of residents over 65 years (13 per cent), with the highest proportion being in the Lithgow LGA (24 per cent). The other LGAs in between were Bathurst LGA (18 per cent), Blue Mountains LGA (22 per cent), and Hawkesbury LGA (16 per cent).

While all the five LGAs will see an increase in residents aged over 65 years by 2041, the Hawkesbury LGA is projected to have the greatest increase (74 per cent), followed by the Penrith LGA (69 per cent), the Blue Mountains LGA (42 per cent), the Bathurst LGA (34 per cent), and then the Lithgow LGA (28 per cent). Despite the variance within the projected increase in older residents within the five LGAs, older residents in these areas will require safer, more accessible and connected transport to support independence and participation within a topographically challenging environment.²⁰

Need for assistance

According to Australian Bureau of Statistics 2021 Census, thousands of residents across the five LGAs are living with a need for assistance in core activities due to disability, long-term health conditions, or old age. Penrith LGA reported the highest number, with 12,000 people (5.5 per cent of its population), followed by the Blue Mountains with 4600 people (5.8 per cent), and Hawkesbury with 3700 people (5.6 per cent). In Bathurst, 2800 residents (6.4 per cent) required support, while Lithgow, despite its smaller population, had the highest proportion at 7.6 per cent, representing 1600 people. Each of these areas has seen a modest increase over the past 10 years, ranging from 1.2 per cent in Penrith LGA to two per cent in the Bathurst and Lithgow LGAs.²¹ Transport planning must prioritise accessibility, inclusive infrastructure and services to meet the growing needs of people with disabilities, health conditions, and older population along the corridors.

¹⁸ ABS, 2021 Census

¹⁹ Transport for NSW, Travel Zone Projections 2024

²⁰ Department of Planning, Housing and Infrastructure, 2024 NSW Common Planning Assumption Projections, Population Projections for year ending 30 June

²¹ ABS, Census 2021, Core activity need for assistance



Households

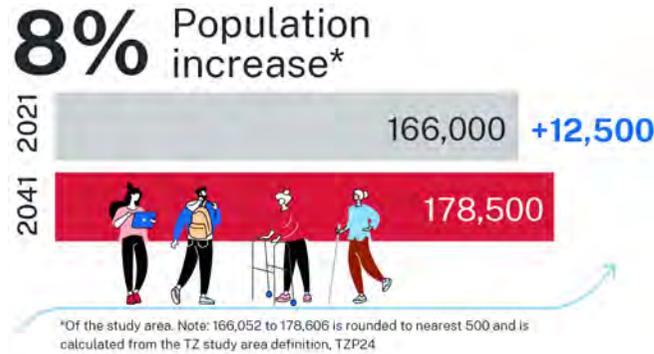
The study area also has a high proportion of single-parent households, between 19 and 23 per cent in Bathurst, Richmond-Clarendon, and Lithgow, well above the NSW average of 15.8 per cent.²² These families often juggle complex schedules across multiple locations and require transport options that are safe, affordable, and responsive to daily routines such as school drop-off, work, and care.

Car ownership

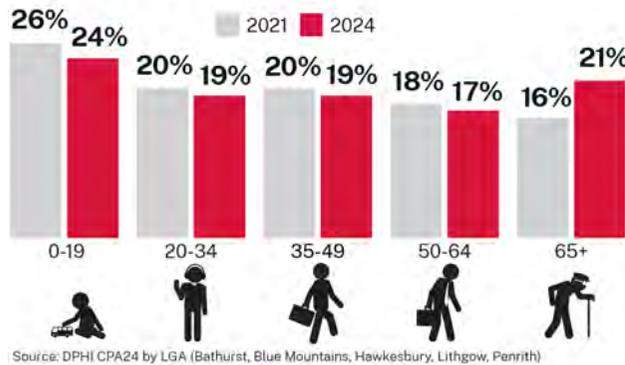
Car ownership is high across the corridor, with 94 per cent of households owning at least one vehicle, compared to the NSW average of 91 per cent. Around two-thirds own more than one vehicle. This reflects both a reliance on cars for mobility and the limited availability of public transport alternatives. However, some areas, including Katoomba-Leura, Bathurst and Lithgow, show significantly higher rates of households without a vehicle (11–12 per cent), pointing to pockets of transport disadvantage.

Cultural diversity

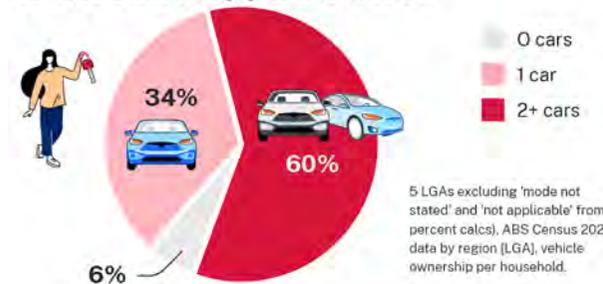
The study area is culturally diverse, with 12 per cent of the population born in non-English speaking countries, with India, the Philippines, China, Germany, Malta and Nepal amongst the top three for each LGA. The average for NSW outside Greater Sydney is around seven per cent.



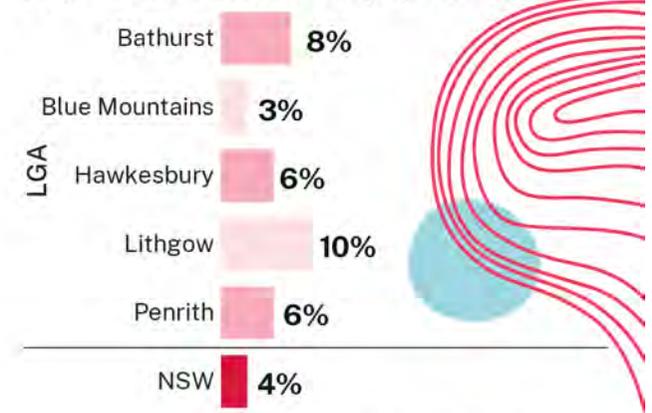
Age bands



Vehicle ownership per household



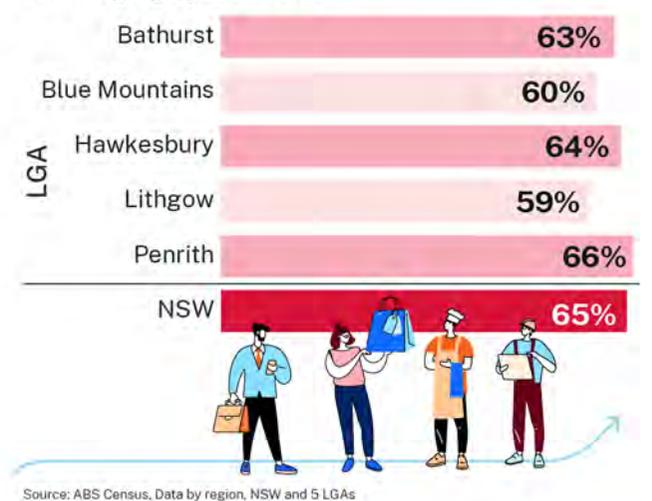
Proportion of First Nations population



LGA	Number of people living with a need for assistance in core activities	%
Bathurst	2,800	6%
Blue Mountains	4,600	6%
Hawkesbury	3,700	6%
Lithgow	1,600	8%
Penrith	12,000	6%

Source: ABS Census, Data by region, 5 LGAs

Working age population



22 ABS, Census 2021

Figure 9. Demographic profile of the Sydney to Central West study area

For instance, in the Bathurst LGA, nearly 90 per cent of people only speak English at home, with only seven per cent of people from households where a non-English-speaking language is used. In contrast, the Penrith LGA recorded 74 per cent of English-speaking residents and nearly 24 per cent of households speak another language other than English.²³

The Greater Blue Mountains Area is also a major tourism destination, attracting large numbers of international visitors, many of whom may not speak English. This highlights the need for inclusive and accessible transport services that accommodate cultural and language diversity, enabling all users, including residents and visitors alike, to navigate the corridors safely and confidently.

Working age

In NSW, around 65 per cent of the population is of working age (15–64 years). Among the five LGAs, Penrith has the highest proportion of working age population at 66 per cent which is higher than the NSW average. The other four LGAs are all lower than the NSW average, with Hawkesbury slightly lower at 64 per cent, Bathurst at 63 per cent, and Blue Mountains (60 per cent) and Lithgow (59 per cent) having the smallest proportions of working age residents.²⁴ This population cohort would typically travel during peak commuting hours. Areas with a higher share of working age people, like Penrith, require strong transport networks with

reliable, frequent services to support daily travel to work. While other regional areas may require better links and multimodal options that connect to key employment destinations.

Employment

As of 2021, the study area supported 63,000 jobs for a population of 166,000. Employment is forecast to grow by 17 per cent by 2041, reaching 74,000 jobs.²⁵ In Bathurst and Penrith, 97 and 90 per cent of residents work within their LGA respectively, Lithgow and Hawkesbury represent 85 and 82 per cent respectively, whereas in the Blue Mountains LGA represents 66 per cent. The high percentage highlights the importance of strong local labour markets and local trips.²⁶ Work from home (WFH) is much more common in metropolitan areas (including Penrith, Hawkesbury and the Blue Mountains) with 36 per cent WFH at least one day a week in metropolitan areas and 21 per cent in rural areas (Lithgow and Bathurst).²⁷

Emerging industry

Economic growth is being driven by major regional investment. The Central-West Orana Renewable Energy Zone just west of the study area is expected to deliver over 6 GW of renewable energy, attract \$20 billion in private investment, and create 5000 jobs during peak construction.²⁸ This will generate additional demand for skilled labour and support new opportunities across the corridors.

Most oversized overmass vehicle movements to the Central-West Orana Renewable Energy Zone will be via the Golden Highway.²⁹

As jobs grow and diversify, workplaces are not confined to single centres as people move flexibly across the region to reach them. Investing in both local transport options, such as public and active transport, and stronger inter-regional connections to Greater Sydney, the Central West and beyond will ensure people can access work safely and reliably, supporting inclusive growth.

Planning for the future must consider the full spectrum of travel needs across life stages, household types, and abilities. As the population continues to age and travel needs diversifies, transport must evolve to provide more flexible, multimodal options that connect people to services, jobs, and communities, especially for those with limited mobility, children, or no access to private vehicles.

Emerging trends and technology

The way we move is shaped by macro and micro influences and trends, both local and international. For example, the last major global disruptor – the Covid-19 pandemic – has had lasting impacts on when and how we travel, as well as what we value in our transport choices.³⁰ This includes rapid technology change, the future of working practices, and the impacts of climate change.

23 ABS, Census 2021, quick stats [accessed July 2025]

24 ABS, Data by region [accessed July 2025]

25 Transport for NSW, Travel Zone Projections 2024

26 ABS, Census 2021

27 Balbontin, Hensher and Beck, "Not to travel or how to travel? Understanding weekly commute choices in metropolitan versus rural settings in Australia", *Journal of Transport Policy*, 175 (2026)

28 Invest Regional NSW, Renewable Energy Zone

29 Transport for NSW, Media Release October 2024

30 Transport for NSW, Connecting NSW Strategy 2025



In terms of the number of days people WFH, on average in metropolitan areas, people work around one day from home every week, while in rural areas people work on average from home one day every 11 days. Furthermore, in metropolitan areas, people who work further away from where they live are more likely to WFH than those that live closer to their employment. In terms of days of the week, for both metropolitan and regional areas, Fridays are the preferred work from home day, followed by Mondays and then Tuesdays/Wednesdays.³¹

Cognisant of shifting travel patterns, Transport aims to use technology to facilitate faster, more accessible, and equitable mobility, attracting more people to public transport, walking, and cycling, fostering liveable communities, improving environmental sustainability, and boosting the productivity of freight.³²

Ongoing development and adoption of technology will continue to shape future travel patterns across NSW and the Sydney to Central West corridors.

4.1.2 Places

The Sydney to Central West corridors are not just transport routes – they connect a series of distinct places that underpin the region’s identity and function. From daily life in local centres to world-renowned destinations like the Three Sisters at Echo Point, transport planning must reflect the unique character and role of each place.

Spanning from Lapstone through the Blue Mountains to Bathurst, and along the Bells Line of Road from Richmond to Lithgow, the two routes link urban centres, heritage towns, rural villages, and natural attractions. The Great Western Highway serves as the main spine, supported by the Blue Mountains rail line in many locations.

At the western end, Bathurst anchors the Great Western Highway as a regional city and freight hub, home to key education institutions, government services, and major tourism events, including Mount Panorama/Wahluu.³³ Lithgow and Katoomba serve as strategic centres, combining access to healthcare, education, employment, with strong tourism appeal. However, gaps in public transport and walkability remain.³⁴

In the Blue Mountains, centres like Blaxland, Springwood, Wentworth Falls, Leura and Blackheath play varied roles. For example, Leura and Blackheath have distinct tourism economies and village identities shaped by geography, culture and place function.

The Bells Line of Road links smaller rural communities such as Kurrajong, Bilpin, Berambing and Mount Tomah. These places support local agriculture and tourism but rely on safe, resilient connections to larger centres and Greater Sydney.

Transport investment must support each place not just as a point on a map, but as a lived-in, active community. This includes infrastructure that enables:

- local movement with safe walking, cycling, and access to shops, schools, and healthcare

- tourism access, supporting visitor economies without diminishing local amenity
- freight and servicing, particularly for rural producers and regional centres
- inter-regional connectivity, enabling access to jobs, services, and opportunities across the broader corridors.

Figure 10 provides a summary of place snapshots of key centres in the study area.

4.1.3 The Western Parkland City connection

To the east, the growing Western Parkland City, anchored by Western Sydney International Airport, is transforming the economic geography of the region. With 59,000 new homes targeted and a population of 1.58 million projected by 2041, it will be a major generator of jobs, freight, and visitation.³⁵

This growth presents both opportunity and pressure for the corridors. As freight volumes rise and more people travel between the Blue Mountains and Western Sydney, demand on the Great Western Highway and Bells Line of Road will increase.

The challenge lies in managing this demand without compromising the character, safety, and liveability of communities along the corridors. A coordinated approach to investment is required to balance inter-regional access, local amenity, and the corridors’ broader state and national role.

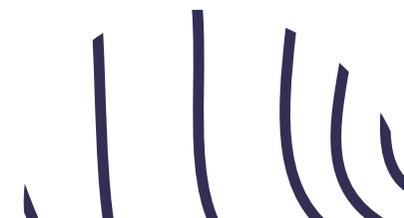
³¹ Balbontin, Hensher and Beck, “Not to travel or how to travel? Understanding weekly commute choices in metropolitan versus rural settings in Australia”, *Journal of Transport Policy*, 175 (2026)

³² Transport for NSW, *Transport Technology Strategy 2024*

³³ Department of Planning, Housing and Infrastructure, *Central West and Orana Regional Plan 2041*

³⁴ Greater Sydney Commission, *Western City District Plan, 2018*

³⁵ Department of Planning, Housing and Infrastructure, *Housing targets*





Bathurst – A regional city driving growth in the central west



Bathurst is a key regional city in Central West NSW, serving as a hub for education, healthcare, government services, and transport. Anchored by institutions like Charles Sturt University and TAFE NSW, and known internationally for its motorsport heritage. Bathurst is a vital freight and transport hub.

Image © Destination NSW

Lithgow – Transitioning town with a strategic role in the corridor



Lithgow will continue to grow as a hub for tourism, heritage, natural environment, and rural village lifestyles, attracting sustainable, environmentally friendly development that preserves its unique character. Strategically located at the junction of key corridors and rail links between the Blue Mountains and Central Tablelands, it offers essential services and attractions, with expanding ecotourism supported by surrounding national parks.

Bilpin – A scenic village with agricultural and tourism significance



Bilpin is a small rural village along the Bells Line of Road, known for its orchards, cool-climate produce, and stunning views of the Blue Mountains. Popular for fruit picking and farmgate experiences, it attracts visitors from Great Sydney and beyond.

Image © Destination NSW

Katoomba – A strategic centre and iconic tourism gateway



Katoomba is the largest town in the Blue Mountains, serving as a cultural, service, and tourism hub with access via the Great Western Highway and rail line. Home to the iconic Three Sisters, it blends heritage charm with global appeal, attracting millions of visitors annually. As both a local centre and major destination, Katoomba faces transport pressures from steep terrain and heavy tourist traffic.

Image © Destination NSW

Leura – Heritage village and tourism jewel of the Blue Mountains



Leura is a picturesque Blue Mountains village known for its heritage charm, boutique shopping, and vibrant tourism centred around Leura Mall. While offering essential services for residents, its strong visitor appeal shapes village life and supports the local economy. Though set back from the Great Western Highway, Leura’s accessibility is challenged by weekend traffic and limited parking.

Image © James Horan; Destination NSW

Wentworth Falls – A tranquil village with natural appeal



Wentworth Falls is a peaceful village known for its natural beauty, cafes, and access to scenic bushwalks and lookouts. While it offers essential services and a strong community feel, its modest centre faces challenges with limited pedestrian infrastructure and disconnected streets.

Image © Destination NSW

Springwood – A key service hub in the lower Blue Mountains



Springwood is a key town in the lower Blue Mountains, serving as a commercial, civic, and cultural hub with shops, services, and the Blue Mountains Theatre along its main street by the highway and rail line. Its strategic location draws both residents and commuters, but the highway’s dominance can hinder walkability and detract from the village atmosphere.

Western Sydney Parklands – A new city shaping regional connections



The Western Parkland City is a major urban transformation anchored by the new Western Sydney International Airport and key employment precincts, set to support over 1.5 million residents by 2041. With 59,000 new homes targeted by 2029 and over 4000 hectares of employment land identified, it will drive growth across Western Sydney and beyond.

Figure 10. Places snapshot

4.2 Topography, natural environment and climate

The Sydney to Central West corridors traverse some of the most distinctive landscapes in NSW, ranging from the steep escarpments and valleys of the Blue Mountains, part of the Great Dividing Range, to the expansive agricultural plains of the Central West. These natural features define the identity of the region and shape both the opportunity and complexity of providing safe, cost-effective, and resilient transport connections.

The Blue Mountains are home to iconic natural landmarks, including the Three Sisters and Jenolan Caves, and are surrounded by vast tracts of protected areas such as national parks and state forests. Such iconic landmarks include the Greater Blue Mountains World Heritage Area, the Garden of Stone Conservation Area, Wolgan Valley. These areas are ecologically and culturally significant, which places important constraints on corridors alignment, upgrade potential, and construction impacts. To the west, the more open terrain around Lithgow and Bathurst provides space for urban expansion, industry, and regional transport hubs. Figure 11 shows the geographic context of the study area.

The stark transitions between dense bushland, heritage landscapes, and emerging urban areas like Western Sydney require place-based transport responses that reflect both environmental sensitivity and the practical needs of residents, visitors, and freight operators.

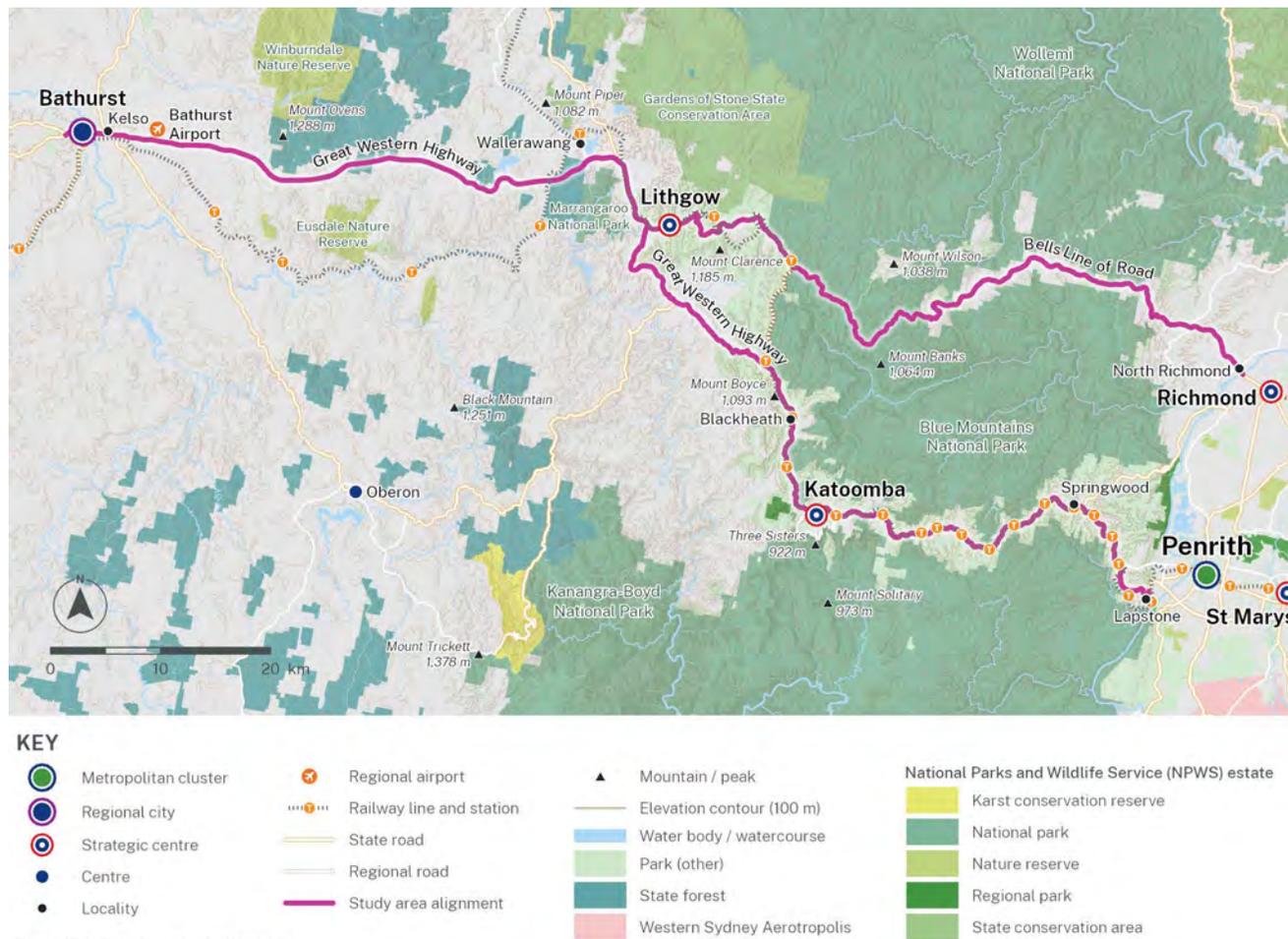


Figure 11. Geographic context of the corridors

4.2.1 Climate and weather impacts

The corridors are exposed to a wide range of climate-related risks, from bushfires and landslides in the Blue Mountains to flooding across the Central West. These risks pose significant challenges to the safety, reliability, and maintenance of the transport network.

The 2019–20 bushfires devastated over one million hectares across the Greater Blue Mountains World Heritage Area, destroying homes and infrastructure.³⁶ Much of the Blue Mountains and Lithgow LGAs are classified as Category 1 bushfire-prone land, the highest risk level, due to highly combustible vegetation and topography

36 Australian Government, Department of Climate Change, Energy, the Environment and Water, Bushfire Recovery [accessed July 2025]

that accelerates fire spread. Urban areas such as Katoomba, Lithgow and parts of Bathurst also fall into moderate-risk zones (Category 2).³⁷

Bushfire-prone areas often overlap with environmentally sensitive sites, particularly national parks and threatened ecological communities. These are most concentrated at the eastern end of the corridors around Lapstone, North Richmond and Penrith, highlighting the need for integrated planning that balances safety, conservation, and transport access.

Severe storms and heavy rainfall also present ongoing risks. Since the 2022 major landslide that took place in November, Wolgan Road at Wolgan Gap remains closed to all traffic.³⁸ In April 2024, a landslide on the Megalong Road cut off access and led to the evacuation of 200 people.³⁹ The Jenolan Caves have remained closed to the public since 2022.⁴⁰ The Central West has experienced significant infrastructure damage during recent flood events, emphasising the need for resilient design and emergency-ready infrastructure. In 2022, significant rainfall caused widespread flooding, including closure of the Great Western Highway at Bathurst.

Climate projections for the corridors include more frequent heatwaves, more intense rainfall events, and rising average temperatures. These changes will require ongoing adaptation in infrastructure design, materials selection, drainage systems, and maintenance practices to ensure the network remains safe and functional into the future.



Great Western Highway through Blackheath © stock.adobe.com

4.3 Travel along the corridors

Travel across the Sydney to Central West corridors reflects a complex mix of movement types: through travel, in-and-out regional trips, and local journeys. These are shaped by the region's geography, land use, and the varied roles places along the corridors play in people's daily lives. Understanding these patterns is essential to guiding investment that responds to how people actually use the network.

4.3.1 Travel modes and behaviours

Travel across the corridors is dominated by private vehicle use, particularly for work trips outside Greater Sydney. In rural areas, around 83 per cent of people use their car at least once a week, typically three to four times a week, compared with around 60 per cent in metropolitan areas, who drive two to three days a week. Public transport use remains low outside Sydney, with only around two per cent of regional residents using it regularly, largely due to limited

³⁷ NSW Government, SEED Portal NSW Bushfire Prone Lands [accessed July 2025]

³⁸ Lithgow City Council, Wolgan Gap Disaster Response [accessed July 2025]

³⁹ Blue Mountains City Council Blue Mountains City Council [accessed July 2025]

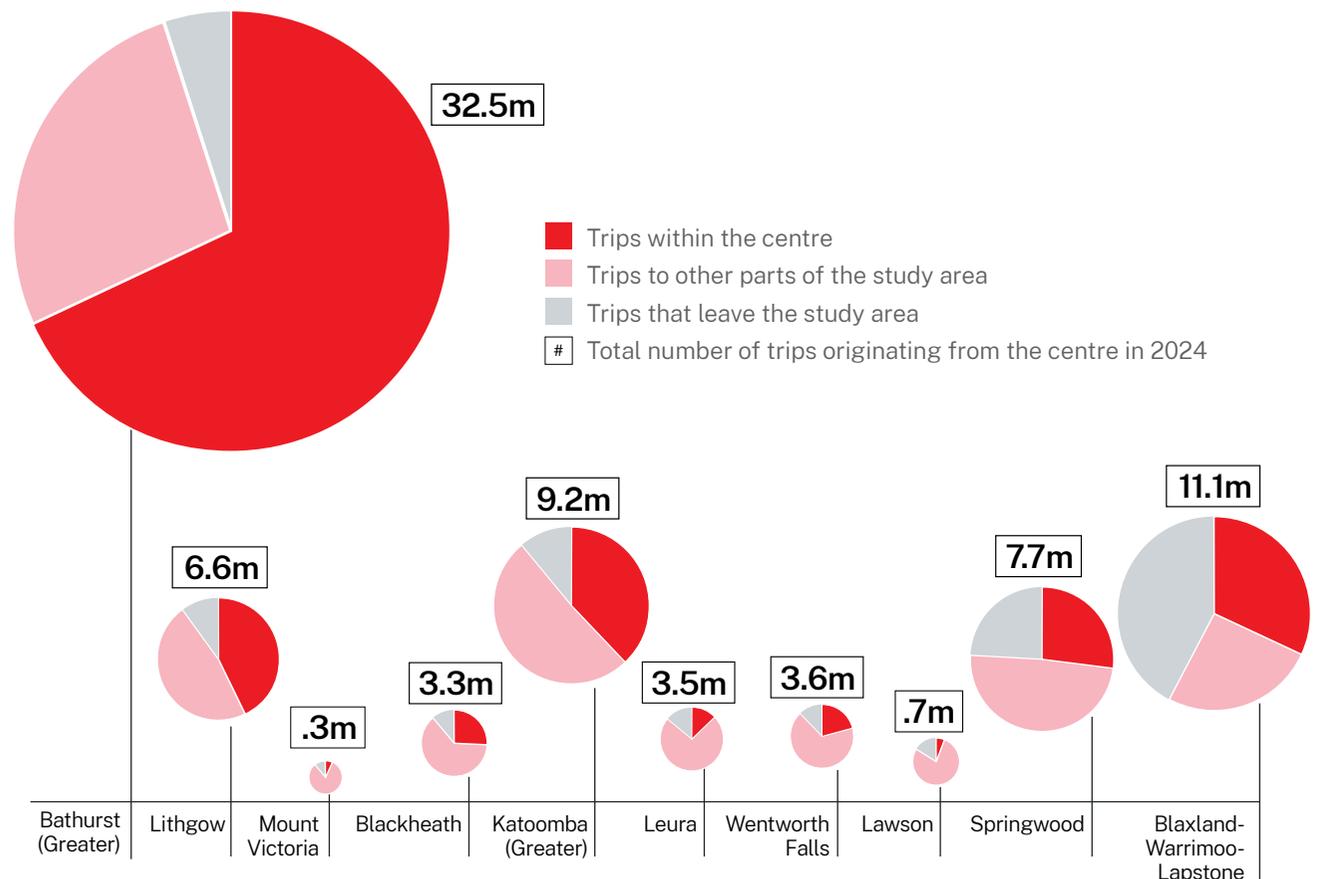
⁴⁰ Transport for NSW, Jenolan Caves Road [accessed July 2025]

service availability and coverage.⁴¹ Census 2016 data (used due to COVID-19 disruptions in 2021) confirms this pattern: 81 per cent of residents along the corridors drove to work, and a further five per cent travelled as passengers. Only seven per cent used public transport, primarily train services from the lower Blue Mountains into Greater Sydney. Active transport remains limited, with walking accounting for about four per cent of work trips and very little cycling or bus use.

Among those commuting into the corridors for work, car dependency is even stronger with 89 per cent arrived by car, two per cent by public transport, and six per cent by walking or cycling. Active modes are most common in compact town centres, where jobs, services, and amenities are located within shorter travel distances.⁴²

4.3.2 Trip purpose and movement types

Household Travel Survey data indicates that most trips in the corridors are for personal or discretionary purposes such as shopping, recreation and social activities, highlighting the importance of local connectivity. Work-related trips, particularly longer-distance commutes to Sydney, show higher train use, but education and other essential trips remain largely car dependent. This underscores the need for better transport options to support daily mobility without reinforcing car reliance.



*The study area for this analysis include the SA3s of Bathurst, Lithgow -Mudgee, Hawkesbury, Blue Mountains and Blue Mountains -South. Centres with a low sample size are excluded. Source: DSpark Mobility Data 2024. Figures are rounded to the nearest 100,000. Separate trips calculated on 15 minute gap between travel.

Figure 12. Mobility data analysis of trip types at various centres along Great Western Highway

Mobile device data from 2024⁴³ was analysed to understand broader movement behaviours shown in Figure 12 and the following patterns emerge:

- Local and intra-regional movement dominate at the corridors' ends – particularly around Bathurst, Penrith and in the upper Blue Mountains – where population density and access to services concentrate movement, with approximately 69 per cent of local trips in the study area starting and ending in the same centre.
- In-and-out movement intensifies toward the east, especially between Katoomba and Penrith, where commuter flows into Western Sydney increase, with approximately 65 per cent of trips in or out of the study area to or from Penrith.
- Through movement, while less frequent, is vital for freight, resilience access, particularly for those travelling between Central West NSW and Greater Sydney.

41 Balbontin, Hensher and Beck, "Not to travel or how to travel? Understanding weekly commute choices in metropolitan versus rural settings in Australia", Journal of Transport Policy, 175 (2026)

42 ABS Census 2016, Method of travel to workplace (MTWP) [accessed October 2025]

43 DSpark Mobility Data, 2024



Freight truck driver looking out the truck window

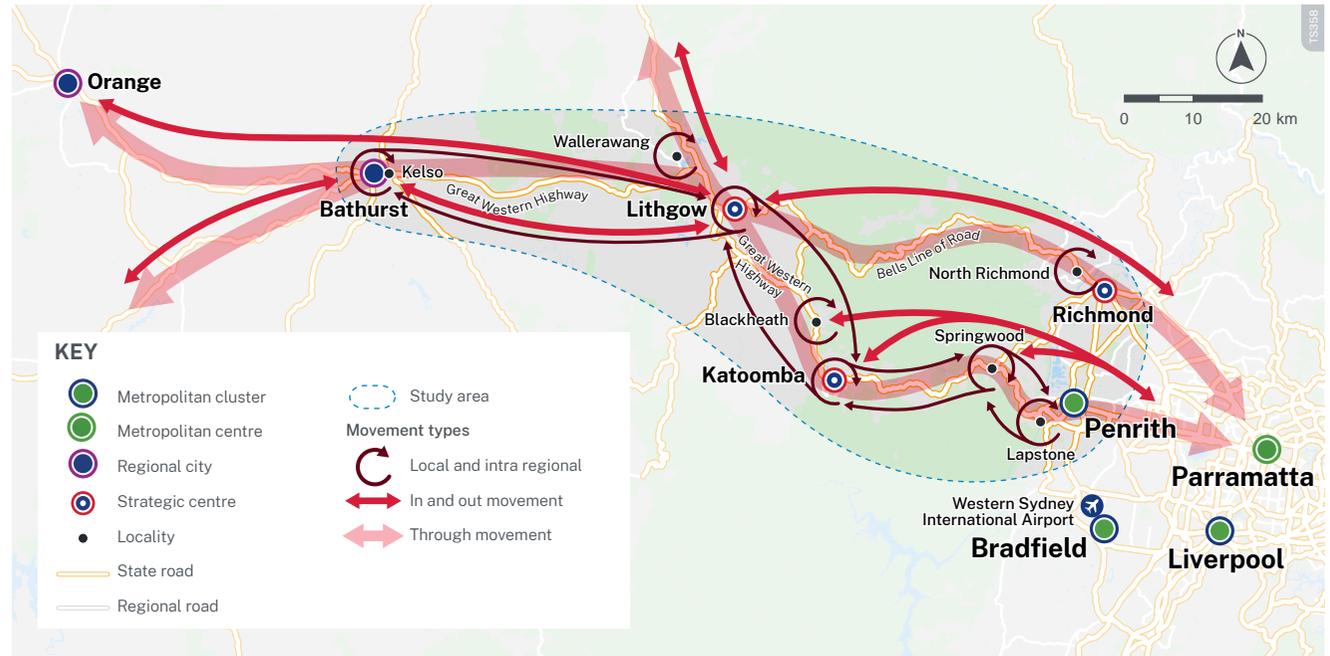


Figure 13. Sydney to Central West movement types

Figure 13 illustrates how these three movement types overlap with key destinations across and beyond the corridors.

Pressure on the network is most evident where movement types intersect. At Katoomba, for example, local travel, commuter activity and tourist visitation converge, particularly near Echo Point, creating congestion and access issues. Near Bathurst, similar pressure arises from local trips, regional service access and freight movements.

These patterns highlight the need for place-sensitive, mode-diverse transport planning. This means:

- improving local travel through better walking, cycling, and public transport connections
- supporting train use where it already meets long-distance commuting needs
- managing pinch points and maintaining capacity for critical freight and inter-regional travel.

4.3.3 Road

The Great Western Highway and Bells Line of Road are the only continuous east–west road connections across the Blue Mountains, linking Greater Sydney to the Central West. As shown in Figure 14, the Great Western Highway is a principal arterial road, classified as part of the National Land Transport Network and designated a national road under the draft National Service Level Standards (NSLS). It carries high traffic volumes, connects major population and service centres, and accommodates both long-distance freight and local movement.

By contrast, the Bells Line of Road, a rural link road and a classified state road and designated regional road under the draft NSLS, plays a supporting role.⁴⁴ It provides critical network resilience, offering the only alternative route during closures of the Great Western Highway caused by vehicle crashes, bushfire, landslides, flooding and planned maintenance.

Darling Causeway, connecting Bell and Mount Victoria, enhances this resilience by providing a short north–south link between the two east–west corridors. Its safe and reliable operation is vital for maintaining redundancy during disruptions.

In towns such as Glenbrook, Woodford, Blackheath, Lithgow and Bathurst along the Great Western Highway, and Bell and Bilpin on the Bells Line of Road, they function as both regional links and local main streets. In these locations, the roads facilitate through traffic while also providing access to schools, shops, and services, creating tension between movement and place. Between centres, the corridors pass through national parks, rural landscapes, and agricultural lands where movement is the dominant function.

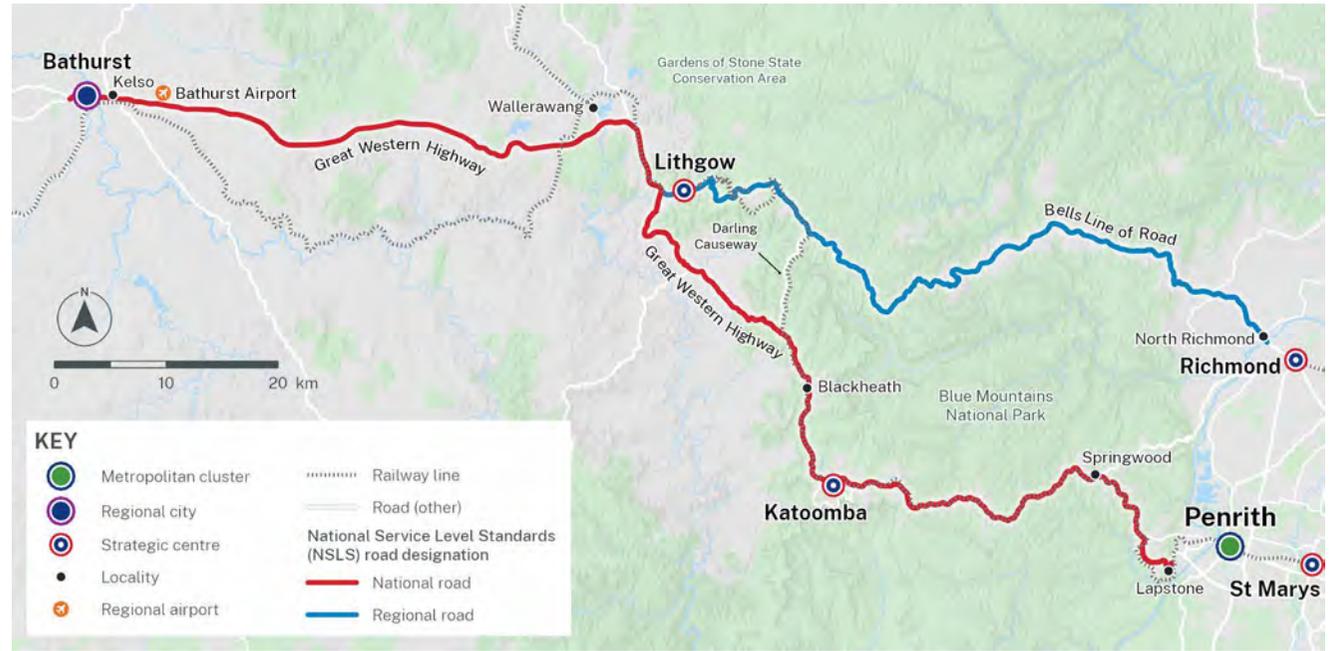
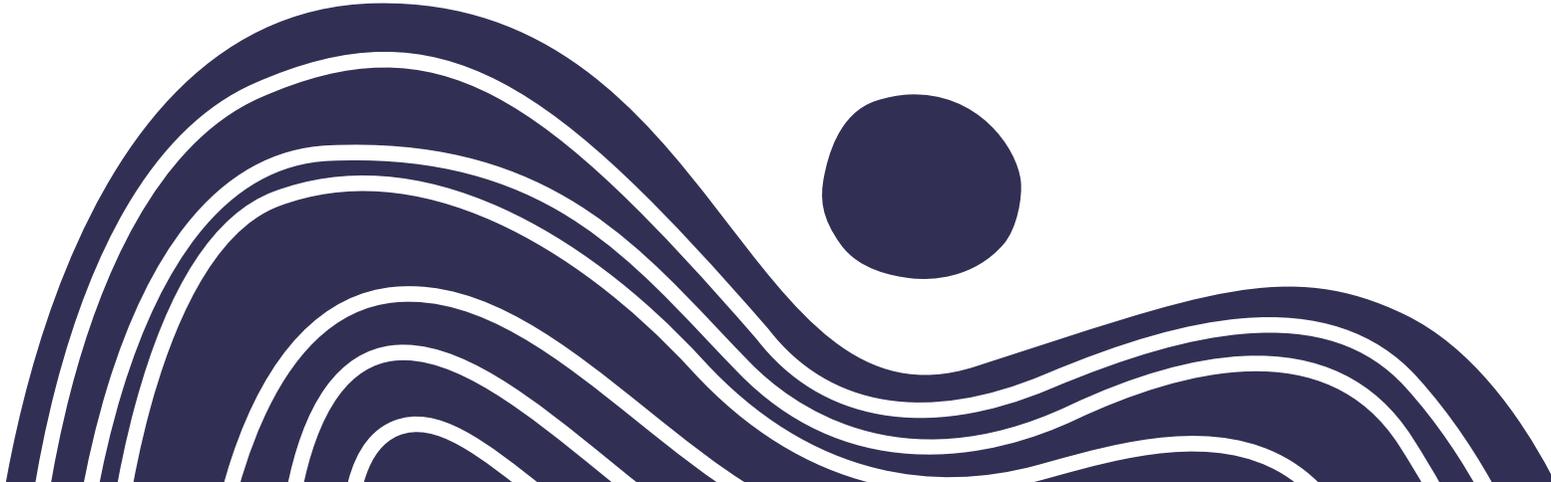


Figure 14. National Service Level Standard draft designation of the study road corridor alignments

⁴⁴ NSW Government, [Movement and Place - Rural link](#) [accessed 27 June 2025]





National Service Level Standards for Roads framework (2021)⁴⁵

The National Service Level Standards for Roads draft framework (2021) provides a nationally consistent approach to assessing and categorising the performance of road corridors based on their function, importance, and user expectations. It aims to guide investment and prioritisation by linking road use with measurable service outcomes. The framework includes three core components.

1. Primary road functions

Roads are classified into one of seven functional categories, based on their role in connecting communities (social function) and enabling economic activity (economic function). These categories range from national roads, which link major population centres and support national freight, to local roads, which primarily serve residential or rural access needs.

2. Secondary road attributes

Within each primary category, road segments are assessed against attributes such as movement function, place context, criticality, access role, and urban or rural setting. These attributes help determine the appropriate level of service for each segment and influence design, maintenance and investment priorities.

3. Customer outcomes

The framework identifies eight customer outcomes that reflect what road users value most, such as safety, efficiency, reliability, access, and amenity. Performance is measured using defined metrics, and the results are aggregated to provide a service rating for each road segment. These ratings are weighted according to the road's functional category and its importance to users.

Together, the National Service Level Standards for Roads draft framework ensures that roads are assessed not only on their technical standards, but also on their ability to meet user needs, support economic growth, and reflect local and regional context. It provides an objective, scalable basis for corridors' planning and performance evaluation across Australia's road network.

⁴⁵ Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts, National Service Level Standards for Roads Framework Summary - September 2021

Traffic volumes and use patterns

Traffic volumes shown in Figure 15 illustrate the corridors' functional differences. The Great Western Highway carries up to 45,000 vehicles per day near Lapstone and Springwood, and 24,000–30,000 vehicles within Bathurst. In contrast, the Bells Line of Road carries between 2700 and 7000 vehicles, peaking near North Richmond (see Figure 15).⁴⁶

Movement data from 2023 confirms that local trips dominate on both roads, especially through towns and large centres.⁴⁷ Analysis showed 70 percent of trips on the Great Western Highway being local and similarly 66 percent of trips on the Bell Line of Road. However, the Great Western Highway carries 25 times more through trips than the Bells Line of Road – further affirming its role as the primary Sydney to Central West connecting route. As noted in Section 4.3.2, traffic pressure is most intense where local, regional, and tourist travel converge – particularly around Katoomba and Leura. Highest traffic growth of 1.7 percent per annum is in the lower Blue Mountains where interregional trips account for more than 50 percent of trips. More options for local travel including walking and cycling, public transport and local parallel roads and cross highway connections through the mountains will be needed in future to enhance the movement of local trips.

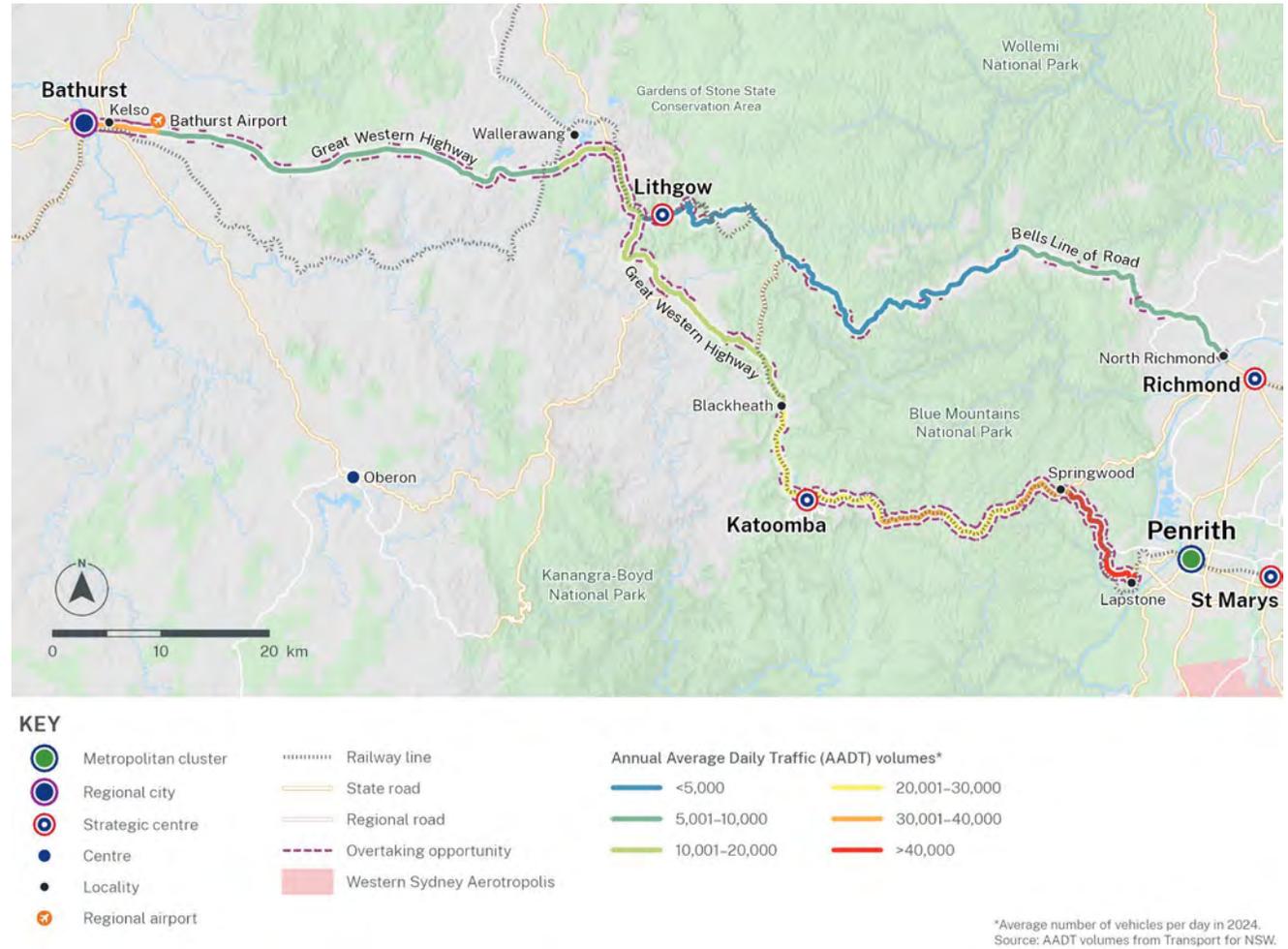


Figure 15. Annual average daily traffic (AADT) volumes

Freight performance and constraints

The Great Western Highway is a vital freight route between Sydney and the Central West, yet topographical and geometric constraints, particularly around Mount Victoria, limit its freight efficiency, especially the 240-metre climb at Victoria Pass. Steep gradients, narrow lanes, tight

curves, resulting in a 20 metre vehicle length restriction, affect articulated and oversize vehicle access. These constraints create safety risks and reduce performance, especially when natural disasters result in lane closures for prolonged periods while being fixed. This creates a pinch point, particularly where freight mixes with local traffic, and extreme event days (including Bathurst

46 Transport for NSW, 2024 Traffic surveys
47 DSpark Mobility Data, 2023

1000 and long weekends) combined with limited overtaking opportunities (see Figure 15). Compared to the Hume Highway, Pacific Highway and Princes Highway, which access Sydney from the north and south, the Great Western Highway represents very poor access for freight from the Central West to Sydney. The existing constraints prevent the use of more efficient high productivity vehicles such as B-doubles up to 26 metres.

The Bells Line of Road, while crucial during emergencies, is significantly less suited to high-volume or heavy vehicle traffic. Sharp curves, narrow cross-sections and steep grades, especially the 450-metre climb at Bellbird Hill, present serious limitations for freight. Its alignment through sensitive environmental areas, including national parks, further restricts its capacity to accommodate large or high productivity vehicles.

By contrast, the Great Western Highway offers comparatively straighter alignments and gentler grades, making it more suitable for supporting the efficient, safe movement of freight and long-distance travel albeit with its own significant challenges with the heritage listed convict-built causeway at Victoria Pass.

Strategic role

Going forward, the Great Western Highway will remain the principal east-west spine, while the Bells Line of Road continues as a vital secondary and contingency route. Effective planning must reflect this interdependence, improving freight and through traffic performance on the primary route, preserving resilience through secondary links, and managing the corridors' dual function as both movement artery and community main street.



Passenger getting ticket from the driver on a bus in the Bathurst area

4.3.4 Local bus services

Local bus networks primarily follow the Great Western Highway, with higher concentrations of services between Mount Victoria and Penrith. Blaxland, Springwood, and Katoomba are key nodes, though many services operate infrequently outside peak times. Gaps are particularly notable in smaller or lower-density towns, such as in and between Blackheath and Mount Victoria, where service availability remains limited.

Tourism-oriented bus routes, such as 686/686G in Katoomba, often operate with greater frequency – combined these two routes now operate at a 10-minute frequency – which is more than other local routes, such as those connecting to Katoomba and Lithgow Hospitals. There is an opportunity to improve service frequency for residents who rely on buses for healthcare and daily activities.



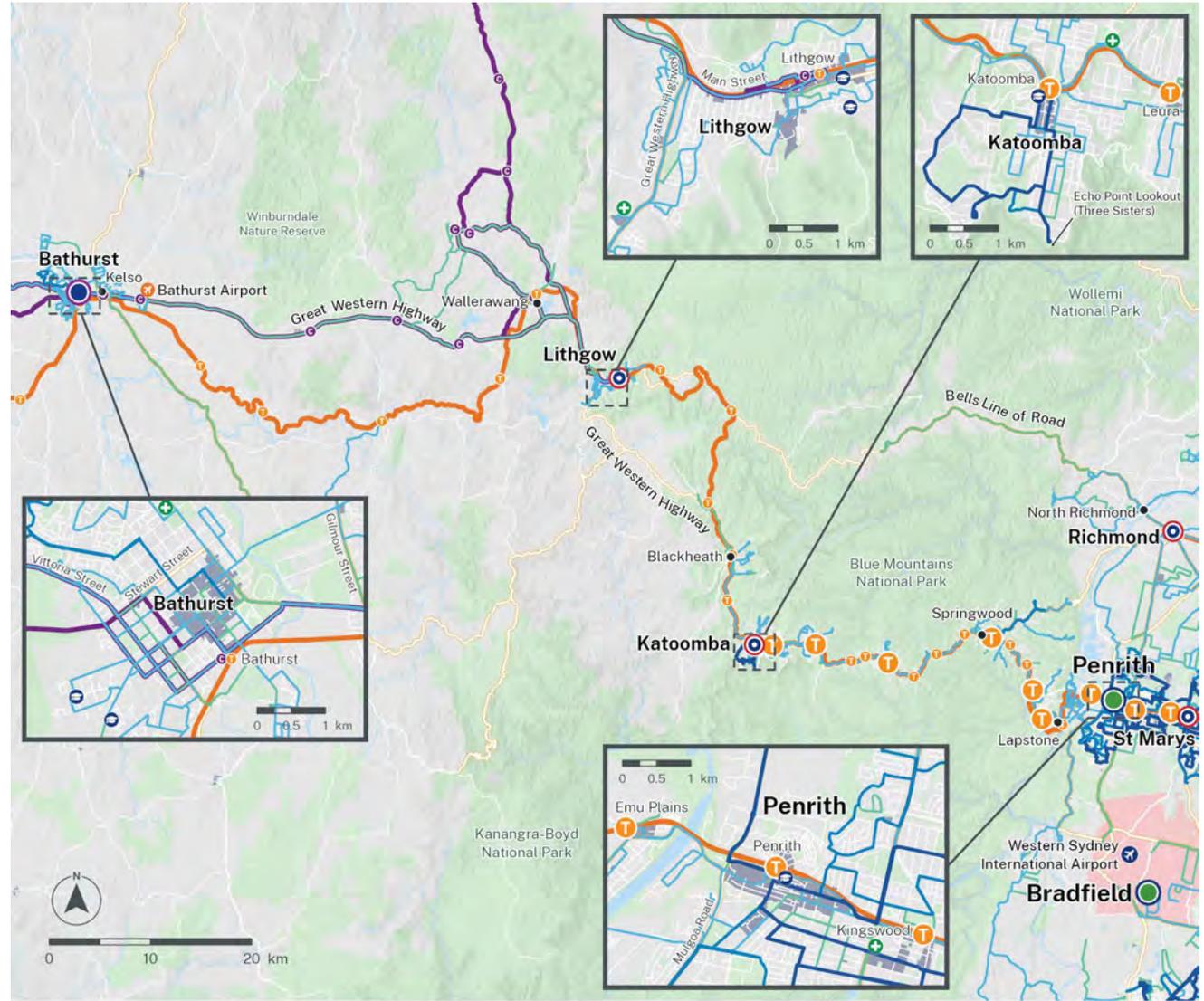
Regional Trains and Coaches map at Lithgow Station

In Lithgow and Bathurst, local buses connect the town centre and surrounding areas like Portland, Wallerawang and Oberon. However, weekend service levels are very limited, and bus services do not operate in the early mornings and evenings to connect with commuter rail services, with some services not operating at all on Sundays. Figure 16 illustrates train, bus, and coach routes and service frequencies between Bathurst and Penrith.

4.3.5 Regional coaches

NSW TrainLink's coach network supports regional access where rail services do not operate, linking towns like Mudgee and Cowra to key railheads including Lithgow. These coaches also serve cross-Regional routes, such as Dubbo to Parkes.

While useful for filling geographic gaps, most coach services are designed to connect with long-distance trains to Sydney. Outside of the Lithgow–Bathurst–Orange core corridor, they generally do not offer high frequency or flexible options suitable for everyday intra-regional travel.



KEY

- | | | | |
|-----------------------|--------------------------------|--------------------------|-------------------------------------|
| Metropolitan cluster | Regional airport | Passenger rail | Western Sydney Aerotropolis |
| Regional city | Hospital | Regional coaches network | Commercial / mixed use zone |
| Strategic centre | Tertiary education | State road | Bus trips per day per route* |
| Locality | High frequency railway station | Regional road | 1 |
| International airport | Low frequency railway station | Local road | 2-12 |
| | | | 13-24 |
| | | | 25-43 |

Source: Routes created from Open Data GTFS (February 2025) from Transport for NSW.
 *Bus trip frequency numbers are calculated based on unique stopping pattern to display most common routes per typical weekday.

Figure 16. Train, bus and coach routes and frequencies between Bathurst and Penrith



The new Mariyung fleet is now servicing the Blue Mountains line

4.3.6 Intercity and Regional trains

Intercity services operate on the Blue Mountains Line, linking Central Station to Lithgow via key stops such as Katoomba, Springwood, and Mount Victoria. Lithgow marks the end of the electrified Intercity line, with typically hourly services in both directions across the day, although several stations receive a service up to every 15 minutes during weekday peak periods.⁴⁸ A twice-daily Intercity service operates between Bathurst and Sydney.

NSW TrainLink operates a daily XPT service from Sydney to Dubbo and a weekly Xplorer service from Sydney to Broken Hill.

As shown in Figure 17, Katoomba recorded the highest ridership on the line, with about 1000 boardings per weekday and weekend (Opal daily

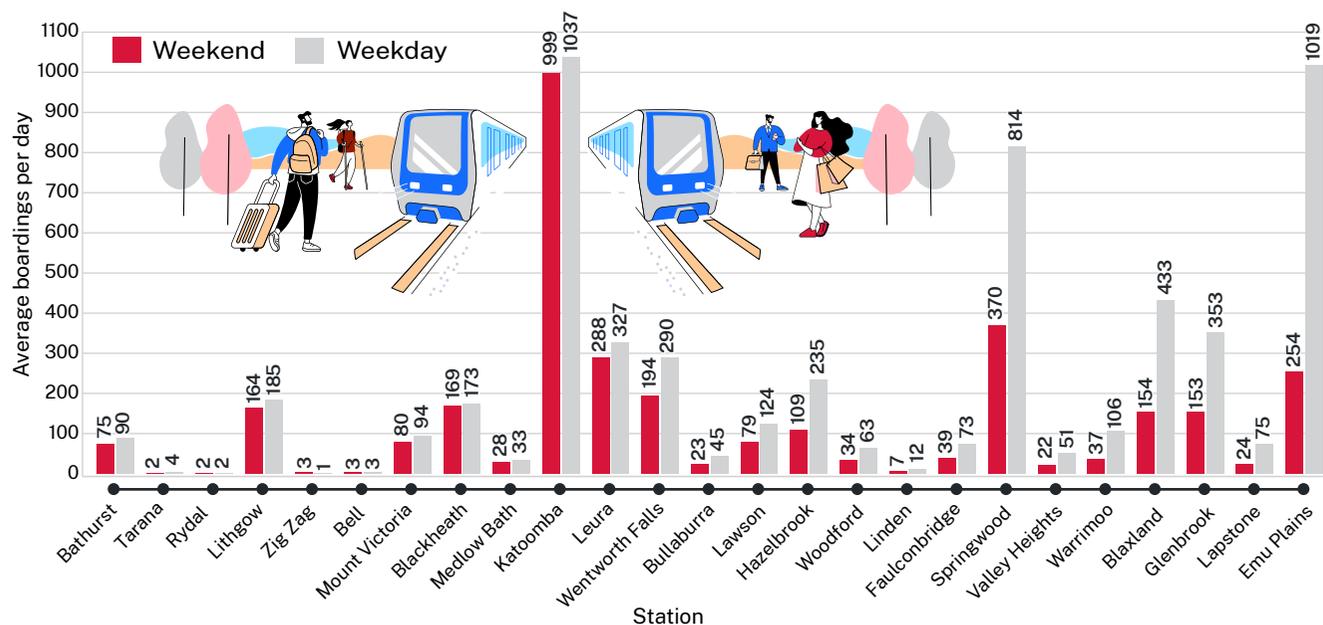


Figure 17. Average boardings per weekday and weekend for the Main West/Blue Mountains Line (Source: Opal daily average for 2024)

average for 2024), followed by Springwood and Leura, reflecting a mix of commuter and visitor demand. Weekend usage is particularly strong along the line, reflecting both commuter and visitor travel.⁴⁹ The NSW Government's decision to reopen Wallerawang Station will extend access to the rail network and improve public transport coverage in the Central West.⁵⁰

Regional destinations west of Bathurst such as Orange, Dubbo, and Parkes remain dependent on infrequent, pre-booked train and coach services, often with variable pricing and limited suitability for spontaneous or day-return travel.

The NSW Government is investing \$2 million to investigate the feasibility of establishing a train stabling facility at Orange.⁵¹ Such a facility would enable additional train services to Orange, in conjunction with the entry into service of the Regional Rail Project fleet. The Regional Network East-West (RNEW) program is also establishing a 10-year investment strategy and strategic plan for the regional rail network intended to drive rail infrastructure and service improvements for regional communities.⁵²

⁴⁸ Transport for NSW 2025, [Intercity trains network, Blue Mountains Line timetable](#) [accessed July 2025].

⁴⁹ Transport for NSW 2024, [Opal Analysis, Daily Average](#) [accessed July 2025].

⁵⁰ Transport for NSW 2025, [Current Projects, Wallerawang Station](#) [accessed July 2025].

⁵¹ NSW Government, [Investigations into Orange train stabling facility](#) [April 2025].

⁵² Transport for NSW, [Regional Network East/West Uplift Program](#) [accessed November 2025].

4.3.7 Walking

Walking is concentrated around town centres, retail precincts, and rail stations – particularly in the Blue Mountains, where footpaths, crossings, and higher urban density is more supportive for walkability. Towns like Katoomba, Leura, and Blackheath benefit from formal, signalised crossings near station entries. However, in Lithgow, pedestrian infrastructure near the station is minimal, creating safety risks and reducing walk-up access.

Pedestrian crossing treatments vary by context. Signalised crossings are common in higher-traffic areas, while zebra crossings and refuges are used in slower-speed zones. Grade-separated pedestrian overpasses exist near some stations but often lack lifts or ramps – creating accessibility challenges for people with limited mobility.

In more rural and dispersed locations across the corridors, walking is infrequent due to long distances and limited infrastructure. Where it does occur, it is often recreational rather than a transport mode.

4.3.8 Cycling and micromobility

Cycling infrastructure along the Great Western Highway from Lapstone to Blackheath is fragmented and inconsistent. Most on-road cycling facilities are unprotected shoulder lanes, offering minimal safety or comfort for riders. Shared paths exist in short sections but lack continuity, making longer trips impractical.



Women putting on their bike helmets

As terrain becomes more challenging towards the upper Blue Mountains, cycling infrastructure and usage decline further.

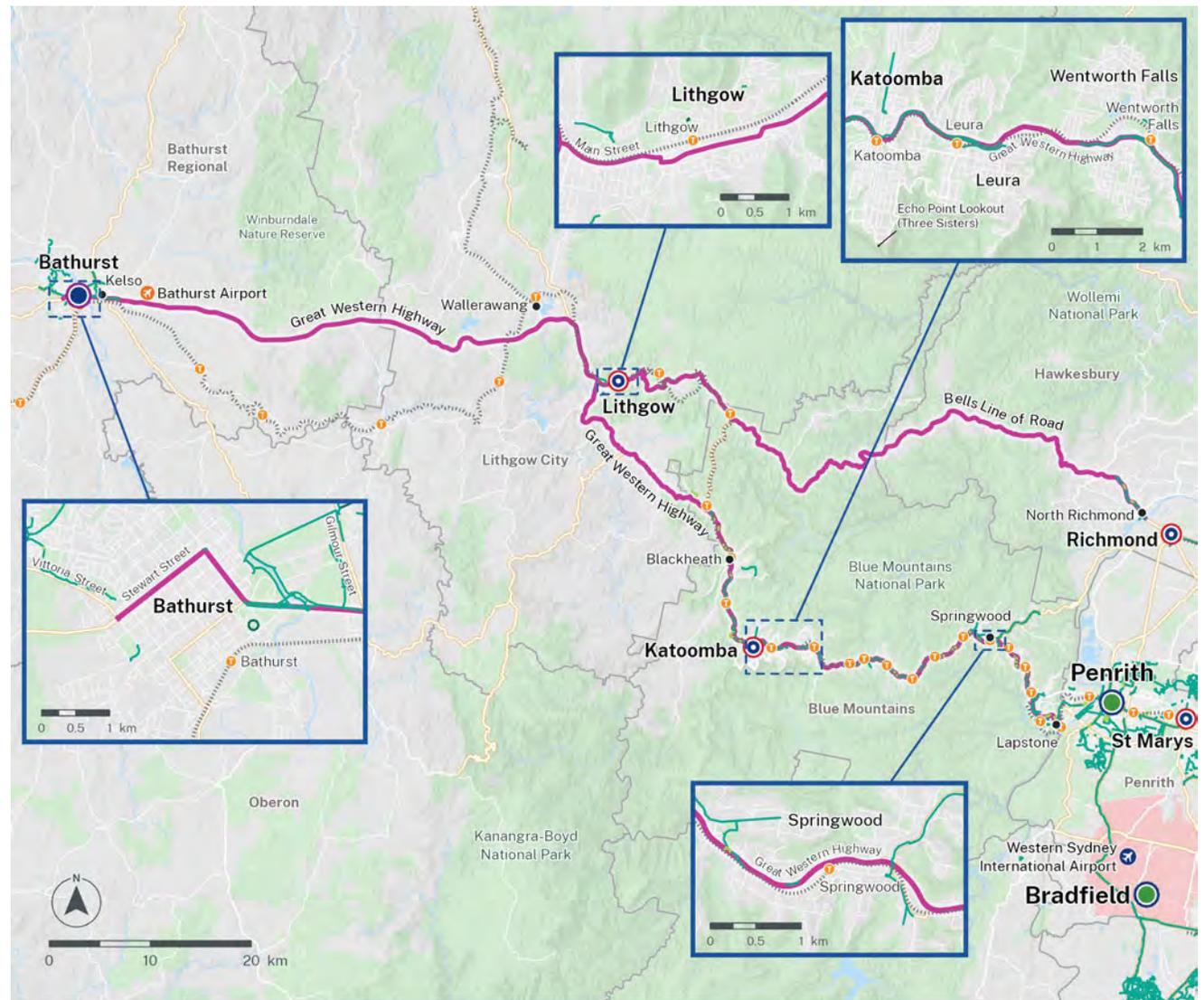
In towns like Springwood, Blaxland, and Glenbrook, recreational riders favour short local trips or travel by car to access designated

trails. The strategic cycleway corridor from Penrith to Katoomba, identified as part of the Western Parkland City connections, presents a long-term opportunity to link communities and improve cross-regional access when aided by electric bike.

Transport for NSW provides grants to Councils through the Get NSW Active program. This program funds active transport plans to identify active transport networks to make walking and cycling more accessible to local communities, as well as funding the development and delivery of these network links. A project to provide the first stage of Blue Mountains active transport link from Linden to Faulconbridge has been funded for development in 2025–26. When constructed it will be a significant step toward delivering the strategic cycleway corridor from Penrith to Katoomba.⁵³

The quality and availability of cycling infrastructure vary widely across the corridors. Survey data shows regional riders prioritise direct, separated, high-quality routes, with safety and driver behaviour being key concerns. Access to public transport by bike is also limited, with many stations lacking secure end-of-trip facilities. While bike racks exist at more than half the corridors' stations, secure options like lockers and sheds are rare.

The rise of e-bikes and e-scooters is shifting short-trip behaviour. In regional NSW, 45 per cent of micromobility users have shifted from private car use, highlighting its potential to reduce car dependency.⁵⁴ Ownership and use of e-bikes (20 per cent) and e-scooters (11 per cent) is growing rapidly, especially in areas with hilly terrain where electric assistance can overcome distance and gradient barriers. However, infrastructure to support this emerging mode is limited and not yet fit for purpose across much of the study area. Figure 18 shows existing cycleway infrastructure along the corridors.



KEY

	Metropolitan cluster		Regional airport		Study area alignment		Existing bicycle paths
	Regional city		Railway line and station		Local government area		Off road shared path
	Strategic centre		State road		Western Sydney Aerotropolis		Off road bicycle path
	Locality		Regional road				On road bicycle lane / shared zone
	International airport		Local road				

Source: Existing bicycle paths (May 2025) from Transport for NSW.

Figure 18. Existing bicycle paths

⁵³ NSW Government, *Get NSW Active 2025–26* [accessed October 2025]
⁵⁴ NSW Government, *E-scooters kick toward legalisation in NSW* [accessed July 2025]

Following the roundtable, Transport for NSW developed a program of reform and funding options to improve wheelchair accessible services.⁵⁴



Passenger who uses motorised wheelchair getting out of accessible taxi

4.3.9 Taxis and rideshare

Taxis and rideshare services help bridge accessibility gaps across the corridors, offering first and last-mile connections where bus coverage is lacking or during early morning and evening periods. These services are most available in centres like Penrith, Katoomba, Lithgow, and Bathurst, but remain limited in smaller towns and rural areas.

Wheelchair accessible taxis (WAT) are a crucial part of NSW transport system, helping people with disability reach healthcare, work, education and community activities, especially in rural and regional areas where other transport options may be limited. The Wheelchair accessible services roundtable in Orange highlighted challenges in getting transport for people with disability.

⁵⁴ Transport for NSW, NSW Government Response to the Key Findings Report Availability of Wheelchair Accessible Services Roundtables – December 2024

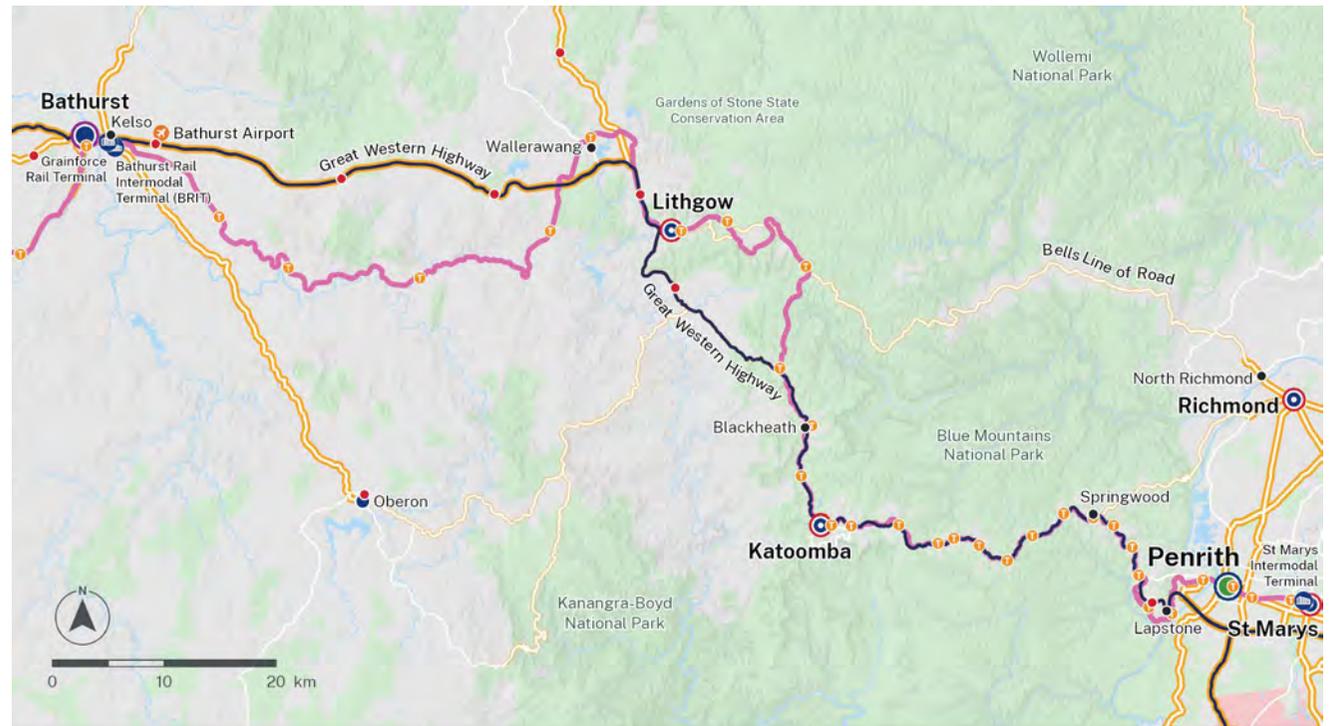


4.3.10 Freight

Road corridors

The Great Western Highway is the primary east–west freight route connecting Greater Sydney to the Central West, playing a critical role in the national and state freight task (Figure 19). As part of the National Land Transport Network, it enables the movement of agricultural goods, manufactured products, retail supplies, and construction materials between regional industries and metropolitan markets, and the Western Sydney International Airport in the future. It also supports local freight access, serving as the main spine for deliveries to and from towns and industrial precincts across the corridors.

Both the Great Western Highway and the Bells Line of Road are accessible to 19-metre B-doubles and Performance Based Standards (PBS) Level 1 vehicles (up to 20 metres). However, longer B-doubles, which currently move a large proportion of the freight task, and modern PBS Level 2 (26–30 metres long) heavy vehicle access is restricted along the full length of the Bells Line of Road and between Lapstone and Marrangaroo west of Lithgow on the Great Western Highway. This results in a 90–100 kilometre east–west access gap between Central West NSW and Sydney, forcing larger vehicles to either downsize freight loads (including by decoupling and performing multiple trips) or divert via long, costly alternate routes such as the Hume Highway via Goulburn



KEY

	Metropolitan cluster		Intermodal freight terminal		State road
	Regional city		Regional airport		Regional road
	Strategic centre		Railway station		PBS 2B road
	Centre		Heavy vehicle rest stop		National key road freight route / National Land Transport Network (NLTN) road
	Locality		Western Sydney Aerotropolis		National key rail freight route

Source: PBS 2B roads and heavy vehicle rest stops from Transport for NSW, NLTN roads and national key freight routes from Australian Government DITRDCA.

Figure 19: Road and rail freight network

and Cowra or the Golden Highway to the north, adding over 300 kilometres to a typical Penrith–Bathurst journey.

The NSW Government's 2024 Heavy Vehicle Access Policy identifies the Great Western Highway as a priority route for east–west freight

access and outlines a roadmap to improve connectivity, reliability, and productivity.⁵⁶ Upgrading the highway between Parramatta and Bathurst to enable PBS Level 2 access would remove a major bottleneck, improving freight efficiency and resilience across the state network and supporting the NSW economy.

Rail corridor

Running parallel to the Great Western Highway, the Main West/Blue Mountains Line is the key rail freight connection between Greater Sydney and the Central West and Orana, moving over eight million tonnes of freight annually.⁵⁷ It carries key commodities such as coal, grain, meat, steel, mineral concentrates, and increasingly, containerised goods through existing and emerging intermodal terminals.

Future growth in agribusiness, food processing, and export industries across the Central West and Orana will increase road and rail freight demand. Figure 20 shows the expected freight movement distribution by entering, leaving and going through Central West and Orana by road and rail in 2046. The opening of Inland Rail (Parkes to Melbourne) in 2027 and the development of the Parkes Special Activation Precinct will likely create new freight flows and relieve pressure on the Main West Line with an expected increase in freight travelling north from the Central West and Orana to the Port of Newcastle.⁵⁸ This could help to segregate passenger and freight rail movements on the Main West/ Blue Mountains Line, ultimately improving the speed, flexibility, and reliability of freight and passenger rail services.

57 Transport for NSW, Main West Rail Line Capacity Enhancement Program [accessed 27 June 2025]

58 Transport for NSW, Draft Central West and Orana Strategic Regional Integrated Transport Plan

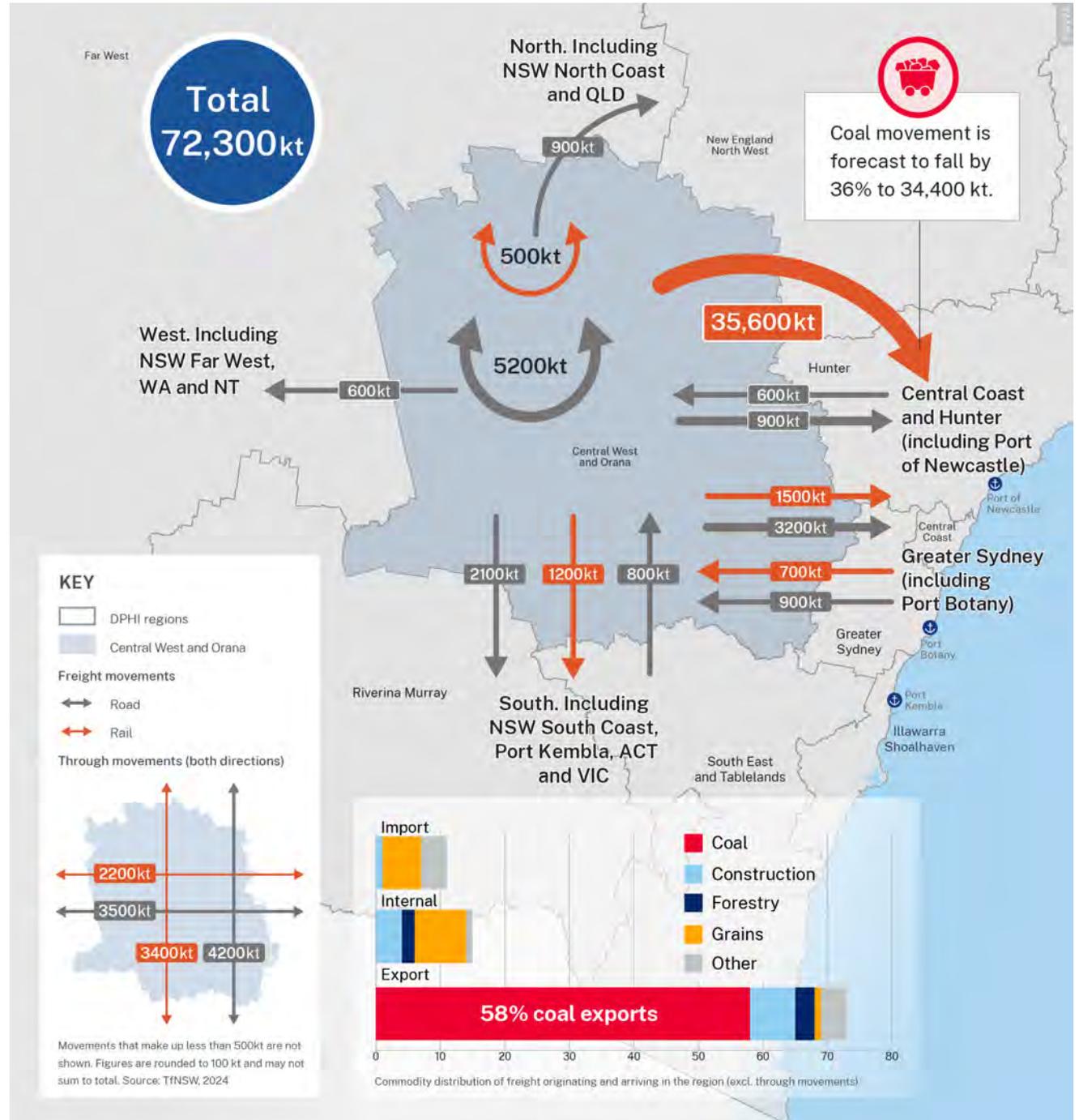


Figure 20. Projected freight movement distribution entering, leaving and going through Central West and Orana by road and rail, by 2046

4.4 Current, planned and committed projects

4.4.1 Future land use changes

Land use across the corridors is changing, with councils planning for population growth, economic diversification and urban renewal, each influencing future transport needs. The Great Western Highway and Bells Line of Road will be essential in supporting these shifts, linking residents, workers, and visitors to new homes, jobs, and services.

To the east of the study area land use change in the Western Sydney Parkland City is reshaping the eastern gateway to the corridors. As one of Australia's fastest-growing urban regions, it is driving significant housing, employment, and infrastructure development, particularly around the Western Sydney International Airport and surrounding growth areas. With 59,000 new homes planned by 2029 and the development of major employment hubs, including advanced manufacturing, freight and logistics precincts, there will be a substantial increase in demand for east-west transport capacity. The Great Western Highway and Bells Line of Road are directly impacted, serving as key connectors between these emerging urban areas and established towns across the Blue Mountains and Central West.



Tourists enjoying the Blue Mountains Explorer Bus at Katoomba © Destination NSW

Corridors to support this growth have already been identified, with land reserved for their future delivery. To help progress planning for the Castlereagh Connection corridor which is intended to enhance economic connectivity, improve emergency response resilience, and raise the standard of living, the Australian Government has allocated up to \$50 million.⁵⁹ Transport for NSW is coordinating with the Australian Government to access this funding and commence planning works.

In the Blue Mountains, growth is being consolidated around existing centres, including Blaxland, Hazelbrook, and Katoomba. Katoomba, as a strategic centre and key tourism destination, is projected to generate more than 2000 jobs between 2016 and 2041, with the highest projected growth in health related, office based and public

sector jobs.⁶⁰ This will increase demand for pedestrian-friendly, high-amenity transport access in and around its town centre.

Lithgow straddles both corridors and is central to long-term growth plans. The Lithgow City Council Local Strategic Planning Statement focuses development around Lithgow, Portland, and Wallerawang to optimise infrastructure use. The decommissioned Wallerawang Power Station is being explored for multi-use precinct incorporating a large-scale energy storage capability.⁶¹ Transport for NSW is supporting Lithgow City Council to support housing, including development opportunities emerging in the Marrangaroo urban release area and nearby industrial lands, close to both the Great Western Highway and Lithgow CBD.⁶²

⁵⁹ Australian Government, Castlereagh Connection – Planning and Preparatory Works [accessed November 2025]

⁶⁰ Blue Mountains City Council, Katoomba Employment Study - June 2019

⁶¹ Department of Regional NSW, [Lithgow Regional Economic Development Strategy - 2023 Update](#)

⁶² Lithgow City Council, [Marrangaroo Masterplan/Development Control Plan Project](#)

Bathurst continues to grow as a regional hub for the Central West. Combined with Bathurst Regional Council’s focus on knowledge industries, underpinned by Charles Sturt University and health sector investment, new housing development is concentrated around Kelso, Laffing Waters, Eglinton, Windradyne, Llanarth, with continued infill development in Bathurst Central and West Bathurst.⁶³

Along the Bells Line of Road, the most notable land use change is occurring between North Richmond and Kurrajong. The new Richmond Bridge will improve evacuation options and connectivity during significant flood events.⁶⁴

4.4.2 Transport changes

There is already significant investment underway across the Sydney to Central West corridors to improve safety, connectivity, and access for communities, businesses, and freight. Upgrades to the Great Western Highway are progressing in key sections between Katoomba and Lithgow, while safety and resilience works are being delivered along the Bells Line of Road, including slope repairs and targeted intersection improvements. These projects reflect a growing recognition of the corridors’ importance, and this active investment lays the foundation for further transport planning to ensure the corridors continue to meet the evolving needs of the communities it connects.

These are highlighted in further detail in Figure 21.

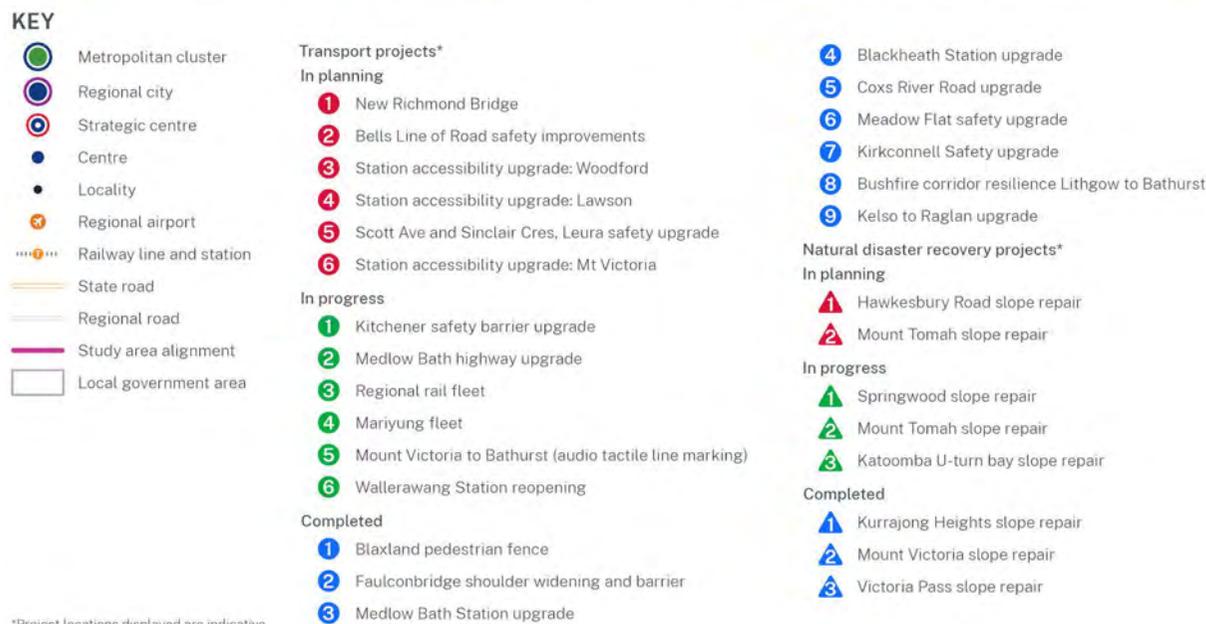
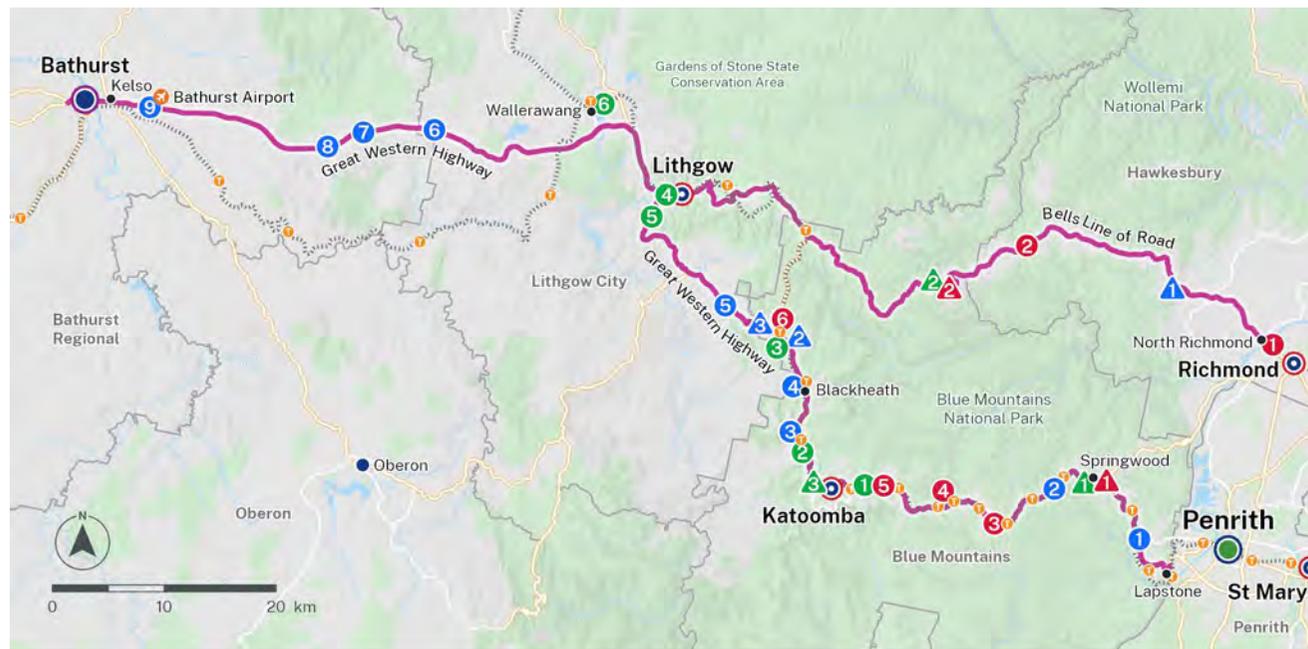


Figure 21. Current, planned and recently completed projects

63 Bathurst Regional Council, [Bathurst 2036 Housing Strategy Volume 2: The Implementation Plan - April 2018](#)

64 Transport for NSW, [New Richmond Bridge – Stage 1](#) [accessed 27 June 2025]

05 The transport challenge and opportunity



5.1 Introduction

Understanding the different types of movement along the corridors is critical to identifying transport challenges and opportunities. Travel across the Sydney to Central West corridors can be broadly grouped into three overlapping categories: through movement, in-and-out movement, and local intra-regional movement, as illustrated in Figure 22. Each serves a distinct function, supporting community life, connecting regions, or facilitating statewide and interstate flows.

Together, they shape how people and goods interact with the network.

- **Through movement** captures longer-distance travel that passes through the corridors without a local origin or destination. This includes interstate freight, long-distance business travel, and tourism between Greater Sydney and Western NSW or beyond.
- **In-and-out movement** refers to flows that extend beyond the region but still connect directly to it. This includes residents travelling to Greater Sydney for work, education, or specialist services, as well as visitors entering the corridors for tourism, day trips, or major events like the Bathurst 1000. It also captures regional freight activity that links the corridors to broader supply chains across NSW.
- **Local and intra-regional movement** includes everyday trips that sustain community life – such as commuting to work or education, shopping, attending appointments or social activities, and travelling between villages. It also includes local freight tasks like parcel deliveries and goods distribution to local businesses. These are typically short to medium-distance trips and are vital to maintaining liveability and access within the region.

While these movement types differ in purpose and scale, they often rely on the same infrastructure.

Where they converge, particularly during peak periods or major events, congestion, reliability issues and safety risks increase. These overlaps are most pronounced at pressure points along the Great Western Highway and Bells Line of Road, where local access, regional mobility, and state significant freight all compete for road space.

This White Paper assesses these layers of movement to better understand where conflicts occur and to identify targeted solutions that improve safety, unlock capacity, and build long-term resilience. By doing so, we aim to ensure the corridors continue to meet the diverse and growing needs of the people and places it serves.

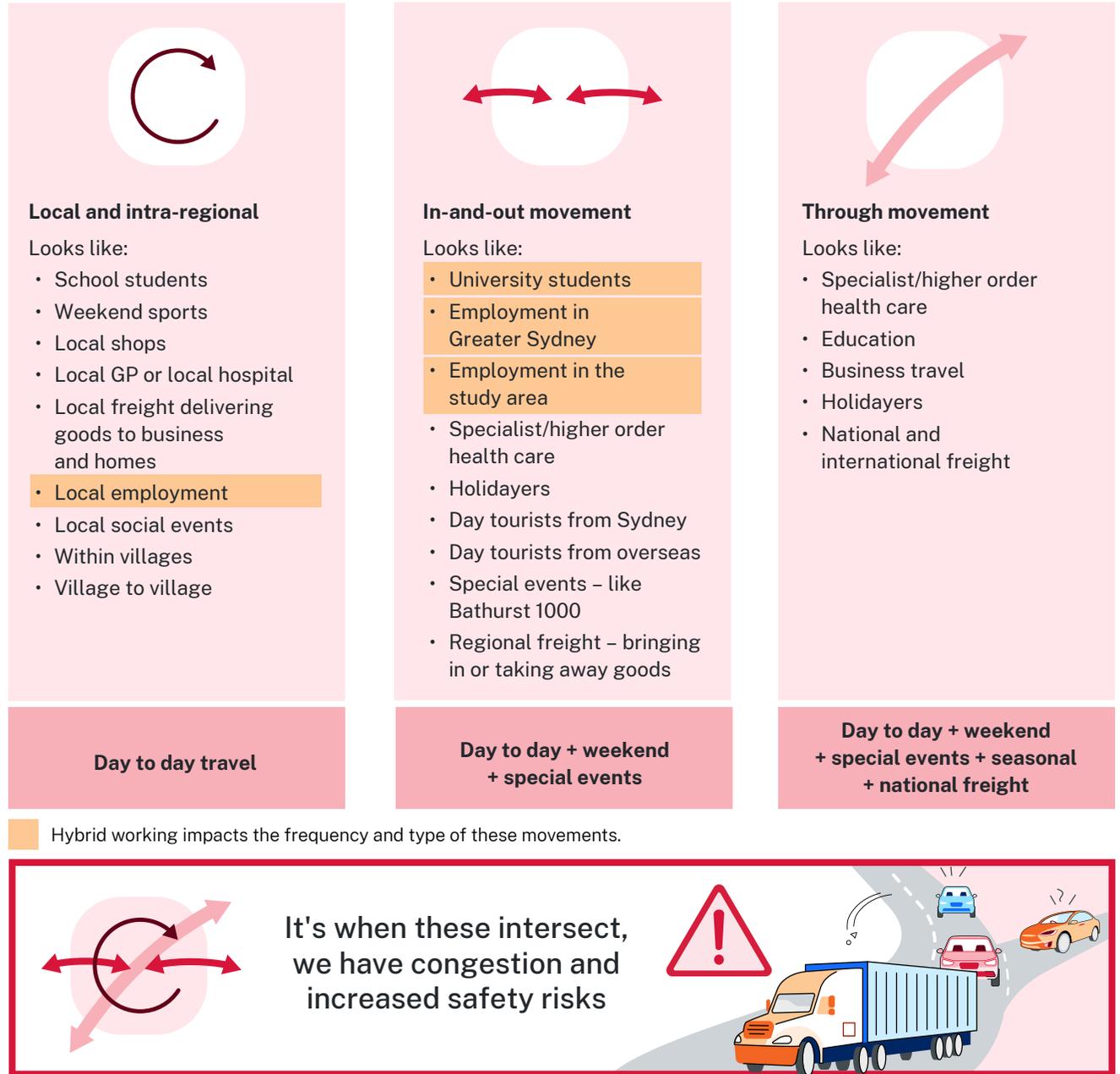


Figure 22. Different movement types



Great Western Highway Kelso to Raglan upgrade construction

5.2 Through movement

5.2.1 Road infrastructure not meeting current and future passenger and freight requirements

Legacy infrastructure and inconsistent standards

The Great Western Highway has evolved from its 1830s origins, with key legacy elements such as Victoria Pass and the convict-built Mitchell's Causeway still in active use. The causeway structure requires complex monitoring and maintenance and necessitates the road being closed to complete repairs and routine maintenance, requiring a substantial diversion. While sections have progressively

been upgraded – most notably dual carriageway sections between Nepean River Bridge, Emu Plains and Katoomba (1981–2015), and from South Bowenfels to Lidsdale in the 1970s to 1990s bypassing Lithgow town centre – the highway carriageway configuration remains inconsistent. While safety upgrades between Blackheath and Lithgow have been delivered (2013–2020), only short lengths of this highway section are dual carriageway. Recent dual carriageway upgrades east of Bathurst (2015–2024) at Kelso and Raglan have improved flow and safety in this section. However, long-standing variations in design standards persist. In several high-volume sections east of the Blue Mountains, safety ratings remain low, with one and two stars, despite daily volumes of up to 47,000 vehicles.

What we heard



- Driver frustration related to speed zones changes and overtaking opportunities is causing dangerous behaviour.
- There are not enough heavy vehicle rest stops. Any new heavy vehicle rest stops must be compatible with surrounds.
- There is a need to improve management of incidents, natural disasters and the increasing impacts of climate change.
- Congestion hotspots include Katoomba to Blackheath and Blackheath to Hartley.
- Upgrades should be future proofed to allow best use of future transport innovations, which would also allow the future use of modern freight vehicles.
- The impacts on the network of Western Sydney International Airport, Central West industrial development, renewable energy zone-related oversize overmass (OSOM) movements.
- Freight and heavy vehicle movements are impacting Darling Causeway and Mount Victoria.
- Bells Line of Road may not be the primary link between Sydney and the Central West, however, it requires upgrades.
- Victoria Pass on the Great Western Highway is a complex maintenance and resilience issue that needs attention.

Safety constraints

Between 2019 and 2023, the Great Western Highway and Bells Line of Road recorded high fatal and serious injury (FSI) crash rates, placing them above the 80th percentile for this crash category per kilometre when compared to roads of a similar class in NSW.⁶⁵ Key locations where FSI crash rates are high include:

- Katoomba to Blackheath⁶⁶
- Mount Victoria to Lithgow⁶⁷
- Wallerawang to Meadow Flat
- North Richmond to Kurrajong
- Mount Tomah to Lithgow.

FSI rates are often linked to road geometry, frequent speeding, and limited safe overtaking opportunities. Speeding was a factor in up to 34 per cent of crashes in flat, straight segments between Blaxland and Meadow Flat.⁶⁸ A 61-kilometre stretch through the Blue Mountains features 17 different speed zones, including eight 40km/h school zones (see Figure 23) – creating confusion, driver discomfort, and enforcement challenges.

Safe overtaking lanes are lacking in locations where the Great Western Highway passes through rural areas between towns and in centres with limited built-up areas. These sections include Katoomba to South Bowenfels and Marrangaroo to Raglan. Topography constraints limit the provision of safe overtaking lanes in these locations.



Source: Speed limit zones from Transport for NSW.

Figure 23. Varying speed zones and frequent 40km/h school zones on the Great Western Highway and Bells Line of Road

There are few safe pull-over areas along the corridors, particularly on the Bells Line of Road, where steep gradients, narrow shoulders and winding sections limit opportunities for drivers to stop safely. Six fatigue-related serious injury heavy vehicle crashes have occurred between

2019 and 2023 in the Blue Mountains with four occurring between Katoomba and Blackheath. The lack of formal rest areas and emergency stopping points reduces options for fatigue management and responding to mechanical issues, creating safety risks for all road users,

65 2024 analysis based on Transport for NSW, 2019–2023 crash data

66 Medlow Bath upgraded 2025

67 Coxs River Road to Mid Hartley Road upgraded 2025

68 2024 analysis based on Transport for NSW, 2019–2023 crash data

– especially freight operators and long-distance travellers. Addressing this gap is critical to improving road safety and resilience across the corridors.

The Australian Road Assessment Program (AusRAP), a risk-based safety assessment of road environments, indicates the Great Western Highway and Bells Line of Road experience heightened safety risks.⁶⁹ This is due to their topography, weather patterns and lack of overtaking opportunities and high traffic volumes in some sections. Bells Line of Road is popular among touring motorcycle riders, but motorcycles are also overrepresented in road crashes across the corridor. Motorcycles were involved in more than 18 per cent of road crashes along the Bells Line of Road between 2019 and 2023, compared to 6 to 13 per cent along the Great Western Highway.⁷⁰

Resilience constraints

The Great Western Highway between Katoomba and Mount Victoria, and the entire Bells Line of Road are prone to natural hazards, which have typically occurred one to two times per year between 2020 and 2024, often resulting in road closures for one to four hours.⁷¹ Unplanned traffic incidents, such as crashes, vehicle breakdowns, and spillages, are also frequent, extending to Katoomba to the east and Lithgow to the west, which also often result



Motorcycles on Bells Line of Road

in road closure. Figure 24 shows the frequency profile of natural hazard and unplanned traffic incidents between 2020 and 2024.

Specifically, unplanned traffic incidents have led to closures of the whole Great Western Highway between Katoomba and Blackheath more than two times annually and in at least one direction between Mount Victoria and Hartley (Victoria Pass) more than 20 times per year between 2020 and 2024.⁷² This may be attributed to the

rural landscapes adjacent to the Great Western Highway, the lack of overtaking lanes, the topography and curved road alignment.⁷³

The Bells Line of Road is enveloped by dense vegetation as it passes through between the Wollemi National Park and the Blue Mountains National Park, resulting in the adjacent areas being predominantly categorised as Category 1 high risk vegetation bushfire zones.

69 Transport for NSW, [AusRAP Map](#)

70 2024 analysis based on Transport for NSW, 2019–2023 crash data

71 Transport for NSW, 2025, [Live Traffic NSW historical data](#)

72 Transport for NSW, 2025, [Live Traffic NSW historical data](#)

73 Transport for NSW, [All Lanes to reopen on Victoria Pass](#) [accessed November 2025]

During the 2019–20 bushfires, the entire Great Western Highway and Bells Line of Road were closed for at least 12 days as fires burned in the two national parks.⁷⁴

Snowfalls, severe rainfalls, and flooding of the Hawkesbury River also pose resilience issues to both roads. In 2021 and 2022, heavy rainfall led to major landslides, pavement failures, and flooding, resulting in the North Richmond Bridge being closed for more than six days and affecting the safe operation of both corridors.⁷⁵ North Richmond, Kurrajong and Bilpin communities rely on the Bells Line of Road as an extended detour route to connect to Sydney when the Hawkesbury River is in flood. The New Richmond Bridge upgrade project is in planning (see Figure 21) to help address this issue. Figure 21 also shows six slope failures across both corridors with the Victoria Pass slope repair requiring significant works and nighttime lane closures to implement repairs to slopes and make them more resilient to future extreme weather events.

Darling Causeway, a north–south road between Bell and Mount Victoria, is an important cross link road that allows traffic to travel between the two corridors and provides redundancy in the network, especially during road closures and when traffic needs to divert between the corridors. Any significant incident at Victoria Pass requires diversion of all traffic to the Bells Line of Road and through Lithgow township. Safe operation is crucial to maintaining the resilience of the network to and from the Central West region.

⁷⁴ Central Western Daily, 2019, [Bells Line of Road reopens to traffic after more than a week](#) [accessed July 2025]

⁷⁵ Infrastructure NSW, 2021, [Hawkesbury-Nepean River March 2021 Flood Review - Final Report](#)

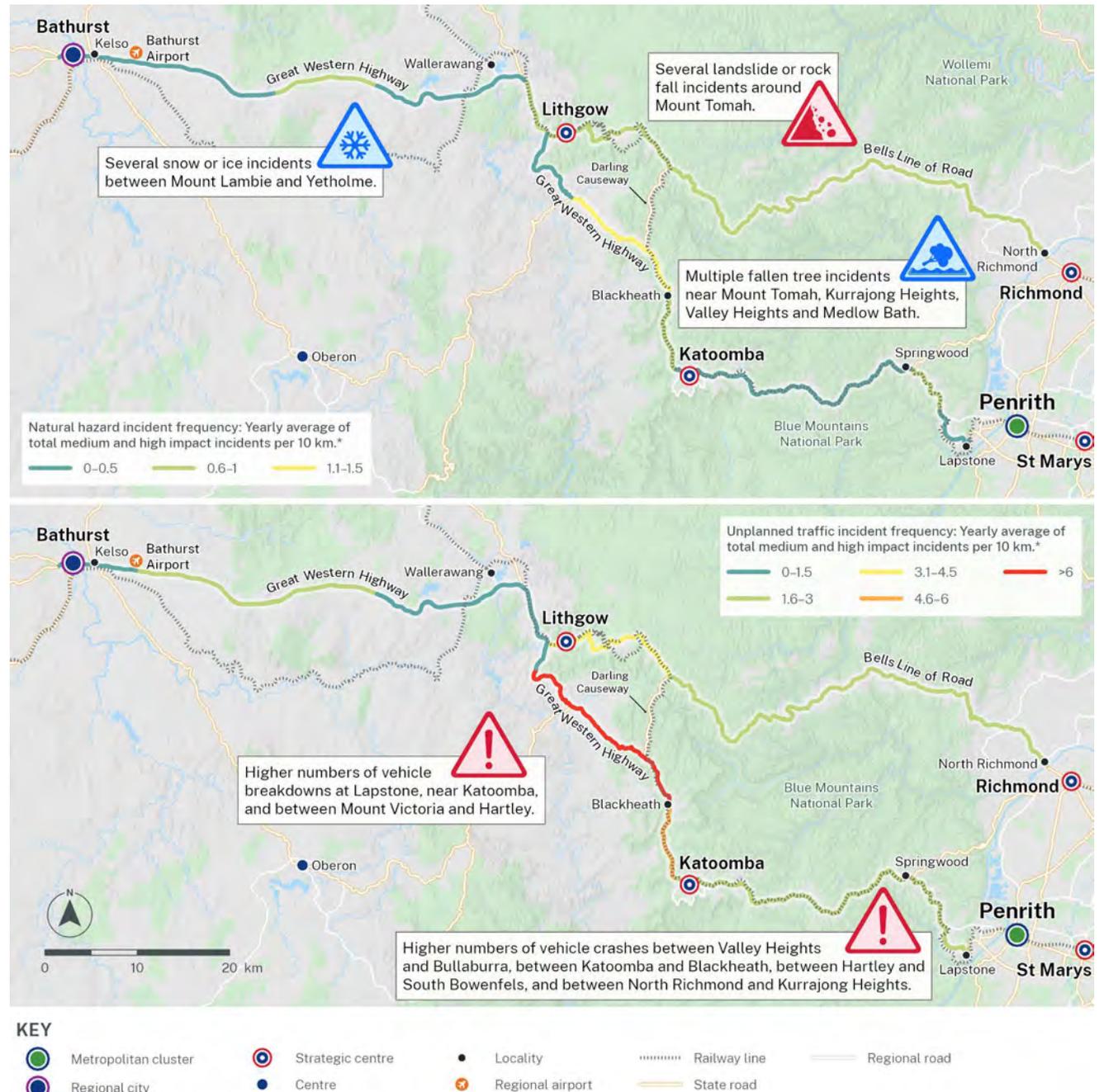


Figure 24. Natural hazard and unplanned traffic incidents on the corridors

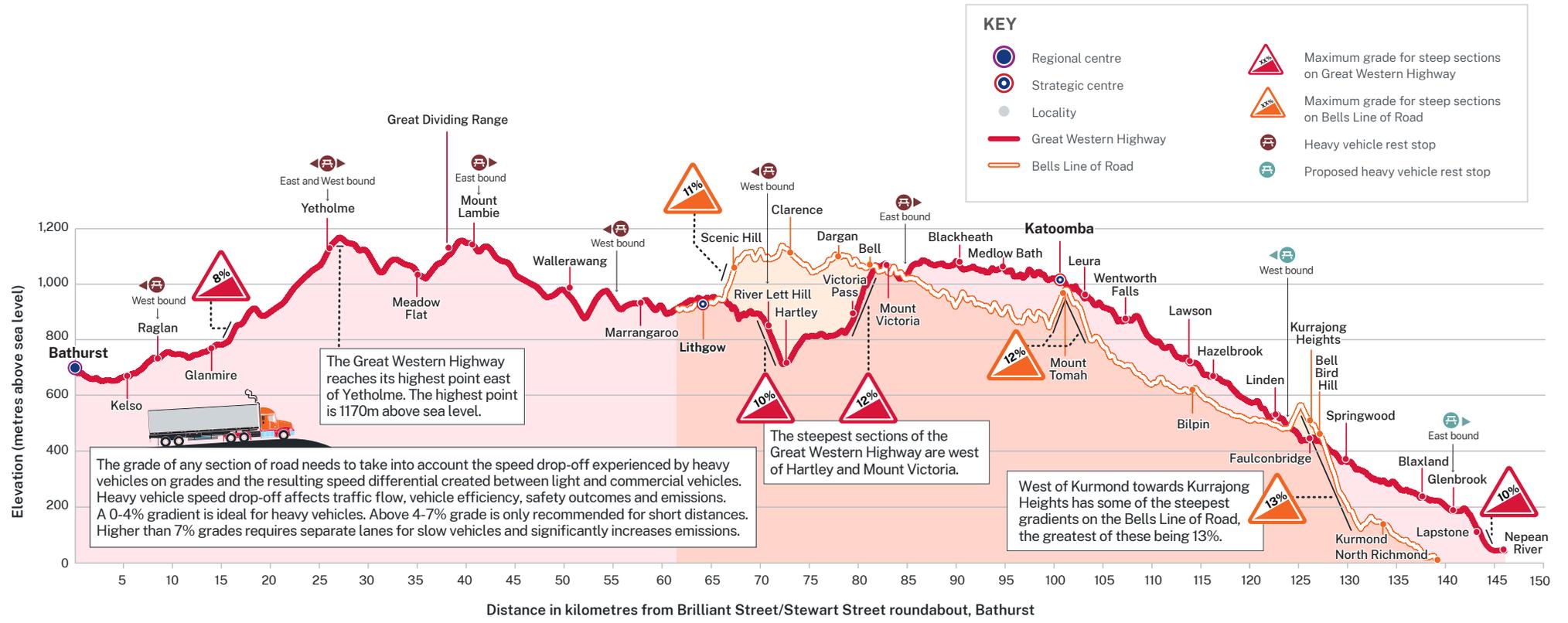


Figure 25. Sydney to Central West corridors elevation and distance

Freight constraints

The Performance Based Standards (PBS) for heavy vehicles currently prohibit Level 2 vehicles – vehicles greater than 20 metres in length – from travelling between Lapstone and Lithgow on the Great Western Highway and along the entire Bells Line of Road. This gap of over 94 kilometres requires larger 30-metre PBS Level 2 vehicles and 26-metre B-doubles to make detours when travelling between the Central West and the Sydney metropolitan area, via either the Golden Highway to the north or the Hume Highway to the south.

As shown in Figure 25, the Great Western Highway is particularly mountainous between Katoomba and Lithgow, especially at Victoria Pass between Mount Victoria and Hartley, with many tight curves and steep grades to navigate, as compared to other sections along the highway. Steep grades and tight curves are found along the Bells Line of Road at Scenic Hill, east of Lithgow, and the section from Kurrajong Hills to Kurrajong Heights (Bellbird Hill), resulting in restricted vehicular performance.

There is only one eastbound rest stop for heavy vehicles in the Blue Mountains, located at Mount Boyce. A minor eastbound stopping area is in Glenbrook at the eastern end of the mountains. There is more than one hour of challenging driving for trucks to the next rest stop in Sydney or further destinations.

There is no recognised westbound heavy vehicle rest stop in the Blue Mountains and is over 1.5 hours of challenging driving to reach a small rest stop at Hartley.

Peak holiday traffic delays

While the road capacity is designed for average daily travel volumes, peak periods can see some locations exceed the hourly volumes that the road can support. These manifest as pinch points where traffic queues extend in some cases for several kilometres. Public holidays are typical traffic surge events where the Great Western Highway exhibits pinch point behaviour. The surge is usually dominant away from Sydney at the start of the holiday and back toward Sydney at the end of the holiday period. On those days, heavy vehicle traffic is lower but light vehicle traffic volumes increase by more than 55 per cent as travel to and through the Blue Mountains becomes more dominant.⁷⁶ The resulting traffic queues and overall travel delays increase dramatically.

The overall travel delay for traffic leaving Sydney can reach 50–60 minutes and returning to Sydney can be 30–40 minutes.⁷⁷ Returning traffic begins to queue at Blackheath and Mount Victoria and extends back down Victoria Pass to Hartley Valley.

When vehicles are stop-start queuing at Victoria Pass where the road gradient exceeds 11 per cent, vehicle breakdowns start to occur, further worsening queues. Transport regularly implements temporary congestion management at Victoria Pass to hold vehicles at the bottom of the steep climb and release them intermittently to avoid vehicles stopping on the pass.⁷⁸



Traffic on the Great Western Highway from Bathurst races at Blackheath

Opportunities to improve the current situation	Movement type		
	Through	In-and-out	Local
Implement travel demand management initiatives to reduce road delays due to peak traffic events.	✓	✓	✓
Improve existing truck stopping areas and provide safe rest areas along the Bells Line of Road and Great Western Highway.	✓	✓	-
Provide de-coupling bays for PBS Level 2 trucks.	-	✓	-
Provide safer road cross sections with centre separation of traffic flows in high crash zones.	✓	✓	✓
Increase road resilience to respond to natural hazards and traffic incidents.	✓	✓	✓
Implement a permanent system for managing peak holiday traffic at Victoria Pass.	✓	✓	-
Review speed zones ensuring posted speeds are self-explanatory, consistent and support compliance.	✓	✓	✓

⁷⁶ Transport for NSW Traffic Volume Viewer comparing holiday Mondays with non-holiday Mondays for 2023

⁷⁷ Transport for NSW, Road Network Monitor 2025

⁷⁸ [Transport for NSW, Great Western Highway holiday congestion](#) [accessed July 2025]

5.2.2 Greater reliability and resilience for passenger and freight rail

Geographic constraints

The development of the Main West/Blue Mountains Line was considered a major engineering feat at the time. The crossing of the Blue Mountains in the late 1860s saw the rapid expansion of rail to and across the Central West. However, as is common to many NSW rail lines from this era, the alignment follows the undulations of the local terrain, rather than taking the most direct path, and assets are ageing which presents several challenges for current and future operation.

Challenging topography with steep gradients and sharp curves, not only through the Blue Mountains, but also west of Lithgow, limit the ability of services to travel at higher speeds. This therefore limits overall journey times to and from the region and constrains efficiency and productivity, especially for freight. West of Lithgow, the rail line echoes its historical roots connecting to stations that are no longer operational, resulting in a longer journey time between key regional centres.

The Main West/Blue Mountains Line is also identified as a critical supply route. The Road and Rail Supply Chain Resilience Review – Phase 1 conducted by the Bureau of Infrastructure and Transport Research Economics (BITRE, 2023) applied a risk framework to calculate an overall vulnerability. Of the 65 routes assessed, the Main West/Blue Mountains Line was one of the

most vulnerable, returning a ‘high’ vulnerability rating.⁷⁹ In the case of significant weather events, bushfires, or road and rail network incidents, the Blue Mountains and Central West region faces difficulties in maintaining supply chains and passenger transport to and from the region due to the continued reliance on limited and specific access routes. In the event of a forced road closures, the rail line becomes even more important in terms of maintaining regional connectivity and access.

Shared-use constraints

The Main West/Blue Mountains Line is a shared passenger and freight rail corridor. Shared operations result in limited freight rail paths being available and limited passing opportunities. In addition to complete closures of the line, reliability is impacted through incompatibilities of freight and passenger trains, frequency of services and infrastructure configuration, with Blue Mountains Line services regularly falling short of the 92 per cent target, sitting at 71 per cent overall for 2024–25 financial year.⁸⁰

The line operates at capacity for most of the day, with a mix of slower freight trains and faster passenger trains. The inability of faster passenger trains to pass slower freight trains is an underlying limiting factor of line capacity and frequency and is compounded by long sections of steep and winding track. The presence of slower freight trains on the Blue Mountains line during the daytime interpeak period is the main constraint on significant future increases to passenger services.

What we heard



- The Central West is facing economic constraints due to a sub-standard connection to Sydney.
- A better connection between Sydney and the Central West would facilitate the decentralisation of NSW and development of regional economies, communities, housing and industrial land.
- Improved connectivity is required for rail freight and passenger transport.
- Rail upgrades should be considered alongside and complementing, road upgrades.



Freight rail at Katoomba

⁷⁹ Bureau of Infrastructure and Transport Research Economics 2023, Road and Rail Supply Chain Resilience Review – Phase 1 Building an evidence base of road and rail supply chain resilience

⁸⁰ Transport for NSW 2025, Data and Insights, Sydney Trains and NSW TrainLink (Intercity) performance reports [accessed 3 July 2025]

Freight trains are also excluded from the metropolitan Sydney passenger rail network during peak periods. Consequently, rail freight is constrained to pre-peak, inter-peak and off-peak periods. For both passenger and freight rail services, operations are constrained by the availability and capacity of the rail line.

Freight trains that miss their scheduled window face missing port network timetables in Sydney and beyond, resulting in impacts to costs and operations at destinations. Overall, the shared nature of the line impacts on both freight operators and customers of passenger services, including reliability, service frequency and customer satisfaction.

Infrastructure constraints in the Blue Mountains

Topography limits locations for additional rail passing loops or other capacity augmenting infrastructure. The narrow corridors means that any additional track infrastructure through urbanised areas would likely impact neighbouring properties, while the rail corridor is also vulnerable to delays due to events including bush fires, floods, land slips and tree falls etc. Temperatures are projected to increase by 1.2°C across NSW under a low emissions scenario and by 2.0°C under a high emissions scenario by 2050, which is expected to exacerbate resilience issues.⁸¹

Much of the railway corridor west of Lithgow has long sections of single track that limit timetabling flexibility and reduce efficiencies for freight and passenger services.

Passing loops on the Main West/Blue Mountains Line require an upgrade to better provide for a mixture of passenger services and stopping patterns, and reliable freight services. Some existing passing loops are too short (600–900 metres long) and are not able to accommodate newer, longer freight rail trains (up to 1800 metres long). Some loops have slow turnout speeds that increase travel times and exacerbate delays. There are frequent level crossings, especially west of Lithgow, resulting increased journey times.

Infrastructure constraints in metropolitan Sydney

Upon reaching Sydney, rail traffic from the Blue Mountains and Central West must contend with frequent suburban trains starting from Emu Plains and Penrith. This creates a Penrith–St Marys pinch point, where freight trains, express Intercity and Regional trains, and all-stops suburban trains all

share one track in each direction. East of St Marys the pinch point is relieved as the rail corridor expands to two tracks in each direction.

Network infrastructure through this pinch point limits the frequency and speed of trains that can reliably use the corridor throughout the day, meaning any changes to add services or more stops would significantly slow down many other services and put pressure on reliability.

Early planning has identified potential infrastructure changes, which could include upgrades to stations as well as additional track and signalling systems. An investment of this nature could benefit all users of the network travelling to or through the area, including faster travel times for freight and passenger trains, fewer impacts to reliability, better connections to and from the Sydney Metro Western Sydney Airport line and more services.

Opportunities to improve the current situation	Movement type		
	Through	In-and-out	Local
Increase separation of passenger and freight rail operations to improve reliability and resilience.	✓	✓	✓
Investigate the potential redirection of rail freight relieving freight pressures on the Main West/Blue Mountains Line.	✓	✓	✓
Plan infrastructure upgrades considering the impacts of climate change.	-	✓	✓
Consider the impacts of recurring incidents on the transport network when planning for areas with new development.	✓	✓	✓

81 [AdaptNSW 2025, My region, Climate change in NSW](#) [accessed 3 July 2025]



Faulconbridge Train Station and carpark located near the Great Western Highway © stock.adobe.com

5.2.3 Regional traffic impacting on safety, amenity and access in town centres

Context of regional through traffic

The Great Western Highway and the Bells Line of Road serve as key regional corridors for through traffic travelling between Sydney and the Central West. Daily traffic volumes on the Great Western Highway range from 8100 to 47,000 vehicles with

nine to 23 per cent of total traffic volumes being heavy vehicles. Higher traffic volumes primarily concentrate in urban areas such as Springwood, Bathurst and Katoomba, and are typically larger towards the eastern end of the Great Western Highway on approach to Sydney. The Bells Line of Road records up to 7000 vehicles per day, with 12 per cent of traffic being heavy vehicles.⁸² Through traffic on these roads can create conflict when passing through town centres designed for lower speeds and for localised access.

What we heard



- A key concern relates to mitigating the safety, amenity and accessibility impacts on communities and other road users from road-based freight. Great Western Highway travels through the majority of population centres.
- Towns and villages along major arterial corridors to the west provide connectivity but there are adverse environmental and amenity impacts from increasing freight and traffic volumes along the Great Western Highway.
- Increased traffic on the Great Western Highway through the Blue Mountains has resulted in congestion points affecting safe and effective traffic movement, including at Blackheath in peak times.
- Driver frustration related to speed zones changes and lack of overtaking opportunities is causing dangerous behaviour. Ensure the speeds within town centres are set to minimise potential fatal and serious injuries between road users.

In the study area, the Great Western Highway and Bells Line of Road pass through a series of key town centres that serve as important community hubs, each varying in scale. Along the Great Western Highway, there are two strategic centres, Katoomba and Lithgow,

⁸² Transport for NSW, Average number of vehicles per day in 2024

and local centres include Blaxland, Springwood, Wentworth Falls, Leura, Blackheath and Mount Victoria, each with distinct town centre features and streetscapes. West of Lithgow, Wallerawang and Kelso are also centres before reaching the regional city of Bathurst. The Bells Line of Road between Lithgow and North Richmond passes through rural towns such as Mt Tomah, Bilpin, Clarence and Kurrajong Heights.

The amount of road freight on the Great Western Highway is projected to grow 20 per cent by 2036,⁸³ which highlights the increasing importance of balancing the efficient movement of through traffic with the need to minimise impacts on the amenity and functionality of town centres.

Safety impacts

Speed limits along the Great Western Highway and Bells Line of Road present safety risks due to inconsistent transitions between higher-speed and lower-speed environments, particularly when approaching and passing through town centres on the Great Western Highway and at windy sections of the Bells Line of Road. The inconsistency in speed limits may lead to driver confusion, especially for those unfamiliar with the area and road conditions. This can make it more difficult to adjust in an emergency that may lead to further accidents or near misses.

Despite speed limits, some drivers fail to adequately slow down, creating serious safety risks for pedestrians, cyclists, and other road

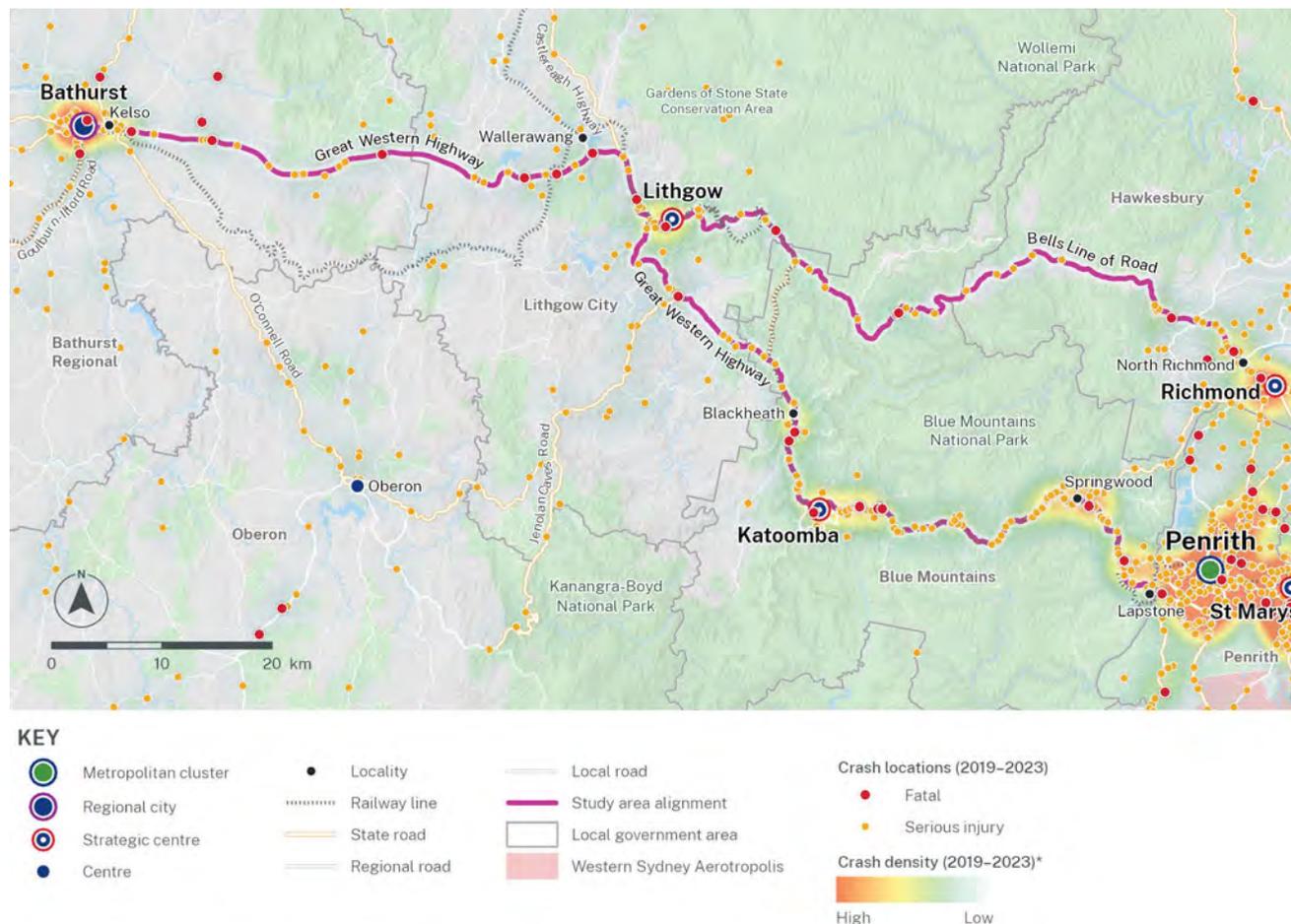


Figure 26. Fatal and serious injury crash heatmap, 2019–2023

users. Between 2019 and 2023, 29 per cent of all casualty crashes in the Blue Mountains involved speeding,⁸⁴ especially between Falconbridge and Katoomba. Fatal and serious injury rates are particularly high in Springwood and towards Katoomba, as shown in Figure 26.

Crash data indicates that most speeding-related accidents along the Great Western Highway occur during the daytime, while fatigue-related crashes are more prevalent at night. However, many fatal or serious injury incidents are not directly linked to speeding or fatigue, suggesting the influence of

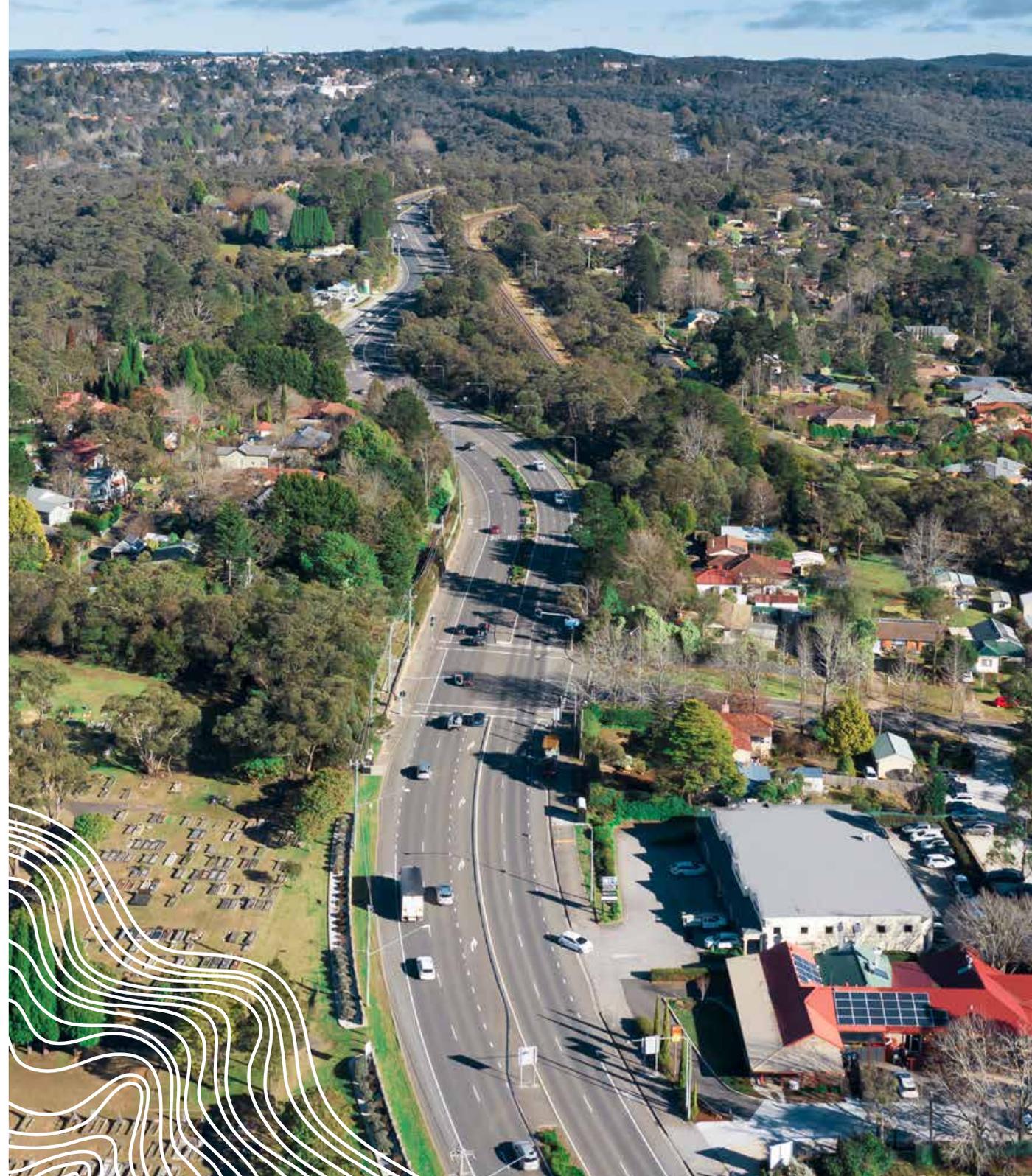
⁸³ Transport for NSW 2025, Facts on Freight

⁸⁴ Blue Mountains City Council 2024, Council encouraging drivers to slow down in our streets

other contributing factors such as poor visibility, inadequate crossing facilities, or human error. Notably, of all fatal and serious injury crashes involving pedestrian and cyclists between 2019 and 2023, only one was attributed to speeding.⁸⁵ Given that the majority of pedestrian and cyclist crashes occurred even when drivers were within the speed limit, it is possible that a review of speed limit is required in town centre areas to enhance safety for vulnerable road users. Despite this, serious incidents involving pedestrians or cyclists have also been recorded in Blaxland, Springwood, Hazelbrook, Wentworth Falls and Blackheath, highlighting a broader road safety challenge through the corridors that extends beyond speed management alone.

The mixing of travel modes in town centres, particularly where high volumes of regional traffic intersect with local pedestrian, cyclist and vehicle movements travelling at different speeds, creates significant safety risks. Pedestrians often face difficulties crossing busy roads, especially at locations without dedicated crossings that may lead to dangerous crossing behaviours. The presence of heavy vehicles and high-speed traffic reduces visibility for both drivers and pedestrians, increasing the likelihood of incidents. These interactions are particularly risky near schools and shops, where pedestrian activity is high and slower, more cautious driving is essential for safety.

⁸⁵ Transport for NSW 2025, [Interactive crash statistics](#) [accessed July 2025]



Amenity impacts

Traffic travelling through town centres on the Great Western Highway and Bells Line of Road can impact vibrancy and reduce amenity and local economic activity. Locations where conflicts between traffic flow and place-based activities are particularly evident through town centres including Blaxland, Hazelbrook, Lawson, Wentworth Falls, Blackheath, Lithgow, Kelso and Bathurst. In these towns, the limited separation of any built form or natural vegetation fails to adequately shield the town centres from the impacts of highway traffic, such as noise, pollution, and impacts on pedestrian safety. Vehicle dominance can create an environment that feels unsafe or overwhelming for pedestrians, especially where footpaths are narrow or poorly maintained.

Heavy vehicles passing through rural areas also contribute to noise and pollution, disrupting the peace and quiet nature of rural towns and villages. The constant rumble of engines, braking and compressing noise can negatively impact residents' quality of life, particularly during night-time, and disturb local wildlife. Steep grades and speed zone changes increase the effect of these impacts. Additionally, emissions from diesel engines degrade air quality and can pose health risks to vulnerable populations, including children and elderly.⁸⁶

Opportunities to improve the current situation	Movement type		
	Through	In-and -out	Local
Better balance movement and place functions of the road corridors and local centres.	✓	✓	✓
Shift car trips to public transport trips where origins and destinations are well served by public transport.	✓	✓	✓
Use high productivity vehicles and trains to 'move more with less' including by shifting from road freight to rail freight.	-	✓	✓
Undertake speed zone reviews and apply safer speed zone settings.	✓	✓	✓
Explore re-timing and staged travel to improve network efficiency and reduce peak period congestion impacts.	✓	✓	✓

Accessibility impacts

Increased traffic volumes on the Great Western Highway have led to growing congestion, especially where the highway intersects with towns and villages. These intersections often serve as key access points for residents to access local services and business needs like local supply chain delivery. Peak periods are especially problematic. During morning and afternoon peaks and school pick-up and drop-off hours higher and uneven traffic flows cause bottlenecks across town centres. This not only disrupts the efficiency of the highway for through movement, but also undermines local accessibility and liveability in affected towns centres, and decreases accessibility for other modes of travel.

Through traffic can also hinder bus movement, especially when buses must pull out of the traffic to stop for passengers and then merge back in. High volumes of continuous traffic can create delays as buses wait for a suitable gap to re-enter the traffic, increasing wait time and disrupting schedule and public transport service reliability.

Similarly, parking and turning also become problematic with high volumes of through traffic. Vehicles attempting to parallel park or make tight turns may block lanes, disrupting a steady flow of traffic and force vehicles to stop or change lanes. This situation may be worsened in areas where street parking is allowed in town centres, as drivers often slow down to search for spots or manoeuvre into them, interrupting traffic behind them. Delivery trucks and service vehicles can add to the problem when they double park due to the lack of designated loading zones.

⁸⁶ NSW EPA, [Vehicle idling](#) [accessed July 2025]



Great Western Highway at Katoomba © stock.adobe.com

5.3 In-and-out movement

5.3.1 Increasing travel demand to and from the region impacting on road network capacity

Journey time variability and delays

The Great Western Highway experiences high journey time variability and delays, above the 80th percentile when compared to roads of a similar class in NSW, westbound between Lapstone and Katoomba and eastbound between Blackheath and

Mount Victoria on the weekends.⁸⁷ This is due to high traffic volumes associated with the more urban nature of the area and tourism-based trips made from Sydney and the Central West. Towards the western end of the Great Western Highway, journey time variability and delays are also notable in and around Bathurst, where the highway functions as an arterial high street through urban and commercial areas. There are complex interactions between through and local traffic, business access requirements and the needs of people walking and cycling. Bathurst Regional Council has identified the need to explore future options for removing heavy vehicle through traffic from the local traffic mix.⁸⁸

What we heard



- There are congestion hotspots at:
 - the intersection of Macquarie and Hawkesbury roads
 - Katoomba to Blackheath
 - Blackheath (peak-times)
 - Blackheath to Hartley.
- Intersection treatments or upgrades are needed at:
 - Macquarie and Hawkesbury roads to address congestion and safety
 - Scott Avenue and Sinclair Crescent to address safety and active transport connectivity.
- Where there is a lack of local link roads, highway duplication provides better resilience.

Major intersections

At the eastern end of the Great Western Highway, traffic volumes increase to above 45,000 vehicles per day.⁸⁹ Intersections at Glenbrook and Blaxland and Springwood have significant through and inter-regional traffic mixing with local traffic crossing and entering the highway at major signalised intersections (see 5.4.1). Springwood is a major focal junction with Hawkesbury Road feeding 12,000 vehicles per day to and across the highway.⁹⁰

⁸⁷ HERE, 2023, Travel time data.

⁸⁸ Bathurst Regional Council, 2020, Vision Bathurst: Bathurst Regional Local Strategic Planning Statement

⁸⁹ Transport for NSW, 2024 Traffic surveys

⁹⁰ Transport for NSW, 2024 Traffic surveys

The interchange of these two major roads is constrained and sees daily traffic queues often extending several kilometres and 5 to 10-minute travel delays each morning and afternoon.⁹¹ Of particular concern for the highway is the traffic queuing onto the highway through lanes from the Macquarie Road off ramp. This ongestion behaviour reduces significantly during school holidays indicating that traffic to and from schools is a contributor.

Katoomba is a major tourist destination as well as a population centre in the Blue Mountains. With a large population base on the north and south side of the highway, there is significant cross highway travel occurring to access local destinations as well as supporting inter-regional journeys with surrounding centres from Wentworth Falls to Mount Victoria accessing the destinations and services in Katoomba on the southern side of the highway. There is also a large tourism draw to Katoomba, particularly on weekends and public holidays. Major destinations at Echo Point, Scenic World and the Katoomba town centre are all on the southern side of the highway. The main crossing location and entry point to Katoomba is Parke Street which has a narrow railway bridge and roundabout on Bathurst Road constraining traffic flow. During peak periods on peak days traffic queues will extend onto the highway creating safety and capacity conflicts with through traffic. Signalised access to the Katoomba train station via Goldsmith Place is also approximately 150 metres to the east on the Great Western Highway. Alternate entry points into Katoomba are available to be used and optimised for peak tourist traffic, including via Bathurst Road from the west and via Leura from the east.

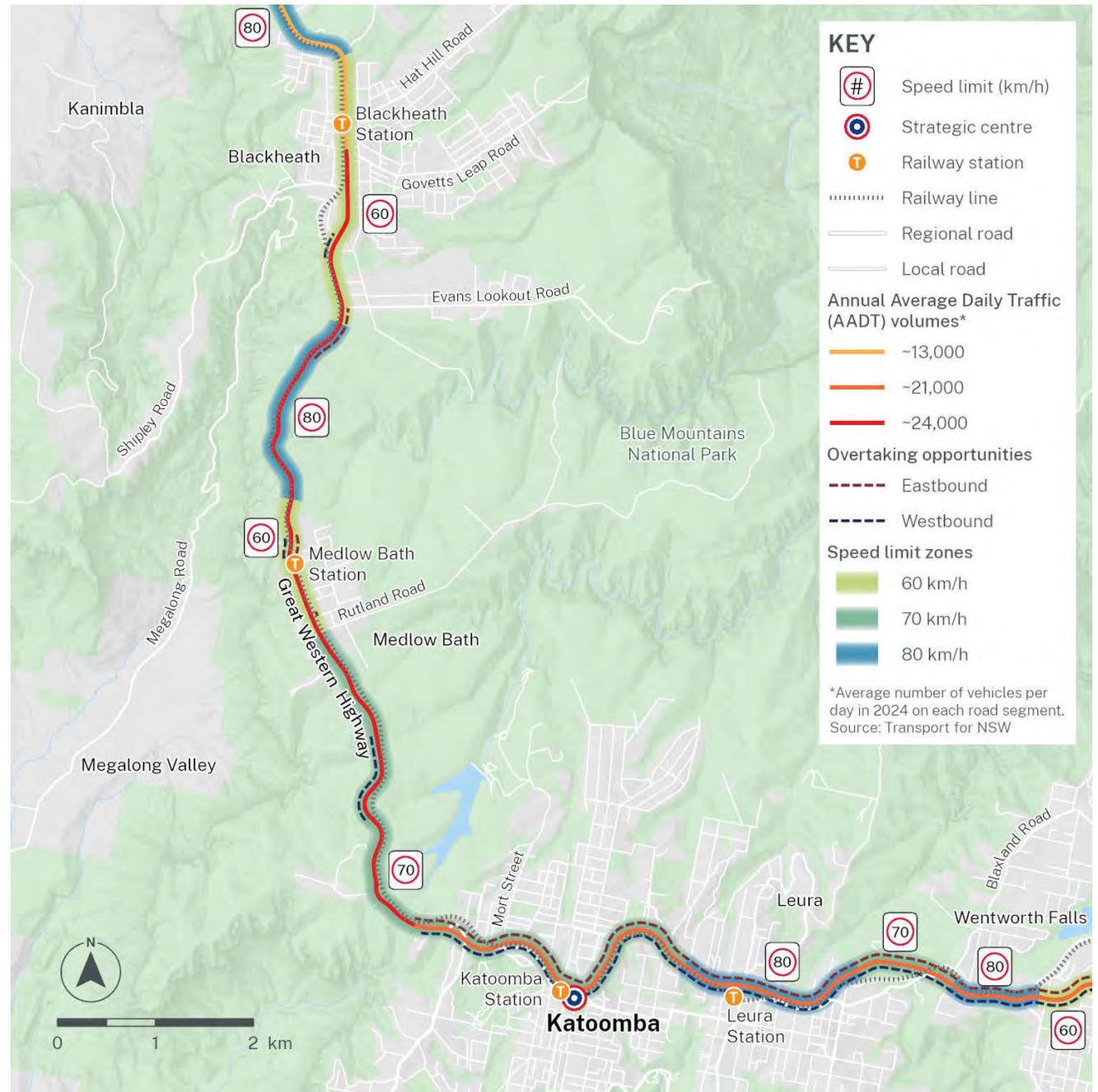


Figure 27. Katoomba to Blackheath traffic and overtaking performance on the Great Western Highway

91 Google, 2025, Travel time data

Lack of overtaking opportunities

Blackheath is growing as a tourist destination and supports a local population of more than 4500 residents.⁹² It marks the point on the Great Western Highway where the mix of through traffic combines with the inter-regional traffic and significantly increases to exceed 20,000 vehicles per day⁹³ (see Figure 27). The highway lane capacity is restricted to two lanes with short sections of overtaking. The volume of traffic per lane is exceeding the recommended trigger level for more overtaking lanes. While the per lane performance is similar to the lower mountains where the volumes exceed 40,000, the highway has much poorer resilience and a lower safety profile. There is no parallel interconnecting local road to provide relief or support local movements during periods of peak traffic.

Lack of opposing traffic separation for high volume

With inter-regional volumes of traffic growing at 1.1 to 1.3 per cent per year⁹⁴ through Lithgow and the Blue Mountains, it is important to have adequate safety protection, especially where daily traffic volumes are above 20,000 vehicles per day. As the dual carriageway has been developed through the Blue Mountains, separation of opposing traffic flows has generally been implemented via a centre barrier in higher speed zones or a raised centre median in lower speed areas. There are some notable gaps in the road corridors where there is no centre separation and

Opportunities to improve the current situation	Movement type		
	Through	In-and-out	Local
Provide local road connections to be able to travel locally without impacting or being impacted by through and inter-regional traffic.	✓	✓	✓
Provide options for people to travel at alternate times or use alternate transport options.	✓	✓	✓
Improve signage into key towns such as Springwood, Katoomba and Blackheath.	-	✓	✓
Improve intersection safety, active transport connectivity and opposing lane separation on the Great Western Highway from Wentworth Falls to Leura.	✓	✓	✓
Investigate additional dual carriageway alignments west of Katoomba to improve overtaking capacity and resilience.	✓	✓	✓

the FSI crash rate is high. This indicates a risk of head-on crashes, which is likely to increase as traffic increases. The key gaps are:

- Faulconbridge to Linden
- Wentworth Falls to Leura, where the posted speed limit has been reduced to 70 km/h to improve safety
- Katoomba to Blackheath, where the posted speed limit has been reduced to 70 km/h from Katoomba to Medlow Bath only to improve safety.

On the Great Western Highway, the section between Wentworth Falls to Leura has an added risk of intersection crashes occurring at the Sinclair Crescent and Scott Avenue intersections, being key inter-regional connecting roads that provide parallel connectivity to the highway. In addition, it is difficult to provide needed active transport connectivity across such busy intersection of roads without either traffic signals or a bridge over/under the road.

⁹² ABS, 2021 Census

⁹³ Transport for NSW, 2024 Traffic surveys

⁹⁴ Transport for NSW, Traffic surveys 2002 – 2024 (excluding 2020–2021 COVID impacted years)

5.3.2 Limited public transport options to and from the region

Rail is not currently a viable option for most customers to and from the region. The low frequency and timing of services provide no rival to the convenience of travel by car. Intra-regional, day-return trips by rail are rare, and trips to or from Sydney usually require either early departure times or late arrivals. Many journeys also involve a lengthy coach portion, connecting with Intercity trains at Lithgow.

Lack of journey options outside peak times for intercity and regional travel

Currently there are low frequency services in non-peak periods servicing the Blue Mountains especially at Lithgow and other stations beyond Katoomba. However, during peak periods (6–9am and 3–6pm), the Blue Mountains Line operates a range of services and stopping patterns to Springwood, Katoomba and Lithgow.⁹⁵ Capacity constraints and the operation of freight trains in non-peak periods make across-the-day frequency improvements difficult.

There are infrequent regional and longer-distance Intercity services operating along the Blue Mountains Line, with two return services per day to Bathurst, one to Dubbo and a once-weekly service to Broken Hill.

Restrictive time-of-day travel (including day-return travel options)

Timetables have been set up to facilitate trips to and from Sydney, which is reflected in observed travel behaviour, that results in either late arrival or early departure times. Additionally, low service frequency results in a lack of choice in departure or arrival times.

Customers travelling beyond Lithgow generally to make connections with onward rail services. There are also no viable day-return journeys for travel between centres further west of Bathurst, such as Parkes or Dubbo.

Lengthy end-to-end journey times

Competitiveness of rail travel times compared to road-based options is a challenge across the Blue Mountains to the Central West. The Great Western Highway typically has 80–100 km/h speed limits, depending on the location, and is relatively direct between regional centres. In contrast, the Main West/Blue Mountains Line was constructed in a winding and indirect alignment that minimises gradient by following the local topography. As a result, train services must travel longer distances compared to road-based connections and are further limited by speed restrictions due to tight curves.

Currently, there are very few origins and destinations on the current train network that match or beat car travel times, with travel times by car on average taking 25 per cent less time than rail.⁹⁶ This contributes to low rail use in the region.

What we heard



- There needs to be more transport options within and between regions.
- Improved connectivity is required for passengers to easily access the region.
- The corridors need to support increased regional tourism and visitation to the Blue Mountains.
- Improved public transport options within and between regions and Sydney would have a positive impact on congestion and resident amenity.
- Additional train services providing a more flexible timetable suiting more journey purposes is desired.

While travel time is important, many customers would welcome the opportunity to use their travel time productively on a train instead of driving.

NSW TrainLink coaches provide connections from Lithgow to Bathurst and various other regional destinations in Western NSW that are not served by train, and provide feeder services to get people to and from train stations. In some cases, coaches provide an alternative to rail services, such as from Orange to Bathurst, however these can be infrequent. Further, many customers do not wish to travel or cannot travel by coach. They find it

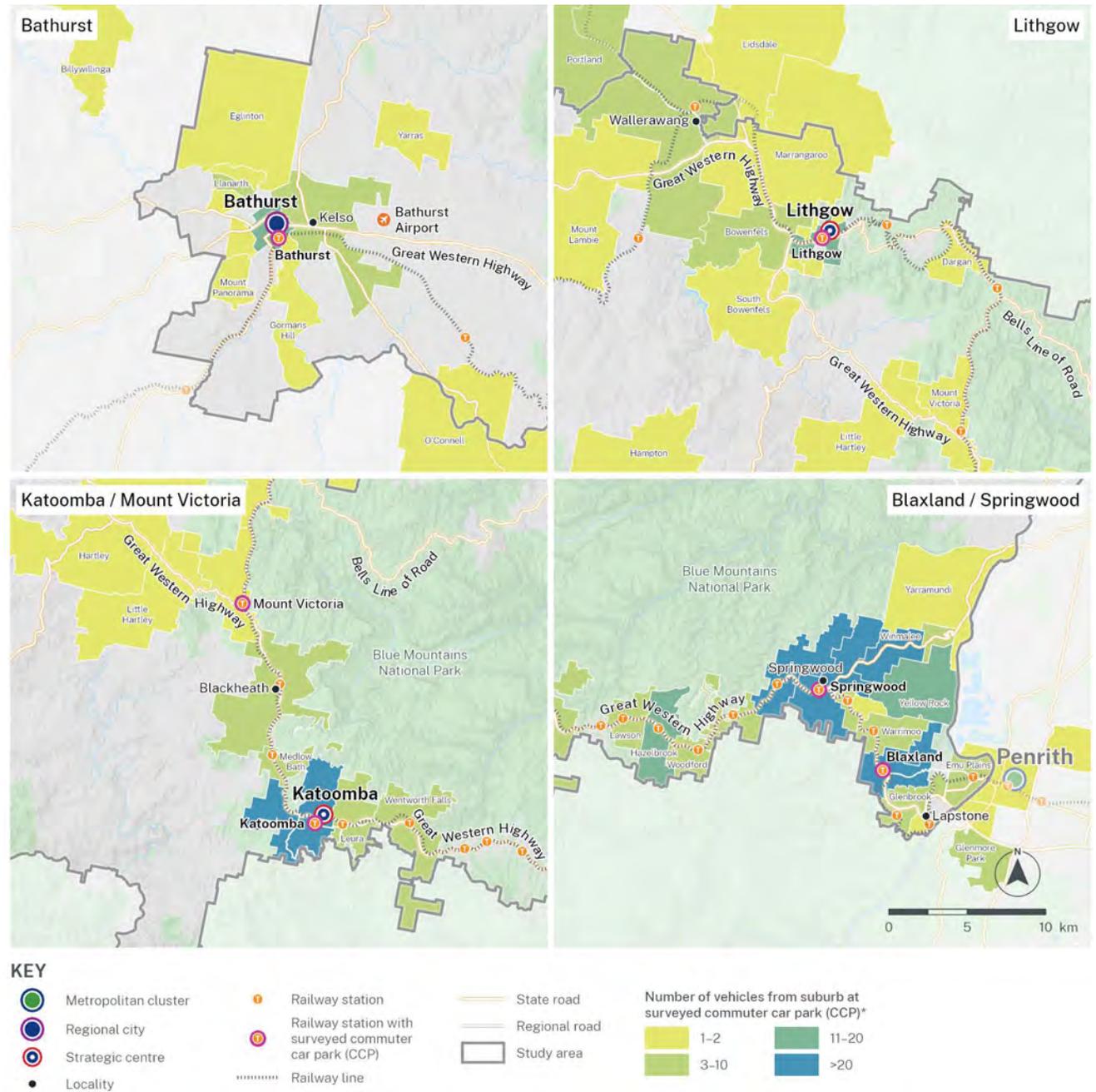
⁹⁵ Transport for NSW 2025, Opal Analysis, March 2025 [accessed 3 July 2025]

⁹⁶ Driving directions from Google Maps, train and coach timetables available at www.transportnsw.info

uncomfortable being unable to move around, have limited mobility needs that cannot be met by coach, and are unable to eat and drink onboard. Travel times are further compounded by insufficient and infrequent feeder public transport services. In addition to limited daily rail services, passengers are commonly required to interchange, representing an additional burden.

When presented with a coach service or connecting bus instead of rail, people often drive. Many people drive to commuter car parks at some of the major train stations for a component of their journey, to maximise or offset slower parts of their journey. As shown in Figure 28, Bathurst and Lithgow stations have wide car parking catchments, with many people driving from west and north of Lithgow to the Lithgow Station commuter car park. This pattern may change with the re-opening of Wallerawang Station.

Many people also drive from west of Mount Victoria and Katoomba to these station commuter car parks. However, most cars at the Katoomba commuter car park are from in close proximity to Katoomba. Additionally, there are many people driving to Springwood and Blaxland from along the rail line towards Katoomba to maximise part of their journey by rail, with many drivers also coming from close by both Springwood and Blaxland stations. This indicates an opportunity for improved active and public transport access to these stations, which is discussed further in [Section 5.4](#).



Source: Surveyed CCP vehicles (May 2025) from Transport for NSW.
 *Origin suburbs of vehicles surveyed at selected railway station commuter car parks on a typical weekday in May 2025.

Figure 28. Postcode origins of cars at select rail station commuter car parks, Transport for NSW, May 2025

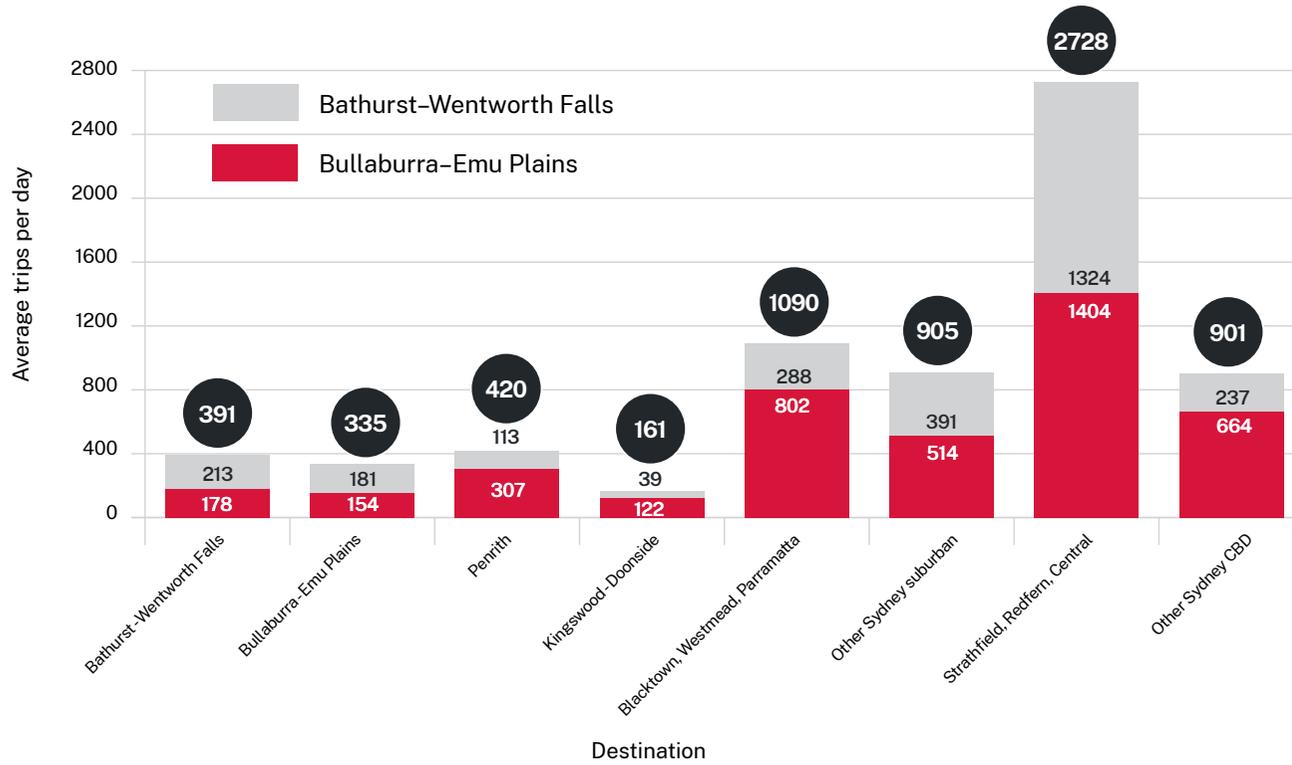
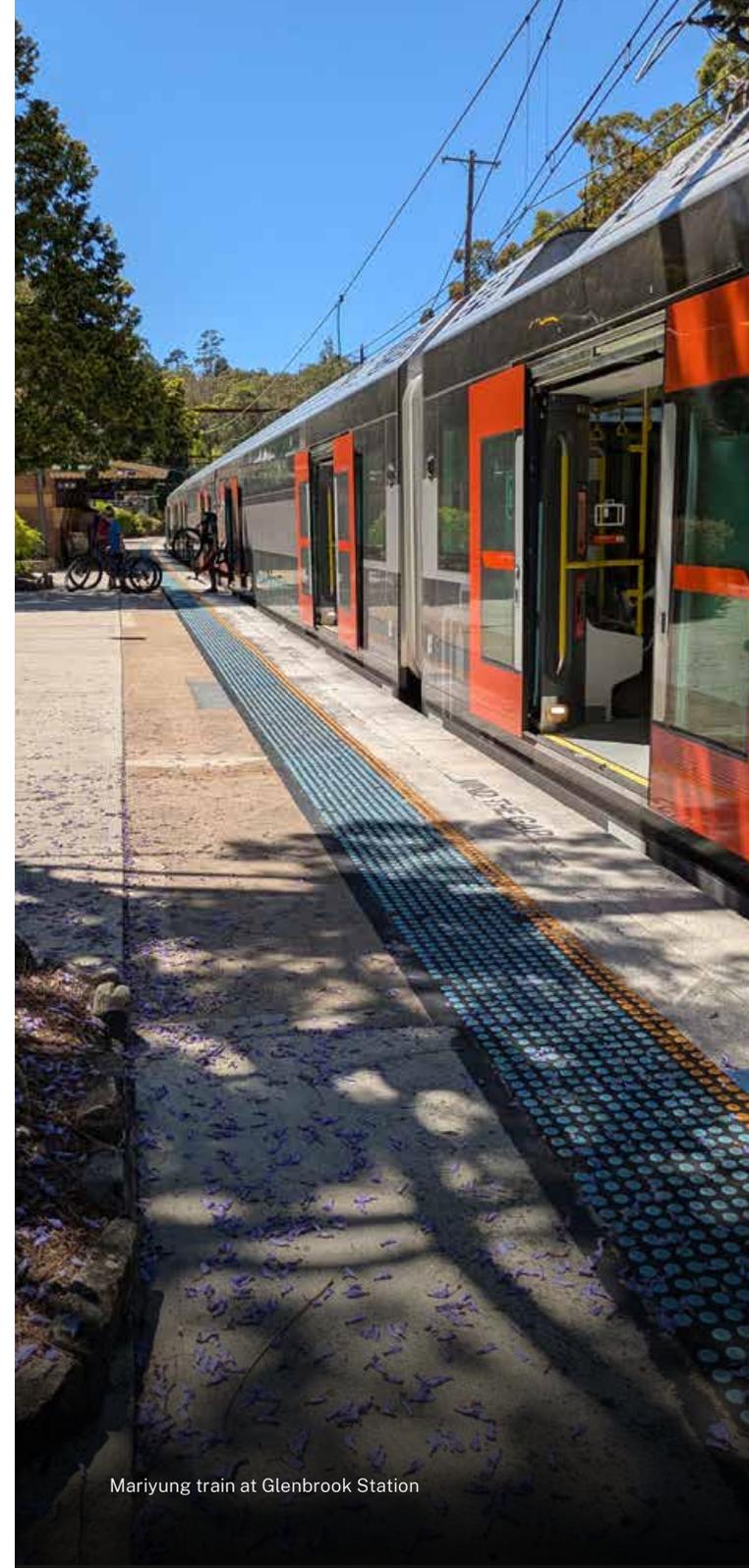


Figure 29. Destinations for passengers originating on the Blue Mountains Line west of Penrith on a typical weekday (Source: Opal average trips, March 2025)

Rail passengers oriented towards Sydney CBD from stations east of Katoomba

Each weekday 6900 passengers use the Blue Mountains Line west of Penrith. Of these, 40 per cent (2800) boarded at stations between Bathurst and Wentworth Falls, while 60 per cent (4100) boarded at stations between Bullaburra and Emu Plains.⁹⁷ These are shown in Figure 29.

⁹⁷ Transport for NSW 2025, Opal analysis, March 2025 [accessed 3 July 2025]



Mariyung train at Glenbrook Station

Over 2700 existing Blue Mountains Line passengers from west of Penrith travel to Strathfield, Redfern or Central stations, with a further 900 trips to other Sydney CBD stations. There were also over 1000 trips to Blacktown, Westmead and Parramatta. Passengers from upper Blue Mountains stations primarily travelled into the Sydney CBD stations, while destinations were more dispersed for lower Blue Mountains travellers, including some only to Penrith Station and many others to western stations including Blacktown, Westmead and Parramatta.

Limited role of rail in accessing key Blue Mountains tourism destinations

Katoomba and Springwood stations have the highest weekday patronage on the Blue Mountains Line. As shown in Figure 30, where Springwood Station shows a typical weekday commuter behaviour with a peak in the 6–8am period, Katoomba is a weekday and weekend destination for day-trip activities with the tap-on peak running from 1–6pm for return trips to the Sydney CBD, Blacktown and Parramatta.

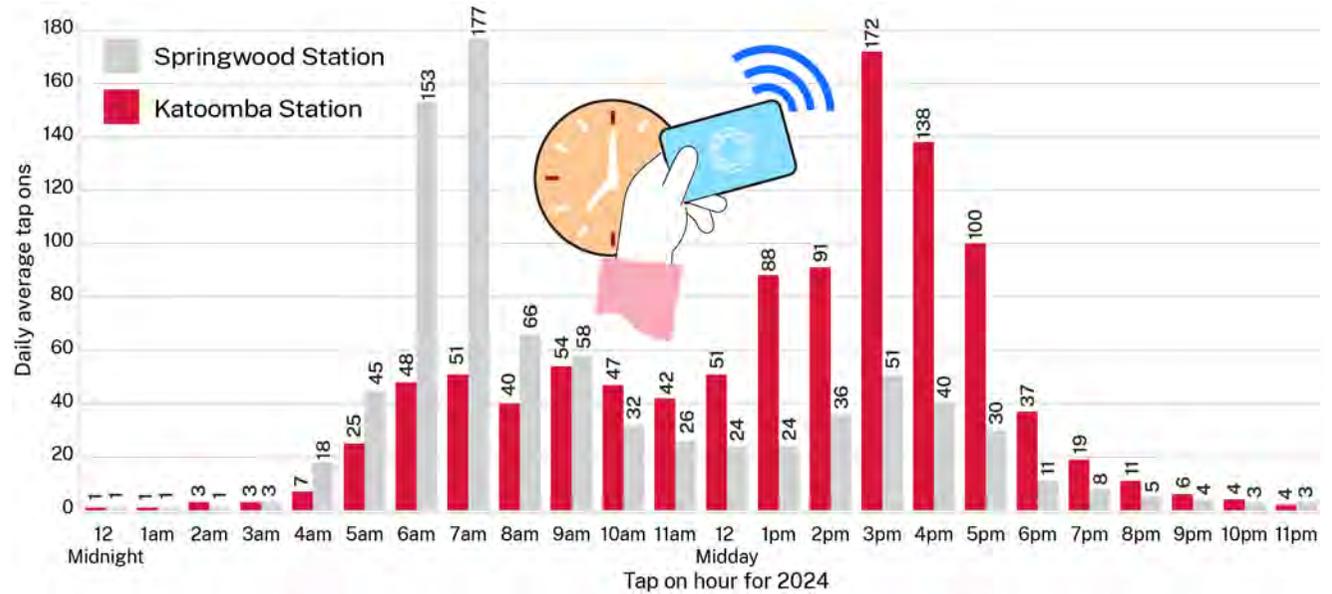


Figure 30. Average entries for Katoomba and Springwood stations on a typical weekday (Source: Opal average for 2024)

Opportunities to improve the current situation	Movement type		
	Through	In-and-out	Local
Provide more convenient departure and arrival times via rail in Sydney.	✓	✓	✓
Provide faster and more frequent train services.	✓	✓	✓
The rollout of the new Regional fleet could attract new customers.	✓	✓	✓
Upgrade track infrastructure and use newer rolling stock.	✓	✓	✓



5.3.3 Supporting the visitor economy

Context of visitor economy

The visitor economy contributes to travel demand on the Great Western Highway and Bells Line of Road corridors. These corridors support access to nationally significant tourism destinations including the Three Sisters, Jenolan Caves, Scenic World, the Blue Mountains National Park and Mount Wilson as well as cultural and sporting events like Bathurst 1000. Visitors, from nature seekers to motorsport fans, have varied transport needs across the corridors.

In 2024, the Blue Mountains tourism region recorded 4.4 million day-trip visits and 3.2 million overnight stays. Combined, these visitors contributed \$1.1 billion in tourism expenditure, representing a four per cent increase from 2023.⁹⁸ Over 65 per cent of day-trip visitors and overnight stays are for holiday purposes, with over 20 per cent visiting families and relatives.⁹⁹ In 2024, 90–96 per cent of domestic day-trip visitors and overnight stays in the study area travelled by road vehicle, while only five to six per cent used public transport. Road vehicle use reached 100 per cent for domestic day trips to Bathurst and Hawkesbury, as well as for overnight stays in Lithgow.¹⁰⁰ For international visitors, public transport trips is higher at 18 per cent, while 67 per cent use road vehicles, five per cent travel by private coach or bus, and two per cent by rideshare or taxi. Public transport use is highest in the Blue Mountains LGA

at 20 per cent, private coach and bus use peaks in Lithgow at 34 per cent and ride share and taxi usage is notably higher in Bathurst at 13 per cent.¹⁰¹

With the future Western Sydney International Airport opening soon, the region's visitor economy is expected to benefit from the airport's proximity. However, the expected increase in domestic and international visitation could also place further pressure on these corridors.

Impacts on town centre amenities

Tourism traffic is placing pressure on town centre amenities, particularly in popular visitor centres. These centres experience significant surges in both pedestrian and vehicle movements during weekends, holidays, and peak tourism seasons, often resulting in congestion, noise and crowding. While tourism is a major contributor to the local economy, the intensity of visitor activity can reduce the everyday amenity for residents, affecting access to local services, increase travel times, and create ongoing tension between the needs of the local community and tourists.

In town centres like Katoomba, Leura and Wentworth Falls, high traffic and pedestrian volumes frequently overwhelm local streets and footpaths, especially near cafes and retail strips. In Leura alone, there are about 50 buses a day during peak periods, with large tourist coaches and mini buses often concentrating along the retail strip of Leura Mall for short breaks before continuing to nearby tourist destinations.^{102,103}

What we heard



- Significant traffic volumes result from tourism. With annual tourist numbers expect to increase, a key challenge is that infrastructure and transport services must evolve to support increased tourism and visitation to the Blue Mountains, and to balance the needs of businesses with the needs of communities.
- Bus and tourism coach parking facilities at key tourist sites are operating at or near capacity during the peak tourism months. Coach operators struggle to find a safe place within Leura to pick up and set down their passengers.
- Some of the most famous sites people visit in the Blue Mountains, such as the Three Sisters, have significant cultural relevance to the local Aboriginal communities. These sites attract high tourism numbers and support the economy, but also could be damaged through high visitor numbers.
- The Western Sydney International Airport precinct will be a future gateway to the Blue Mountains, regional NSW and more.

98 Destination NSW 2024, [Travel to Blue Mountains Tourism Region Year ended December 2024](#)

99 Destination NSW 2024, [Blue Mountains Visitor Profile Year ending December 2024](#)

100 Tourism Research Australia 2024, [National Visitor Survey and International Visitor Survey](#)

101 Tourism Research Australia 2024, [National Visitor Survey and International Visitor Survey](#)

102 Nature Trail 2019, [Bus overtourism overcrowds Leura village amenity](#) [accessed July 2025]

103 Blue Mountains Gazette 2025, [Leura's bus woes continue](#) [accessed July 2025]

Impacts on key tourist destinations

Blue Mountains Council's Parking Strategic Plan (2023) identified that several parking spaces at key tourist destinations across the region regularly operate at or over capacity during weekends, holiday and seasonal periods. Many of these locations either lack designated tourist bus parking entirely or offer only limited spaces, forcing some buses and tourism coaches to park temporarily in parallel while picking up or dropping off visitors. When formal parking areas reach capacity, the overflow frequently spills into adjoining residential streets, creating congestion, safety, and amenity issues for local communities. This challenge is particularly evidenced at high-demand sites such as Wentworth Falls, Conservation Hut, and Scenic World.¹⁰⁴

The availability and quality of walking and cycling facilities in those key tourist destinations also vary. In high-demand sites like Echo Point, Katoomba Falls and Scenic World, cycle trails are well signposted as both off-road and on-road, as part of the Great Blue Mountains Trail. While Echo Point has dedicated tourist bus parking facilities, the area is also experiencing increasing pressure from growing visitor numbers, highlighting the need for coordinated parking and transport management solutions.

The entire Greater Blue Mountains Area, which includes Blue Mountains National Park, is a UNESCO World Heritage site.¹⁰⁵ The area supports exceptional biodiversity including many rare plants and is also highly valued for its Aboriginal



View of the Three Sisters from Katoomba © Destination NSW

heritage and its outstanding geological features. The Three Sisters are significant to Aboriginal culture, as the area down into the valley below the Three Sisters was used as a ceremonial space with legend telling how the Three Sisters came to be the land formations. The high volume of visitors can lead to physical degradation of these

sites and disrupt the sacred connection Aboriginal communities maintain with the land. Collaborative efforts involving local Aboriginal communities, local councils and tourism operators are essential to ensure that tourism development respects and preserves Aboriginal heritage.

¹⁰⁴ Blue Mountains City Council 2018, *Citywide Parking Strategic Plan Appendix 2A Visitor Parking Destinations*

¹⁰⁵ NSW National Parks and Wildlife Service, *Greater Blue Mountains Area*

Western Sydney International Airport

The Western Sydney International Airport is expected to reshape and reimagine travel across Western Sydney and the Blue Mountains, with implications for the Great Western Highway and other transport interfaces connecting the study area to the Western Sydney International Airport and the Aerotropolis precinct.

It is expected to increase traffic on the Great Western Highway, as residents from the Central West and Blue Mountains drive to the airport. The highway already faces congestion and reliability issues, particularly through the constrained sections of the Blue Mountains, as well as in extreme weather events.

Public transport will offer an alternative travel option once the Sydney Metro Western Sydney Airport line is complete, however, low service frequency and long travel times on the Blue Mountains Rail Line may make the travel less efficient and attractive than by car. Dedicated express bus and coach service to and from Blue Mountains and the Western Sydney International Airport could also serve as an alternative transport option to provide greater flexibility.

There is also potential to extend the strategic cycleway corridor from the airport to the Blue Mountains, via Emu Plains, as part of the strategic cycleway extension in Figure 31. This could support recreational cycling, sustainable tourism, and short-distance commuting, but will require investment in safe, continuous infrastructure to overcome current gaps and geographic challenges.

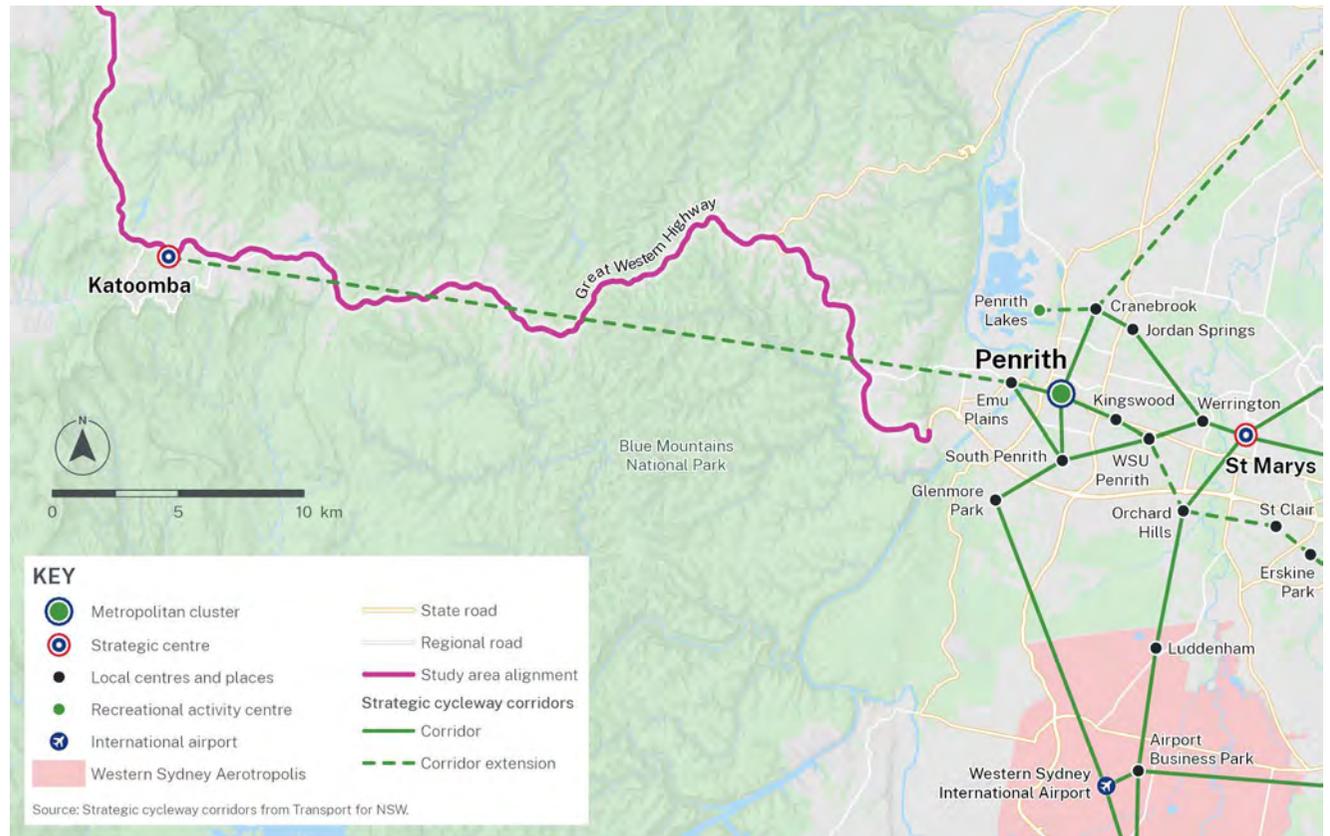


Figure 31. Strategic cycleway corridors

Opportunities to improve the current situation	Movement type		
	Through	In-and-out	Local
Identify safe locations for dedicated pick-up and drop-off zones, within town centres and in key tourist destinations.	-	✓	✓
Embed Aboriginal outcomes in transport planning by avoiding damage to heritage and cultural sites.	-	✓	✓
Spreading the tourism load by coordinating events and itineraries that shift peak load times and locations.	-	✓	✓
Support the visitor economy with a range of multimodal travel options.	✓	✓	✓
Leverage connections to the Western Sydney International Airport.	✓	✓	✓



Stretch of M4 Motorway leading to the Blue Mountains © stock.adobe.com

5.4 Local and intra-regional movement

5.4.1 Lack of connections along and across major road corridors

Both road corridors connecting the Central West to Sydney have significant communities through which they travel. While servicing the regional through movement they also play a key role for the travel within those communities highlighted in [Section 4.1.2](#).

Cross connections

For the entire length of the Great Western Highway there are communities connecting across the highway for local travel and daily activities. Those cross connections vary from unsignalised intersections, to signalised and grade-separated crossings. Given the number of daily movements and the tangling of local, inter-regional journeys and through movements, the need to provide opportunities to separate out local journeys from the higher volume through movements presents benefits for local liveability as well as improving travel times for the regional travellers.

What we heard



- There is a lack of local link roads including:
 - Falconbridge to Woodford
 - Blackheath to Medlow Bath
 - South Bowenfels to Marrangaroo.
- Congestion deters locals from using local roads, including at Blackheath and Katoomba.
- Freight demands need to be balanced with business and community needs.
- The corridors and any upgrades must support place making and local economies.
- Local access and connectivity along the corridors need to be improved.
- Freight demands should be balanced with other needs.

With highway through volumes now exceeding 40,000 vehicles per day¹⁰⁶ in the lower Blue Mountains, there is a need to separate out the local movements and provide better connections for active transport.

Key intersections limiting highway crossing and increasing delays for through and inter-regional traffic through the Blue Mountains are found at:

- Glenbrook – Ross Street and Hare Street
- Blaxland – Layton Avenue and Wilson Way
- Katoomba – Civic Place and Parke Street.

Side road traffic at intersections comprises up to 17 per cent cross movements compared with the through movement.¹⁰⁷

Lack of parallel connections

Local roads that are parallel to the Great Western Highway help to provide a connection for local travel without having to share the highway for local everyday journeys. They also provide a resilient network that gives alternatives for local travel, especially when the highway is congested or impacted by incidents. Where there is higher density of urban development, the priority for parallel connecting roads is increased by the need to contribute to more liveable neighbourhoods.

There is a lack of parallel road connections between some villages in the Blue Mountains, including Faulconbridge to Woodford, Katoomba to Medlow Bath, and Blackheath to Mount Victoria. Other locations such as Blackheath to Medlow Bath have connecting tracks but are not suitable for general traffic. These gaps have an impact on the local residents as well as through travellers when the highway is closed due to natural hazards as well as traffic incidents. The alternate route in those cases is a long detour of more than 100 kilometres via Bells Line of Road.

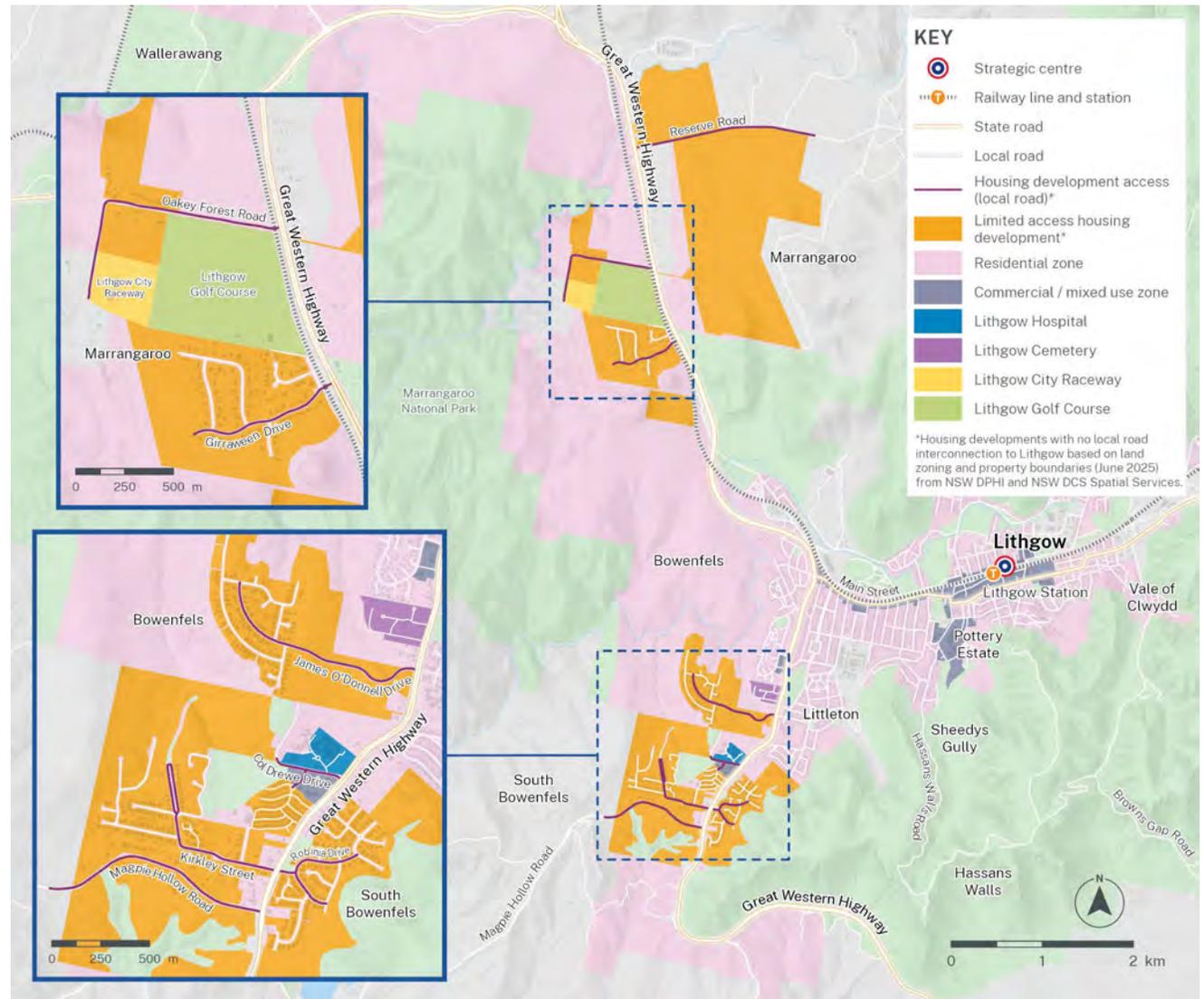


Figure 32. Housing developments in Lithgow that have limited access via one local road connecting the highway

¹⁰⁷ Transport for NSW, 2025 SCATS traffic signal count data

Improving local link roads to provide alternate routes, could also provide liveability benefits, allowing residents to complete their local journeys without needing to enter the highway as well as providing relief for highway traffic during long closures.

Lithgow is another location where there are numerous urban neighbourhoods with no parallel road connections and access is reliant on the Great Western Highway for connections to the Lithgow CBD and surrounding destinations such as schools, shops, workplaces and recreation areas. The following roads shown in Figure 32, access current and future planned urban areas that rely on a singular access point to the Great Western Highway: Magpie Hollow Road, Kirkley Street, Robinia Drive, Col Drewe Drive, James O'Donnell Drive, Girraween Drive, Oakey Forest Road, and Reserve Road. For these roads there is a lack of internal connections between or within housing developments, as well as a lack of well-connected walking and cycling infrastructure to connect across and along the highway to their local destinations. As housing developments are planned and approved, there is an opportunity ensure these parallel connections are created and implemented as a priority rather than waiting for the final linking developments. Planning interconnections also enables intersection signal controls to be implemented on the highway to ensure access at priority locations. Col Drewe Drive is one example where future traffic signals can be implemented to support the activation of a parallel linking road with James O'Donnell Drive.



Aerial view of Lithgow © stock.adobe.com

Opportunities to improve the current situation	Movement type		
	Through	In-and-out	Local
Provide safe access to schools from local roads.	-	-	✓
Provide local road connections for local communities.	-	✓	✓
Improve local bus services and increase public transport for local journeys.	-	-	✓
Provide separate cross-highway movements for local traffic and active transport.	-	✓	✓
Provide safety upgrades at intersections in the Blue Mountains and Lithgow LGAs.	✓	✓	✓



Visitors with luggage at Katoomba train station © Destination NSW

5.4.2 Supporting public transport access to destinations and stations within the region

Limited public transport access to destinations in the Blue Mountains results in high levels of car use for short trips

In the study area, driving is the mode of choice for most trips, as many of the destinations that local residents access daily are not within a convenient distance of a train station or bus stop. In the Blue Mountains LGA, almost 80 per cent of 280,000 trips were by car (driver or passenger), with 15 per cent of trips by walking and only five per cent on

public transport. Travel by car also averaged 15 kilometres which indicates a high level of car travel within the Blue Mountains. Public transport users averaged 27 kilometres which reflects longer distance train journeys, typically beyond the region to and from Sydney. Walking trips averaged one kilometre. In comparison, Hawkesbury has even higher car use (driver or passenger) at 90 per cent.¹⁰⁸

Further, most health and education facilities across the study area are not within walking distance of a train station. While many are served

What we heard



- There is concern about access to, flow and frequency of public transport.
- Local access and connectivity along the corridors need to be improved.

by local bus routes, these are generally infrequent, have large service gaps, and have stops that are not located near hospital or campus entrances.

Poor last-mile station connectivity in the Blue Mountains, Lithgow and Bathurst

There is strong walking or driving access preference to many stations within the Blue Mountains which may either reflect poor alternative options, particularly regarding the bus network, or be related to the urban structure, amenity and topography where walking to a station may not be a preferred or viable option. It is also difficult to undertake a multimodal journey across the region, with current regulations mandating bikes to be boxed on Regional trains, a lack of secure bike parking at train stations and bus stops and limited safe day/night access routes to bus stops and train stations. For those without a car, or those who are less physically able, access to the rail line can be very difficult. There is limited dedicated commuter car parking available at stations across the Blue Mountains.

108 Transport for NSW, Household Travel Survey 2022/23

While many of the Blue Mountains bus services interact with the local train station, poor timetable integration between rail and bus services means customers either spend a long time waiting for their train or must arrive at their destination very early (or too late). This means bus services struggle to compete with the directness of the private car.

In Lithgow, although all the bus routes interchange with the train station, the bus network has limited operating hours and customers cannot rely on buses to connect to early or late train services.¹⁰⁹

In Bathurst, the local bus network is not a viable first or last mile option as some bus routes from the northern and eastern suburbs of Bathurst do not extend from the town centre to Bathurst Station, which is over one kilometre from the train station. The 2021 redesigned bus network improved the hours of operation and bus frequency. However, some Regional coach services remain outside the hours of the local bus network.¹¹⁰

Last-mile station connectivity in Greater Penrith

Blue Mountains and Lithgow residents travel to Greater Penrith to access health and education facilities that are not available locally. These include the Nepean Hospital, Nepean TAFE and Western Sydney University campus at Werrington. Accessing these services from the Blue Mountains Line requires a transfer at Penrith Station to either the T1 Western Line or

¹⁰⁹ Buslines Group 2025, Lithgow, timetables

¹¹⁰ Transport for NSW 2020, FAQ 16 Regional Cities, Bathurst

Opportunities to improve the current situation	Movement type		
	Through	In-and-out	Local
Improve bus services to key destinations, including within, to and from Bathurst, Lithgow and the Blue Mountains.	-	-	✓
Consider the introduction of on-demand and community buses.	-	-	✓
Increase bus operating hours.	-	-	✓
Improve active transport access to stations.	-	-	✓
Improve the suitable and safe storage of bikes at stations.	-	-	✓
Trial bicycles on buses and coaches.	-	✓	✓

bus services. While frequent bus services operate every 15 minutes or better on weekdays between Penrith Station and the Nepean Hospital, coordinated timetables and frequent services are needed to reduce end-to-end travel times.

There is also an emerging need to connect customers to the Western Sydney International Airport and the Western Sydney Employment Area.

While these destinations will be served by the Sydney Metro Western Sydney Airport line, Blue Mountains Line passengers would be required to make two rail-based transfers as services do not currently stop at St Marys to enable an interchange with Sydney Metro.



5.4.3 Limited active transport infrastructure for local trips

Context of active transport

Active transport (walking and cycling) plays a vital role in short and local trips. Travel by active transport brings a wide range of benefits. It contributes to improved physical and mental health outcomes by encouraging physical activity, supports environmental sustainability by reducing travel-related emissions, and helps relieve pressure on the road network. Many towns and villages along the corridors are compact and suitable for localised active travel.

Despite these benefits, the uptake of active transport remains low with only four to six per cent of trips being made by walking and cycling. This is largely due to the absence or fragmented active transport infrastructure, safety concerns sharing roads with high-volume traffic, including freight trucks, as well as the topographic challenge of the corridors.¹¹¹

Research indicates that an ideal gradient for cycling falls within the range of zero to three per cent, providing a comfortable and sustainable riding experience for most cyclists. Gradients of between four and six per cent can lead to fatigue if sustained over long distances, while gradients exceeding six per cent are generally considered challenging and can be painful.¹¹² Along the Great Western Highway, elevation reach the highest point of 1170 m above sea level east of Yetholme,

with steepest section west of Hartley and Mount Victoria, up to 12 per cent gradient. Similarly, on the Bells Line of Road, the gradient reaches 12 per cent at Mount Tomah, with the steepest section between Kurrajong Heights and Kurmond, reaching 13 per cent.¹¹³ High gradient sections limit the effectiveness of cycling as a viable alternative transport option for long-distance travel.

Lack of active transport infrastructure and connectivity

A lack of continuous active transport infrastructure presents a major barrier to safe and accessible walking and cycling for local trips in the study area. As shown in Figure 18, the bicycle paths along the Great Western Highway are fragmented, with most facilities being shared paths, concentrated on major towns and villages, except in Blackheath and Lithgow. On road bicycle lanes are limited across the study area.

In the Blue Mountains LGA, existing cycling routes are concentrated to the north of Blaxland towards Mount Riverview, Faulconbridge and Blackheath, Wentworth Falls, south of Leura and south of Katoomba, however, some are singular and fragmented routes with limited connectivity with other parts of the local towns and villages.¹¹⁴ Ensuring safe and direct crossings of the highway for pedestrians and cyclists is increasingly important to create a safe local active transport network that connects communities and enhances the uptake of active transport for local trips.

What we heard



- There are gaps in active transport connections.
- Better active transport links would improve congestion, and support tourism and amenity.
- Local access and connectivity along the corridors need to be improved.
- An ageing demographic should be considered.

In Lithgow, while many footpaths are in relatively good condition, there is an absence of dedicated cycling infrastructure. Cyclists use the Great Western Highway to access quieter streets and trails south of Lithgow, however this imposes safety risks. For example, there is not a signalised crossing at the intersection of the Great Western Highway and Col Drewe Drive outside the entrance to Lithgow Hospital.¹¹⁵ Without targeted interventions to improve safety and local mobility, it will be difficult to encourage more people to travel by active modes of travel.

In the Hawkesbury, locations intersecting Bells Line of Road, particularly in Bilpin, North Richmond and Kurrajong experience challenges similar to those in the Blue Mountains. High-speed traffic, limited pedestrian facilities, and dispersed

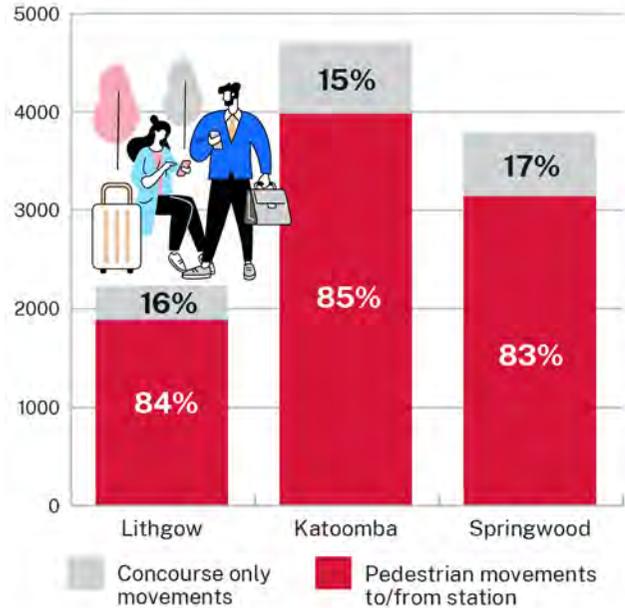
¹¹¹ ABS 2016, Journey to work data by SA2

¹¹² The Climbing Cyclist, Gradients and cycling: an introduction, [Gradients and cycling: an introduction – The Climbing Cyclist, 2013](#)

¹¹³ NSW Government, Spatial Services, 2m & 5m digital elevation model 2015-2018

¹¹⁴ [Blue Mountain City Council 2020, Blue Mountains Bike Plan – An Infrastructure and Operational Plan](#)

¹¹⁵ [Lithgow Council 2019, Lithgow Active Transport Plan](#)

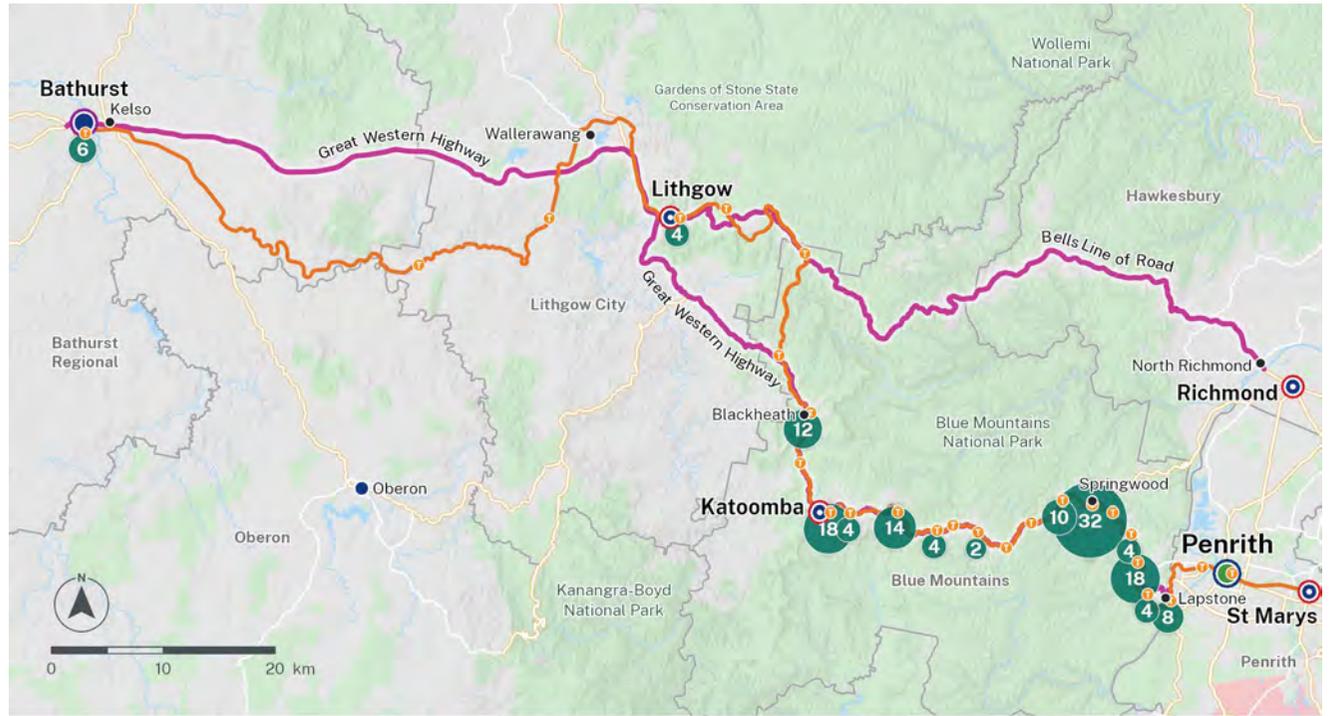


Source: Transport for NSW, pedestrian counts Thursday 12 June 2025 (14 hours)

Figure 33. Rail station pedestrian counts at select stations (Transport for NSW, June 2025)

settlement patterns reduce the viability of walking for local trips.¹¹⁶ Hawkesbury Council recognises the need for proposed upgrades to pedestrian networks and new crossing opportunities in these locations to ensure safety.

Transport conducted pedestrian counts at three key stations in Lithgow, Katoomba and Springwood on a weekday in June 2025 (see Figure 33). The results indicate that, across all three stations, the majority of people interacting with the station were actually using the public transport service, rather than simply passing through the concourse. Katoomba recorded the highest activity with almost 5000 people, 85 per cent of whom were using the train service. Springwood followed with nearly 4000 people and 83 per cent transport-



KEY

- Metropolitan cluster
- Regional city
- Strategic centre
- Centre
- Locality
- # Bicycle parking capacity*
- Railway station (BMT)
- Blue Mountains Line (BMT)
- State road
- Regional road
- Study area alignment
- Local government area
- Western Sydney Aerotropolis

*Capacity at railway stations based on site survey. Source: Bicycle parking capacity (2025) from Transport for NSW.

Figure 34. Bicycle parking capacity at Blue Mountains Line train stations

related movements, while Lithgow had just over 2000 people with 84 per cent using the station for train service. The consistent high proportion of public transport-related pedestrian activity across all stations underscores the strong role of walking in station access. However, the lower volumes observed at Lithgow may indicate limited active transport infrastructure and weaker connectivity, which could be discouraging access.

Low active transport amenity

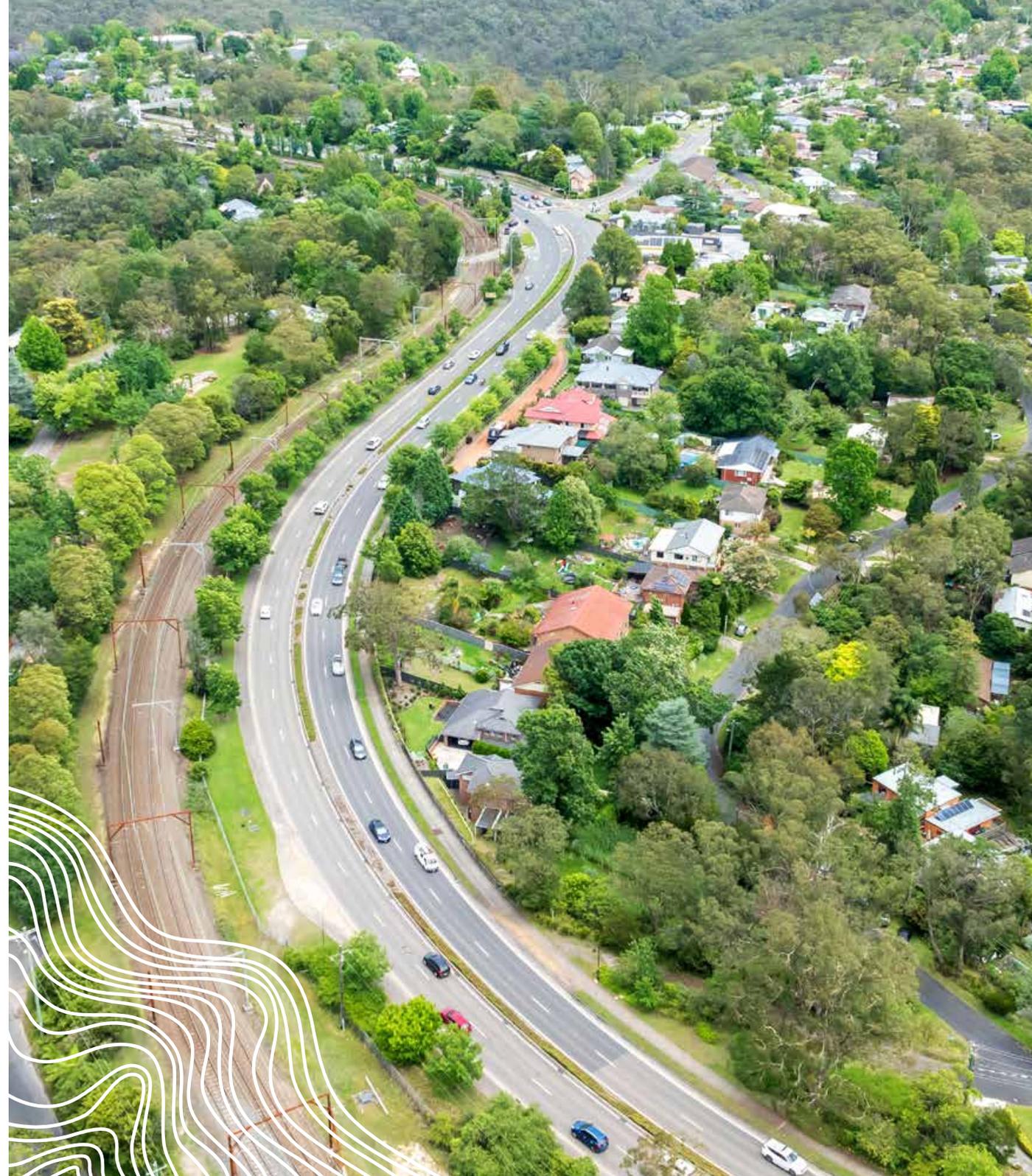
Beyond infrastructure such as footpaths and bicycle lanes, there are a range of amenity factors that influence whether people feel safe and motivated to walk or ride. A lack of shaded footpaths, hydration points, and street benches can make walking uncomfortable, especially for children, the elderly and people with mobility challenges.

The condition and width of footpaths also plays a crucial role as narrow, uneven or poorly maintained paths reduce accessibility and increase risk of injury. Similarly, people are less likely to cycle if there is limited secure bike parking at key trip destinations such as train stations, local shops, parks, schools, and hospitals. For example, in Lithgow, there is little to no bicycle parking in public spaces.¹¹⁷ Bicycle parking capacity is concentrated at train stations east of Lithgow as shown in Figure 34. These missing amenities undermine the convenience and practicality of choosing active travel over driving, particularly for short, local trips.

Safety concerns

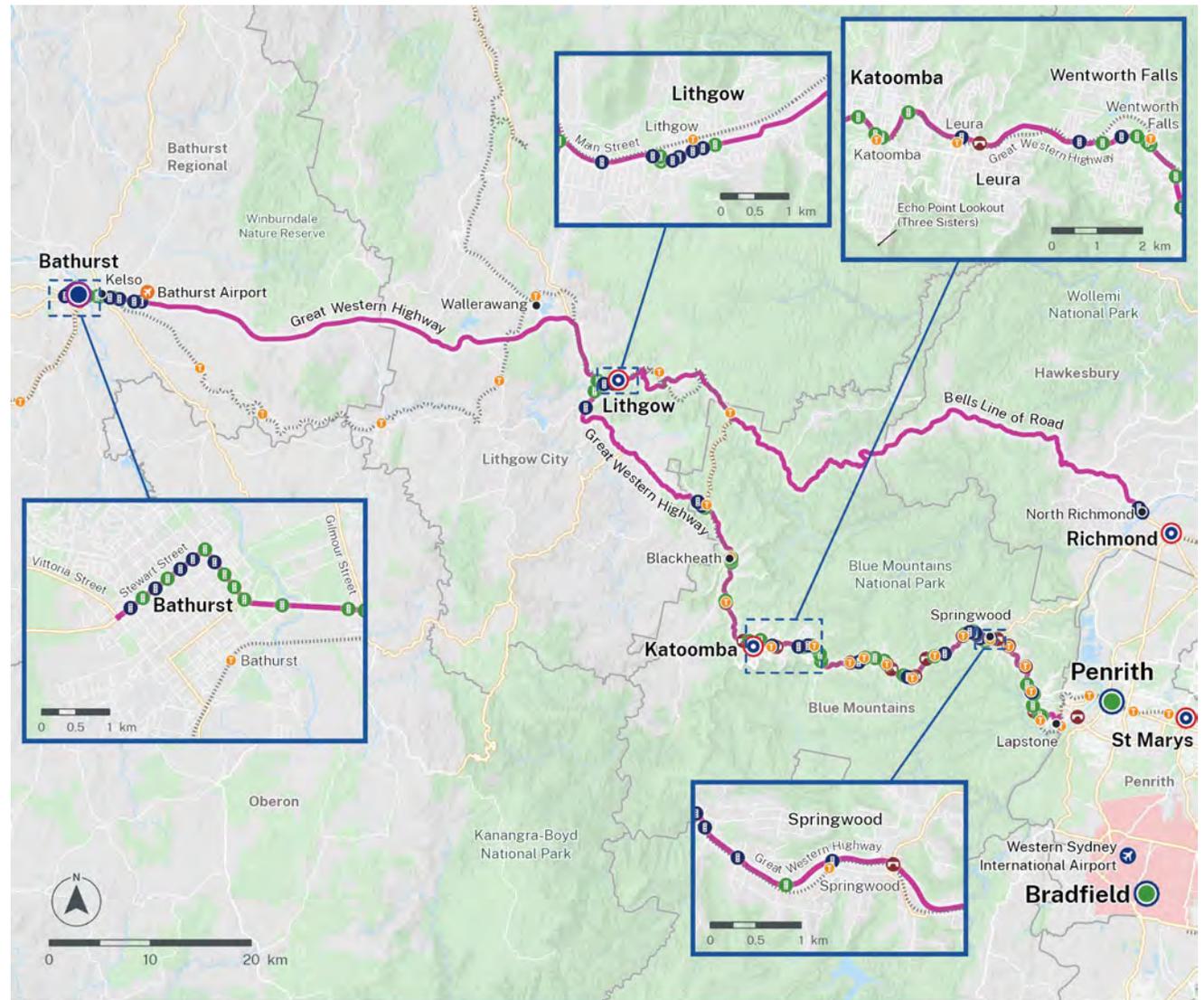
Between 2019 and 2023, there are 17 recorded fatal and serious injury crashes involving pedestrians or cyclists within the Blue Mountains towns and villages, with a further two incidents occurring in Lithgow during this period. This pattern reflects the relationship between road corridors and active transport activity, primarily in the Blue Mountains area. In Lithgow, pedestrian movements are largely concentrated along local streets near the railway corridor as the Great Western Highway is not close to the town centre. The Great Western Highway sees relatively low levels of active transport activity, contributing to the lower crash incidents. However, there are limited crossing facilities across the highway in Lithgow.

¹¹⁷ Lithgow Council, Lithgow Active Transport Plan



In contrast, the Blue Mountains features several towns where the highway directly intersects the town centre and areas with high pedestrian activity, resulting in a higher frequency of pedestrian and cyclist crashes. Notably, over 85 per cent of these incidents occurred during daylight hours.¹¹⁸ Speeding was a factor in only one fatal crash, suggesting that other elements such as road design, visibility, crossing opportunities and human error may be more significant contributors to safety concerns for active transport in the study area.

The towns and village strips along the corridors have a diverse range of pedestrian crossing opportunities, including signalised crossings, unsignalised crossings, and pedestrian bridges, as shown in Figure 35. However, in locations such as Glenbrook, Warrimoo, Lawson, Bullaburra and Blackheath, only a single type of crossing opportunity is provided, either in the form of signalised crossing or pedestrian bridge. Many refugee crossings have insufficient sight distance, while they may still be suitable facility types when crossing volumes are low, improvements to sight distance for safety purpose is needed. It is essential that these facilities are fit for purpose, respond to the specific place context, and meet the needs of all users, including those with mobility challenges, to ensure a safe and inclusive crossing environment.



KEY

- Metropolitan cluster
- Regional city
- Strategic centre
- Locality
- ✈ International airport
- ✈ Regional airport
- Railway line and station
- State road
- Regional road
- Local road
- Study area alignment
- Local government area
- Western Sydney Aerotropolis
- ⤴ Overpass
- Ⓜ Signalised crossing
- Ⓜ Unsignalised crossing

*Opportunities based on review of OpenStreetMap and aerial imagery. Source: Pedestrian crossing opportunities (May 2025) from Transport for NSW.

118 Transport for NSW, Interactive crash statistics, accessed July 2025

Figure 35. Crossing opportunities along the corridors

Poor perceptions and risk to personal security

The Safer Cities Survey Report revealed that 42 per cent of women feel unsafe 'most of the time' or 'all of the time' in public spaces after dark, compared to only 17 per cent of men who reported similar feelings. Furthermore, 59 per cent of women rate their sense of safety at night as 'not so safe' or 'not at all safe' while 31 per cent of men feel the same way. Additionally, 92 per cent of women and 75 per cent of men agreed that a sense of safety influences their choice of routes. Lighting was identified as the most important factor by all participants, as after dark, only eight per cent of women said they feel safe at bus stops and 12 per cent at train stations.¹¹⁹ These findings are repeated by young people, who often feel unsafe on public transport and in parks and other public spaces, with poorly lit pathways being highlighted.¹²⁰

Within the study area, most councils' active transport-related plans recognise that poor street lighting contributes to both real and perceived risks for pedestrians and cyclists, particularly during early morning and evening hours when visibility is reduced. Night-time outdoor lighting along the corridors has been traditionally designed for vehicle movement, prioritising driver visibility over the needs of active transport users. Poor lighting results in pedestrians and cyclists struggling to see pavement irregularities or obstacles, while

Opportunities to improve the current situation	Movement type		
	Through	In-and-out	Local
Improve active transport routes to key centres and destinations.	-	-	✓
Improve amenity along the corridors with shading, hydration points, seating, including using Crime Prevention Through Environmental Design principles.	-	-	✓
Support the implementation of shared micromobility such as e-bikes and e-scooters.	-	-	✓
Improve safety on public transport and in interchange precincts and public spaces by: <ul style="list-style-type: none"> improving lighting at bus stops and parking areas physically separating pedestrians and cyclists from traffic and high-speed vehicles ensuring train staff members are visible and accessible emphasising women's safety and security during night-time hours supporting the development of vibrant town centres. 	-	-	✓
Review road speed limits in towns and villages to improve safety.	✓	✓	✓

drivers may also have difficulty detecting cyclists in low-light conditions. Adequate lighting plays a critical role in enhancing safety by improving visibility, supporting wayfinding through clearer identification of signage, enabling physical recognition from a distance, and contributing to crime prevention.



¹¹⁹ Safer Cities Survey Report: Perceptions of safety in public spaces and transport hubs across NSW, Transport for NSW, July 2023

¹²⁰ NSW Strategic Plan for Children and Young People 2022-2024

5.4.4 Supporting access for Aboriginal communities

The NSW Government is committed to achieving the objective of the National Agreement on Closing the Gap, enabling Aboriginal and Torres Strait Islander people and governments to work together to overcome the inequalities experienced by Aboriginal and Torres Strait Islander people and achieve life outcomes equal to those of all Australians.¹²¹ The NSW Government's Closing the Gap Implementation Plan provides a framework for delivering more equitable outcomes for Aboriginal communities and people.

Key challenges and reform areas related to Closing the Gap that can be addressed through transport planning and programs include:

- improving access for Aboriginal peoples to jobs, healthcare, education, social and recreational venues, housing, and their Country
- enhancing transport services by partnering with Aboriginal communities and businesses, which includes funding the development and operation of Aboriginal transport enterprises.

These challenges highlight the importance of accessible transportation to key destinations and services, which are crucial for improving outcomes related to Closing the Gap, including healthcare, education, social services, and well-located housing.



An Australian Aboriginal flag flying in front of an Australian flag

What we heard



- Central West Orana SRITP Aboriginal consultation identified concerns around limited transportation options, particularly for the elderly, and challenges with accessing support services.
- Equitable access to health, education, and other government services is critical for improving outcomes for Aboriginal communities. Ensuring these services are available and accessible is a priority for achieving better health and educational outcomes.
- Providing diverse transport options, including walking, public transport, and on-demand services, is essential for all trips. This is particularly important for remote Aboriginal communities, where equitable access to transport choices is necessary for day-return journeys and seasonal travel.
- Transport plays a significant role as a major direct employer of Aboriginal people and as a facilitator of Aboriginal tourism, which contributes to economic independence.
- Engaging with Aboriginal culture and communities through initiatives like 'Walking on Country' is essential for fostering respect and understanding. This engagement should be integrated into planning and decision-making processes to ensure culturally appropriate outcomes.

¹²¹ NSW Government, National Agreement on Closing the Gap [accessed 27 June]

Transport's Reconciliation Action Plan acknowledges and values the importance of Connecting to Country in creating our transport infrastructure and networks. Transport will monitor and report progress against the Aboriginal Outcomes Framework, which has four key areas for transport outcomes:

- Aboriginal people are connected safely to the economy and socially through transport solutions.
- Our Country is healthy and strong through transport planning and place making.
- Aboriginal economic independence is supported by Transport.
- Transport drives transformative action to deliver systemic change.

The NSW Government is dedicated to fulfilling the National Agreement on Closing the Gap. This commitment aims to enable Aboriginal and Torres Strait Islander peoples and governments to collaborate in overcoming the inequalities faced by these communities, ensuring they achieve life outcomes comparable to those of all Australians.

Opportunities to improve the current situation	Movement type		
	Through	In-and-out	Local
Increase opportunities for Aboriginal community controlled organisations to own, access, manage and use land and waterways.	-	-	✓
Develop local Aboriginal transport and services plans partnership with Aboriginal community controlled organisations.	-	-	✓
Provide Acknowledgement of Country signage and wayfinding that reflects Aboriginal heritage, cultural identification and storytelling.	✓	✓	✓
Improve on-demand and flexible transport options to connect communities to the broader public transport network.	-	✓	✓

The NSW Government's Closing the Gap Implementation Plan provides a framework for delivering more equitable outcomes for Aboriginal communities and individuals.



06 Realising the vision



6.1 Key directions

The initiatives for the Great Western Highway and Bells Line of Road corridors are a direct response to the transport challenges, future land use changes, and evolving community needs outlined in previous sections.

They are designed to support the corridors vision, outcomes and objectives through a staged and evidence-led approach to investment.

Recognising the complexity and diversity of movement across the corridors, from local access to inter-regional freight, the approach is to build up over time, starting incrementally, with data-driven interventions that improve safety, capacity, accessibility and resilience in the short term, while informing the design and timing of longer-term infrastructure responses.

Section of the Bells Line of Road



This stepped approach:

- maximises the value of investment by focusing early efforts on better understanding current conditions and user behaviour
- unlocks early gains in network performance and community safety through targeted, smaller-scale upgrades
- supports a more resilient and adaptive network by testing and refining interventions before larger capital outlays
- coordinates with land use change and partner agencies to align transport improvements with regional growth and economic development.

Initiatives are grouped into four themes: Safety, Resilience, Capacity and Access. Within each theme, the initiatives are ordered by early achievements first, as well as those to be done as a preliminary step to longer-term infrastructure, as shown in Figure 36. These are not committed projects but actions for further investigation, collaboration, and investment planning.

They reflect a shared commitment to working with local communities, councils, and stakeholders to shape inclusive, connected, and resilient corridors.

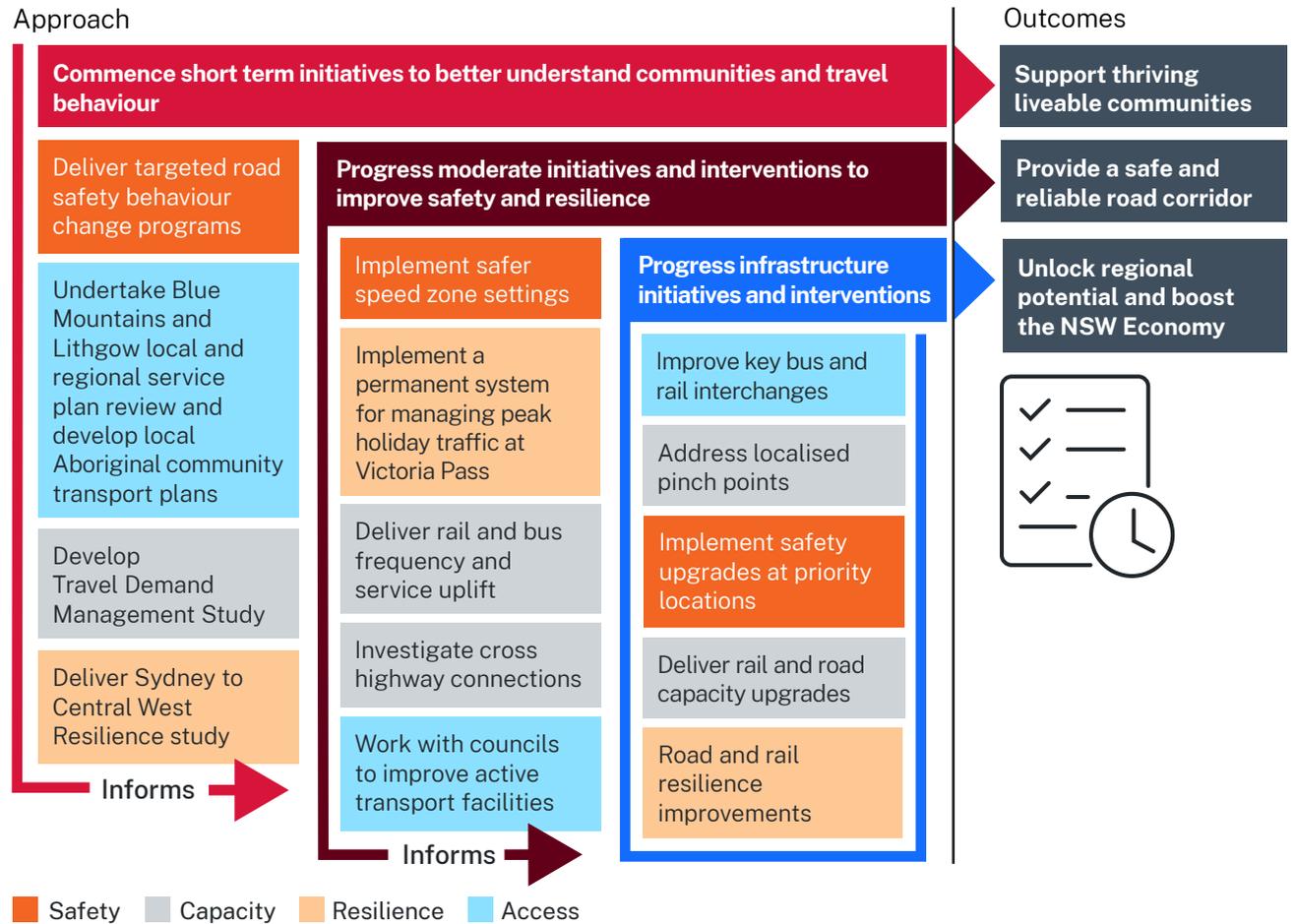


Figure 36. A stepped approach to delivering our three core outcomes

6.2 White Paper initiatives

The following initiatives, organised by the four main themes of Safety, Resilience, Capacity and Access, have been identified to address the challenges and to leverage current and future opportunities in the corridors. The initiatives align with the Connecting NSW priorities of Towards zero trauma; Restore reliability and build resilience; Transition to net zero emissions; Reduce transport disadvantage; Reimagine road space to drive mode shift and Enable whole-of-government outcomes.

6.2.1 Safety

Safety #	LGA	Connecting NSW Priority alignment	Initiative	Lead	Source	Timeframe
S1	Blue Mountains, Hawkesbury		Plan and deliver Bells Line of Road safety improvements program targeting a range of improvements including realigning curves, improvements to signage and delineation, fauna crossings, intersection upgrades and improving heavy vehicle rest areas.	Australian Government Transport for NSW	Internal Transport investigation	0–5 years
S2	Lithgow, Blue Mountains, Hawkesbury		Partner with councils and the NSW Police Force to improve road safety as part of the regional implementation plan that aims to reduce road trauma by deterring unsafe behaviours across the road network and support police compliance activities. Include a motorcycle route safety assessment for Chifley Road and Bells Line of Road as motorcycles are overrepresented in crashes on these roads.	Transport for NSW Council	Internal Transport investigation	0–5 years
S3	Lithgow, Bathurst		Continue working with Bathurst and Lithgow councils to improve network safety and access between future housing release areas and destinations and services in Bathurst and Lithgow including Bowenfels and Marrangaroo urban release areas.	Transport for NSW	Internal Transport investigation Lithgow Council	0–5 years

Safety #	LGA	Connecting NSW Priority alignment	Initiative	Lead	Source	Timeframe
S4	Lithgow	 Towards zero trauma	Reduce serious injury crashes on Great Western Highway, through improved speed management at Hartley 'River Lett Hill'.	Transport for NSW	Internal Transport investigation	0–5 years
S5	Blue Mountains, Hawkesbury	 Towards zero trauma	Improve safety and reliability outcomes along the corridors: Undertake speed zone reviews and apply safer speed zone settings following the principles and guidance in the NSW Speed Zoning Standard, suitable for the state road and highway networks, with a focus on improving safety around schools, improving awareness of frequent changing speed zones, and identifying infrastructure required to support safer speeds.	Transport for NSW	Stakeholder engagement	0–5 years
S6	Blue Mountains, Lithgow	 Enable whole-of-government outcomes	Support the national economy: Identify and implement opportunities to support the safe and efficient movement of higher productivity heavy vehicles across the mountains on the Great Western Highway, as identified in the NSW Heavy Vehicle Access Policy. This may include decoupling facilities, access trials, freight access changes and freight safety performance behavioural program.	Transport for NSW	Stakeholder engagement Internal Transport investigation	0–5 years
S7	Blue Mountains	 Towards zero trauma	Improve safety and efficiency of the Hawkesbury Road interchange with Great Western Highway at Springwood by developing options to reduce traffic queues impacting the highway and local access to and from Winmalee.	Transport for NSW	Stakeholder engagement Internal Transport investigation	0–5 years

Safety #	LGA	Connecting NSW Priority alignment	Initiative	Lead	Source	Timeframe
S8	Blue Mountains	 <p>Towards zero trauma</p>	Develop improvements to Glenbrook and Linden rest stops to improve heavy vehicle driver safety and fatigue management.	Transport for NSW	Internal Transport investigation	0–5 years
S9	Blue Mountains	 <p>Towards zero trauma</p>	Improve the safety of the highway from Leura to Wentworth Falls developing safety upgrades including consideration of signalisation of the Great Western Highway's Scott Avenue/Sinclair Crescent staggered intersection, and centre barrier extension, shoulder widening and improved active transport access across the highway.	Transport for NSW	Internal Transport investigation	0–5 years
S10	Blue Mountains	 <p>Towards zero trauma</p>	Improve safety of the highway from Faulconbridge to Linden by development of safety upgrades including consideration of centre barrier extension, shoulder widening and active transport access across and along the highway and improved access to local road intersections.	Transport for NSW	Internal Transport investigation	0–5 years

Safety #	LGA	Connecting NSW Priority alignment	Initiative	Lead	Source	Timeframe
S11	Blue Mountains	 <p>Towards zero trauma</p>	<p>Continue working with councils to identify and support the development of preferred local alignments of a network of high-quality cycleway corridors separated from vehicle traffic to broaden the attractiveness and improve the safety of cycling for access to key villages and transport. Initial locations include:</p> <ul style="list-style-type: none"> • Emu Plains to Glenbrook • Falconbridge to Woodford • Bullaburra to Wentworth Falls • Mount Victoria to Medlow Bath. 	Transport for NSW Council	Internal Transport investigation	5–10 years
S12	Lithgow, Bathurst	 <p>Towards zero trauma</p>	<p>Investigate options to improve safety on the Great Western Highway between Wallerawang and Raglan.</p>	Transport for NSW	Internal Transport investigation	5–10 years

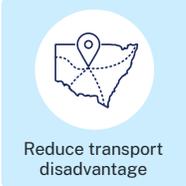
6.2.2 Resilience

Resilience #	LGA	Connecting NSW Priority alignment	Initiative	Lead	Source	Timeframe
R1	Blue Mountains, Lithgow, Bathurst	 <p>Restore reliability and build resilience</p>	<p>Prepare the transport network for shock and stresses: Work in partnership with federal, State and local government and transport operators to develop a Sydney to Central West resilience study to understand current network vulnerabilities to shock and stresses.</p>	<p>Transport for NSW Department of Planning, Housing and Infrastructure</p>	<p>Internal Transport investigation</p>	<p>0–5 years</p>
R2	Blue Mountains, Lithgow	 <p>Restore reliability and build resilience</p>	<p>Remove local movement from the Great Western Highway: Undertake a local road and transport network study to identify where the local road and transport network could be extended to better connect communities and to avoid additional travel on the highway.</p> <p>Potential locations include:</p> <ul style="list-style-type: none"> • Falconbridge to Woodford • Blackheath to Katoomba • South Bowenfels to Marrangaroo. 	<p>Transport for NSW NSW Government agencies Councils</p>	<p>Stakeholder engagement Internal Transport investigation</p>	<p>0–5 years</p>

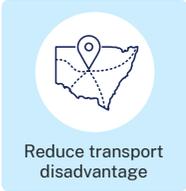
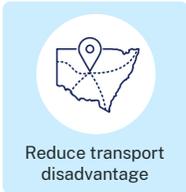
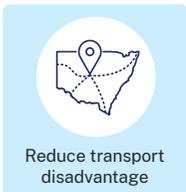
Resilience #	LGA	Connecting NSW Priority alignment	Initiative	Lead	Source	Timeframe
R3	Blue Mountains, Lithgow, Hawkesbury	 Restore reliability and build resilience	Investigate a targeted program of works for Bells Line of Road based on the recommendations of the Sydney to Central West resilience study to ensure Bells Line of Road provides a safe alternative to the Great Western Highway during unplanned and planned disruptions on the Great Western Highway.	Transport for NSW	Internal Transport investigation	0–5 years
R4	Blue Mountains, Lithgow	 Restore reliability and build resilience	Improve time reliability during peak periods: Implement a permanent system for managing peak holiday traffic at Victoria Pass.	Transport for NSW	Internal Transport investigation	0–5 years
R5	Blue Mountains, Lithgow, Bathurst	 Restore reliability and build resilience	Building resilient roads: Apply learnings from the Aboriginal Cultural Landscapes Project trial sites alongside the Bruxner Highway near Grafton, the Oxley and Newell highways near Coonabarabran, and the Princes Highway near Batemans Bay and Bega and develop a local approach for the road corridors for traditional owners using land management methods, such as slow cultural burns, to control roadside strips of native title-owned land.	Transport for NSW Aboriginal community-controlled organisations Local Aboriginal Land Councils	Closing the Gap Transport's Aboriginal Outcomes Framework	0–5 years

6.2.3 Capacity

Capacity #	LGA	Connecting NSW Priority alignment	Initiative	Lead	Source	Timeframe
C1	Blue Mountains		<p>Investigate opportunities to separate cross highway movements for local traffic and active transport to improve travel times and safety through and within Blue Mountains villages.</p> <p>Cross highway connectivity priority locations:</p> <ul style="list-style-type: none"> • Blackheath (Govetts Leap Road/Bundarra Street plus railway level crossing of Main West Line) • Glenbrook (Wascoe Street/Fletcher Street) • Blaxland (Layton Avenue/Hope Street) • Blaxland (Wilson Way) • Katoomba (Parke Street/Civic Place). 	Transport for NSW	<p>Stakeholder engagement</p> <p>Internal Transport investigation</p>	0–5 years
C2	Blue Mountains, Lithgow		<p>Support freight productivity and plan to improve safety, efficiency and resilience for all road users by working with Infrastructure Australia and the Australian Government to develop a preferred future corridor to bypass key freight and traffic pinch points:</p> <ul style="list-style-type: none"> • Mount Victoria and Blackheath urban area traffic and heritage pinch points • Victoria Pass and River Lett Hill freight pinch points. 	<p>Transport for NSW</p> <p>Infrastructure NSW</p> <p>Infrastructure Australia</p>	Internal Transport investigation	0–5 years
C3	Blue Mountains, Lithgow, Bathurst		<p>Create capacity on the road network through local and regional travel behaviour change: Undertake a travel demand management strategy and deliver behaviour change programs with the local councils, industry and community groups to create capacity on the road network and generate long term sustainable travel behaviour through remode, reroute and retime both passenger and freight movements.</p>	Transport for NSW	Internal Transport investigation	0–5 years

Capacity #	LGA	Connecting NSW Priority alignment	Initiative	Lead	Source	Timeframe
C4	Blue Mountains, Lithgow, Bathurst	 Reduce transport disadvantage	Increase the frequency of rail services between the Central West and Sydney: Investigate service frequency increases in the short term to allow better day-return connectivity within the region, and to Sydney, making rail a convenient, useful and reliable travel option for a greater range of journey purposes. Connectivity with coach and local bus services will also be enhanced.	Transport for NSW	Internal Transport investigation	0–5 years
C5	Blue Mountains, Lithgow	 Towards zero trauma	<p>Improve safety, resilience, freight productivity and reduce heavy vehicle driver fatigue through a program of work along the Great Western Highway at targeted sections including:</p> <ul style="list-style-type: none"> • Katoomba and Medlow Bath • Medlow Bath and Blackheath • Hartley and South Bowenfels. 	Transport for NSW Infrastructure NSW Infrastructure Australia	Internal Transport investigation	5–10 years
C6	All	 Restore reliability and build resilience	Deliver capacity-uplifting rail infrastructure to improve outcomes for Blue Mountains and Central West passengers and freight customers via improvements to passenger frequency and increasing access time to the network for freight trains. This includes uplift in Sydney at pinch points such as Emu Plains and between Penrith and St Marys.	Transport for NSW	Internal Transport investigation	5–10 years
C7	Blue Mountains,	 Restore reliability and build resilience	Blue Mountains Line rail improvements: Investigate capacity and infrastructure enhancements to allow passenger and freight rail service frequency and reliability improvements on the Blue Mountains, including integration with local public and active transport connections.	Transport for NSW	Internal Transport investigation	5–10 years

6.2.4 Access

Access #	LGA	Connecting NSW Priority alignment	Initiative	Lead	Source	Timeframe
A1	Blue Mountains, Lithgow, Bathurst	 <p>Reduce transport disadvantage</p>	Starting with Country: Provide Acknowledgements of Country that reflect Aboriginal heritage, cultural identification and storytelling along the corridors, for example, new signs and wayfinding that acknowledges and interprets Country along key driving, walking and cycling routes along the Great Western Highway and Bells Line of Road corridors	Transport for NSW	Internal Transport investigation	0–5 years
A2	Blue Mountains, Lithgow, Bathurst	 <p>Reduce transport disadvantage</p>	Improve transport outcomes for local Aboriginal Communities: Develop local Aboriginal transport and services plans co-designed in partnership with Aboriginal community controlled organisations including LALCs, Aboriginal medical services and community transport providers to identify and deliver the best fit transport services for Aboriginal people for all trip purposes including health, employment, education and to places of significance.	Transport for NSW Aboriginal community-controlled organisations Local Aboriginal Land Councils	Closing the Gap Transport's Aboriginal Outcomes Framework	0–5 years
A3	Blue Mountains, Lithgow, Bathurst	 <p>Reduce transport disadvantage</p>	Improve transport choices for local communities: Start investigations and planning for a range of short and medium-term improvements to bus and coach services in Bathurst, Lithgow and the Blue Mountains to provide better connectivity to services, health, education, employment, recreation, and other transport modes.	Transport for NSW	Internal Transport investigation	0–5 years

Access #	LGA	Connecting NSW Priority alignment	Initiative	Lead	Source	Timeframe
A4	All		Work with councils and other State agencies to improve local transport choices that include providing safe and connected active transport facilities in town centres and at key destinations, support and implement shared micro-mobility across the region to improve transport choice and reduce car dependence. Active transport facilities should include end of trip facilities and secure bicycle parking.	Council Transport for NSW	Internal Transport investigation	0–5 years
A5	Blue Mountains, Lithgow		Improve transport connections: Investigate improvements to key bus and train interchanges to offer passengers seamless connections between rail, local bus services, and active transport to enhance the passenger interchange experience, building upon improvements through the Safe Accessible Transport program at Lawson, Mount Victoria and Woodford stations. This should consider reconfiguration of layouts, vehicle and bus, coach and bike parking provision and wayfinding. Locations include Bathurst, Mount Victoria, Lithgow, Katoomba and Springwood.	Transport for NSW	Stakeholder engagement Internal Transport investigation	0–5 years
A6	All		Support the national economy: Work with federal, State and local government to improve multimodal transport connections for people and freight to Western Sydney International Airport.	Transport for NSW	Internal Transport investigation	0–5 years
A7	Blue Mountains, Lithgow, Bathurst		Improve local transport choices: Investigate introduction of on-demand and improvements to complementary community transport services across the Central West and Orana region and the Blue Mountains to connect difficult to access, developing, and Aboriginal communities to the wider public transport network.	Transport for NSW	Internal Transport investigation	0–5 years

6.3 Longer-term outcomes (10+ years)

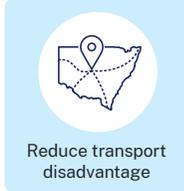
The longer-term outcomes or responses identify how Transport can address the challenge for the Blue Mountains and Central West region through policy implementation, service delivery, or infrastructure. Triggers could lead to a change in priorities for the longer term or reprioritise an initiative to bring it forward in time.

Connecting NSW Priority alignment	Objective	Longer-term outcomes	How we make it happen	Trigger that would change priority
 <p>Enable whole-of-government outcomes</p>  <p>Reduce transport disadvantage</p>	 <p>Starting with Country</p> <p>All investment in the transport network, services, policy and technology takes a Country-centred approach</p>	<p>Embedding planning with Country practices at every stage of planning, development and delivery to result in Country-centred design</p>	<p>Embedding planning with Country practices at every stage of planning, development and delivery to result in Country-centred design</p> <p>Policy</p> <ul style="list-style-type: none"> • Deliver regional Aboriginal transport data through open-source dashboard sharing • Increase the number of Aboriginal businesses on approved prequalified panels and schemes <p>Services</p> <ul style="list-style-type: none"> • Improve access to education, health, employment and cultural places for Aboriginal communities 	<p>-</p>

Connecting NSW Priority alignment



Enable whole-of-government outcomes



Reduce transport disadvantage



Towards zero trauma



Reimagine road space to drive mode shift



Restore reliability and build resilience



Transition to net zero emissions

Objective



Access to transport for all

An equitable transport network that provides a range of travel choices to all people living, working in or visiting the Blue Mountains and Central West region

Longer-term outcomes

- Transport disadvantage is reduced across the entire Blue Mountains and Central West region and people are able to access their regular destinations with a variety of transport choices for all trips purposes
- Public transport and active transport are seen as a safe, reliable and convenient transport option for most journeys within as well as outside the region.
- A significant long-term reduction in private vehicle dependency

How we make it happen

Policy

- Use the Road User Space Allocation Policy to prioritise more sustainable travel modes
- Develop and implement behaviour change programs that highlight the benefits of walking, cycling and public transport choices

Services

- Better bus and coach services connecting to education, employment, shopping centres and health throughout the Blue Mountains and Central West region
- Services that support housing development

Infrastructure

- Connected active transport network within the centres throughout the Blue Mountains and Central West region

Trigger that would change priority

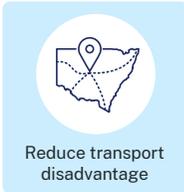
- Expansion or new primary, secondary and tertiary education campuses
- Expansion or new Health services
- New employment precincts or shopping centres
- Development of future housing growth areas
- New Employment precincts
- Major change in population or demographics



**Connecting NSW
Priority alignment**



Enable whole-of-government outcomes



Reduce transport disadvantage



Towards zero trauma



Restore reliability and build resilience



Transition to net zero emissions

Objective



Well-located housing and successful places

Support the delivery of well-located housing, successful places and local amenity for communities along the Sydney to Central West corridors

Longer-term outcomes

An integrated public transport network to enable housing supply through:

- frequent and reliable public transport services to access health, education, employment and tourism locations
- delivery of a connected active transport and micromobility network
- first and last-mile freight access

How we make it happen

Services

- Better bus services supporting university travel
- Increase bus and rail services across the day and week

Road infrastructure

- Local connections as part of the development
- Connections to the critical road corridors
- Network capacity monitoring because of growth
- Local cycleways and footpaths to support short trips sustainably

Public transport infrastructure

- Additional stations
- Bus priority measures
- Train station and bus stop upgrades, including accessibility, information and corridor crossings

Trigger that would change priority

- A rapid uptake of housing around train stations
- Major land release for development within centres

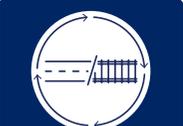
**Connecting NSW
Priority alignment**



Enable whole-of-government outcomes



Towards zero trauma



Restore reliability and build resilience



Transition to net zero emissions

Objective



A thriving and diversifying economy

An efficient transport network to support a diversifying and growing economy, including tourism and freight movements, while preserving the distinctive character and environment of villages and scenic landscapes

Longer-term outcomes

Improved road and rail freight network efficiency to support and enable economic growth

Safe, productive and sustainable freight through good planning, which incorporates freight movements in and between places

How we make it happen

- Policy
- Support more efficient and safer freight vehicles
 - Support the decarbonisation of freight
 - Improve freight accessibility (vehicle type and access)
 - Support agribusiness
 - Deliver the Heavy Vehicle Access Policy 2024, enabling high-productivity vehicles on critical freight corridors across the region, ensuring connectivity to points of economic purposes, such as former power plants
- Infrastructure
- Infrastructure that enables the diversifying and growing demand for freight and heavy vehicle rest stops
 - Protect land for future freight corridors
 - Increase network access for high-productivity vehicles
 - Network and structure improvements to support this

Trigger that would change priority

- New tourism industry
- Major change in primary, raw materials or construction industry resulting increased freight movement
- New Industrial land released
- Increase in capacity of existing aviation travel routes and establishment of new airports

**Connecting NSW
Priority alignment**



Enable whole-of-government outcomes



Towards zero trauma



Restore reliability and build resilience



Transition to net zero emissions

Objective

A white icon of a bar chart with an upward-pointing arrow and a dollar sign.

A thriving and diversifying economy

An efficient transport network to support a diversifying and growing economy, including tourism and freight movements, while preserving the distinctive character and environment of villages and scenic landscapes

Longer-term outcomes

Transport networks connect visitor and tourism destinations, including:

- transport that responds to seasonal demands
- services and infrastructure that improve the uptake of public transport

How we make it happen

Services

- Bus connections to support tourism workers to workplaces across the Blue Mountains and Central West region

Infrastructure

- Continue to implement bus priority measures on key corridors
- Train station, bus stop, including accessibility and information about accessing the tourism area
- Consider vehicles suitable for the needs of tourists, including luggage

Trigger that would change priority

- Increase in capacity of existing aviation travel routes and establishment of new airports

**Connecting NSW
Priority alignment**



Enable whole-of-government outcomes



Towards zero trauma

Objective



A safe transport network

Improve safety for every customer and reduce fatal and serious injuries on the transport network

Longer-term outcomes

- Safer roads, transport and waterways:
- Reduced road and waterway trauma
 - Safer level crossings
 - Improved safety for vulnerable users
 - Improved personal safety and security for transport users
 - Improved perceived personal safety for transport users
 - Safer, more sustainable access to transport networks for safe and productive movement of goods

How we make it happen

- Policy
- Safer vehicles
 - Safer drivers
 - Lower speed limits in targeted locations
 - Public transport station/stop location activation (passive surveillance/activity)
- Services
- Onboard surveillance and safety
- Infrastructure
- Rail level crossing safety improvements
 - Road safety network improvements
 - Train station and bus stop lighting

Trigger that would change priority

- Changes to crash patterns
- New crash clusters
- New personal safety clusters



**Connecting NSW
Priority alignment**

Enable whole-of-government outcomes

Reduce transport disadvantage

Towards zero trauma

Reimagine road space to drive mode shift

Restore reliability and build resilience

Transition to net zero emissions

Transition to net zero emissions

Objective

Reliable and resilient network

Reduce the impact of transport network shocks and stresses to service and network interruptions, respond to congestion, natural disasters, special events and traffic incidents and proactively plan for future impacts

Net zero emissions

Contribute to achieving the emissions reductions targets as outlined in the Net Zero and Climate Change Policy

Longer-term outcomes

Maintaining and improving transport networks in a changing climate:

- Continuous improvement of asset management processes
- Journey reliability in response to external events

Transport construction and maintenance by 2040

- Net zero in Transport’s annual embodied emissions by 2045
- Net zero in transport sector emissions by 2050
- Net negative transport sector emissions by 2060
- Achieving net zero emissions will also lead to cleaner, quieter and more liveable neighbourhoods, healthier communities and a more resilient transport system.

How we make it happen

Policy

- Continually review asset management processes
- Asset problem identification and response procedures
- Community information about asset practices

Infrastructure

- Infrastructure is designed for a changed climate, and more extreme weather and temperatures
- Resilience (alternative routes/paths) is a determinant in prioritising delivery programs

Policy

- Support freight industry’s moves to decarbonise
- Infrastructure
- Support EV charging infrastructure delivery
- Transition NSW public transport fleet to zero emissions (including zero emission bus fleet roll out)
- Transition Transport for NSW vehicle fleet to zero emissions

Trigger that would change priority

- Extreme weather events occur more frequently than forecast and require a reprioritisation of response

- Introduction of alternate fuel

07 Next steps

7.1 Where to next?

This White Paper sets out the NSW Government's commitment to transparent and considered transport planning for the Sydney to Central West corridors. It articulates the Government's intention to deliver a transport network that is safe, resilient and capable of supporting the region's communities, economy, and environment

The White Paper will serve as a foundational document to support future investment proposals, helping to shape a clear, evidence-based case for funding across all levels of government. It also provides a platform for collaboration – enabling Transport to work closely with local councils, NSW Government agencies and the Australian Government to align planning efforts and coordinate delivery.

This document is not an end point, but a snapshot in time. It consolidates our current understanding of the corridor's condition, challenges and opportunities.

As communities grow, land use patterns evolve, and travel behaviours shift, so too will the priorities for action. The White Paper will be supported by ongoing engagement, data collection and monitoring to ensure an adaptive and responsive approach to planning and delivery.

7.2 Funding and delivery

The initiatives identified in this White Paper are not currently funded. They represent a pipeline of potential actions to address known issues and opportunities, aligned to the transport vision and objectives for the corridor. Further detailed investigation, design and assessment will be required to determine feasibility, cost-effectiveness, and appropriate timing.

Investment decisions will be subject to formal prioritisation and approval processes, including consideration of value for money, strategic alignment, and broader regional benefits. The proposed initiatives are intended to guide staged investment – balancing early, lower-cost interventions with planning for longer-term infrastructure responses. Collaborative funding partnerships and coordinated delivery will be essential to realising these outcomes and ensuring that the corridors continue to serve as a vital link between Greater Sydney and the Central West.



Great Western Highway passing through Blackheath

Sydney to Central West Corridors
White Paper

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