

REGIONAL NSW SERVICES AND INFRASTRUCTURE PLAN



Contents

Executive Summary	02
1. Introduction	08
2. Our Vision for 2056	32
3. Customer outcomes for regional NSW	56
4. Service and infrastructure initiatives for regional NSW	109
5. Service and infrastructure initiatives by region	132
6. Next steps	184
7. Glossary	193
8. Appendix	210

Executive Summary

Transport has a vital role to play in ensuring access to jobs, education, health care and other services as well as enabling the social well-being of regional communities.

Transport also has the opportunity to keep people safe, develop and enhance tourism experiences, drive economic growth and create vibrant regional spaces and communities. Future Transport 2056 provides a long-term strategic vision at the state-wide level for regional NSW by looking at and responding to changing demographic, customer and technology trends.

Globalisation is a mega-trend impacting all aspects of our lives and regional transport is no different. It is critical that we continue to invest in regional transport to provide people and businesses with the opportunity to participate in the global economy. The NSW Government is changing the game for businesses, industry and communities in regional NSW by backing visionary freight and port projects which will better connect regional NSW to global markets.

The commitment to building the Inland Rail through NSW provides a once-in-a-generation opportunity to reconfigure the regional freight network in NSW. We're looking at opportunities along the route to provide more efficient and cost effective ways to move freight in and out of regional NSW.

As well as thinking big about major infrastructure, we're also focussed on other key freight issues such as first and last mile which plays a critical role in the delivery of efficient and effective networks as well as creating regional investment and jobs. We've developed a supporting Freight and Ports Plan to detail our approach to these issues.

Past transport planning for regional NSW has focused on meeting the needs of long distance journeys to and from Sydney. Future Transport 2056 focuses on connecting our regional cities and centres to ensure regional communities play their role in the larger NSW, Australian and global context. For the first time, Future Transport 2056 introduces a stand-alone regional vision with a 'hub and spoke' planning model which recognises regional cities such as Bathurst, Tamworth, Wagga Wagga and Port Macquarie (among others) as central hubs for services, employment and social interaction. The Plan also recognises challenges faced by communities adjoining the ACT, Queensland, Victoria and South Australia.

Our infrastructure and services have historically focused on major north-south transport connections in regional NSW. Looking forward we've made a commitment to improve east-west connectivity to open up areas west of the Great Dividing Range to the east and vice-versa. This will provide improved connectivity between the coastal population and the inland as well as critical freight linkages, including connections to Inland Rail and ports.

In relation rail service outcomes, we are replacing the entire Regional Rail Fleet and introducing a New Intercity Fleet (NIF). The new Regional Rail Fleet will lead to improved levels of passenger comfort and operational performance as well as providing regional jobs with a new maintenance facility at the preferred site in Dubbo (subject to planning approval). The NIF will provide services from Sydney to the Central Coast, Newcastle, the Blue Mountains and the Illawarra. The first of the 500 new NIF carriages are to be delivered in 2019 and a maintenance facility is currently under construction at Kangy Angy on the Central Coast.

To maximise the operational capabilities of the NIF and new Regional Rail Fleet the regional rail network will be improved through Faster Rail investments in track straightening and signalling between the key Global Gateways (Newcastle, Canberra) and Satellite Cities (Wollongong, Gosford).

New Regional Rail Fleet

The entire regional train fleet will be replaced to deliver unprecedented levels of comfort and service for regional rail customers. This includes 60 XPT passenger cars (plus 19 diesel locomotives), 23 XPLOER and 28 Endeavour passenger cars for services between Sydney, Canberra, Melbourne, Brisbane and major NSW regional centres.

An Expression of Interest was issued in August 2017 for the design, construction and maintenance of the new trains and a new maintenance facility at the preferred site in Dubbo (subject to planning approval). In December 2017 a Request for Proposal was issued to three proponents, and is due to close June 2018. A detailed review of proposals will follow before the contract is awarded. The new trains will come into service progressively, with the first trains anticipated to be delivered in the early 2020s.

Just like a new car compared to an old car, a new train could provide lots of benefits. TfNSW is looking to the industry to help us find the best possible train for this service.

Dubbo has been identified as the preferred location for the brand new regional maintenance facility, subject to planning approval.

The key benefits from the introduction of the new Regional Rail Fleet are:

- › Safe, reliable, comfortable and accessible regional trains
- › Ability to leverage innovative technologies for customers and fleet operations
- › A more reliable service for customers travelling long distances
- › Opportunities for new servicing patterns for regional cities and centres, including day return travel to support the hub and spoke model
- › Stimulation of the regional economy and provision of long term, sustainable jobs including traineeships and apprenticeships with the maintenance of these new trains in regional NSW.

Future Transport 2056 continues to put the customer at the centre of our thinking. We aim to get people to the shops and catch up with family and friends as well as supporting the trip to work, school or university. To ensure that we maintain our customer focus in the future, we've approached this work from our customer's perspective by thinking about the experience we want our customers to have in the future. Consequently we've developed ten customer outcomes for regional customers through which our vision of 2056 is expressed. The customer vision covers a range of aspects such as safety (a vision of zero deaths or serious injuries on the network by 2056) to innovation (a transport service that adapts to and embraces new technology).

We're supporting the customer vision by identifying a range of service, infrastructure and policy initiatives which are outlined in this plan. For example, we're going to roll out integrated ticketing across regional NSW so that locals and regional visitors have the same convenient experience as Sydney. Looking further ahead our vision is for a seamless customer experience across modes and borders by 2056; this will mean multiple tickets and different concession entitlements will be a thing of the past.

Regional NSW is benefiting from a once-in-a-generation investment in its transport infrastructure and services to enhance communities, boost regional growth, and support businesses and investors. Since 2012, the NSW Government has invested over \$15b in transport infrastructure in regional NSW. This has been through critical programs such as Fixing Country Roads, Fixing Country Rail, Bridges for the Bush and the Walking and Cycling Program. We're conscious that we need to continue the investment that's already taking place by continuing to build and improve local infrastructure such as roads, rail and bridges. Future Transport 2056 identifies over 200 regional services, infrastructure and policy initiatives that are significant at the state-wide level to be delivered or investigated throughout the life of the plan.

The vision and supporting projects outlined in this Plan are ambitious but we believe they are achievable because we have a track record of delivering. The previous Long Term Transport Master Plan for NSW produced in 2012 identified over 700 projects across the state, of which 638 have either commenced or have already been delivered, with the remaining in planning.

Some of the most beneficial improvements we can make are based on innovative and incremental improvement to current infrastructure, assets and/or services. For example, we've committed to piloting flexible transport and driverless vehicles in regional NSW in 2018 to provide a better experience for regional customers. We are looking at opportunities to complement or replace time limited local public transport services and introduce services for smaller towns where no scheduled public transport exists.

As we developed Future Transport 2056 we visited more than 25 regional locations for detailed discussion, met face to face with over 1800 people, received over 500 formal written submissions and more than 2000 comments online. We've now acted on your feedback. For example, you asked us to investigate improved connectivity from inland NSW to Sydney, Newcastle and Wollongong, as well to review how roads are classified in NSW; they're in the plan.

NSW Road Classification Review

This review and subsequent implementation is committed for delivery in the 0–10 year timeframe and seeks to address the large amount of feedback from councils about the classification of roads within their jurisdictions.

Currently, road funding and management arrangements between State and Local Government are based on a three tier hierarchy of State, Regional and Local Road classifications. The NSW Government, through Roads and Maritime Services, funds and manages State Roads and provides funding assistance to councils towards their management of Regional Roads. A review provides an opportunity to make adjustments to the classification process and ensure an up to date network that meets the social and economic needs of the community and industry. The last review took a number of years to complete and the three year implementation process concluded in mid-2012.

A number of submissions were received through Future Transport 2056 in relation to the classification of roads and associated availability of funding. The proposed review could consider classification of roads such as: Scone to Gloucester Road, Armidale to Kempsey Road, Brindabella Road (Tumut to ACT), and Clarence Way (Grafton).

We've also been working very closely with other NSW Government colleagues to deliver a transport vision for the regions which is consistent with the Department of Premier and Cabinet's regional vision, the State Infrastructure Strategy and the Department of Planning and Environment's Regional Plans. This was crucial to providing a plan which we believe reflects a whole-of-government approach to consider and plan for transport services and infrastructure which are important to you in the future.

Critically, Future Transport 2056 renews our commitment to working with the regions to plan and deliver a transport service which brings our collective vision to life. The next step is for us to work with local government, businesses and regional communities during 2018 and beyond to develop region-level and place-based transport plans which will detail transport infrastructure and services at the local regional city and regional centre level.

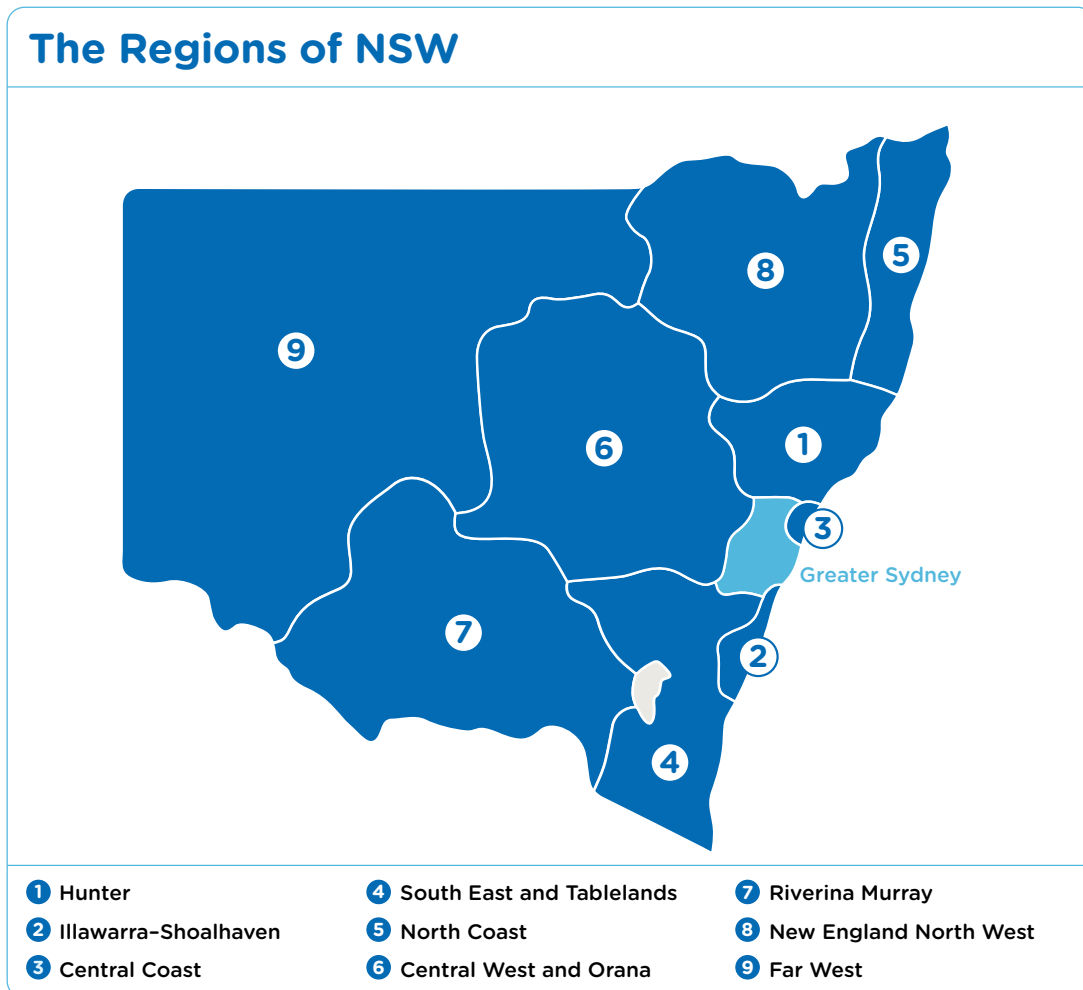


Figure 1: Regional NSW

In summary, key initiatives for investigation in this Plan include:

Regional NSW

- › Road Classification Review
- › Strategic investigation to increase access across the Great Dividing Range from inland NSW to Newcastle/Sydney/Wollongong
- › Regional Rail Fleet project

Hunter

- › Bypasses of regional centres on New England Highway
- › Faster rail connections between Newcastle and Sydney
- › Lower Hunter Freight Corridor

Illawarra-Shoalhaven

- › Improved connections between Wollongong and three cities of Greater Sydney
- › Expanding 30 minute catchments for public transport

Central Coast

- › Faster rail connections to Sydney and Newcastle

South East and Tablelands

- › Seamless cross-border travel to the ACT
- › Faster rail connections between Sydney and Canberra
- › Completion of the duplication of Barton Highway

North Coast

- › Seamless cross-border travel to Queensland
- › Improved east-west connections to New England North West
- › Extension of Gold Coast light rail to Tweed Heads

Central West and Orana

- › Rail and road connections to Inland Rail
- › New Intermodal facilities associated with Inland Rail

Riverina Murray

- › Upgrade of Sturt Highway and Kidman Way
- › Seamless cross-border travel to Victoria
- › Rail and road connections to Inland Rail

New England North West

- › Connections to Inland Rail
- › New Intermodal facilities associated with Inland Rail
- › Upgrades of Newell, Oxley and Kamilaroi Highways

Far West

- › Upgrade of Barrier Highway, sealing extensions to Wool Track
- › Seamless cross-border travel to South Australia, Victoria and Queensland

Improving east-west crossings of the Great Dividing Range

As the population of regional NSW keeps moving towards the coast and primary industry continues to grow in the inland regions, safer and more efficient connections joining the two geographies are required for freight and passenger movements.

The recent investments in north-south highway connections (Pacific, Hume, Princes and Newell Highways) have created significant benefits for the state in terms of safety, travel time savings and productivity. A focus on east-west connectivity is now essential to create a truly connected transport network.

CHAPTER

1

Introduction

Future Transport 2056 comprises an overarching strategy and a suite supporting of plans. It is an update of NSW's Long Term Transport Master Plan released in 2012. It has been developed in concert with the Greater Sydney Commission's Sydney Region Plan, Infrastructure NSW's State Infrastructure Strategy, and the Department of Planning and Environment's Regional Plans, to provide an integrated vision for the state.

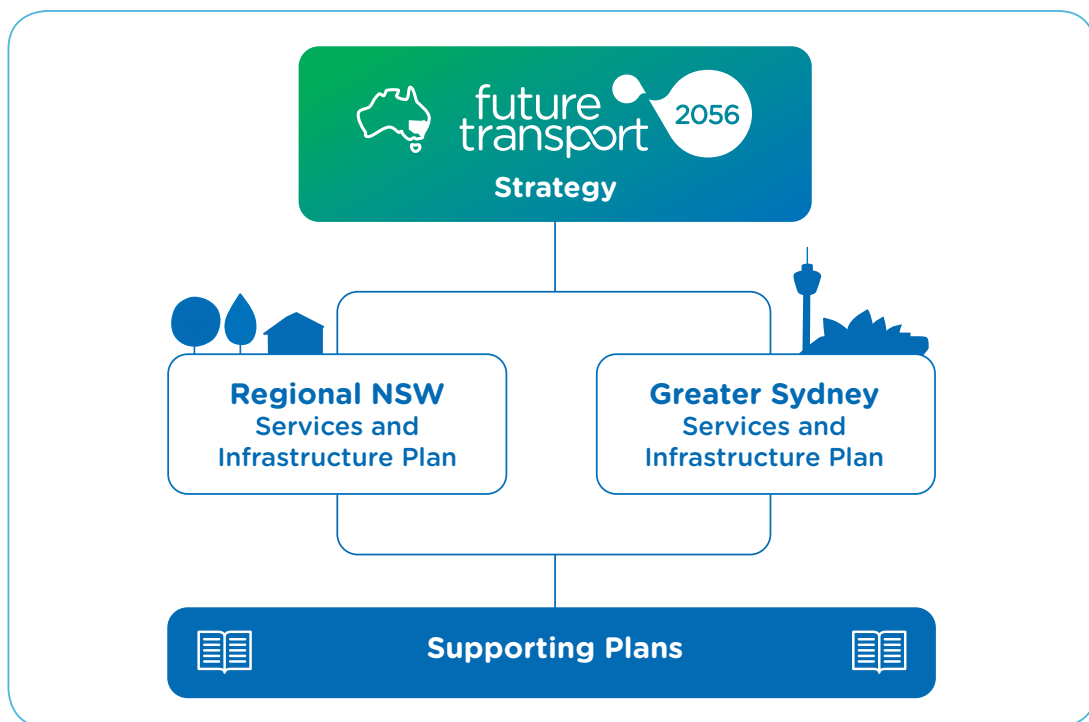


Figure 2: Overview of Future Transport 2056

Future Transport Strategy

The Future Transport Strategy is a vision for how transport can support growth and the economy of New South Wales over the next 40 years. It has [six](#) outcomes to guide investment, policy and reform and service provision. They provide a framework for network planning and investment aimed at harnessing rapid change and innovation to support a modern, innovative transport system that serves the community and economy well into the 21st century.

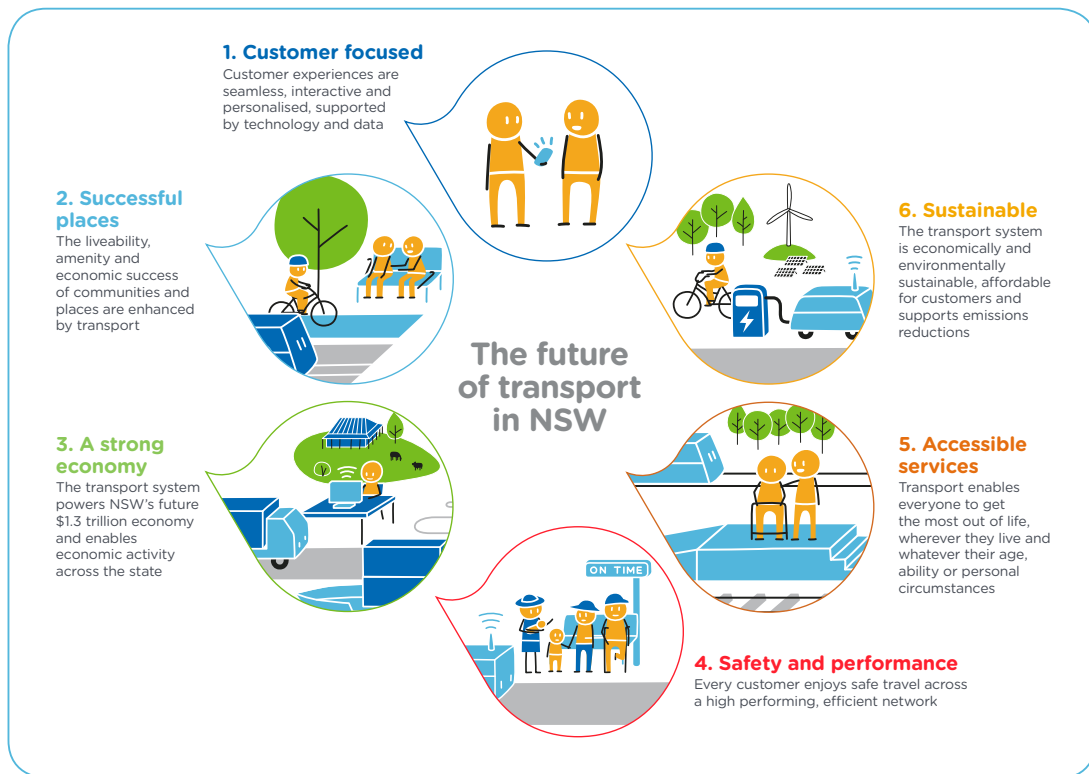


Figure 3: Future Transport Strategy customer and network outcomes

The Regional NSW Services and Infrastructure Plan

The Regional NSW Services and Infrastructure Plan is the NSW Government's blueprint for transport in regional NSW from now until 2056. It sets out the Government's thinking on the big trends, issues, services and infrastructure needs which are now, or will soon shape transport in regional NSW.

The Regional NSW Services and Infrastructure Plan outlines the vision and customer outcomes that the government will use to go about its detailed transport planning in each region and also support its future decision making. The Regional NSW Services and Infrastructure Plan is not intended to be a detailed transport plan for each region and there's much more detailed strategy and planning to come at the regional level.

Our customers are at the centre of everything we do. That is why our transport plan for regional NSW is underpinned by the outcomes customers can expect – whether they be commuters, customers travelling to access goods, services or leisure or freight customers. The outcomes are designed to respond to what customers have told us is important to them and underpin our plan for policy, service and infrastructure improvements.

A Plan that puts the customer at the centre

The customer is at the centre of everything we do. That is why input from our customers, the community and industry is fundamental to Future Transport 2056, including the Regional NSW Services and Infrastructure Plan.

The suite of Future Transport 2056 documents was developed using a process called co-design, meaning early involvement and ongoing collaboration with all stakeholders – customers, our people, wider government, industry and the community – in the design process so the end result best meets their needs. A multi-channel, three-phase engagement campaign means we have engaged closely with customers and the community over a period of more than a year.



Figure 4: Future Transport 2056 community engagement process

Phase 1 commenced in November 2016 with the announcement that the NSW Government were developing a 40-year transport strategy. The website was launched introducing Future Transport 2056, displaying information on the intended priorities in developing the plans and obtaining feedback via the website and digital channels. Communications and engagement also facilitated early collaboration with the Department of Premier and Cabinet, Department of Planning and Environment, Infrastructure NSW (INSW) and other NSW Government departments and agencies.

Phase 2 during May to June in 2017 aimed to raise awareness of the transport challenges that Future Transport 2056 will seek to address and to gain feedback on new approaches to integrated land use and transport planning. Communications channels included digital, social media and face to face sessions. During this time, 34 engagements were held in 16 locations across NSW. These included community forums and industry roundtables. Engagement outcomes included:

- › 43,000+ people engaged digitally and face to face
- › 5,315 online surveys completed
- › 35,299 comments, likes, and shares on Facebook
- › 40,263 views of animations and videos
- › 730,053 people reached through Facebook advertisements
- › 85,844 occasions where people engaged with the material via Facebook

Feedback from stakeholders from Phase 2 activities informed the development and design of the draft Future Transport Strategy and plans.

Phase 3 during October to December 2017 launched the draft Future Transport Strategy and plans and included a significant consultation campaign to seek feedback on these. A community roadshow was held in 34 communities across NSW, over 68 briefings and Q&A sessions with industry and local government were undertaken and online submissions were sought.

Customer insights are critical to transport planning and have been included throughout the development of the **Regional NSW Services and Infrastructure Plan**. Between November 2016 and December 2017, customers were invited to provide input and feedback on the draft plan. We received submissions from local councils, industry bodies, community groups, other government agencies, and members of the public. Overall, our engagement campaign for the draft plan resulted in over 500 formal feedback submissions being received, over 2000 comments on the Future Transport 2056 website and we engaged face to face with over 3,300 people.

Since receiving feedback on the draft Regional NSW Services and Infrastructure Plan between October and December 2017, we have reviewed all comments and submissions, summarised key comments, consulted across the NSW Government, and where feasible, refined our plans so the final Regional NSW Services and Infrastructure Plan truly reflects what our customers want. For example, we have heard that more needs to be done to explain the benefits of our proposed initiatives, so a comprehensive list of initiatives and their proposed benefits is now included.



The suite of Future Transport 2056 documents was developed using a process called co-design, meaning early involvement and ongoing collaboration with all stakeholders.

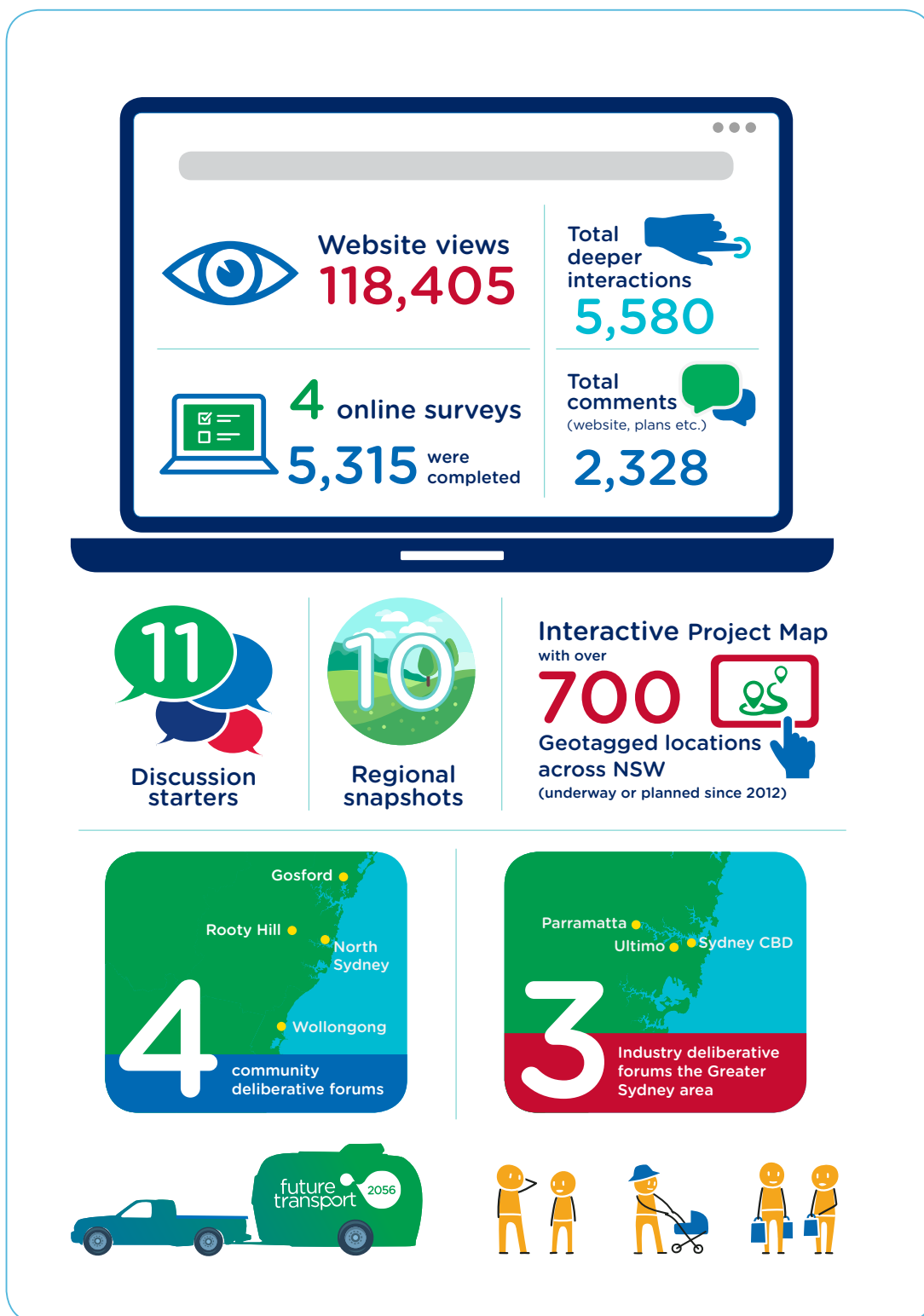


Figure 5: Summary of feedback received November 2016 to December 2017

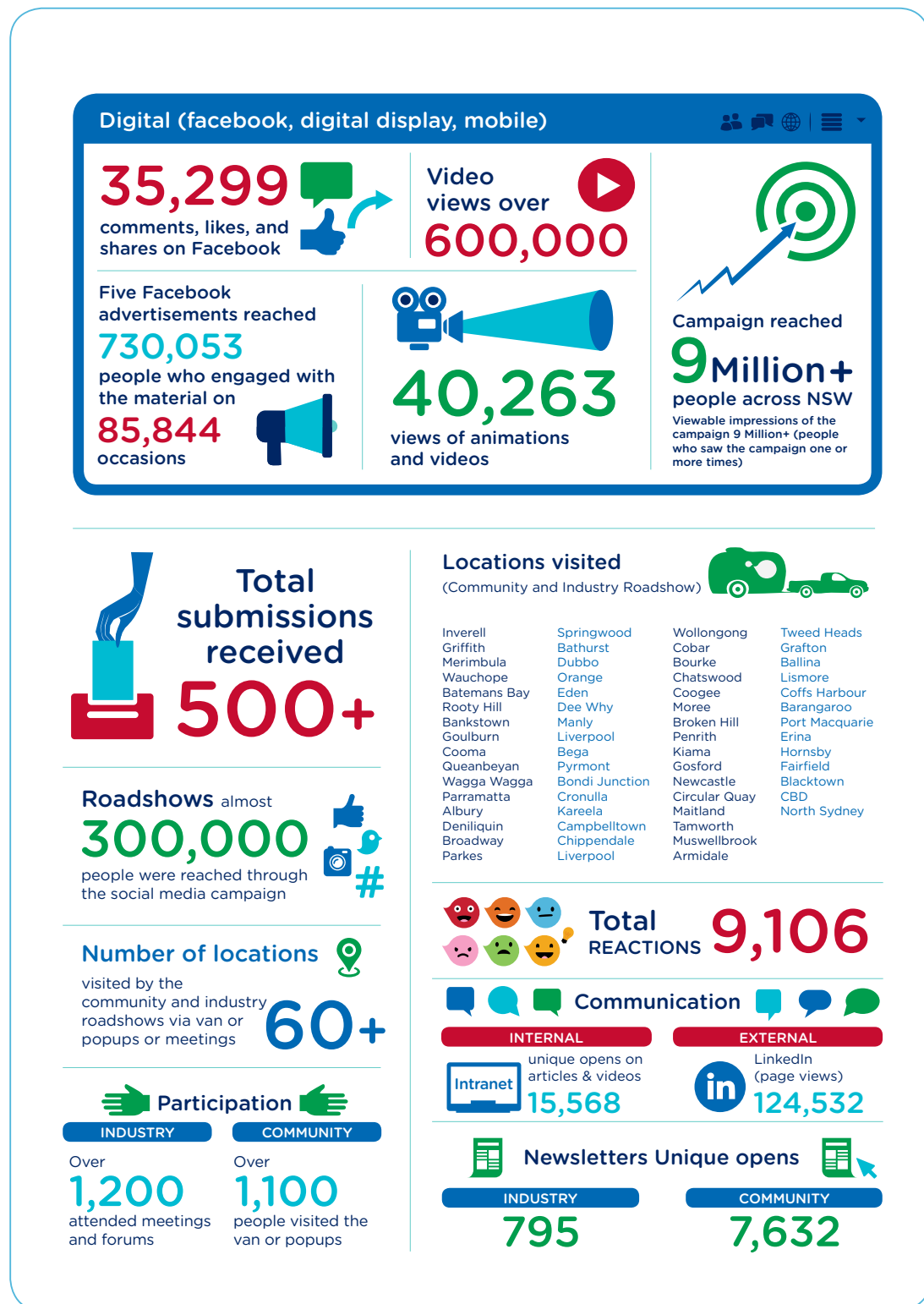


Figure 5: Summary of feedback received November 2016 to December 2017

The Future Transport 2056 Supporting Plans

Supporting Plans are more detailed issues-based or place-based planning documents that will support the implementation of Future Transport 2056. The supporting plans are:

- › Road Safety Plan 2021 – final released February 2018
- › Tourism & Transport Plan – draft released October 2017
- › Freight & Ports Plan – draft released December 2017
- › Greater Newcastle Future Transport Plan – draft released November 2017
- › Other issue based and location specific plans – yet to be completed

The Road Safety Plan 2021 is aimed at reducing death and serious injury in regional NSW

Regional NSW is over-represented in transport fatalities. The Plan aligns the Towards Zero vision with Future Transport 2056, which aims to have a NSW transport network with zero trauma by 2056. To realise this vision we have developed the detailed Road Safety Plan 2021 as a supporting plan to Future Transport 2056.

The Road Safety Plan 2021 features targeted and proven initiatives that will help us progress towards our transport safety goals, addressing key trends, trauma risks and the types of crashes occurring on NSW regional roads. Key initiatives include:

- › Deliver a new Saving Lives on Country Roads program to address the challenge of more than two thirds of fatalities occurring on country roads, including:
 - An initial additional \$125 million for safety infrastructure upgrades targeting high risk curves and key routes, including local roads
 - Delivery of the first, targeted NSW country roads public education campaign
 - Partnering with local councils, community groups and industry to support grassroots Towards Zero initiatives.
 - Develop a new NSW Police enforcement strategy for regional NSW to target high risk behaviour.
- › Tackle drink and drug driving behaviour by strengthening penalties and enhancing enforcement, including:
 - Increased penalties for driving under the influence
 - Swift, strong and certain penalties for lower range drink driving and drug presence first offenders
 - Alcohol interlocks for mid-range offenders
 - Doubling mobile drug testing to 200,000 tests by 2020 and adding cocaine testing to the regime.
- › Implement legislative changes to allow camera based technology to enforce mobile phone use offences and further analyse the role of distraction in the road toll.

- › Increase safety for pedestrians through providing pedestrian crossings, refuges and traffic calming devices as well as expand 40km/h zones in high pedestrian and local areas.
- › Work with the heavy vehicle industry to develop a heavy vehicle strategy to improve operational safety and increase the uptake of safety technology.
- › Enhance the NSW Government vehicle fleet policy with lifesaving technologies, including autonomous emergency braking and other driver assist technologies.
- › We will continue to deliver:
 - The Safer Roads Program
 - Road safety education campaigns
 - NSW Police Enhanced Enforcement Program
 - Local Government Road Safety Program
 - Implementation of the Speed Camera Strategy
 - Promotion of safer cars as a member of the Australasian New Car Assessment Program
 - High quality enhanced fatal and serious injury crash data and analysis as well as implement a robust research program
 - Road safety education in schools as part of the mandatory curriculum based roads safety education program
 - Continued development of the young drivers Graduated Licensing Scheme.

The plan was released on 6 February 2018.

The plan should be read as a detailed supplementary plan and can be accessed [here](#).

A Freight and Ports Plan to improve the movement of produce and products

Freight, logistics and distribution services are the backbone of regional NSW, connecting businesses to markets in Australia and across the world. In 2014–15, the regional NSW freight, logistics and distribution sector contributed an estimated \$21.8 billion to the state economy. A thriving population and growing industry presence in regional NSW is creating significant demand for investment in the sector. High volumes of commodities, manufactured goods, agriculture and wholesale items are currently moved around NSW.

As Australia's most populous state and the central jurisdiction along the eastern seaboard, volumes are expected to grow significantly in coming years. The growing freight task will see more heavy vehicles mixing with other vehicles and transport users on the road which increases risk for our customers. Improvements to both safety and efficiency of freight movement are therefore key considerations throughout Future Transport 2056.

In recognition of the critical role that freight and logistics plays in regional NSW, a supporting Freight and Ports Plan has been developed as part of Future Transport 2056. In summary the plan proposes:

- › Continuation of investment in road and rail infrastructure in partnership with local government to provide greater access for freight on the networks, improve connectivity and accessibility for high productivity vehicles and efficient rail wagon loading
- › Creating intelligent transport networks, managed with data, that enable increasingly efficient, flexible and dynamic service delivery with improved safety, access, reliability and responsiveness that prioritises vehicles depending on productivity, type of use and time of day
- › Pursuing national standards for the road infrastructure, systems and regulatory frameworks needed to adopt greater levels of vehicle automation earlier, and identify how best to deliver the benefits that autonomous vehicles can bring
- › Reforming road, rail and maritime regulations to harmonise cross border regulatory regimes that will drive economic efficiencies and reduce the regulatory burden on industry
- › Pursuing harmonisation within NSW, to encourage regional shire councils to allow access for higher productivity vehicles through planning and investing in a network that caters for these vehicles
- › Exploring the implementation of initiatives to facilitate freight access to key urban centres including efficient ways of moving freight through the five road types of the movement and place framework
- › Promoting alternative last mile modes that are safe, sustainable and efficient within urban centres as well as to the farm gate
- › Pursuing opportunities to provide dedicated rail networks for passengers and freight, to reduce sharing of busy rail corridors which reduces the ability to deliver increased off-peak passenger frequencies or increased freight capacity to support long-term needs, especially near trade gateways
- › Investigating key arterial road and country rail branch lines to establish ways to better connect important regional centres
- › Exploring the implementation of dedicated freight lanes on key freight corridors on the strategic road network, outside of peak periods, to help to improve safety, and support efficient, reliable freight movements.

The plan is due to be finalised in mid-2018 following engagement with key stakeholders.

The plan should be read as a detailed supplementary plan.

A Tourism and Transport Plan to support visitors to regional NSW

Regional NSW tourism has grown steadily in the last decade as visitors are drawn to the region's diverse natural beauty, country hospitality and excellent food and wine.

Regional NSW tourism expenditure was \$15.4 billion in the last twelve months to June 2017. The number of visitors to regional NSW grew by 19% from June 2010 to June 2017 or 2.9% per year in compound annual growth terms. Regional NSW welcomed 813,000 international visitors in the year to June 2017 for a total of 14.8 million nights and \$1.1 billion of expenditure.

More people visit NSW than any other state or territory in Australia. Visitors are increasingly seeking opportunities to experience NSW's unique Aboriginal culture and history, while regional NSW hosts over 850 major sports events. No other Australian state offers outback, country, alpine, coastal, and subtropical regions all within its borders. Cruise ship visits are growing, supported by related investment in the ports of Newcastle and Eden, leading to higher revenue and increased passenger and crew days.

Transport has the potential to support and enhance existing tourism as well as create new economic development through activating new opportunities and places. In recognition of the critical interconnect between transport and tourism in regional NSW, a supporting tourism plan has been developed as part of Future Transport 2056. In summary the plan proposes:

- ▶ To continue to implement new ticketing products, improving options for visitors and encouraging them to travel by public transport across NSW – including the NSW TrainLink Discovery Pass, Opal ticketing and a Contactless Payment trial
- ▶ Ongoing implementation of wayfinding improvements, including public transport and roadside signposting across NSW and visitor information and regional promotion
- ▶ Continuation of upgrades to transport infrastructure enabling greater destination options across NSW, including along the Pacific Highway corridor, which has contributed to significant growth in national park visits
- ▶ Improvement of connections to key gateways including cruise terminals and airports including investigation of integrating regional air services with the state's regional passenger transport network
- ▶ Upgrades to regional airports
- ▶ Increased connections from regional cities and centres to interstate destinations as well as Sydney
- ▶ Introduction of new train, bus and ferry services in Sydney to serve growing numbers of visitors and to key regional destinations including the Blue Mountains
- ▶ Improvement in out of peak services and on weekends to popular tourist destinations
- ▶ Providing services to events and festivals, as well as during peak holiday times.

The plan is due to be finalised in mid-2018.

Greater Newcastle Future Transport Plan

This is an evidence based plan that has identified key initiatives for investigation within the Global Gateway of Greater Newcastle, comprising the five local government areas of Cessnock, Lake Macquarie, Maitland, Newcastle and Port Stephens. It explores:

- › Development of an integrated public transport network hierarchy, including:
 - A single operator taking multi-modal responsibility across Greater Newcastle covering bus, light rail and ferry services
 - Improved integration and interchange between modes/services to enable seamless customer experience
 - Expanding 30 minute catchments for public transport
 - Improved time of day coverage and service frequency, reduced journey times, and the deployment of on-demand, flexible services
 - Rail corridor infrastructure investment programs allowing the New Intercity Fleet to operate to its operational capacity with significant travel time savings
 - Station upgrades and integration between the stations and surrounding land uses are needed to support increased public transport travel, with opportunities for park and ride at key stations to reduce private vehicle travel for long distances
- › Facilitating car sharing services that are integrated with public transport.
- › Development of active transport networks
- › Extending the light rail in Newcastle to facilitate urban development opportunities in inner Newcastle
- › Addressing pinch points in the road network and informing the program of road network optimisation improvements to support the maintenance of 30 minute catchments for car journeys
- › Undertaking a car parking review to evaluate and prioritise car parking availability and use within centres and at key interchanges
- › Introducing travel demand management policies and transport optimisation programs to re-balance demand against service and infrastructure provision
- › Protection of freight through movements and reinforcing key links to Newcastle Port and Airport.
- › Reducing the volume of freight trains travelling through urban areas.

The Greater Newcastle Future Transport Plan is currently being finalised.

Regional NSW is vitally important, fundamentally different, diverse and changing

The aspiration for regional NSW is to maximise the potential for regional areas, recognising the economic and social diversity between regions in their natural assets, strong communities, local skills and expertise and globally competitive industries.

The regional population is growing

Regional NSW is home to close to 3.1 million people which is 40% of the state's population. By 2056 it will be 3.83 million. Currently population density is highest along the coastal areas of NSW and by 2056 a trend towards higher population density in regional cities, centres and along the coast will continue.

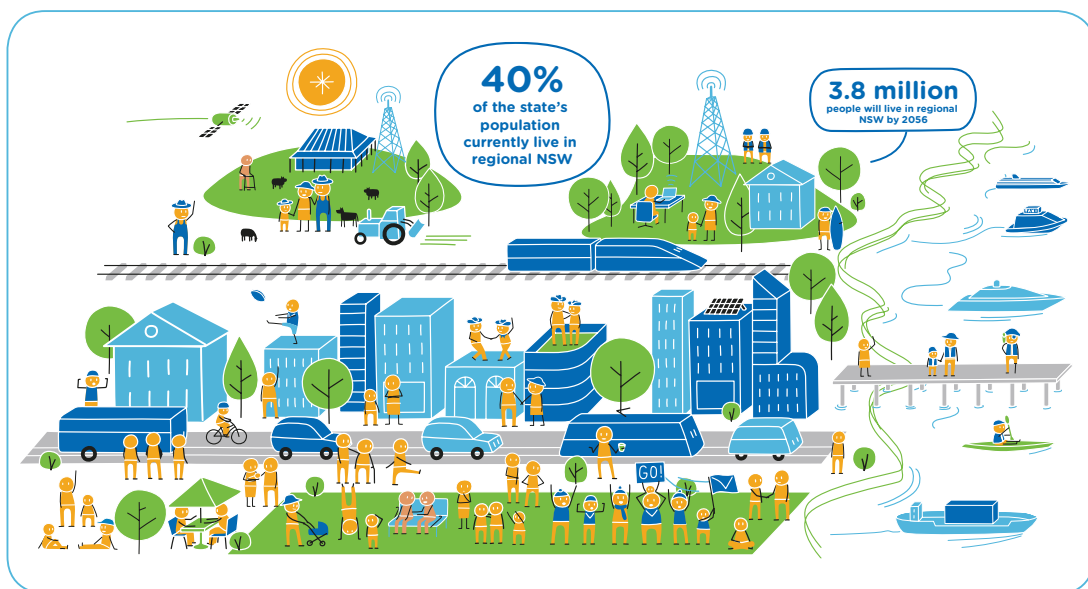


Figure 6: The population of regional NSW

Regional NSW is forecast to grow by 438,000 people by 2036 and then a further 329,000 by 2056. Over this 40 year timeframe Greater Sydney is forecast to grow by 3 million people. Many regional communities have told us they want to capture some of this growth through a cross-government vision for Regional NSW.

Regional growth will be predominantly be in the Hunter, Central Coast and Illawarra regions which are forecast to grow by 505,000 people by 2056. The Hunter region will continue to be regional NSW's largest and is expected to have almost twice the population of the next largest regions – Illawarra and Central Coast. The rest of regional NSW is forecast to grow by around 262,000 people by 2056.

Strong growth is also expected in the coastal regions north and south of these areas, with their regional cities and centres growing. For inland regions, regional cities and centres will see growth, while their surrounding towns will see flat or declining population. The population in regional NSW will also be ageing, creating additional challenges particularly in more remote communities.

Location	Population		
	2016	2036	2056
Greater Sydney	4.68M	6.42M	8.26M
Regional NSW Outer Metropolitan	1.48M	1.75M	1.98M
- Hunter	0.73M	0.86M	0.94M
- Illawarra-Shoalhaven	0.40M	0.47M	0.53M
- Central Coast	0.34M	0.45M	0.51M
Regional NSW Remainder	1.59M	1.75M	1.85M
Total (NSW)	7.75M	9.92M	12.09M

Figure 7: Population projections (Source: Department of Planning and Environment, Transport Performance & Analytics TfNSW)

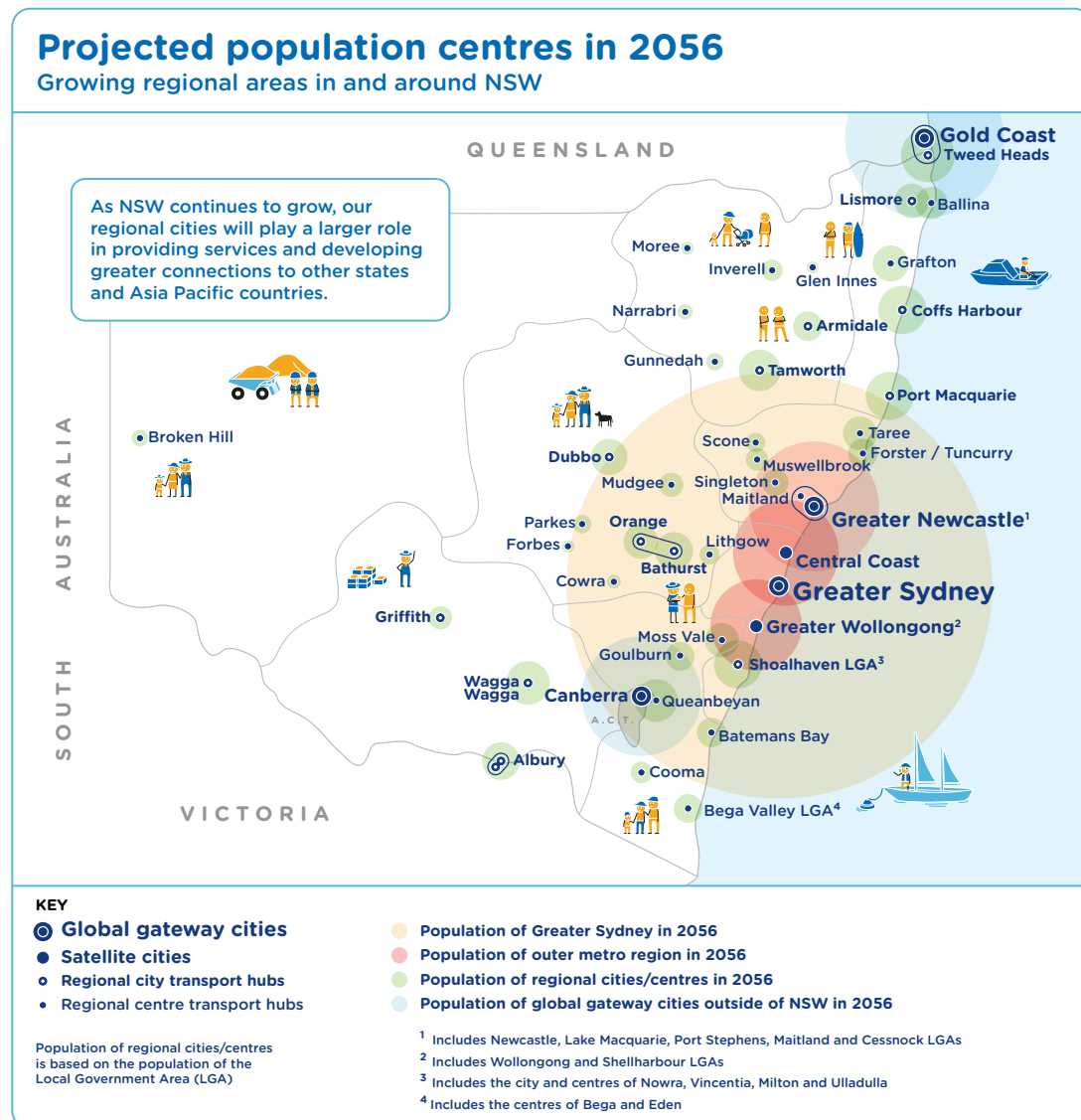


Figure 8: Expected population in 2056

As NSW continues to grow, all regional cities will play larger roles in service provision for their population catchments. Some regional cities will have stronger links to capital and regional cities in other states. While other regional cities will evolve to develop greater global connections with the Asia/Pacific Region through their nationally significant infrastructure.

The transport network across regional NSW is large and complex

The NSW road network is around 184,859 km in length. Roads and Maritime Services (RMS) is responsible for the management of 18,028 km of the major arterial road network in NSW, known as State Roads. RMS also provides funding assistance to councils for managing their regional roads (18,257 km) and, to a limited extent, local roads through funding and other support.

NSW TrainLink train and coach networks reach as far as Broken Hill and Bourke in the West, Eden and Melbourne in the South, and Brisbane in the North. Intercity train services operate between Sydney and the Hunter, Central Coast, Blue Mountains, Southern Highlands, Illawarra and South Coast.

Freight is moved on the road and rail networks and also in and out of air and maritime ports. Regional NSW has 27 airports and major ports are located in Newcastle and Port Kembla with a number of smaller ports all along the coast.

By 2056, traffic volumes in the Hunter section of the Pacific Highway can be expected to be over 25,000 vehicles. Similar volumes of magnitude are estimated for the Hume Highway south of Sydney.

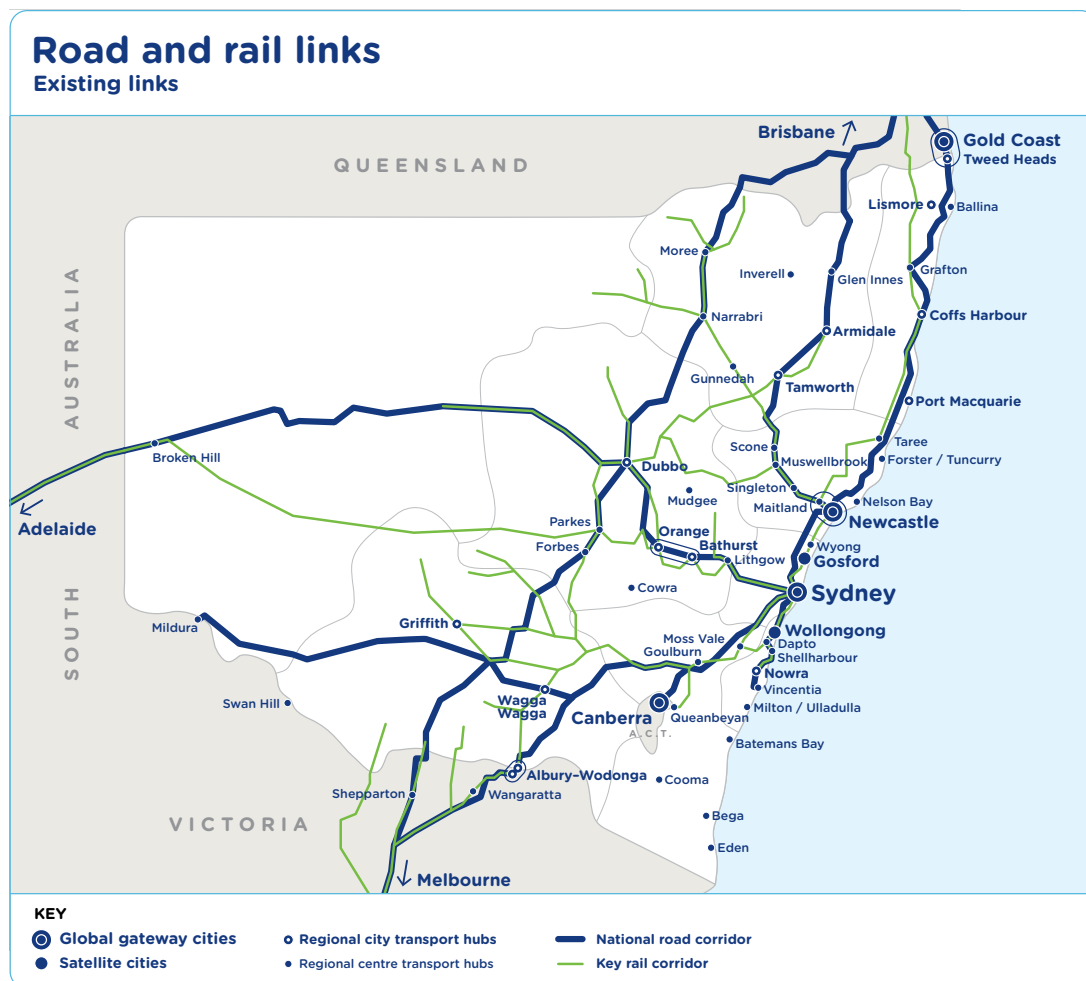


Figure 9: Regional NSW transport network

Most people in regional NSW drive to work

Journey to work data across the state shows that people generally travel towards their local regional city or centre for work. It is also clear that there are strong interstate movements between NSW and QLD; NSW and Victoria; and also NSW and ACT.

Most travel in regional NSW is by private vehicle, including 91% of all trips to work, while public transport mode share is 3%. Travelling by car is often more flexible and quicker than other modes of transport in regional NSW. Consequently the regional transport strategy in NSW is weighted toward supporting road transport and providing other transport options which are useful and fit for purpose.

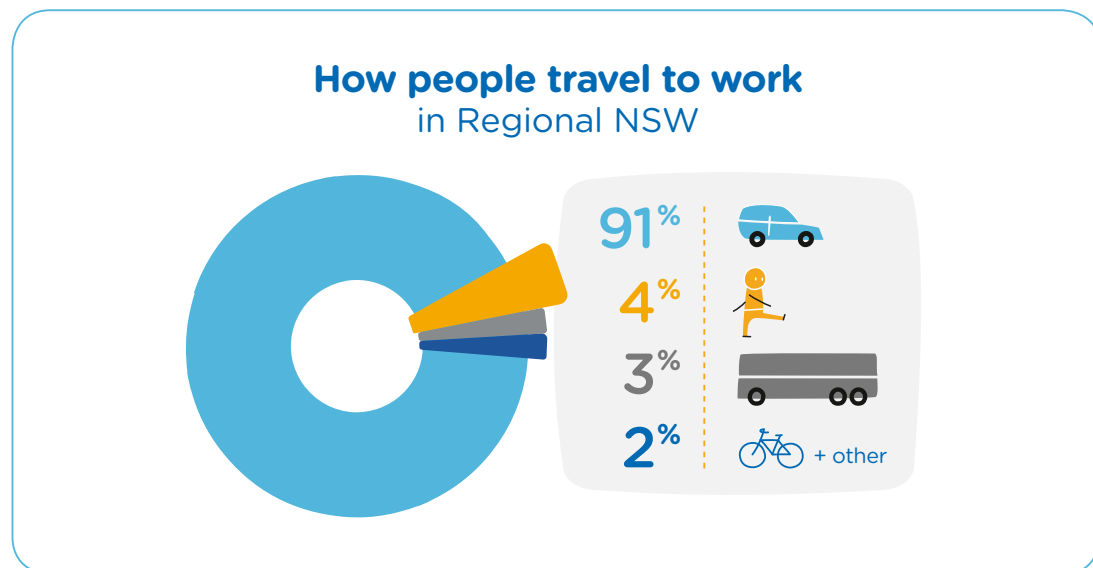


Figure 10: Mode share to work (Source: Journey to Work 2016)

Across regional NSW 6% of people walk or cycle to work, however the percentage is much higher in many regional centres, reflecting that 66% of people in regional NSW live within two kilometres of their nearest urban centre or locality. Walking and cycling are attractive transport options and future investment could increase the use of active transport as a mode of transport and for recreational use, as well as providing significant health benefits to individuals and the wider community. Active transport also provides more choice for those people without a licence or access to a vehicle, particularly in areas with limited public transport.

Geography is a major factor in planning regional transport

Regional NSW comprises four different geographies; remote, inland, coastal and outer metropolitan which influences the way transport is provided and networks are structured. The reality is people in regional NSW have to drive much more than people in Sydney. These realities mean that the NSW Government must have a different investment mix in the regions than it does in Greater Sydney. For example, the mix of transport investment to get people to work in regional NSW is much more heavily weighted to roads as opposed to public transport (trains and buses).



Figure 11: Four geographies of Regional NSW

Regional NSW covers 797,076 km² of land representing 98.5% of NSW which means that our regional customers are dispersed. In comparison, Sydney only covers 12,368 km². This dispersal of customers across a vast area means that the NSW Government must take a different approach to planning transport for regional NSW than it does for the largest city and region of Greater Sydney. Our regional investments and service delivery models have to be clever and strategic to get the best value for money and positive impact for communities.

Transport has a vital role to play in social well-being and inclusion

Transport has a vital role to play in ensuring access to jobs, education, health care and other services and in enabling the social well-being of regional communities. Our customers come from different socio-economic backgrounds and the availability of, and safe access to, transport has implications for levels of disadvantage experienced by our customers.

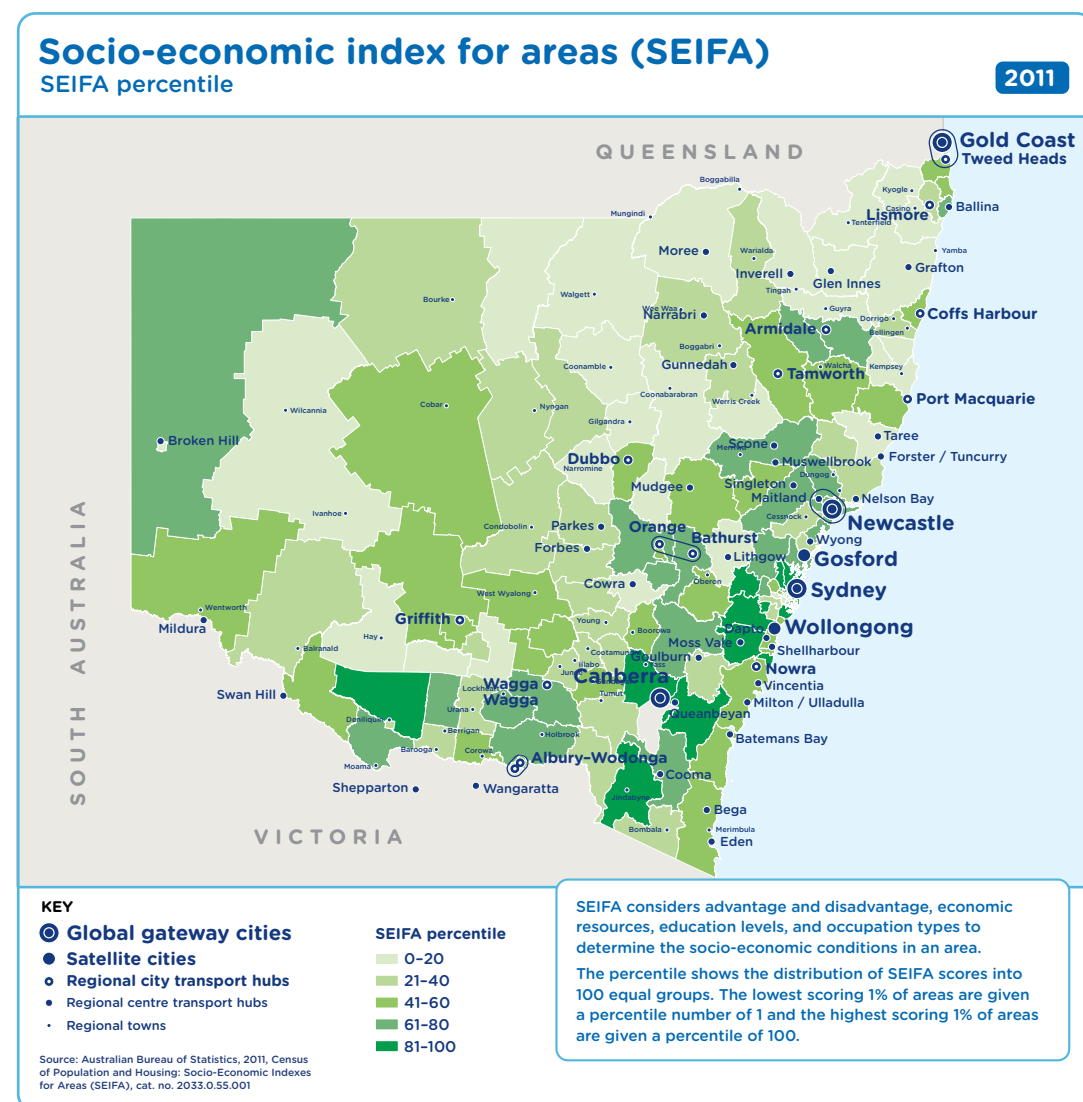


Figure 12: Socio-Economic Indexes for Areas (SEIFA) 2011 (Source: Australian Bureau of Statistics)

Half of the state of NSW is considered remote. People who live in areas that are remote often have to travel relatively longer distances to access services and infrastructure. It is important to recognise that remoteness has an impact on the mode, frequency and feasibility of transport services however it is critical to ensure that a level of transport amenity is provided to reduce social isolation.

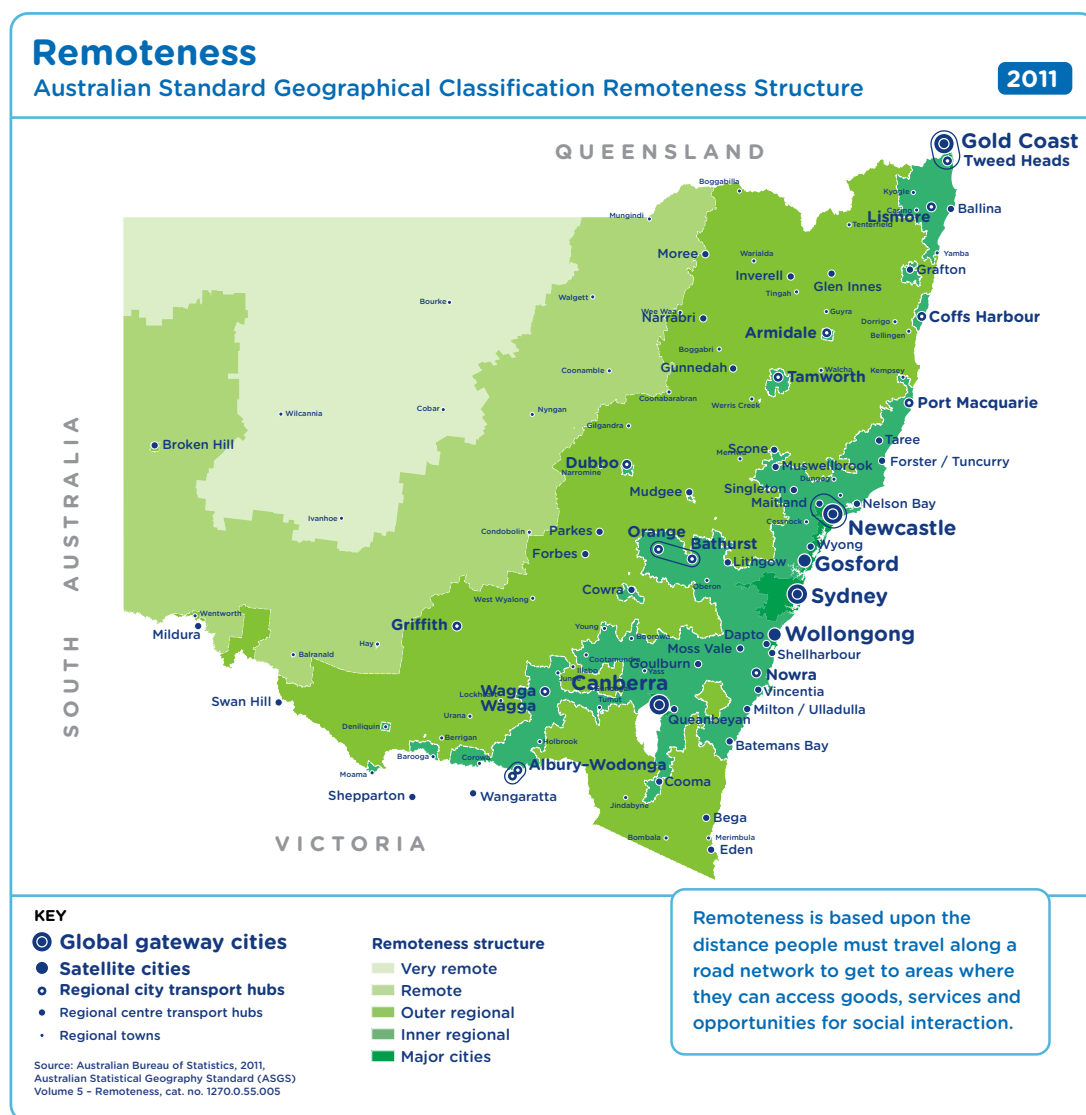


Figure 13: Remoteness (Source: Australian Bureau of Statistics)

Innovation will be the key to supporting diverse regional industry and communities

We need to make sure we're trialling new technology in the regions. With improvements in engineering and technology, the traditional barriers such as the Great Dividing Range and the remoteness of the Far West can be reduced. Emerging technology such as driverless vehicles and drones, provide the promise of cheaper and more convenient movement of people as well as efficient movement of freight.

We're not waiting for the future: Regional On Demand Public Transport!

We want to improve public transport for customers in regional NSW. We want to identify and implement new and creative customer focussed services to ensure people can utilise public transport to travel to their desired destination quickly, safely, easily and at a time that suits them.

Transport for NSW sought innovative ideas from the market through expressions of interest to run a number of pilots aimed at identifying different solutions to achieve our goals.

The pilots are not restricted to bus services and may include any form of public transport that provides potential to improve customer services.

We will have pilots running in 2018. More information is available [here](#).

Regional NSW contributes 30% of the NSW state economy¹ and 33% of goods manufactured in NSW. Approximately 39% of the value of NSW's exports are derived from agricultural, fisheries and other natural resources, primarily sourced from regional NSW². In 2014-15, the mining and resources sector in regional NSW contributed \$8.8 billion to the state economy. Coal, iron, steel, aluminium, gold, lead and copper are major exports and export demand remains high from Asia with excellent future export potential.

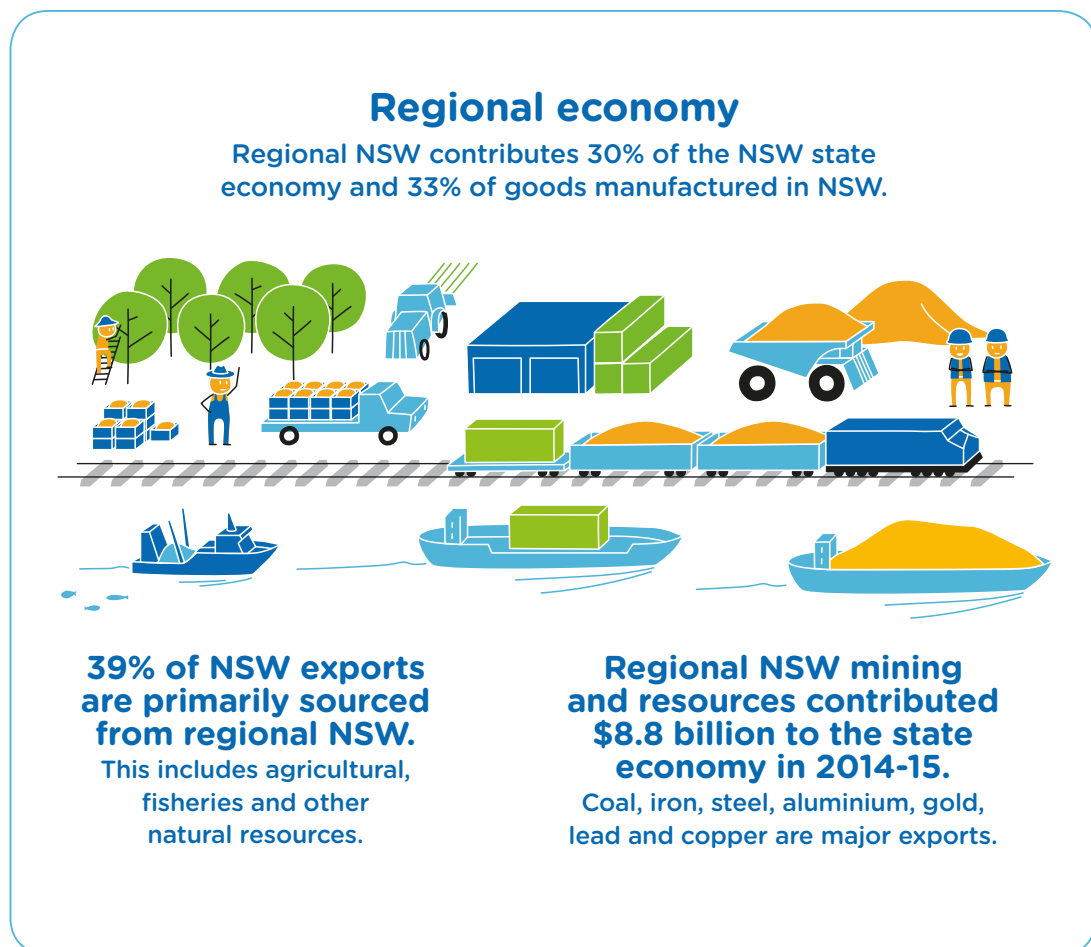


Figure 14: Economic contribution of regional NSW to the State

It is vital that air, road, rail and port access adapts to the changing demands of regional businesses and its population. Transport for NSW works closely with the Regional NSW Group within Department of Premier and Cabinet, and its Centre for Economic and Regional Development (CERD) to understand the connectivity needs of key industry sectors in regional NSW now and into the future. Research and modelling conducted by [CERD](#) shows that economic activities in regional NSW are becoming increasingly aligned with regional endowments and this in turn has resulted in greater specialisation, with regions producing fewer types of goods and services for export outside of their region while employing a larger proportion of the local workforce. This supports a region-specific approach to transport planning and investment in infrastructure which supports a local specialisation.

Currently, the key industry sectors that will drive growth in regional economies are Agriculture, Manufacturing, Tourism, Mining and Population Services. As well as being a key industry in its own right, the Transport, Logistics and Communications industry is also a crucial enabling industries for other key sectors as well as linking manufacturing and distribution in capital cities.



Figure 15: Aboriginal Cultural Tours, Tamworth (Destination NSW)

CHAPTER

2

Our Vision
for 2056

The Regional NSW Services and Infrastructure Plan sets a 40 year vision for transport in regional New South Wales to support liveable communities and productive economies. Our aspiration for regional NSW is to maximise its potential recognising the diversity between regions in their natural assets, individual communities, local skills and globally competitive industries.

A truly collective and shared vision for transport in regional NSW

Our vision for regional NSW is a safe, efficient and reliable network of transport services and infrastructure that recognises and reinforces the vital role of regional cities such as Dubbo, Armidale, Lismore and Albury as hubs for services, employment and social interaction for their surrounding communities.

Achieving this vision will require an integrated whole-of-government approach, working in partnership with local communities and stakeholders to deliver integrated transport networks and places that best meet the needs of our wide range of customers.

During late October to early December 2017 the Future Transport 2056 team visited more than 25 cities, centres and towns across regional NSW for briefings and Q&A sessions with community, industry and local government and spoke to over 1100 people from regional communities in face to face conversations. In addition we received over 500 long-form submissions from organisations and more than 2000 on line comments.

Infrastructure NSW has recently released a State Infrastructure Strategy and the Department of Premier and Cabinet is developing an over-arching economic vision for regional NSW. Future Transport 2056 is aligned with and supports these other state-wide visions and strategies.

Introducing a new 'Hub & Spoke' Transport Network Model for Regional NSW

The most effective way of providing better transport to more potential customers in regional NSW is through the development of a 'hub and spoke' network model radiating out from regional cities rather than a network just focused on Sydney. This will capitalise on the role that regional cities and centres play as hubs for employment as demonstrated through Journey to Work data from the Census, and for services such as retail, health, education and cultural activities for their surrounding catchment areas. It also acknowledges the importance of national and state significant transport links (or spokes) that pass through regions.

Previous regional planning has focussed on the connections of regional cities within a region or to Sydney. Whilst these will remain important, safe and efficient links to regional cities in adjacent regions is considered just as important as different products and services or service levels may be offered in other regional cities.

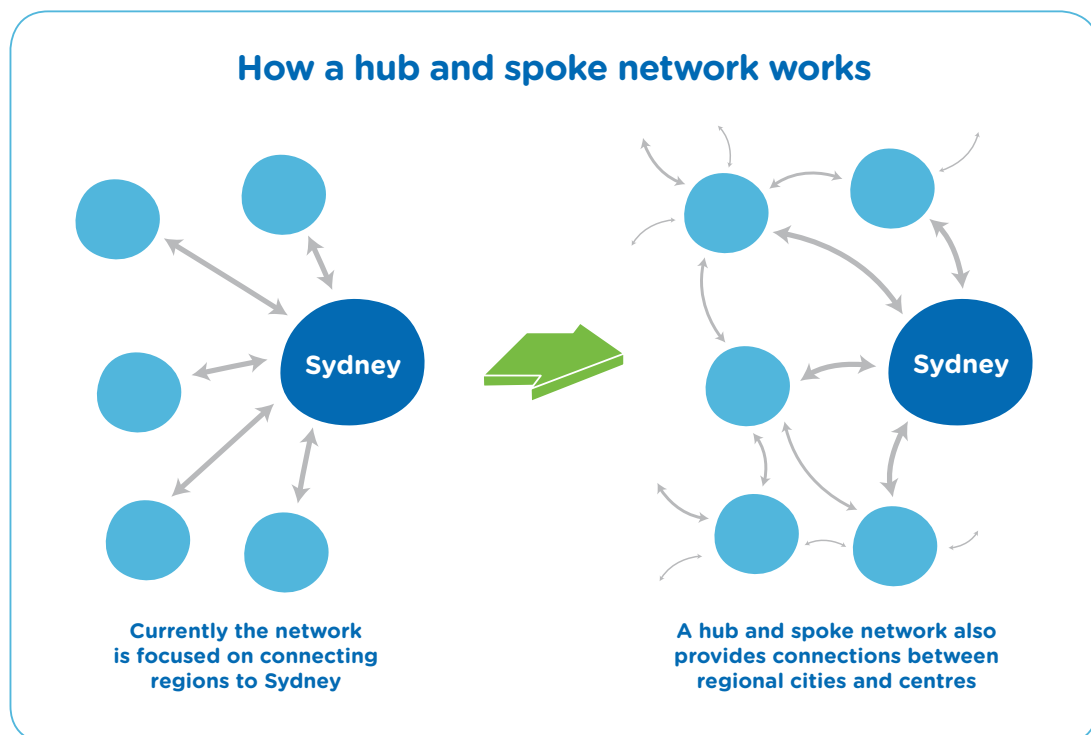


Figure 16: Moving from a Sydney-focused network to a focus on your local regional city

This integrated network will be comprised of a range of modes, reflecting the level of demand and distance. By developing the radial network around centres and key corridors, it can respond to the three dominant types of regional journeys; within centres, between centres and between regions.

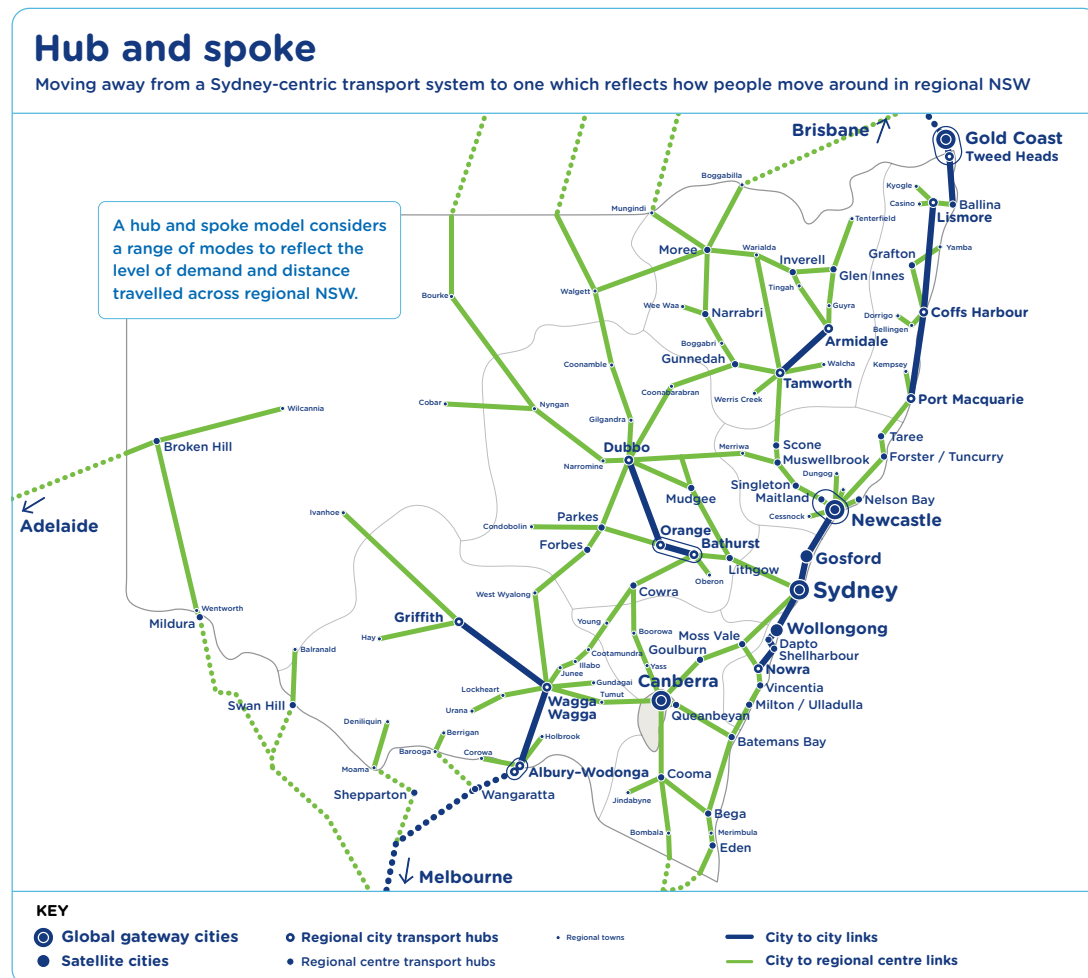


Figure 17: Links to regional transport hubs

Functional Economic Regions - recognising the role regional cities and centres

The NSW Government Centre for Economic and Regional Development (CERD) has developed Functional Economic Regions (FER) based on the economic modelling of data about where people travel to work in order to develop Regional Economic Development Strategies. Each FER usually includes more than one local government area, as their boundaries do not always reflect the boundaries of regional economies and economic interaction. The integrated hub and spoke transport networks in Future Transport 2056 support the FERs and subsequent Regional Economic Development Strategies.

A customer journey with no boundaries

Some areas of regional NSW are heavily influenced by or relate to other states and capital cities due their proximity such as the Tweed, Queanbeyan, Albury and other communities along the Murray River, and Broken Hill. By 2056 it is the intention of the NSW Government that transport customers will be able to travel throughout NSW and into neighbouring jurisdictions with borders appearing invisible.

We're already improving cross-border transport

The Office of the NSW Cross-Border Commissioner advocates for the resolution of cross-border issues which impact on communities, businesses organisations and individuals as a result of them living, working or operating in multiple jurisdictions.

The NSW Cross-Border Commissioner has recently negotiated two significant agreements: the [ACT-NSW MoU for Regional Collaboration](#), signed on 9 December 2016, and the [Qld-NSW Statement of Principles and Priorities for Cross-Border Collaboration](#), signed on 27 January 2017. Robust governance arrangements associated with these agreements require the Commissioner to lead work to develop annually revised worklists and priority actions, and in reporting progress to stakeholders through an annual reporting cycle.

The worklists for 2017-18 have recently been agreed and released and contain a range of transport initiatives:

- › [ACT-NSW 2017-18 Annual Worklist](#)
- › [Qld-NSW 2017-18 Annual Worklist](#)

Movement and place: great regional places supported by transport

The NSW Government has a vision of diverse and dynamic regional communities where economic growth is supported, economic potential is fostered, and locals have access to quality services. Central to these outcomes is a modern, flexible transport network that works for businesses and people, connecting regional centres, global gateways and local communities.

The way in which transport is envisaged, planned and delivered has a significant impact on regional communities and places. Traditionally transport has often been based on efficient movement without equally considering the transformative (both positive and negative) impacts on land use and communities and opportunities of transport corridors, modes and customer purpose.

‘Movement and place’ is all about creating regional places and experiences which locals and visitors will seek out. The movement and place framework acknowledges that both customer and community needs are different and the street environment needs to provide different functions – moving people and goods while also being destinations for people. The framework will enable us to plan, design and operate the road network to meet these different needs.

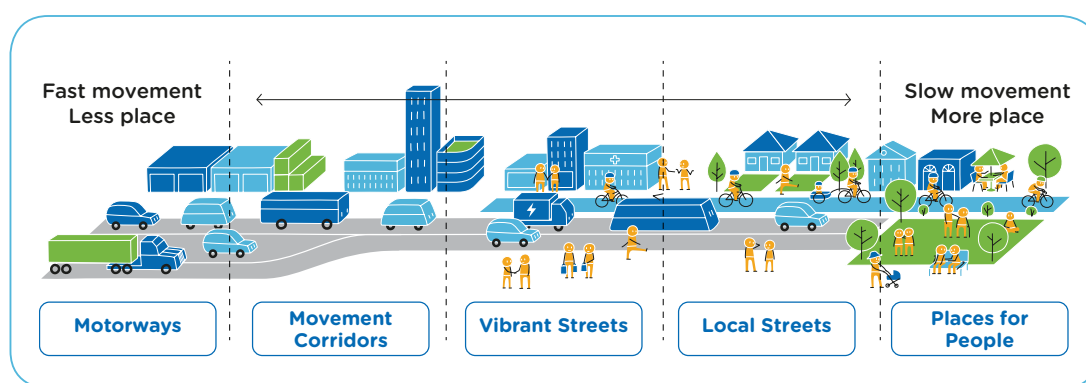


Figure 18: Different street environments under the Movement and Place Framework

Adopting the movement and place framework and principles in regional cities, centres and towns has the potential to transform the way those communities operate. Movement and place will support the hub and spoke model by forging stronger connections from surrounding catchments to regional cities and centres and between them, rather than focussing connections on Sydney or other interstate capitals.

Planning for Places

A tiered approach to planning transport for the regions

Future Transport 2056 has adopted the nine regions used by the Department of Planning and Environment's (DPE) Regional Plans.

DPE has identified around 20 regional cities and over 30 regional centres in their recently released [Regional Plans](#).

As NSW continues to grow, all regional cities will play larger roles in service provision for their population catchments. Each of the nine regions supports one or two regional cities and a similar number of regional centres and many towns and villages. In 2056, the major regional cities in NSW will be Newcastle, Gosford, Wollongong and Tweed Heads. The key regional city transport hubs will include Lismore, Coffs Harbour, Port Macquarie, Armidale, Tamworth, Dubbo, Orange, Bathurst, Griffith, Wagga Wagga, Albury and Nowra. Regional centres such as Broken Hill, Maitland, Shellharbour and Queanbeyan will continue to play an important role servicing local communities with links to regional cities.

The Future Transport 2056 Plans also recognise that areas of the north, south and far west of the state are intrinsically linked to cities in other jurisdictions; the National Capital of Canberra and the Gold Coast that adjoin NSW, as well as more distant cities of Brisbane, Melbourne and Adelaide. NSW has four Global Gateway cities which provide the state-level services and facilities required to support the growing population in NSW; Sydney, Newcastle, Canberra and Gold Coast.

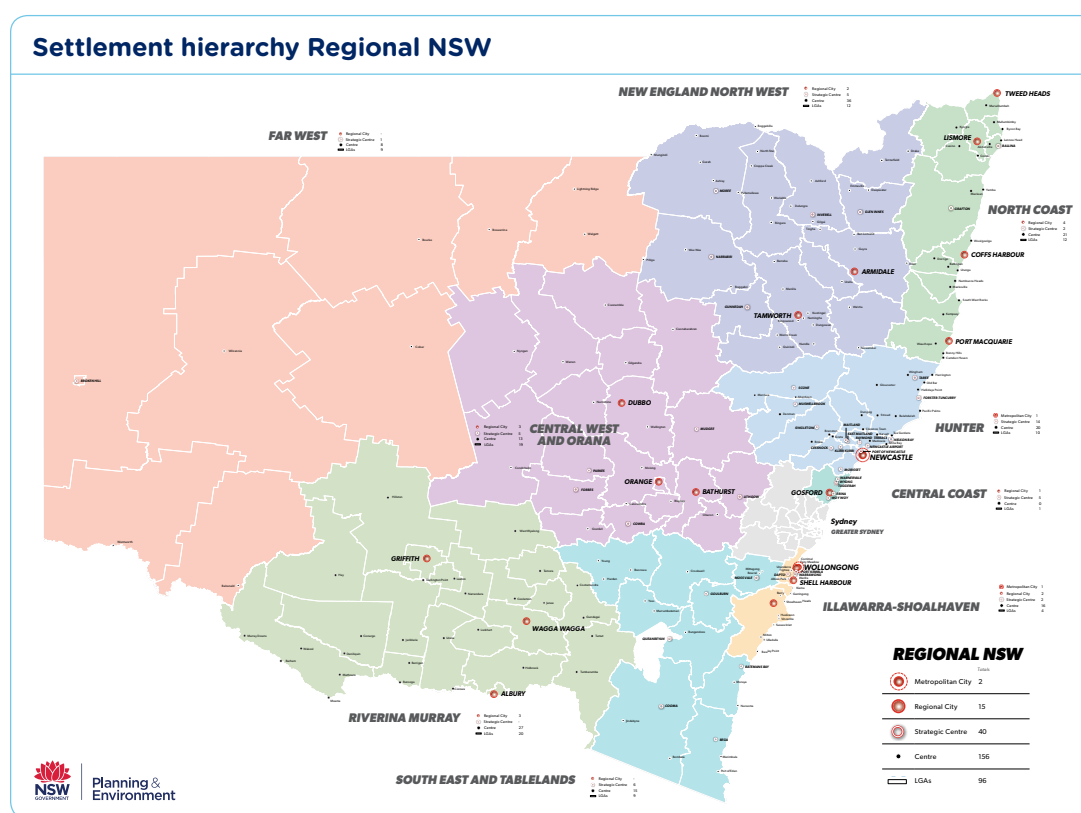


Figure 19: Settlement hierarchy regional NSW



Figure 20: Global Gateway and capital city population catchments (illustrative only)

Connecting regions to their Global Gateway city will be of paramount importance to ensure high quality access to major services and facilities such as Level 1 hospitals, major education institutions, and international travel and trade gateways.

The growth of Greater Sydney will directly influence the growth of surrounding regional cities resulting in the regional cities of Gosford and Wollongong becoming Satellite cities and a part of the Greater Sydney conurbation by 2056. The existing cities will evolve to strengthen critical linkages to jobs and services within Greater Sydney, due to their proximity and improved road and rail connections.

With its port and airport, Wollongong is considered to have future potential as an emerging Global Gateway. However there are constraints to its future growth due to the area's topography and proximity to Sydney, while over 80% of workers are employed locally.

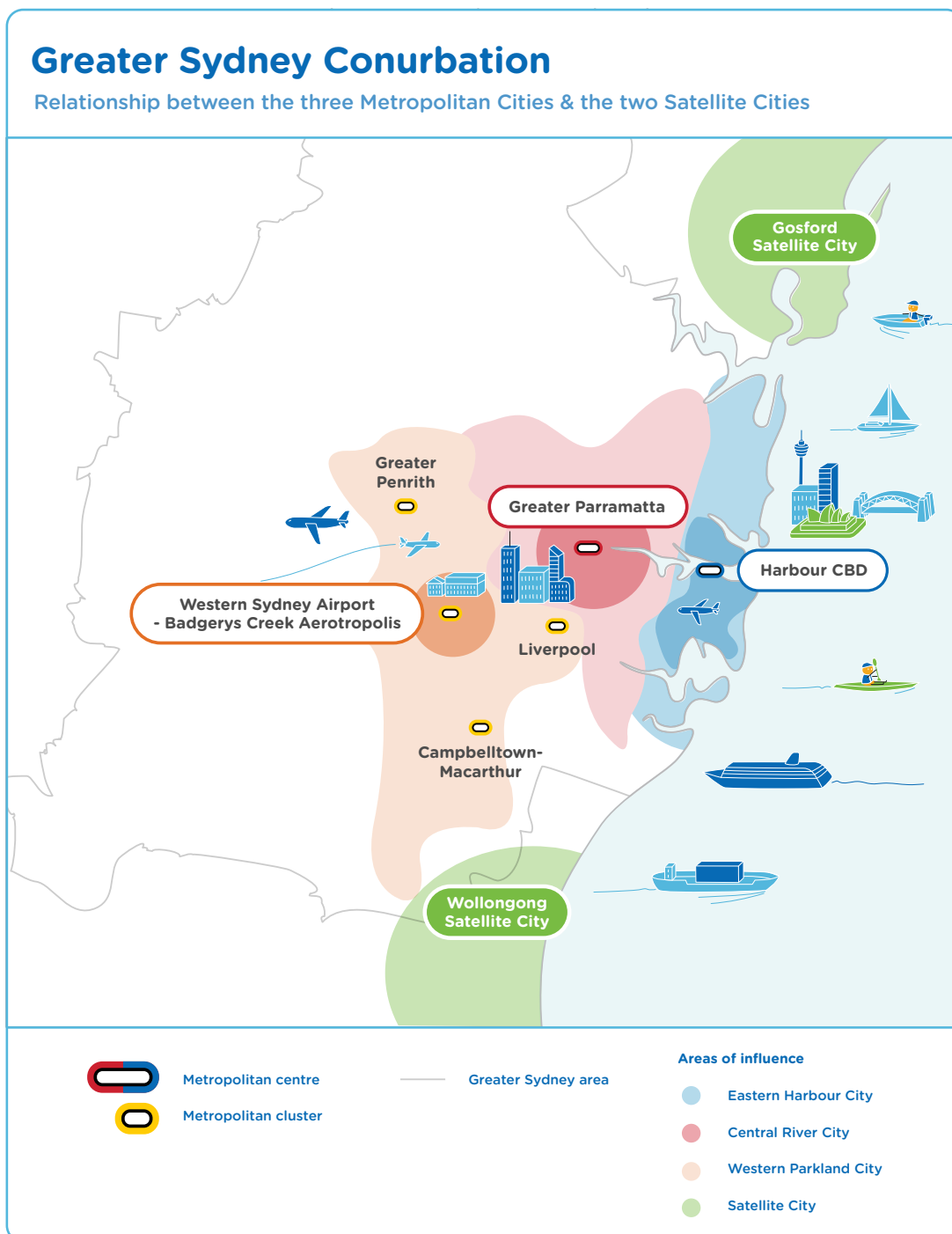


Figure 21: The five metropolitan cities of Greater Sydney by 2056

Movement Corridors

Regional NSW has a number of nationally significant transport corridors (road and rail) which pass through the state and connect capital cities and major trade gateways including ports and airports.

Significant investment has been made over the past 20 years to improve the north-south highway connections in particular the Hume, Pacific and Newell Highways. These road corridors will continue to play an important role in the movement of passengers and goods and will evolve to become Smart roads of the future.

Recent announcements by the Federal Government means that the Inland Rail project will become a reality and provide opportunities to establish intermodal hubs along its alignment through inland NSW and connections from Parkes to the east. The NSW Government is identifying ways in which it can leverage regional NSW's central location in this once-in-a-generation project.

North-south freight movements facilitated by Inland Rail and the Newell Highway will provide opportunities for improved movements of freight to ports and also provide relief for the coastal road and rail networks which will continue to experience growth in flows dominated by passenger movements.

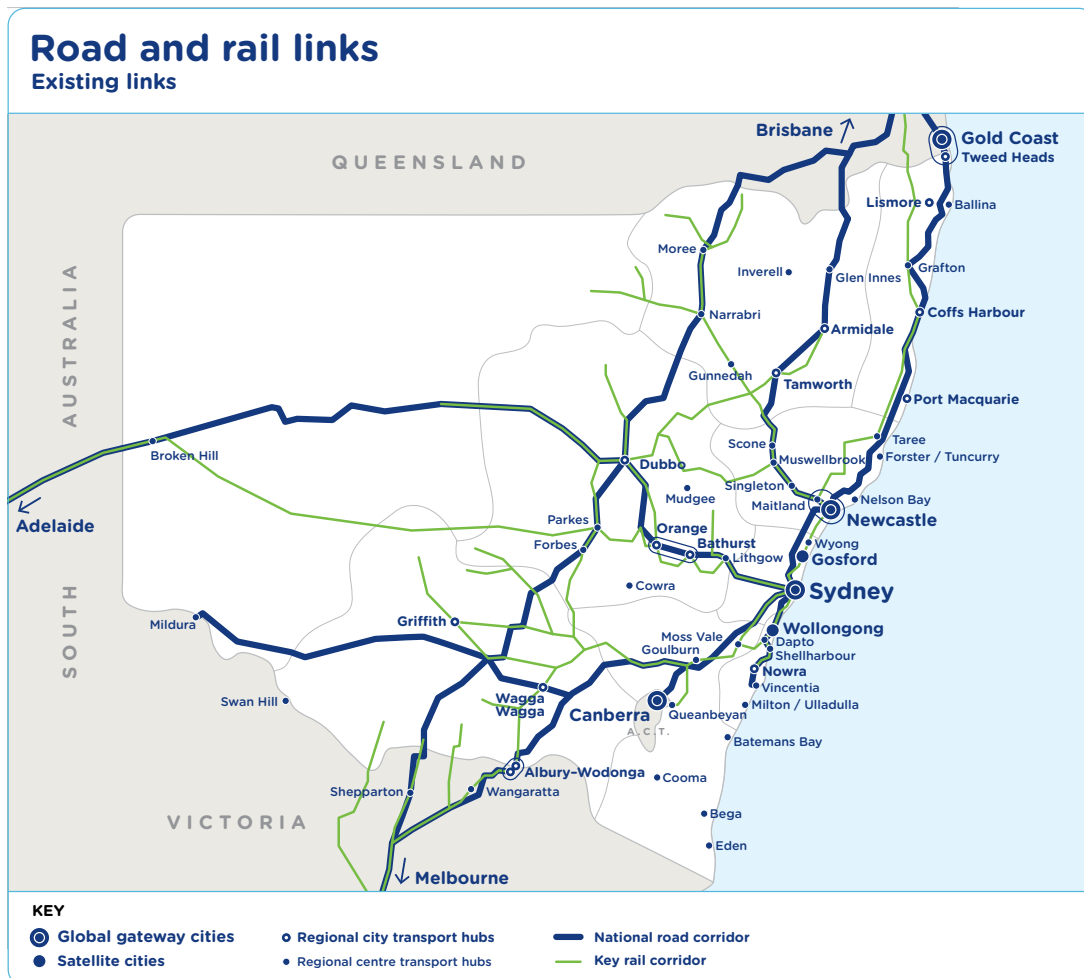


Figure 22: Current state significant road and rail network

Opening up inland regional NSW through improved east-west crossings of the Great Dividing Range

As the population of regional NSW keeps moving towards the coast and primary industry continues to grow in the inland regions, safer and more efficient connections joining the two geographies are required for freight and passenger movements.

The recent investments in north-south highway connections (Pacific, Hume, Princes and Newell Highways) have created significant benefits for the state in terms of safety, travel time savings and productivity. A focus on east-west connectivity is now essential to create a truly connected transport network.

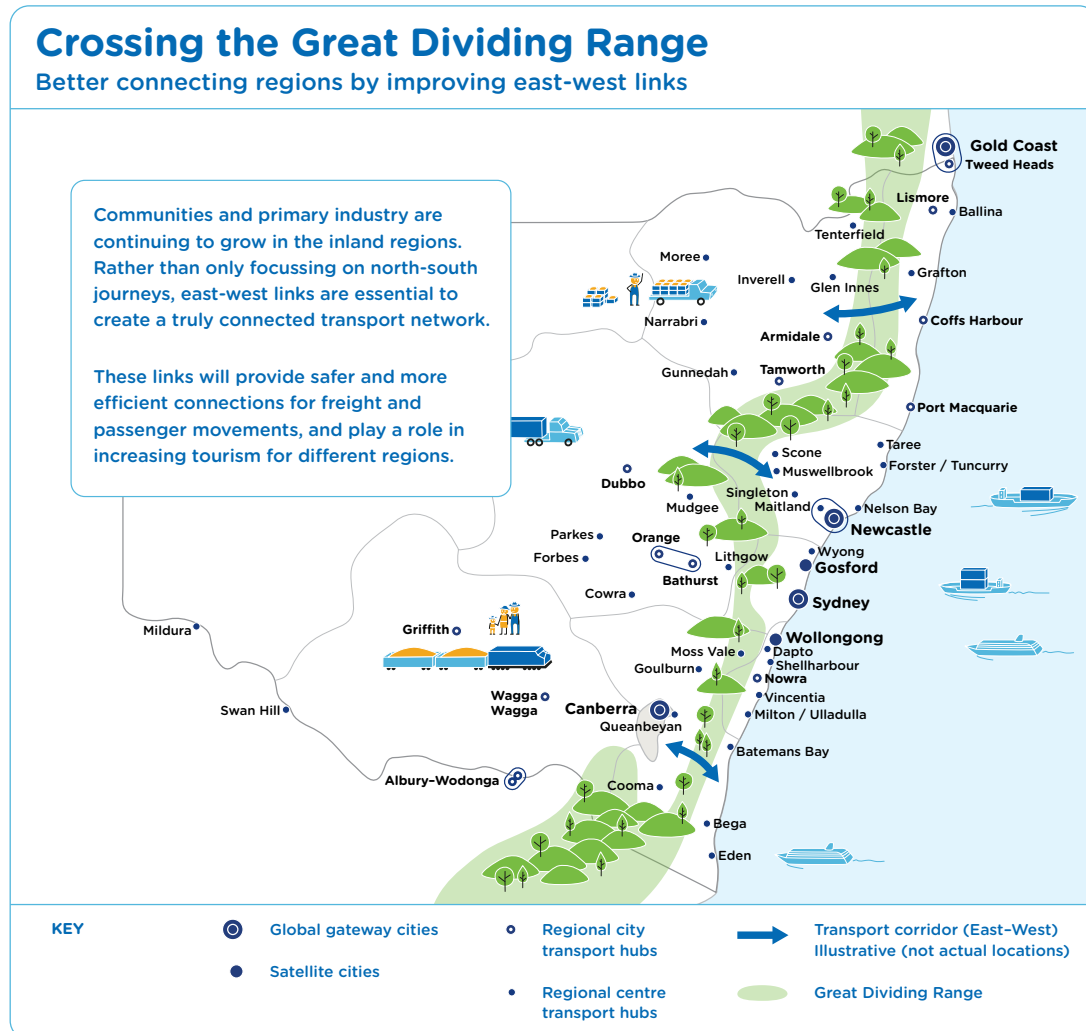


Figure 23: Connecting cities and centres across the Great Dividing Range

On the North Coast, the Bruxner, Gwydir, Waterfall Way and Oxley Highways are the key routes connecting regional cities and centres in the New England and North West region.

Linking the Hunter Expressway with the Golden Highway and New England Highways will support the resource rich regions of the Hunter, Central West and Orana and New England and North West. Upgrading of these connections also supports and reinforces the global gateway status of Greater Newcastle through access to its port and airport. The development of the Golden Highway will provide an alternative route from Central West and Orana around Greater Sydney.

The Blue Mountains will continue to challenge transport access to Greater Sydney from the Central West and Orana due to its expanse, world heritage status and restrictions on High Productivity Vehicles. There are committed investments by government to upgrading the Great Western Highway as the main road freight corridor over the Mountains as well as the Main Western Line. Investigation of improvements to the Bells Line of Road will continue to deliver benefits for local communities and the Central West and Orana.

The Illawarra escarpment is one of NSW's most dramatic topographic features which will require significant investment to improve the connections from Wollongong to Sydney and the South East and Tablelands and maximise access to Port Kembla.

The growth of the global gateway city of Canberra will continue to drive demand for movement between the city and the coast via the Kings Highway for both access to services and to support the visitor economy.

The Snowy Mountains Highway will also play a role in maximising the investment for the visitor economy in places such as Eden (new cruise facilities development) and Cooma (Alpine region).

Future Movement Corridors

The future transport network needs to address:

- › Changing land use across NSW
- › The needs of the freight and tourism sectors
- › Movement and Place principles
- › The new Hub and Spoke network
- › Connections across the Great Dividing Range.

This Regional NSW Services and Infrastructure Plan encapsulates these identified network needs to propose a future transport network for NSW.

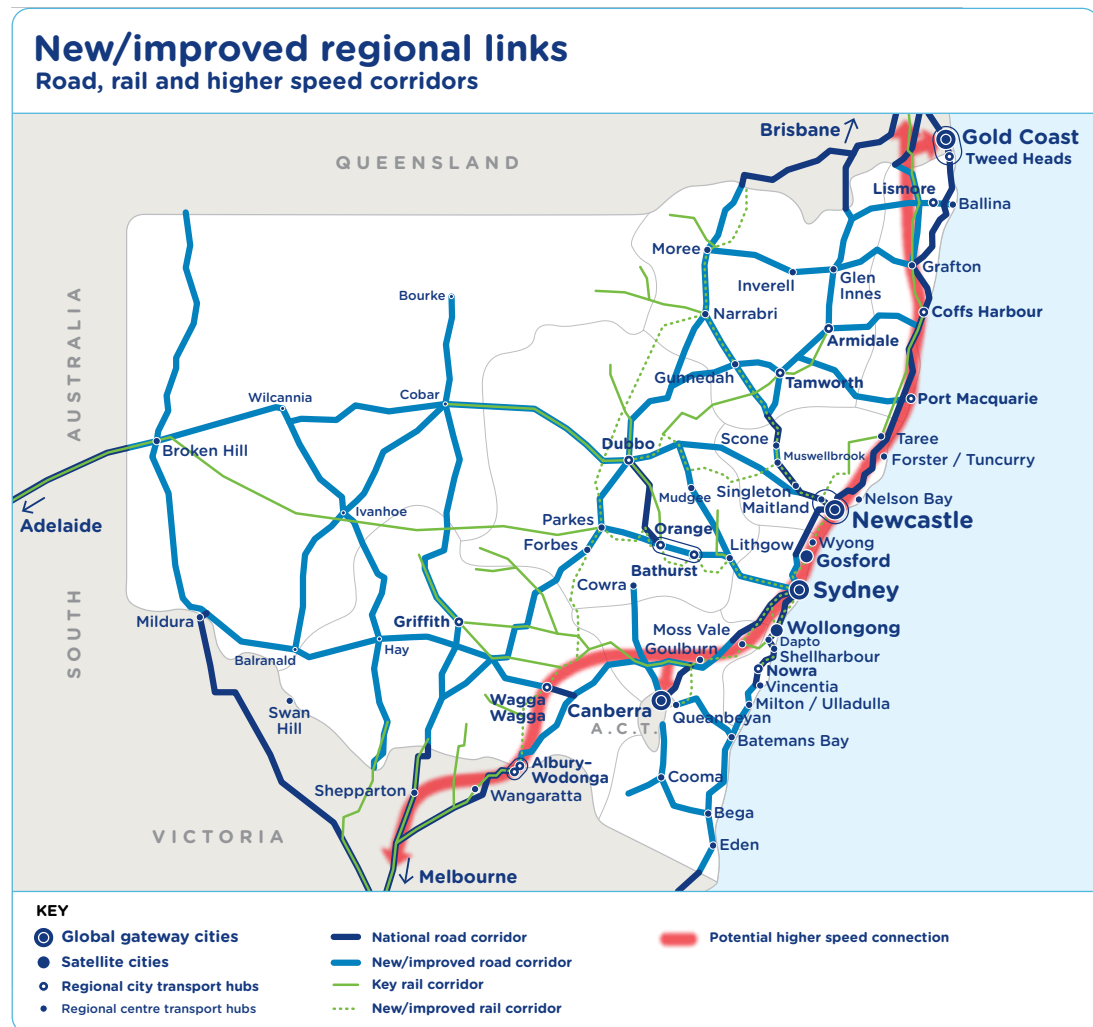


Figure 24: Future Network

The future of public transport in regional NSW

Regional public transport will be planned within a strategic framework of servicing principles which allow for local adaptation and interpretation

The regional passenger transport servicing principles provide the strategic framework underpinning the passenger transport services provided in rural and regional areas.

The principles will inform ongoing improvements to services to meet the changing travel needs of customers in regional and rural areas.

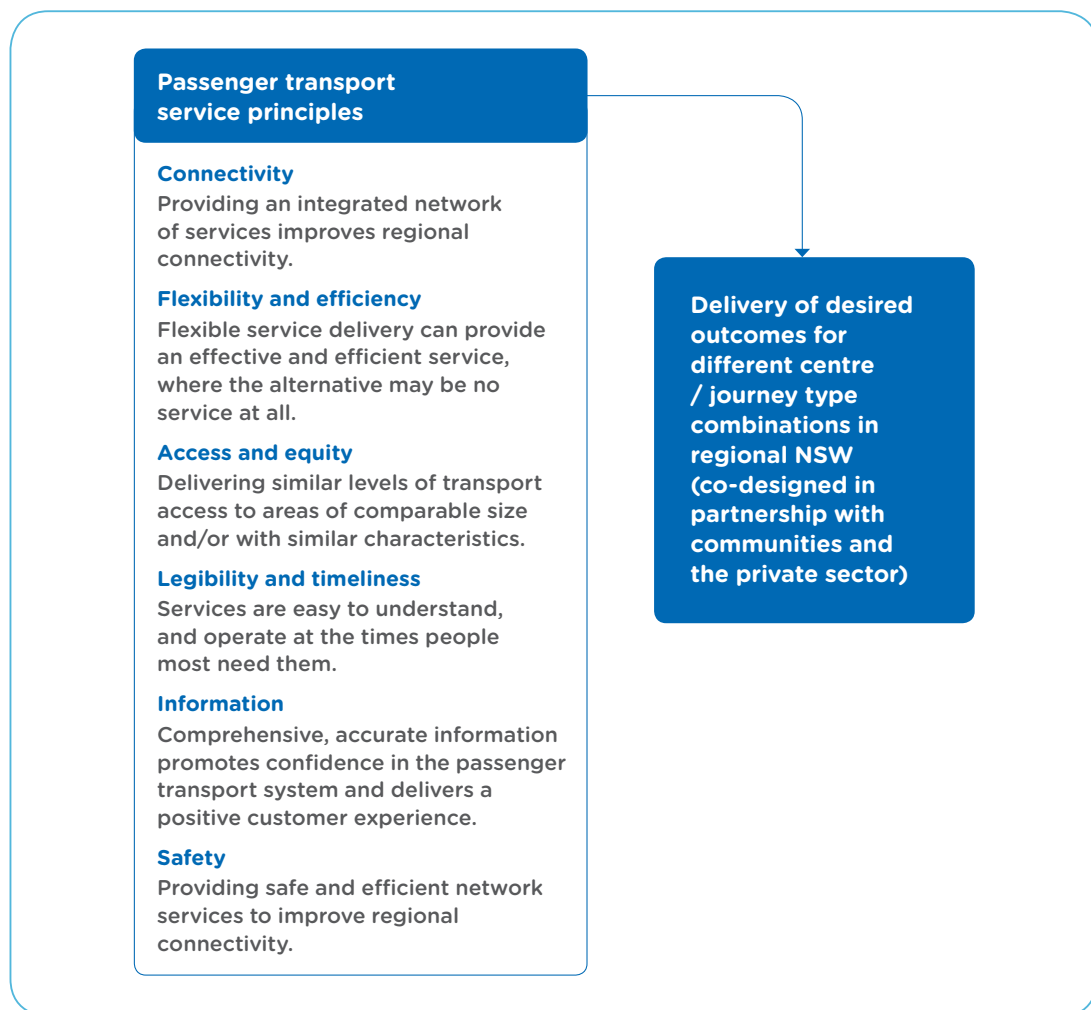


Figure 25: Passenger transport network principles

Transport service levels

Our aim is to create a simple transport network in regional NSW with a clear hierarchy of services which is tailored to local communities. This will enable us to make better places and provide a level of service that provides flexibility for future service improvements based on changing customer demands.

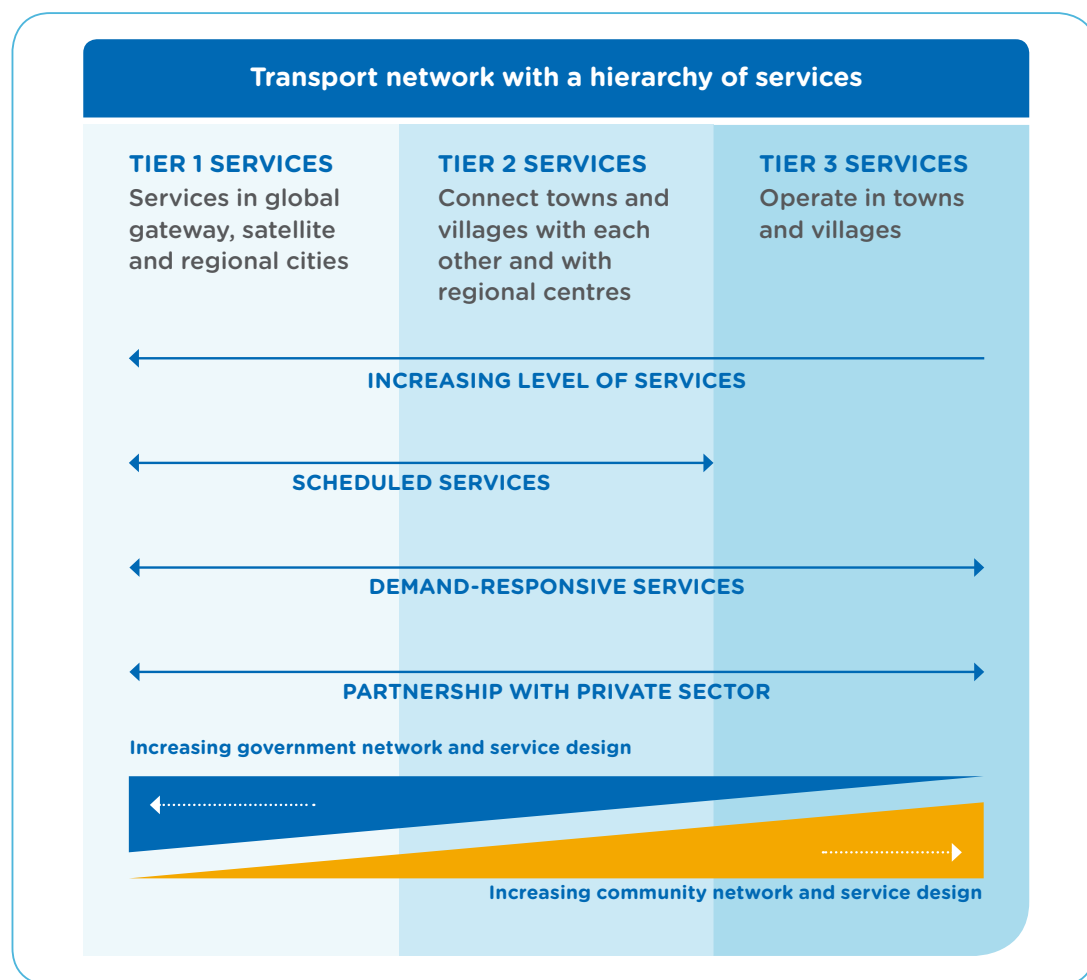


Figure 26: Transport network with a hierarchy of services

Tier	Identified locations	Future service levels
Global Gateway	Newcastle, Canberra, Gold Coast	Provide at a minimum international, interstate, inter-regional, intra-regional and in-town services in conjunction with ACT and Queensland Governments
Satellite Cities	Gosford and Wollongong	Provide 30 minute city access within cities, with 60 minute access to Sydney
Regional City transport hubs	Tweed Heads, Lismore, Coffs Harbour, Port Macquarie, Armidale, Tamworth, Dubbo, Orange, Bathurst, Griffith, Wagga Wagga, Albury and Nowra	Provide at a minimum inter-regional, intra-regional and in-town services
Regional Centre transport hubs	Such as Broken Hill, Shellharbour and Queanbeyan	Provide at a minimum intra-regional services

Figure 27: Transport service hierarchy applied to cities and centres in the future

Providing more transport choices for regional communities

Our vision for regional NSW is a future with greater choice for regional travellers. This will be achieved through initiatives such as:

- › Hub and spoke model connecting to centres and regional cities
- › Integrated timetables enabling better connections and day return services
- › Increased frequencies and operating hours
- › Flexible / demand-responsive public transport offering a mix of services
- › Accessible services for mobility impaired and disadvantaged customers
- › Real-time information making public transport more user friendly and accessible
- › Mobility as a Service
- › Improved walking and cycling infrastructure within towns to accommodate shorter trips

Future Transport 2056 will aim to capitalise on the opportunity to increase the use of public transport and walking and cycling in regional NSW for all trips, improving levels of social inclusion and bringing flow on health benefits. At present we only have Journey to Work data to measure the use of these modes, but we are investigating opportunities to source information on the use of all modes for all trip purposes through initiatives such as sourcing data from telecommunication providers and the roll-out of a next generation ticketing system.

Our aspiration for regional NSW as a whole over the next 10 years is to increase public and active transport use across regional NSW.

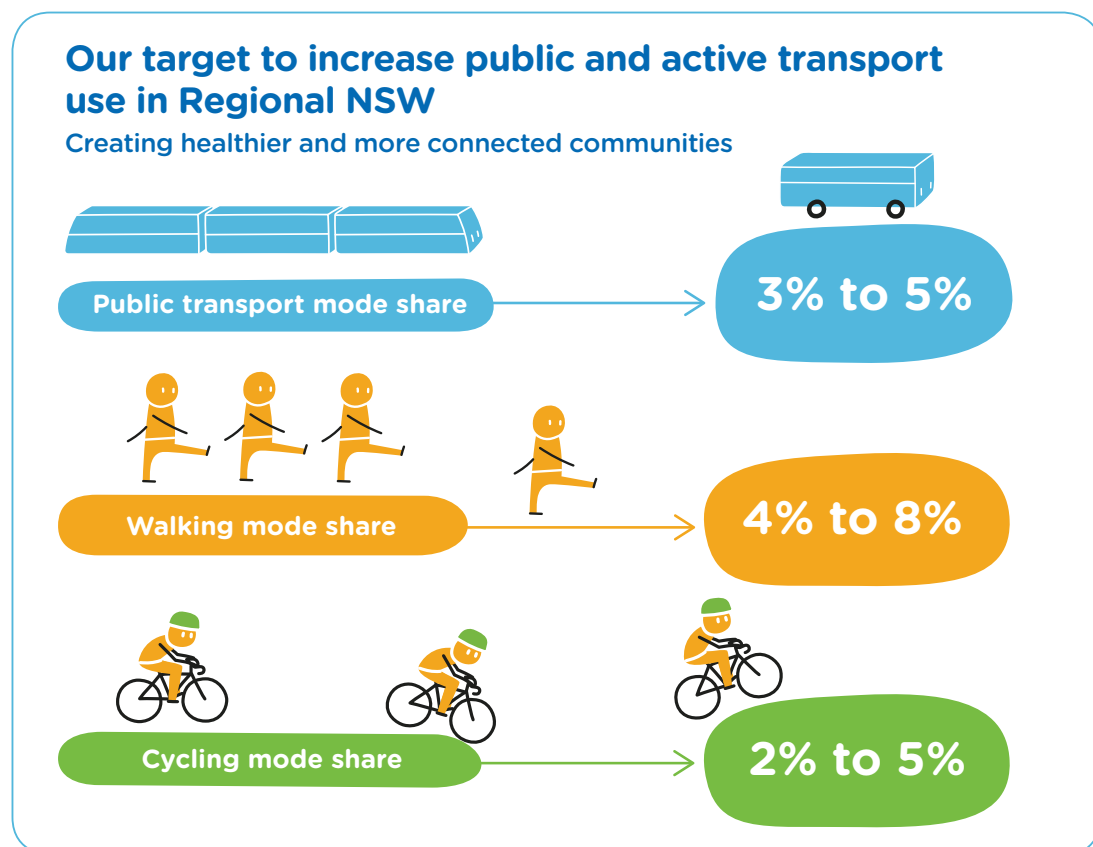


Figure 28: Public and active transport targets

The greater density of residential and employment land uses within NSW's Global Gateways and Satellite cities (i.e. Newcastle, Wollongong and Central Coast) presents a greater opportunity to increase sustainable mode shares compared to other regional areas. The availability of robust evidence on travel patterns (via Household Travel Survey data) also enables monitoring of performance throughout the day in these areas.

Starting in March 2018, NSW TrainLink proposes to trial new coach connections to better connect regional communities. The proposed services would provide new links between:

-

Each trial aims to provide easy connections between regional hubs for better access to medical and health providers, business, shopping, recreational activities or to catch up with family and friends.

<https://transportnsw.info/news/2017/trials-of-new-public-transport-options-for-regional-nsw>

The delivery of regional air transport services is a complex collaboration

Regional airports in New South Wales are largely owned and managed by local government and aviation services are mostly delivered by private commercial operators. Aviation safety, security, price and access are regulated by the Australian Government via the *Civil Aviation Act 1988 (Cth)* and the *Air Services Act 1995 (Cth)*. The NSW Government has a regulatory and licensing role under the *Air Transport Act 1964*.

As well as the specific air transport legislated functions, the NSW Government has an ongoing role to work collaboratively with the owners, regulators and operators to ensure a level of transport and essential service amenity is delivered in regional communities and that economic growth and potential in regional NSW are supported consistent with our vision for the State.



Our aspiration for regional NSW
as a whole over the next 10 years
is to increase public and active
transport use across regional NSW.



Figure 29: Regional NSW Intrastate Aviation Connections (February 2018)

Aviation will continue to be an essential transport mode for regional NSW in the future. Our vision is for regional air passenger services to be part of an integrated and seamless journey for people living in and also visiting regional NSW. Our immediate focus will be the development of the hub and spoke model for all regional transport modes through Regional Transport Plans. We're committed to connecting public transport services with regional airports and considering timetabling, marketing and ticketing as a holistic product in the next ten years.

We're investing in the future of regional aviation now!

Regional air services play an essential foundation role in the economic development of regional cities, centres and towns. In recognition, the NSW Government has committed \$70 million to a regional airports upgrade program through 27 projects at 22 regional airports that will boost regional airport capacity and safety and increase their ability to attract visitors to regional NSW.

The projects include passenger terminal upgrades, improved lighting to support airport expansion, and expanding runways or aircraft parking to accommodate larger planes.

More than \$9 million worth of projects have already been delivered including an extended runway apron area and upgrade terminal facilities in Coffs Harbour which was completed in December 2017. While Ballina airport is undergoing an expansion through Restart NSW funding in recognition of its growing importance as an entry point to the North Coast region, with passenger numbers at over 510,000 per annum. The remaining projects are in various stages of design and construction with final completion of all projects currently forecast by 2019.

The NSW Government will continue to consider investment proposals in multi-use regional aviation infrastructure on a case by case basis through the \$1.3b Regional Growth Funds announced in the 2017/18 budget. All proposals are required to be consistent with recently developed Regional Economic Development Strategies and assessed on merit against clear criteria to demonstrate benefit for regional NSW.

<https://www.industry.nsw.gov.au/business-and-industry-in-nsw/assistance-and-support/regional-tourism-infrastructure-fund>



Figure 30: Major projects forming part of the NSW Government's \$70 million regional airports program

Existing Global Gateway airports at Sydney's Kingsford Smith (KSA), Canberra, Gold Coast, Brisbane, Adelaide and Melbourne currently provide national and international connectivity for regional NSW. The addition of the new Western Sydney Airport (WSA) at Badgerys Creek in 2026 to the NSW air network will provide an alternative to KSA in Greater Sydney for regional passengers and freight and will provide some relief for capacity and access issues in the Sydney basin. The NSW Government will continue to advocate for arrangements which are beneficial for regional air services during the development of WSA.



Figure 31: Regional NSW Interstate Aviation Connections (February 2018)

CHAPTER

3

Customer
outcomes for
regional NSW

Our vision is for regional people, visitors and businesses to experience a world-class regional transport network

The Future Transport Strategy articulates the transport vision for NSW for the next 40 years through six customer and network outcomes; A customer focus, Contributing to successful places, A growing economy, Safety and performance, Accessible services, and Financial and Environmental Sustainability. This section of the Regional NSW Services and Infrastructure Plan considers these outcomes further and details ten outcomes from a regional perspective for our diverse range of customers.



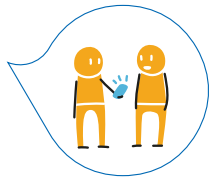
Figure 32: Our customers

Regional NSW Customer Outcomes

Future Transport 2056 Statewide outcomes

Regional NSW customer outcomes

Customer Focused



Convenient and responsive to customer needs

1. Flexible services are an integral part of the transport system helping to deliver reliability
2. A transport system that adapts to and embraces new technology

Successful Places



Sustaining and enhancing the liveability of our places

3. The appropriate movement and place balance is established enabling people and goods to move efficiently through the network whilst ensuring local access and vibrant places
4. Supporting centres with appropriate transport services and infrastructure

Growing the Economy



Sustaining and enhancing the liveability of our places

5. Changes in land use, population and demand, including seasonal changes, are served by the transport system
6. Economic development is enabled by regional transport services and infrastructure

**Future Transport 2056
Statewide outcomes**

Regional NSW customer outcomes

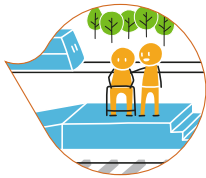
Safety and Performance



Safely, efficiently and reliably moving people and goods

7. A safe transport system for every customer with zero deaths or serious injuries on the network by 2056
8. A transport system that is resilient to significant weather events including floods, fog and bush fires

Accessible Services



Accessible for all customers

9. Accessibility to employment and services such as health, education, retail and cultural activities within Regional Cities and Centres

Sustainability



Makes the best use of available resources and assets

10. Customers enjoy improved connectivity, integrated services and better use of capacity
-

Customer Outcome 1: Flexible transport services

Customer needs are met by flexible services which are appropriate and reliable

Technology has enabled an increase in customer-focused and commercial applications of flexible transport, for example point to point (taxis and rideshare), community transport and Mobility as a Service models.

Flexible transport services provide the most appropriate type of service for customer needs by:

- ▶ being agile and responsive to personalised customer needs allowing customers to organise a service when they need it, providing a more personalised, door-to-door experience
- ▶ offering the right transport mode for the right task
- ▶ better serving multiple destinations, particularly isolated communities
- ▶ responding to seasonal changes.

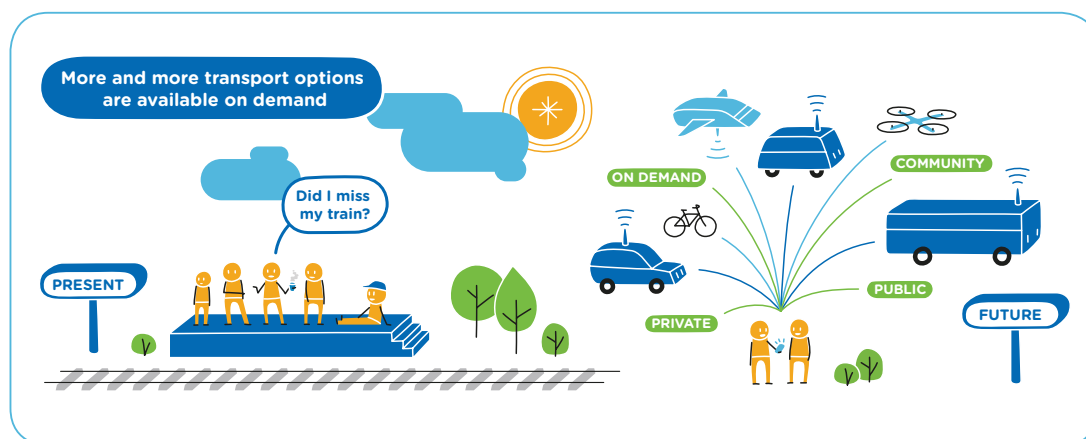


Figure 33: More demand responsive services expected in the future

The introduction of flexible transport across regional NSW will be a big shift in the transport business model which will benefit regional communities. It enables isolated customers to more meaningfully contribute to society through employment and community engagement and also provides access to basic services such as health and shopping in efficient and cost effective ways that are often not ordinarily available through regular scheduled services.

Flexible services in regional NSW will be targeted at regions or routes where services have long travel times or multiple interchanges and lack integration with other modes. These services will also target first and last-mile connections to and from transit hubs.

In the short term – 3 models of flexible transport could be introduced in regional NSW:

1. **Complement** time limited mainstream local public transport services (i.e. scheduled bus services) in centres/large towns
2. **Replace** existing time or coverage limited mainstream local public transport service in towns
3. **Introduce** services for smaller towns where no mainstream public transport exists.

In the longer term – all local public transport services in regional NSW could have increased levels of flexibility.

The two following case studies present examples of two service providers contracted to deliver eligibility-based community transport for Transport for NSW are also able to deliver flexible services using their spare vehicle assets.

On demand transport services trial in Sydney and Central Coast

Eight trials of on demand transport services will run in Sydney's north west, south west, west, eastern suburbs, northern beaches, Sutherland Shire and the Central Coast commencing from late 2017. Their focus is on connecting people to transport hubs (bus, ferry and train) to reduce demand for commuter parking, employment centres, local shops and hospitals.

Each trial is unique and has its own pricing scheme. Customers will be able to book online, by phone or via an app. Transport for NSW will use data from the trials to plan future public transport improvements across all areas of Sydney.

The trial on the Central Coast is a service to take customers to Woy Woy station from locations on the Woy Woy peninsula. The service will be provided by a community transport operator.

Rural and Regional Flexible Transport Trial – Tottenham to Dubbo

The Western Region is facing issues relating to an ageing and declining population, as well as social disadvantage.

The Western Regional Transport Pilot (WTRP) has been implemented as a possible way to respond to these challenges and is the first of its kind in regional NSW. Stage 1 commenced in May 2017 with a weekly return service between Tottenham and Dubbo via Albert and Narromine operated by a community transport provider that services the Dubbo area.

The journey from Tottenham to Dubbo is 145 km and is approximately a 2 hour drive each way. Fares have been set at \$15 return for adults, \$7.50 for children and \$2.50 for eligible concession holders in line with the Regional Excursion Daily (RED) ticket.

A recent evaluation of the service has found:

- › The service benefited the community and residents of Tottenham
- › The service improved social access for socially disadvantaged residents
- › Access to medical services increased along with reports of better independence amongst users
- › The community also reported on road safety benefits and social inclusion improvement
- › 8.4% of Tottenham's population had used the service and there is potential to grow
- › The operator reported an average occupancy rate of 66%.
- › The service appealed to a broad group with the majority of users female, aged over 60 who held a full car licence
- › Fares were perceived to be very affordable and a key driver to usage
- › 90% of customers on the new transport service travelled on a concession fare.

Key learnings from the evaluation will be incorporated into the remaining stages of the WTRP and will also inform government decisions on further flexible services in regional NSW.

Customer Outcome 2: Embracing new technology

Customer needs are met by a transport system that is continuously adapting to and embracing new technology

The NSW Government is committed to adopting and applying new technology to transport needs in regional NSW. Technology will continue to challenge and disrupt current thinking and innovation will be critical as we seek ways of doing things differently.

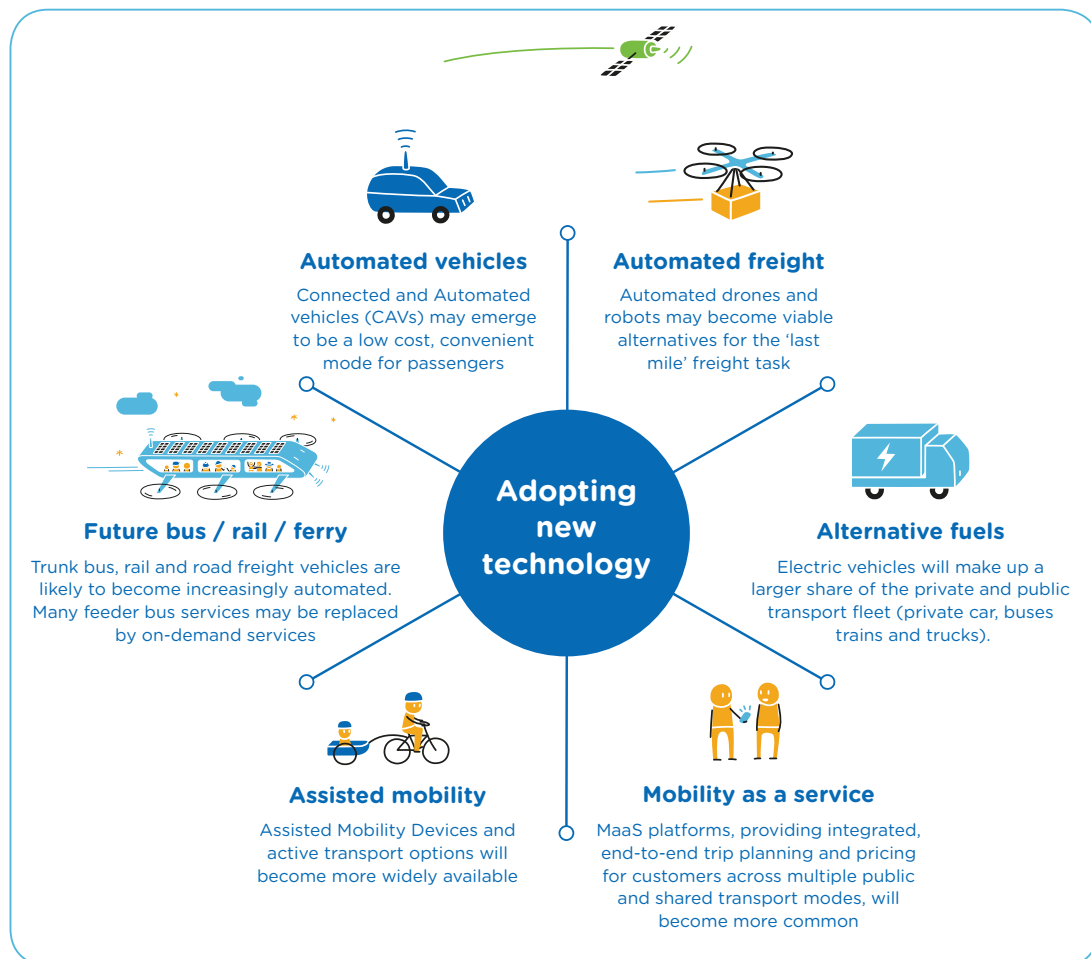


Figure 34: Technology and potential impact on the future of mobility



CAV trial underway in Sydney

A two year trial of connected and autonomous vehicles (CAVs) is underway at Sydney Olympic Park. It is the first precinct-based trial of an automated shuttle in Australia and is the first trial of vehicle automation to take place in NSW.

The trial aims to understand what supporting technology and infrastructure is needed to operate an automated shuttle in this environment, how it interacts with other precinct users (pedestrians, cyclists, etc.) and how it integrates with the broader transport network. We will also better understand passengers' responses to this type of vehicle and the services it can enable, like on-demand transport in off-peak times.

Opportunities for CAV Technology in regional NSW

Fully connected and autonomous vehicles (CAVs) are expected to be widely used post-2035, with benefits expected for both passengers and freight. CAVs have application as part of a flexible integrated public transport solution, providing first and last mile connections to trunk services such as rail, coach, air, bus or demand responsive services as well as improved freight productivity.

CAV trial recently announced for regional NSW

On 1 December 2017 an expression of interest was announced for trials of driverless vehicles in regional NSW. Transport for NSW plans to provide seed funding and partner with industry, researchers, local councils and businesses to develop and co-deliver a number of connected and automated vehicle trials across regional NSW.

Trials will focus on customer mobility use cases and investigate the benefits and challenges involved in introducing emerging CAV technology to country NSW.

Lessons learnt from these trials will help Transport for NSW identify and implement new, creative and better ways to deliver transport to our regional customers. It will also help industry develop technology, products and services that can be deployed to deliver improved mobility for customers.

Technology underpins all aspects of our vision for regional NSW, for example:

- › **Customer focus:** Mobility as a Service technology platforms enable dynamic, personalised, customer-centric services with seamless multimodality.
- › **Growing the economy:** Improving productivity through exploring benefits of freight technology advances, for example supply chain efficiencies of vehicle platooning.
- › **Successful places:** Flexible services that take customers where and when they want to go.
- › **Safety and performance:** Smart vehicle technology features such as automatic braking and lane keep assist are increasingly available in new vehicles to improve road safety
- › **Accessible services:** Assisted mobility devices (such as e-bikes, segways and mobility scooters) enable people to travel further than traditional active transport (such as walking and cycling).
- › **Sustainability:** Electric vehicles and/or aerial mobility devices (for example drones) for use in emergency response where traditional networks are compromised (for example accidents or natural disasters).

Telecommunication improvements in regional NSW are foundational to enabling people to travel less and undertake some work, study, shopping and health appointments at home, or at locations close to home.

The NSW Government is delivering improved digital connections in regional NSW to enable technology

The Mobile Black Spot Program improves and extends the coverage of high quality mobile voice and wireless broadband services in rural and regional areas across Australia.

The NSW Government has committed \$39 million, which has been leveraged for a total program investment of over \$120 million in NSW communities by the NSW Government, the Australian Government and privately owned mobile carriers.

The program is currently delivering 183 new or upgraded mobile base station sites in NSW with 40% already completed. These sites will address up to 795 mobile phone black spots in regional communities and provide more than 14,000 square kilometres coverage.

Beyond the Mobile Black Spots Program, the NSW Government is also exploring other options to improve for improving digital connectivity in the regions as part of the \$50 million Connecting Country Communities Fund and the Growing Local Economies Fund www.nsw.gov.au/connectingcountrycommunities

The 2017–18 Budget also included \$177.7 million to support the next phase of the Critical Communications Enhancement Program, managed by the NSW Telco Authority. The program will deliver an enhanced Government Radio Network to improve emergency and day-to-day operational communications for a wide range of NSW Government agencies and essential services.

Customer Outcome 3: Movement and place framework

People and businesses experience vibrant local places balanced with efficient and effective movement of people and goods

Transport connects places but transport can also make places. The movement and place framework is a planning approach which takes broad consideration of surrounding land uses when making transport network and planning decisions. It seeks to reduce conflict between users by providing separation of local movement and through movement whilst creating better, safer street environments for customers and communities.

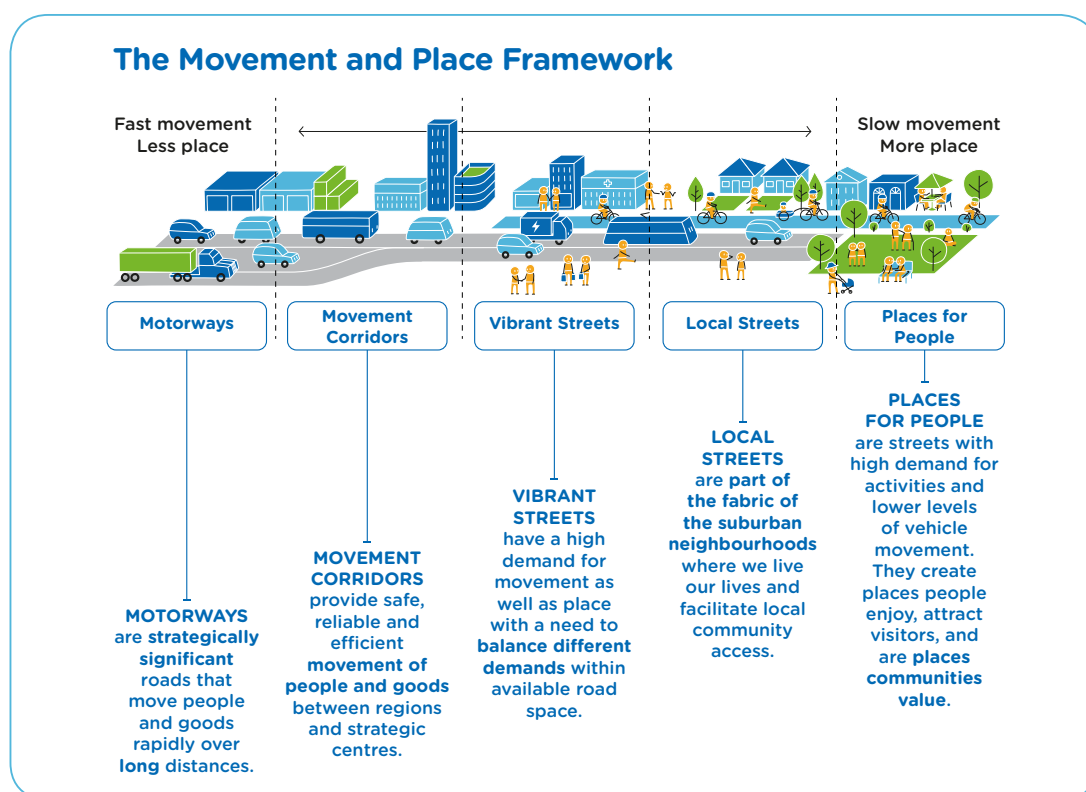


Figure 35: Movement and place framework

The application of the movement and place framework also has road safety benefits. Areas that are considered 'places for people' will need lower speed limits (set in accordance with the NSW Speed Zoning Guidelines and international best practice). Lower speeds in this environment will ensure the safety of road users, particularly vulnerable users such as pedestrians.



Figure 36: Implementing the movement and place framework

Implementing the Movement and Place Framework

Movement and Place is our framework for planning, designing and operating the road network to account for different uses. Adopting the framework will ensure that transport networks reflect the needs of surrounding land uses, enabling efficient and reliable movement of customers and goods as well as creating places for people. This concept helps us to move away from planning for different transport modes and customers in isolation towards personalised end to end customer experiences.

The framework will guide the specific corridor and place plans. We will develop a Movement and Place Practitioners Toolkit to provide specific guidance to stakeholders involved the planning, designing and operating the road network.

By engaging across government with those bodies responsible for transport, land use and roads in NSW, Street Environments will be agreed and become a common platform for road planning, based on an integrated view of:

- › the strategic significance of roads and streets in their role to move people and goods
- › the strategic significance of the land use adjacent to roads and streets

Through this more collaborative and integrated approach, the Movement and Place Framework will enable greater transparency, collaboration and an tool to provide better clarity to communities and the public, how the NSW Government plans, designs and operates the road network.

Applying Movement and Place

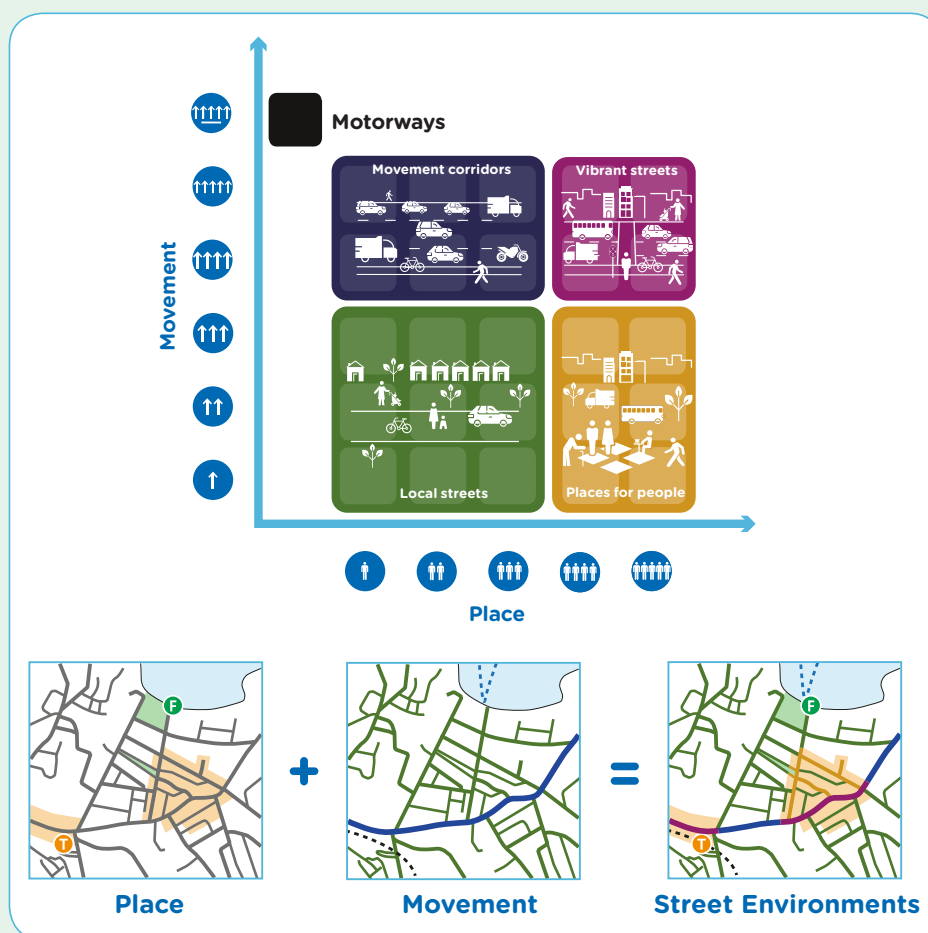


Figure 37: Street Environments, agreed between land use and road authorities, determines the desirable outcomes for all customers

The guiding principles within the framework acknowledge that the needs and expectations of transport customers and communities change for different street environments. Similarly, there is the need to prioritise different customer groups, depending which street environment they are travelling in.

- › **Creating places for people** – support principles of centre development, amenity enhancements, transport network connectivity, time of day management, walking and opportunities to dwell in city centres to support local identity and placemaking
- › **Local connectivity** – improving local public transport, walking and cycling connectivity between railway station, airport, key land uses (health, education, retail, employment) and town centres.
- › **Movement corridors** – planning, design and management of major roads to be sensitive to centres and surrounding land use and planning for future bypasses using the Movement and Place principles, with whole-of-government multi-modal road and corridor planning, including 'last mile' connectivity and freight access for industry.



Movement and place case study

Until Kempsey was bypassed in 2013, the Pacific Highway was a thoroughfare that cut the town in half — bringing tourists and trucks, but discouraging locals. However now the Kempsey CBD has become a retail hub after significant gentrification.

A study by Dr Bruno Parolin found that despite significant fear amongst the business community before the bypass, between 2013 and 2017 there has been an increase of 22% in jobs across all businesses.

Source: <http://www.abc.net.au/news/2017-09-29/kempsey-disadvantaged-town-now-bypass-success-story/9001840>




Regional Cities	Regional Centres	Local Towns
e.g. Orange, Port Macquarie, Wagga Wagga	e.g. Broken Hill, Inverell, Goulburn	e.g. Dorrigo, Peak Hill, Deniliquin
Separation of through movement (Movement Corridors) and reinforced place based activity (Places for People)	Separation of through movement (Movement Corridors) and supporting place based activity (Places for People)	Balancing needs of through movement and servicing local business (Vibrant Streets)
Time of day and day of week management of customer and business needs that consider both movement and amenity	Time of day management of customer and business needs that consider both movement and amenity	
Prioritise access to centre for freight, walking, cycling, public transport, interchange and manage parking demand	Facilitate improved access options to centre – improved walking, cycling, public transport and possible interchange options	Facilitate safe access to centre – improved walking, cycling, public transport and parking
Focused investment on making more Places for People linked to key transport nodes through effective land use and transport planning	Focused investment on making Places for People linked to key transport nodes through effective land use and transport planning	Strengthen and grow place making through effective land use and transport planning (e.g. lower vehicle speeds, footway access)
Integrating safety features with road function, accounting for needs of different road users in each environment.	Integrating safety features with road function, accounting for needs of different road users in each environment.	Integrating safety features with road function, accounting for needs of different road users in each environment.
		
Wagga Wagga	Broken Hill	Dorrigo

Figure 38: Key movement and place principles for regional NSW settlements

Customer Outcome 4: Supporting centres with appropriate transport services and infrastructure

Regional NSW has a diverse size of places and which require a scalable transport network response

Connections to Global Gateways, Satellite and regional cities

As Greater Sydney grows to a city of 8 million people by 2056, regional passengers and freight operators will look to more efficient ways to move to alternate global gateways, be they in NSW or interstate, to avoid the complex Sydney transport network.

The Global Gateway of **Newcastle** with its trade port, new cruise terminal and airport will play a bigger role in serving regional catchments beyond the Hunter to the north, north-west and west. Investments in such infrastructure as the Hunter Expressway, Pacific Highway, New England Highway and Golden Highway will facilitate safer and more efficient connections for passenger and freight movement from Tamworth, Armidale, Dubbo, Coffs Harbour and Port Macquarie.

Canberra is another Global Gateway city. Its international air connections and federal government service functions allow it to provide a broader range of services and amenities than adjacent regional cities. Canberra will provide global connections to the regional cities of Wagga Wagga and Albury / Wodonga.

Gold Coast is a Global Gateway city to the north of the state. It is one of the fastest growing regions in the country and provides nearby communities with access to health services, tertiary education as well as international air connections. It is also one of the fastest growing tourism markets in nation attracting both domestic and international visitors.

Linking Global Gateway and Satellite cities to Sydney

The demand for travel between Sydney and the cities of Newcastle, Canberra, Gold Coast, Brisbane and Melbourne will continue to grow as global connections become increasingly important. With recent significant investment in road infrastructure on the corridors linking these cities (Pacific and Hume Motorways), alternate public transport links have significant room for improvement in journey times to become competitive with car and air travel.

Emerging technologies for land based long distance travel are rapidly evolving however tested and proven methods of transport remain some time off and the previously federally investigated (2012) mode of high speed rail (HSR) was not deemed to be feasible until the 20+ year timeframe. Whilst the operation of emerging technologies are likely to be some way off, investigations into corridor preservation based upon the most constrained design criteria (HSR) should be investigated within the 10-20 year timeframe.

Another constraint for the implementation of higher speed connections is the requirement to navigate the complex urban environment and established transport network of Greater Sydney. To increase the potential passenger catchment, it is recommended that any higher speed connection travelling through Greater Sydney enters from Campbelltown and Hornsby and passes through Parramatta (Central City) where rapid connections to the metro network would provide access to the Eastern and Western Cities.

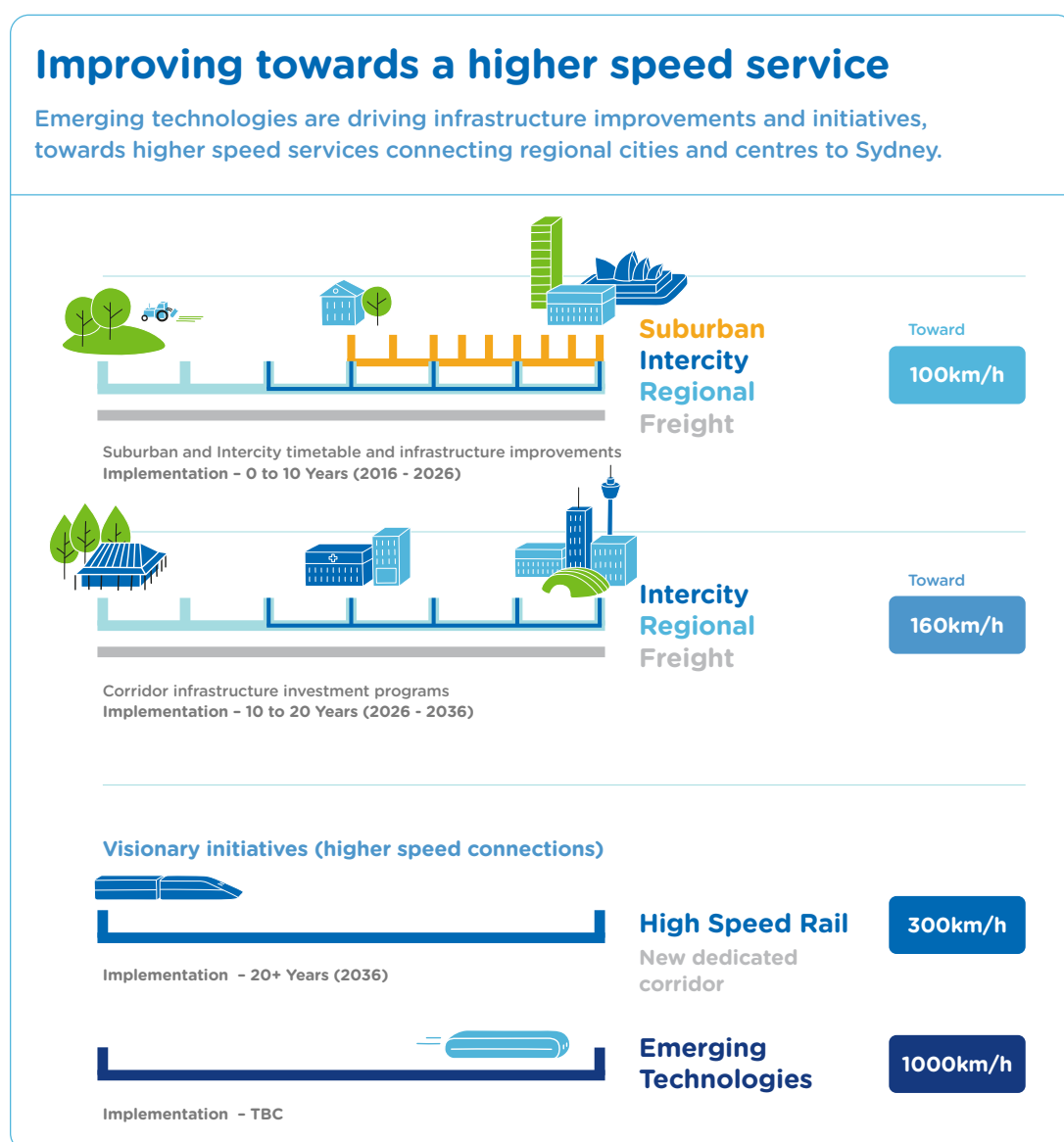


Figure 39: Options for connecting Global Gateway Cities to Sydney

In the next decade it is recommended that Faster Rail corridor infrastructure investment programs be focused on Satellite and Global Gateway cities to achieve significant travel time savings. For Wollongong and Gosford the aspiration is for a 60 minute journey time. For the Global Gateway of Newcastle the travel time aspiration is 2 hours, while for Canberra it is under 3 hours. The Australian Government has recently announced that it will provide matched funding for the development of a strategic business case for Faster Rail in the Sydney to Newcastle corridor. These investments will be required independently of the introduction of higher speed connections which would appeal to different rail travel markets (i.e. less or no stops and potentially higher fares) and deliver benefits to both passenger and freight flows.

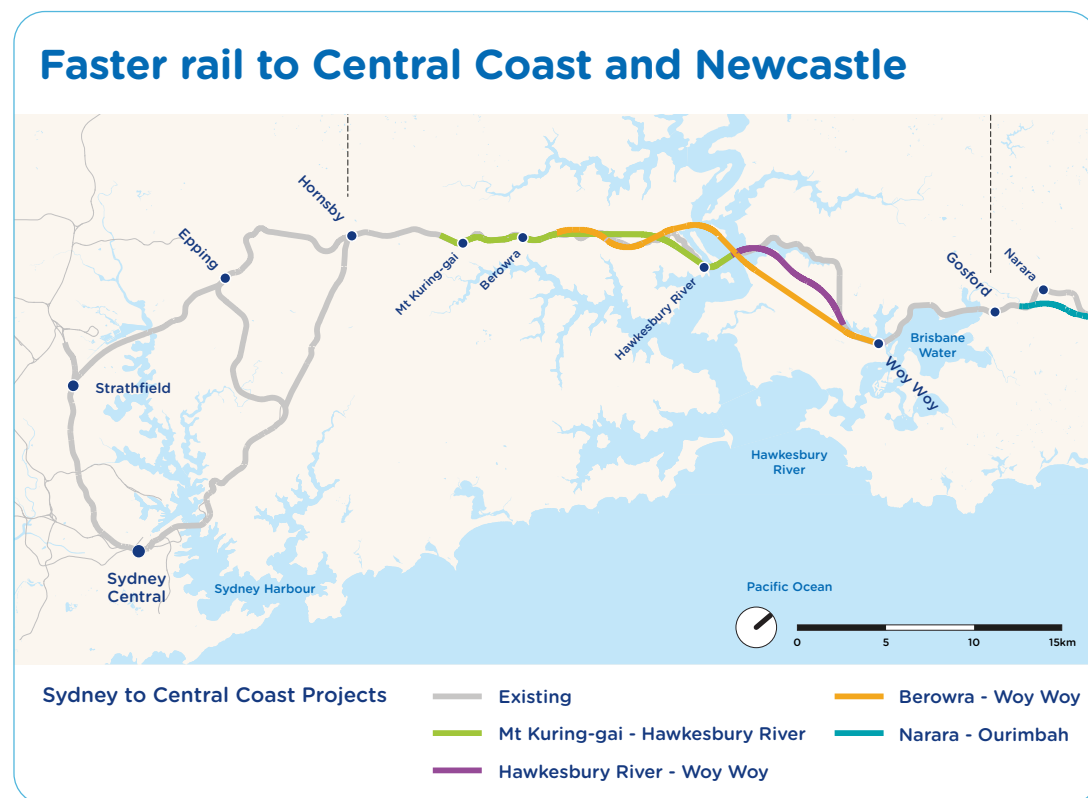


Figure 40: Potential Faster Rail improvements Central Coast and Newcastle rail line

Access to the trade gateways of Newcastle port and Port Kembla from inland NSW will continue to be important for the next 40 years with the movement of coal dominating the rail transport task. The establishment of a 24-hour International Airport in Western Sydney will also provide new opportunities for agriculture and passenger access from the Central West and Orana and South East and Tablelands.

Importance of connections to closest regional city

A change in approach to providing transport in regional NSW will be a shift away from a network focussed on servicing trips to Sydney to providing more services and facilities in regional cities and leveraging changes in technology to reduce the need to travel long distances.

Journey to Work data shows there is a strong connection between regional centres and their associated regional cities and towns. These connections will remain important and are likely to benefit from improved transport connections between regional cities.

The challenge is to serve these trips as conveniently, safely, efficiently and financially sustainably as possible through new and more flexible transport service models and the leveraging of technological enhancements.

Importance of regional city to regional city connections

Previous regional planning has focussed on the connections of regional cities within a region. Whilst these will remain important, safe and efficient links to regional cities in adjacent regions is considered just as important as different products and services or service levels may be offered in other regional cities.

As previously discussed, the investment in transport infrastructure in the past 20 years has focussed on creating efficient north-south connections between regional cities. A future focus on east-west connections between the inland and coastal geographies will support the growth of population on the coast whilst also opening up tourism and trade connections to the inland regions.

New Intercity Fleet (NIF)

A new fleet of long distance, intercity trains from Sydney to the Central Coast, Newcastle, the Blue Mountains and the South Coast is on the way. The first of the double deck trains consisting of 500 new train carriages will be delivered in 2019 and the rest of the fleet will progressively follow. A portion of the new fleet will be serviced and maintained at a new purpose-built train maintenance facility being built at Kangy Angy on the Central Coast whilst modifications are needed to existing maintenance and stabling facilities at Eveleigh, Broadmeadow, Wollongong and Port Kembla.

Some existing rail infrastructure also needs to be upgraded on the intercity network to accommodate the introduction of the New Intercity Fleet. This includes:

- › Platform extensions
- › Installation of CCTV, PA, lighting and station furniture, where required
- › Modifications to station platform edges
- › Modifications to infrastructure within the rail corridor, including the installation and relocation of signalling and overhead wiring structures
- › Re-positioning of rail tracks along parts of the rail corridor

The key benefits for customers from the introduction of the New Intercity Fleet are:

- › Two by two seat layout, wider seats with arm rests, and more space
- › Charging stations for each seat, digital screens, air conditioning, CCTV and passenger intercoms
- › Dedicated space for luggage, prams, bicycles and wheelchairs, plus accessible toilets

Active transport in our regional cities, centres and towns

A key to supporting the growth and vibrancy of our regional cities, centres and towns through transport is making them places people want to walk and cycle in.

Walking and cycling contribute to the amenity of places. They provide opportunities for social interaction and increase the perception of safety in places through passive surveillance. Places with a high amenity are also generally places people want to travel through and spend time in. This often means more money being spent locally.

Walking and cycling also have a number of other benefits – they contribute to the health of people by preventing serious illnesses like diabetes, heart disease and anxiety and depression as well as reduce the impact on the environment when people choose to walk or cycle rather than drive.

Across NSW, Walgett, Barraba, Bourke, Braidwood and Bingara have some of the highest percentages of people who walk to work in their community. Similarly, Byron Bay, Mullumbimby, Iluka, Broulee and Ballina have some of the highest percentages of people who cycle to work.

Our regional cities, centres and towns already outperform Greater Sydney in the average percentage of people who walk or cycle to work. We will continue to work with local government and other key stakeholders to build on this great base and support our regional cities, centres and towns.

Active journeys to work by region

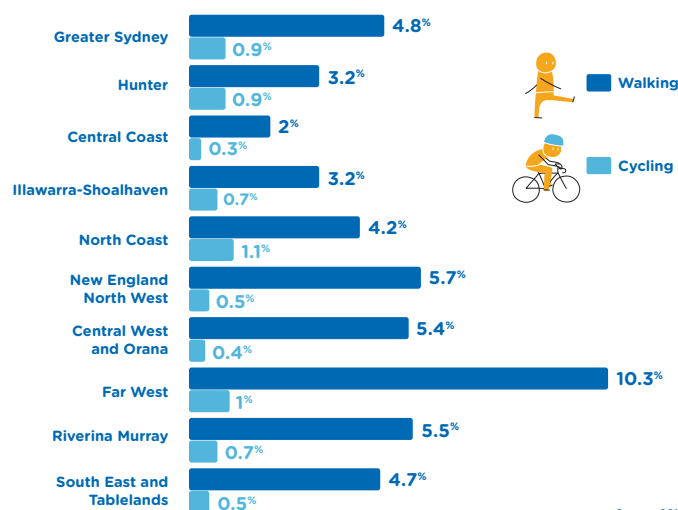


Figure 41: Mode share to work (Source: Journey to Work 2016)

Customer Outcome 5: Responding to changes in land use, population and demand

Changes in land use, population and demand, including seasonal changes, are served by the transport system

Regional communities in NSW have always changed, developing and growing on the back of natural endowments and other economic opportunities. The regional transport network must also change, continuously planning and investing according to the current trends and predicted future needs of regional communities. As well as providing transport amenity in regional NSW, the NSW Government is committed to supporting economic growth and working with local communities, local government, industry and other regional stakeholders to respond to key new economic growth opportunities as they emerge.

This commitment requires an agile transport system which is supporting economic growth and responding to opportunities for new economic activation. We recognise the critical role that transport plays in supporting regional NSW, especially the role of the visitor economy, and in turn the role that regional NSW plays in the broader NSW and Australian economies. In this Regional NSW Services and Infrastructure Plan, and also the supporting Future Transport 2056 Plans such as the Freight and Ports Plan and the Tourism and Transport Plan, we're investigating initiatives which:

- ▶ Connect communities and businesses conveniently, efficiently and safely to their regional centre or city and onwards to capital cities and international markets
- ▶ Enable significant holiday and weekend movements associated with the visitor economy, seasonal demands related to agriculture and movements of Fly-in Fly-out workers
- ▶ Increase frequencies and span of hours for public transport services
- ▶ Deliver the most appropriate type of service for customer needs
- ▶ Improve port connections catering for significant freight movements and enabling improved market access and distribution.

Taking an integrated approach to transport services, infrastructure and land use allows us to more accurately predict and more appropriately respond to emerging trends including:

- ▶ Demographic trends within regions such as population growth
- ▶ Urbanisation such as the shift from rural areas to regional cities and centres
- ▶ Densification of land use such as is occurring along transport corridors, within identified centres and in proximity to areas of high land value and amenity.



Catering for the seasonal demand in Jindabyne

Every year the number of people in Jindabyne more than doubles in the winter ski season. This population grows even more during the school holiday periods and over weekends.

With this population growth there is an increase in demand for travel options to connect residents, temporary workers and visitors to where they need to go.

At peak times the existing road network reaches capacity. Weather events can mean road closures and travel delays.

Both Government and private operators are working to deliver solutions to improve travel options in the Snowy Mountains region.

The NSW Government has provided \$20 million to build new overtaking lanes and improve safety on the Monaro Highway and Kosciuszko Road.

See www.rms.nsw.gov.au/projects/south-coast/monaro-highway-kosciuszko-road/index.html for more information.

Private coach operators run seasonal services from Canberra and Sydney to the ski resorts during the peak winter months.

Additional flights are available over winter between Sydney and the Snowy Mountains Airport.

The point to point transport reforms have also opened up new opportunities for how transport services are provided. Local businesses have since been established in the Snowy Mountains region that provide people and groups direct and personalised transport.

Although there's still more work to be done, these are just some of the examples of how both Government and private industry are responding to changes in population and demand.

Customer Outcome 6: Economic development is enabled by regional transport services and infrastructure

Regional businesses and tourism are enabled by appropriate, coordinated, efficient and effective transport services and infrastructure

Providing transport amenity, supporting growth & realising potential

The NSW Government's Regional Development Framework provides an overall vision across Government for regional development in NSW and acts as a point of reference for work such as Future Transport 2056.

Critically, through the Regional Development Framework, the NSW Government recognises the importance of ensuring all regional communities can access the essential services of a modern economy. The NSW Government believes our geography brings enormous opportunity, and should not deter people from choosing where they live, work and play.

Transport plays a major role in bringing this vision to life through three underlying programs of investments which are best described as:

1. Providing quality transport services and infrastructure in regional NSW – ensuring a baseline set of transport services across regional NSW
2. Aligning effort to support growing regional centres, acknowledging the needs of areas with strong growth in population, jobs or both
3. Identifying and activating economic potential through new transport services and infrastructure.

Freight

The freight industry is one of the key drivers of regional economies. A number of service and infrastructure initiatives identified in this plan are targeted at addressing inefficiencies in the regional transport network which are impacting freight costs. A number of initiatives are also targeted at identifying and preserving key freight precincts and corridors to address urbanisation.

The rail corridors in the Hunter region move the most volumes of freight in the state with the major commodity being coal to Newcastle port. The Newell Highway, the Pacific Highway and the Hume Highway are currently the major road freight routes which carry over 10,000 kilotonnes per annum.

Over the next 20 years, rail freight growth is expected along the corridors in the Hunter, Illawarra and Sydney, with much related to accessing the three major ports. Road freight flows are expected to grow along the Pacific Highway, Hume Highway, Newell Highway corridors as well as the western half of the Sturt Highway.

Post 2036, road freight growth is expected to continue along the major north-south and east-west corridors across the state providing inter and intra state connectivity. However, the growth rate of coal, which is the biggest volume of freight movement in NSW, is expected to slow over the long term, and by 2036 its growth could be very modest, which will impact rail freight demand, particularly in the Hunter Valley Coal Chain.

We aim for regional NSW to have a modern multi-modal freight transport network with high quality service standards in cost, efficiency, safety, access and automation. We aim to lift freight productivity in regional NSW above recent results, in order to achieve a future with higher living standards through economic growth, and to minimise increases in congestion and other community impacts. Initiatives identified in this plan such as enabling HPVs have the potential to increase the competitiveness of regional businesses resulting in increased employment and lower costs to consumers.

Our detailed approach to the freight task in regional NSW is addressed in the draft Future Transport Freight and Ports Plan. We are working to fully integrate our strategy and planning across all tiers and areas of Government. The final Future Transport Freight and Ports Plan is being developed to align with the Australian Government Freight and Supply Chain Strategy, the NSW State Infrastructure Strategy, Department of Planning and Environment Regional Plans, and Regional Economic Development Plans.

Air freight

The NSW air freight task is a relatively small but strategically and economically significant part of the NSW economy. Domestic air freight movements are vital to business and industry in regional areas due to the diverse and high-value range of products which travel by air in the regions, such as medical supplies and high value electronic equipment. Air freight also provides fast delivery of time-sensitive fresh produce such as seafood, fresh fruit and vegetables.

Air freight is moved by commercial operators in two ways; either using specialist freight aircraft or within the belly-holds of passenger aircraft. Due to the small size of passenger planes that serve many regional airports as well as runway size constraints, many industries rely on specialist, just in time, air freight services.

Regional NSW businesses are also increasingly accessing air freight through emerging international freight gateways such as Canberra airport and the privately funded Wellcamp airport in Queensland. The development of Western Sydney Airport and its associated freight capability will provide potential new routes for regional freight and expanded operating times to support increased aircraft movements from regional airports.

The visitor economy

The visitor economy is one of the key drivers of regional economies. Service and infrastructure initiatives identified in this plan are targeted at supporting the attraction of people to regional NSW and also an uplift in the tourist experience through improved transport infrastructure and end-to-end customer journey offerings. Initiatives such as road improvements, integrated ticketing and cruise facilities have the potential to deliver improved visitor experiences resulting in new regional jobs and economic growth. Our detailed approach to both the freight task and the visitor economy in regional NSW are addressed in two supporting plans; the Future Transport Freight and Ports Plan and the Future Transport Tourism and Transport Plan respectively.

Rail trails

Rail trails unlock scenic public land in regional areas offering tourists and local residents a safe option to walk, cycle, jog or use other non-motorised forms of transport such as bicycles. The economic benefit of rail trails includes the creation of jobs in local communities and other economic benefits for local businesses associated with tourism such as increase expenditure on accommodation, food and participation in regional events.

In June 2015, the NSW Government announced \$4.9 million funding for the Rosewood to Tumbarumba Rail Trail pilot project. The proponent demonstrated effective community consultation, a viable operating model and the ability to generate economic benefits.

In June 2017, following significant community engagement and work by local and NSW Government agencies in the proposed rail trail, the NSW Government passed the ***Transport Administration Amendment (Closure of Railway Line between Rosewood and Tumbarumba) Act 2017***, which has allowed the development of the Rosewood to Tumbarumba rail trail.

This pilot rail trail project is providing the opportunity to both identify the full range of tourism and recreational opportunities presented by rail trails and also clarify and address issues such as biosecurity and privacy related to the establishment of rail trails on disused rail corridors in NSW. The NSW Government is also undertaking consultation with communities that are proposing to develop rail trails to inform Government about community attitudes to future rail trail development.

The NSW Government retains ownership and control of the public land associated with rail trail development, therefore preserving the rail corridor for re-opening in the future should it be required.

Inland rail

The Inland Rail project is a significant addition to the NSW rail freight network which provides an opportunity to consider freight network fundamentals and also to realise a range of benefits for NSW industries.

In a competitive business environment, industry are naturally seeking information and certainty to plan, invest, and ultimately increase revenues and reduce costs. A key focus for the NSW Government is to ensure that Inland Rail optimises the movement of freight in regional NSW through efficient linkages to NSW ports and the development of economically sustainable freight hubs by the private sector at appropriate locations along the route. For example, Parkes as a regional centre with a key strategic location along the Inland Rail route is emerging as a logical major freight hub in the future.

All levels of Government are working together to realise the potential of Inland Rail for regional NSW

The Australian and NSW Governments have provided grant funding to local government through the Murray Darling Basin Regional Economic Development Program to undertake studies and planning to optimise the commercial and other economic development opportunities associated with the Inland Rail project. Funding has been made available to Local Government Areas along the Inland Rail route including Moree Plains Shire Council and Narrabri Shire Council to undertake activity such as strategic planning and preliminary design work including identifying road access and critical 'last mile needs' especially with a view to new major intermodal opportunities.

The NSW Government is working collaboratively with the Australian Government and ARTC to deal with a large number of complex issues. This plan identifies a number of early initiatives for investigation, such as bridge upgrades to allow double stacking on the Inland Rail, however the final NSW Freight and Ports Plan will reflect the final arrangements agreed with the Australian Government and ARTC. It will also consider the infrastructure investment requirements to address east-west rail implications such as network upgrades to key rail hubs and junctions with a focus on more efficient connections between inland NSW and global gateway ports on the coast.

Intermodal terminals (IMTs) will enable growth

IMTs play a critical role in the transport of freight, facilitating improved productivity and efficiency across the network, and acting as a key enabler for increasing rail share. By facilitating landside efficiencies, IMTs also ease capacity constraints at NSW ports and the surrounding road network resulting from growing containerised freight volumes. The introduction of Inland Rail and the strengthening of connections to the State's ports provide the opportunities for IMTs to play a larger role in growing regional NSW's economic output.

There are currently 45 sites identified as intermodal container terminals in regional NSW (sites outside the Sydney Trains network), with 33 operational, 10 proposed (in planning) and two currently non-operational.

Within Greater Newcastle, intermodal facilities are operated by freight forwarders and transport operators at strategic locations. In other regional areas, the terminals have generally evolved around pre-existing rail infrastructure with few greenfield sites being developed as intermodal terminals.

There are three operational 'border' sites at Bromelton (QLD), Merbein (VIC) and Wodonga (VIC) which attract freight from NSW. There is also a proposed 'border' site at Fyshwick (ACT) and a non-operational terminal at Kingston (ACT). Another terminal at Goondiwindi (QLD) is currently only supporting road based operations.

Intermodals are commercial enterprises operating for profit. The NSW Government has an important role to support the private sector transport industry and broader regional economic development, including working with businesses to identify and realise investment opportunities which provide an appropriate benefit to regional communities and their economy. In a transport context, this can include working with proponents on issues such as planning and provision of multi-user last-mile transport infrastructure connection. However the final decision on the viability, investment, location, services, private-use infrastructure, warehousing and logistics of commercial enterprises such as IMTs is a decision for private operators.

The Inland Rail project may encourage the development of new IMTs in regional areas where the new alignment could allow the operation of longer or heavier trains. A key focus for NSW is to ensure that Inland Rail optimises the movement of freight in regional NSW through efficient linkages to NSW ports and the development of economically sustainable freight hubs by the private sector at appropriate locations. Efficient links to Port Botany, Newcastle port and Port Kembla will be essential.

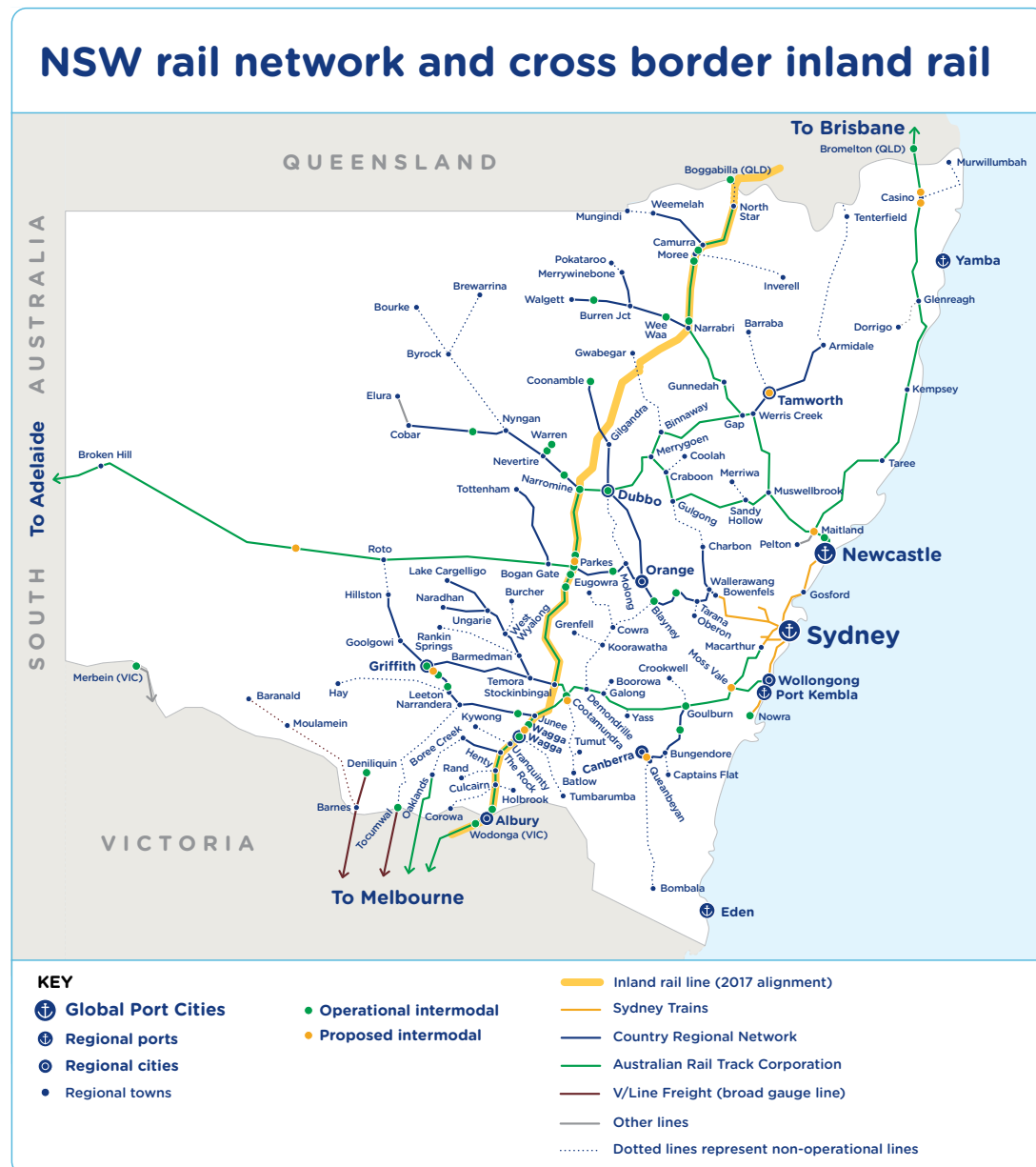


Figure 42: NSW rail network and intermodals terminals in regional NSW

Regional Economic Development Strategies will support regional-level planning

The NSW Government and local Councils, in collaboration with industry, are completing Regional Economic Development Strategies (REDS) covering all regions in NSW in the first half of 2018. The REDS identify a range of projects and other initiatives, including transport projects and initiatives, which can be undertaken to support and stimulate regional growth. Where these strategies identify state-wide transport projects or initiatives they have been considered in Future Transport 2056 whilst region-specific or local projects and initiatives will be considered during the development of region-level plans.

Red Bend Silo last mile road improvements

In 2016/17 an upgrade of 4km of local roads connecting to the Newell Highway has enabled road train access to Red Bend Silo, resulting in greater economic value and fewer vehicle movements.

Red Bend Silo is a grain receival site located in Red Bend near Forbes, Central West NSW. The site processes 60,000 tonnes of grain per year on average and is identified by GrainCorp as a primary site.

Prior to the road upgrades road train access was not available from the Newell Highway to the Red Bend Silo as there were three undersized intersections as well as road sections with overly narrow pavement widths. As a result smaller combinations of heavy vehicles had to be used, or road trains had to be decoupled into smaller units.

Enabling road train access has significantly reduced the volume of trucks on the road, creating an economic benefit for many stakeholders, including farmers, truck operators and GrainCorp by increasing the efficiency of this task. Local councils and RMS have also benefited from reduced wear and tear on road infrastructure.

Customer Outcome 7: Safety

A safe transport system for every customer with zero deaths or serious injuries on the network by 2056

Every customer reaching their destination safely is the most fundamental requirement of the transport system, and NSW will have a network with zero trauma by 2056. Over the past 5 years an average of 350 lives have been lost and more than 12,000 serious injuries have occurred every year, while the cost of trauma to the community is over \$7b a year (Source: Centre for Road Safety, data 2013 to 2017).



Figure 43: Cost of road trauma in NSW per year – average over past 5 years (Source: Centre for Road Safety)

Regional road safety

This is a particular challenge on regional roads, where one-third of the population live but two-thirds of road deaths occur. The Road Safety Plan 2021 sets new priorities and helps NSW work towards the State Priority Target of a 30 per cent reduction in road fatalities from 2008–2010 levels by 2021. New road safety targets will be set every 10 years to continue to move Towards Zero trauma on our roads by 2056.

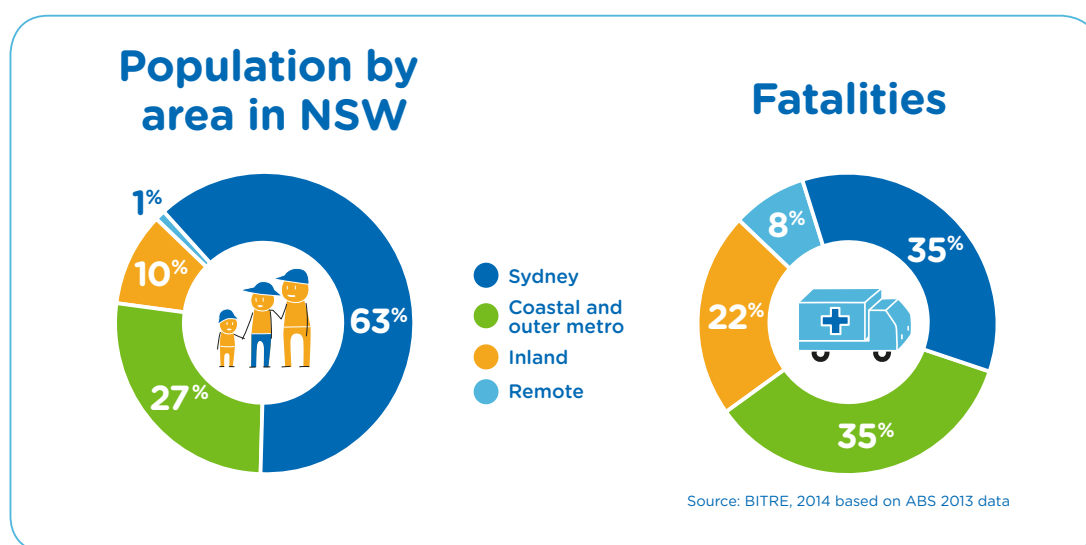


Figure 44: Population and road fatalities by area in NSW (Source: BITRE, 2014 based on ABS 2013 data)³

We will work towards achieving zero deaths or serious injuries through a Safe System approach where we plan services and design infrastructure to integrate with human behaviour to prevent trauma. It involves all elements of the system (infrastructure, vehicles, speeds and people) working together to ensure safety and in a way that accounts for human error.

³ Definition of regional NSW in this graphic differs from that in Road Safety Plan 2021 released 6 February 2018.



Figure 45: Safe Systems Approach (Source: Centre for Road Safety)

Saving Lives on Country Roads program

To address the trauma experienced on regional roads, the NSW Government will implement a new Saving Lives on Country Roads program to install and upgrade safety features on country roads and reduce run off road crashes, crashes on curves and head on crashes. It will:

- Address high risk curves through improved curve signage, widened shoulders, vehicle activated signage and safety barriers
- Reduce crash types commonly related to lane departure and driver fatigue by installing wide centre lines, flexible barriers, audio tactile (rumble) line marking and sealed shoulders
- Deliver a targeted Saving Lives on Country Roads public education campaign
- Partner with local councils, community groups and industry to support grassroots Towards Zero initiatives
- Ongoing targeted Police enforcement to reduce risky behaviour common in crashes on country roads
- Enhance planning and design of major road projects and upgrades with safety at the core
- Identify high risk roads and, in consultation with the community, review travel speeds where there are limited road safety features protecting people if there is a crash
- Continue to deliver the Safer Roads Program to improve road safety on country roads, including works to upgrade features on regional motorcycling routes.

These initiatives will be integrated with other initiatives identified throughout the Road Safety Plan 2021 to deliver a safer road system in regional NSW. This includes measures to increase the uptake of safe vehicles by regional NSW residents, enhance enforcement to shift unsafe behaviour, deliver targeted public education, implement legislative changes to allow camera based technology to enforce mobile phone use offences and engage with regional NSW communities, councils and businesses.

Level crossings

There are more than 3,800 level crossings in NSW. Of these more than half are on public roads, with the remainder on private roads. Level crossing collisions between trains and vehicles are a major road safety risk.

Individual rail and road agencies are responsible for managing and funding level crossing safety on their rail networks. Local government agencies are asked to contribute one-third of the cost for level crossing upgrades on local roads.

Level Crossing Improvement Program

We allocate supplementary funding for level crossing upgrades and to support initiatives such as safety awareness and police enforcement campaigns through the Level Crossing Improvement Program (LCIP).

Upgrade locations funded by the LCIP are identified through a priority ranking approach using the Australian Level Crossing Assessment Model (ALCAM), a review of NSW safety incident data and consultation with relevant road managers and rail infrastructure managers.

Level Crossing Policy

To minimise risks to the public, Transport for NSW has developed two policy positions:

- › **Construction of new level crossings** – new level crossings are to be avoided and all other options including grade separation and use of existing level crossings should be explored before a new crossing is proposed
- › **Level crossing closures** – public and private level crossings should be closed wherever it is practical and cost effective to do so. Access can often be managed by a grade separation or by redirecting traffic via an alternate route.

<https://www.transport.nsw.gov.au/projects/programs/level-crossing-safety>

Technology making our roads safer

Cooperative Intelligent Transport Systems (C-ITS) allow vehicles to communicate with other vehicles and infrastructure to improve road safety. Drivers receive alerts about upcoming hazards and traffic signal information. The technology is sometimes referred to as 'connected vehicles'.

The NSW Centre for Road Safety has established Australia's first C-ITS testing facility. Based in the Illawarra region, the trial has fitted C-ITS technology to:

- › 60 trucks, 11 public buses, 2 light vehicles and 1 motorcycle
- › 3 signalised intersections, broadcasting signal phase information to C-ITS equipped vehicles
- › 1 portable roadside unit broadcasting speed limit information to C-ITS equipped vehicles
- › 3 portable roadside units receiving and collecting data from C-ITS equipped vehicles.

Drivers in participating vehicles see the following safety messages:

- › Intersection collision warning
- › Harsh braking ahead warning
- › Red light alert when light is red or amber
- › Speed limit information.

Video showing how the trial of new technology allows drivers to receive safety messages about upcoming hazards: https://youtu.be/dNgm_QRcwnq

CITI Light Vehicle Study

CITI is being expanded to include 50 light passenger vehicles. The study will investigate the potential safety benefits and user friendliness of the system.

<http://roadsafety.transport.nsw.gov.au/research/roadsafetytechnology/cits/citi/light-vehicle-study.html>

Wildlife crossings on the Pacific Highway

Animals on our roads are a safety issue. One in every 41 casualty crashes on country roads involves a vehicle hitting an animal ([Centre for Road Safety](#)). When animals stray onto the road it's hard to know what they'll do next. Kangaroos, wombats, emus and stray stock can move fast and be extremely unpredictable.

The upgrade of the Pacific Highway has been recognised across Australia and the world as a leader in reducing animal strikes and maintaining habitat connectivity.

Measures such as fauna crossing structures, food trees and fauna fencing have been implemented along the Pacific Highway to cross upgraded sections of the Pacific Highway.

This ensures that animals, including koalas, potoroo and other species can successfully cross the road.

The section between Woolgoolga and Ballina is currently being upgraded with:

- › 25 fauna crossing structures
- › 130 hectares of koala food trees to encourage koalas to access the crossing structures
- › 16 kilometres of fauna fencing to prevent animals from reaching the roadway.

Customer Outcome 8: Network Resilience

A transport system that is resilient to significant weather events, including floods, fog and bush fires

Weather events impacting the transport network affect connectivity and can have significant social and economic costs for regional communities and businesses. Inland and Remote areas, in particular the Far West, face resilience issues. Increased resilience in the transport system will improve access and reduce isolation for communities affected by severe weather events and also avoid service disruptions and associated negative impacts on business costs and the regional economy.



Figure 46: Road closures due to flooding & landslip

Types of severe weather events and their potential impacts include:

- › Closure of a major highway due to flooding or bushfire increasing travel times, isolation and costs to business as well as reducing access to homes, services, employment, and tourism
- › Closure of a rail line due to extreme heat or bushfire impacting on the short-term usability of infrastructure and services by both passenger and freight customers
- › Regional flights grounded due to fog which impacts the timely movement of people and freight to their destination.

The challenge may increase if extreme weather events become more frequent. Asset planning needs to continue to consider how drainage can be built in to the road network, so that our roads don't inadvertently act as flood levy banks.

Inland and Remote areas, in particular the Far West, face resilience issues. Given the region's remoteness, and relative transport disadvantage, transport has a critical role in providing access to essential services.

The introduction of the hub and spoke model will be fundamental to the way in which regional resilience is planned. Ensuring that regional centres, towns and remote communities are connected to their regional cities will provide redundancy in the transport network to cope with and respond to local events and broader natural disasters.

Investment decisions in regional transport assets, and also the standard to which they are designed, will take account of future climate risks and the need for increased resilience. If extreme weather events become more frequent, the long term costs of being prepared by making assets more resilient to extreme weather events is likely to be lower than the cost of recovery.

Costs of the Newell Highway closure in 2016

A study was undertaken to estimate the direct and indirect cost of the flooding in the Bland Creek catchment which led to the closure of the Newell Highway between West Wyalong and Forbes. The road was closed on 23 September 2016 and reopened on 4 November 2016. A total of 43 days.

Cost identified included:

- › Increased road freight transport costs
- › Loss in tourism expenditures
- › Loss of agriculture production
- › Increased road maintenance expenditure.

https://infrastructure.gov.au/transport/freight/freight-supply-chain-submissions/Newell_Highway_flood_report.pdf

Resilience initiatives

A number of initiatives identified in this plan are part of building a resilient network.

- › Resilience Package – improving immunity for flood prone regional roads.
- › Road sealing initiatives such as the Wool Track and Silver City Highway and the continuation of Sealing Country Roads Program.
- › Slopes and culverts condition program – program to progressively address and improve the conditions of slopes and culverts in the network.
- › Investigate implementation of traffic incident and information services for management of all road closures (ie floods and natural disasters).
- › Road improvements such as Golden Highway, Henry Parkes Way, Barrier Highway (Dubbo-Broken Hill), Castlereagh Highway (Mudgee-Lithgow), the Lakes Way corridor, New England Highway, Oxley Highway, Kamilaroi Highway, Summerland Way, Gwydir Highway, Sturt Highway, Kidman Way, Newell Highway, Snowy Mountains Highway, Lismore to Bangalow Road, Lachlan Valley Way and Mitchell Highway will include flood immunity works.

Customer Outcome 9: Accessibility to employment and services

Accessibility to employment and services such as health, education, retail and cultural activities within regional cities and centres

Tomorrow's transport system will see personalised, integrated service provision and a fully accessible network that enables people who find it difficult to access transport services today to use transport when and how they want to in the future.

Improving transport access for regional NSW encompasses three key themes:

- › Geographic accessibility
- › Social accessibility
- › Accessibility for people with mobility constraints, which is particularly important with our growing and ageing population.

Accessibility outcomes	Geographic Accessibility	Social Accessibility	Accessibility for people with mobility constraints
Greater coverage	X	X	
Improved information and legibility		X	
Flexible and personalised services	X	X	X
An equitable and uniform fare structure		X	
Physical infrastructure		X	X

Greater accessibility will mean better connections to places and opportunities for employment, education, business and enjoyment, especially for those people with few transport options today:

- › People living in remote communities and smaller towns
- › People of all ages including the young and older age groups
- › People on low incomes
- › People with physical disabilities.

Greater coverage

- › A transport system that provides greater coverage across NSW including day return regional centre connectivity for an expanded geographical catchment
- › Same day connectivity to Global Gateway cities or capitals for all locations in NSW either:
 - Directly, by air or rail services
 - Indirectly, by bus/coach, air or rail
- › An equitable transport system that provides connections to all settlements
- › A transport network that enables seamless and affordable inter-regional and cross-border travel
 - Transport services improve opportunities for people and industry to travel easily and affordably interstate
 - Travel to your nearest centre or city without penalty
 - We will work collaboratively with other State governments to remove barriers and improve connectivity for communities and industries of NSW.
- › Provide for trips within centres, between centres and between regions
- › Change to land use and activity patterns are responded to and influence the transport network.

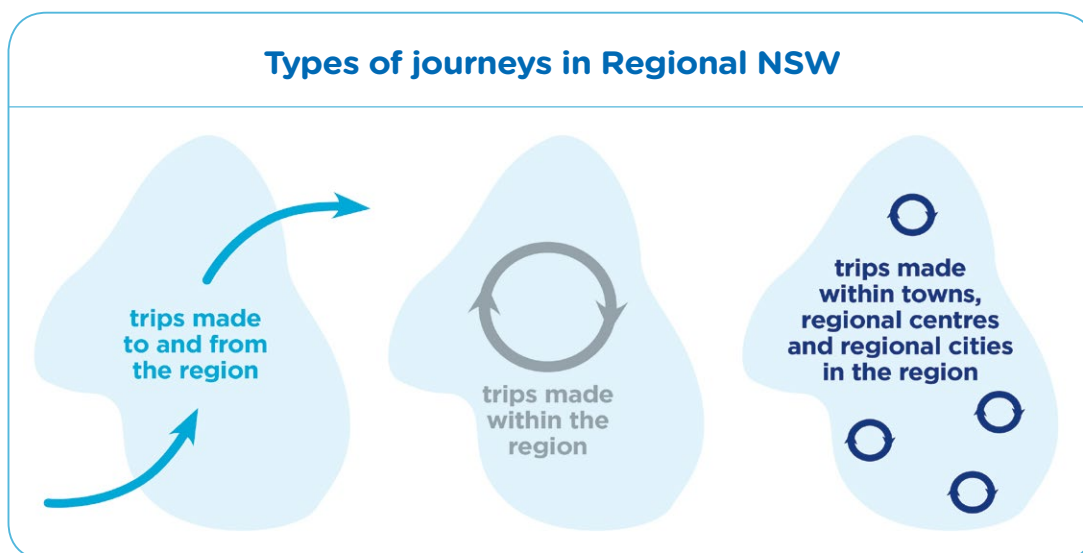


Figure 47: Types of journeys in regional NSW

Improved information and legibility

A transport system that is easy to understand:

- › Comprehensive, accurate information to promote confidence in the passenger transport system and deliver a positive customer experience
- › Mobility as a Service (MaaS) – real time information and booking access to a broad range of transport modes
- › Wayfinding improvements, visitor information and regional promotion.

Flexible service and personalised services

A transport system that through flexible service delivery models:

- › Provides personalised services
- › Serves multiple destinations (particularly isolated communities)
- › Enables customers to access services (e.g. Health, shopping, etc.) that are not ordinarily available through regular scheduled services
- › Transport services that support tourism movement demands and seasons.

An equitable and uniform fare structure – alignment of fares in regional NSW with metropolitan Sydney

Following recommendations by the Independent Pricing and Regulatory Tribunal (IPART) bus fares in regional NSW will be reduced by almost 30 per cent on average. More affordable fares will provide equity across NSW and encourage social inclusion. The changes were introduced on 5 March with a simpler fare structure with 10 standard fare bands.

Significantly, for the first time people in regional NSW will be able to purchase a Daily Ticket that will provide them with unlimited travel within certain sections on a day. Eligible concession holders will pay half the adult fare for the Daily Ticket and the Regional Excursion Daily ticket for pensions will remain at \$2.50.

Other recommendations from the IPART review will continue to be investigated such as restructuring services to better match emerging needs, including on demand services. This new fare structure also provides an opportunity to introduce a next generation ticketing system.

Future ticketing for regional customers

As well as the new fare structure for buses in regional NSW there are a number of new ticketing initiatives underway that will further benefit regional customers:

- › Transport for NSW is trialling new ways customers can pay for their travel such as contactless payments with credit and debit cards on Sydney Ferries. These payment systems are already available in places like London, while Singapore is due to roll-out contactless payments via wearable technology such as smart watches.
- › Investigations into the implementation of on-board technology that tracks vehicles and passenger boardings in regional fleets could facilitate the implementation of next generation ticketing.
- › NSW TrainLink Discovery Pass that offers customers unlimited booked travel anywhere and as often they like on the NSW TrainLink regional train and coach network.

Physical infrastructure

Ongoing improvements to infrastructure including buses, trains, bus stops, train stations, etc. to enable whole of journey accessibility for all customers regardless of age or mobility constraints, through:

- ▶ Transport Access Program (TAP) – delivers upgrades to improve accessibility for all pedestrians to get to, from and around public transport interchanges. The Program ensures that all stations comply with the requirements of the Disability Discrimination Act
- ▶ Country Passenger Transport Infrastructure Grants Scheme (CPTIGS) for bus stop upgrades.

New express commuter bus service to Lismore

A new express bus service trial providing better links with the major regional hub of Lismore commenced in December 2017 for 6 months. The service reflects community feedback and provides connectivity from Byron Bay to Lismore via Lennox Head and Ballina to health facilities, a major regional hospital, the University and other services in Lismore. It is aimed at providing an alternative to car travel, enabling customers to get to Lismore before 9.00 and return home after 5.00pm. Previously customers could only access a shared school service.

The new service is an example of how the NSW Government is rethinking the way we move as part of Future Transport 2056. The service is about encouraging more personalised and better transport outcomes over the coming 40 years.



Bourke/Brewarrina to Dubbo day return trial

People from Bourke, Brewarrina and towns along the way will be able to travel safely and comfortably to Dubbo, spend up to four hours in town and return home later that afternoon. Currently, people travelling from Bourke or Brewarrina to Dubbo, have to stay overnight or organise their own return travel as there's no day return option.

Starting in 2018 as a trial, the additional service(s) will provide more flexibility to travel to the regional centre of Dubbo for medical and business appointments, shopping, recreational activities or to catch-up with friends and family.

Transport for NSW sought community feedback through a survey in late 2017 to help in determining the preferred day(s) and times of travel when the trial begins in 2018.

<https://www.transport.nsw.gov.au/projects/current-projects/new-coach-services-for-dubbo-region-trial>

Customer Outcome 10: Improved connectivity, integrated services and better use of capacity

Customers will enjoy improved efficiency and reliability from their network

An efficient and reliable network

A future regional transport network will:

- › Provide reduced journey times and increased reliability
- › Provide improved accessibility and coverage
- › Keep our communities connected (especially for Inland and Remote geographies that are more reliant on the road network for connectivity)
- › Improve the efficiency and safety of freight and passenger movements, especially those that move east-west.

We will improve the efficiency of the regional transport network by:

- › Taking advantage of technology advancements to improve the efficiency of the transport system
- › Creating an integrated transport system that connects communities, consisting of services within centres, services between centres, services between regions
- › Improving multi-modal interchanges in regional cities and centres to enable seamless connections with local services e.g.
 - Utilising demand responsive services from remote towns and villages to interchanges within regional cities and centres
 - Facilitating easy and direct walking and cycling access to and from interchanges, through wayfinding as well as provision of bike storage/end-of-trip facilities
 - Breaking down the regulatory barriers to efficient cross-border travel and trade.

Improved productivity of the broader road network and rail network

The productivity of the regional road network will be improved through:

- ▶ Continued additional investment in the road network through the Fixing Country Roads program, as well as the harmonisation of heavy vehicle regulations
- ▶ Investment in heavy vehicle access to provide the critical linkage from main roads (including regional road network) to highways and strategic road corridors, while ensuring exposure to risk is managed
- ▶ Implementing the movement and place road planning framework to enhance the movement corridors and place function of our regional cities and centres
- ▶ Undertaking a NSW Roads Classification Review to ensure investment and asset management is funded and managed by the appropriate levels of government to meet future movements
- ▶ Improvements for the crossing of the Great Dividing Range from the Central West and Orana via Great Western Highway for freight movements and the Bells Line of Road corridor as an alternative corridor to Sydney and the Golden Highway to Newcastle.

The regional rail network will be improved through:

- ▶ Investment in Faster Rail between the key Global Gateways (Newcastle, Canberra) and Satellite cities (Wollongong, Gosford) through major investment in track straightening, signalling improvements to maximise the operational capabilities of the New Intercity Fleet and the Regional Rail Fleet Project
- ▶ Replacement of the entire regional Rail Fleet which will lead to improved levels of passenger comfort and operational performance as well as providing jobs for regional cities
- ▶ Investment in east-west rail capacity from the Inland regions to the ports to capitalise on the opportunities generated by Inland Rail
- ▶ Introduction of the More Trains, More Services Program which will facilitate the separation of inner urban and intercity services and freight on the T1 Western and Northern line and the T4 Eastern Suburbs and Illawarra line
- ▶ Select investments through the Fixing Country Rail program in the non-mainline rail network to improve rail freight productivity such as improvements to axle weight capacity, track speeds, siding lengths
- ▶ In coordination with the Australian Government, investigate improvements to lines leased by ARTC (remove speed restrictions, curve easing etc.).



Figure 48: Freight movements in NSW

Improved connectivity to ports

Planning for future growth in the movement of goods across NSW and within our regional areas is critical to improve reliability in the import / export freight supply chain. In addition to three main NSW ports at Port Botany, Port Kembla and Newcastle, the ports of Melbourne and Brisbane will become increasingly important to the Riverina Murray and Northern NSW respectively with the implementation of Inland Rail.

Newcastle port

Newcastle port is the world's largest coal export port, and one of Australia's largest ports with 168 million tonnes handled in 2016. In addition to coal, other cargoes include alumina, petroleum, fertilisers, grains, cement and steel. Newcastle port will continue to be the primary coal export facility for NSW, and will continue to diversify into other commodities including fuel as well as supporting the growing cruise ship industry.

The value of cruising to the Hunter region has been estimated at approximately \$11 million per year, and is set to grow. The Newcastle cruise terminal has already been announced and is funded.

Two hundred hectares of vacant port land is available for future port capacity development, representing over 25% of total land holdings at the Newcastle port. The growth and diversification of the Hunter region will stimulate a requirement to expand the port's facilities with strong support for the investigation of containerised freight facilities.

Improved road and rail connections, from regions such as the Central West and Orana and New England North West feed into the Newcastle port and will contribute to growth.



Improved separation of freight and passenger trains – what’s good for rail freight is good for rail passengers

Better separation of freight and passenger trains is a key focus of our plans for the future, providing real benefits to both these customers. One of the limitations on more freight being carried by train both within regional NSW and on the corridors connecting it to Greater Sydney is that freight trains mainly rely on tracks that are shared with passenger trains.

As passenger trains are prioritised, this means moving freight by rail is often less reliable and efficient than other forms of transport.

We will address this by investing in more dedicated freight rail lines, providing dedicated link between Port Botany and intermodal terminals in the Western Parkland City. This includes upgrading the Port Botany rail line to increase capacity and investigating delivery of the Western Sydney Freight Line to provide 24/7 dedicated freight rail access between the port and intermodal terminals.

To improve the reliability of connections between Greater Sydney and regional NSW, we will also investigate capacity improvements to the Northern Sydney Freight Corridor and Southern Sydney Freight Line and protection of a Lower Hunter Freight Corridor.

Port Kembla

Port Kembla handles commodities such as grain, coal and motor vehicles. Port Kembla will act as a progressive overflow facility for Port Botany once its operational capacity has been reached for containerised freight. This is expected to occur after 2040, with Port Kembla requiring development to increase its capacity to accommodate the overflow.

There are existing challenges accessing Port Kembla, including interaction with the metropolitan network for volumes from Central West and Orana, sharing of the Illawarra line with passenger trains, and the limitations of Moss Vale to Unanderra line.

The NSW Government supports the use of rail for the movement of freight. While there is sufficient rail capacity in the short to medium term, freight rail access to Port Kembla is recognised by Infrastructure Australia as an initiative of national priority.

Port of Eden

The Port of Eden is the southernmost deep water harbour in NSW on the Sapphire Coast. The Port of Eden services the needs of regional industries, including fishing, forestry exports and, is an emerging cruise ship destination, whilst playing an important role for the Royal Australian Navy.

The Port of Eden Infrastructure Improvement Program is delivering new boating infrastructure to improve maritime safety in Twofold Bay. The NSW Government has also committed \$32 million for the Breakwater Wharf Extension Project, which will allow cruise ships to berth in Eden rather than the current transfer of passengers via tender to the wharf.

Port of Yamba

The Port of Yamba is located at the mouth of the Clarence River. It serves the North Coast region and is the home port of the state's second largest fishing fleet, handling a range of commodities.

It is currently the smallest port in NSW, with only 18 trading vessel visits for 2015–16. Although Yamba has the potential to have a greater role as an export point for the agricultural and fisheries production of northern NSW, it is not currently viable to substantially expand port facilities due to environmental constraints.

Coastal shipping

The NSW Government understands that further investigation is warranted to assess the feasibility and viability to expand NSW inter and intra state coastal shipping, with particular regard to alleviating potential road and rail freight network constraints.

The challenges to freight cargo from inland or regional NSW, for example to coastal destinations, place substantial demand on the existing road and rail infrastructure network, as well as raise changes in the areas of road congestion and fatalities. Such an investigation will factor in the economic constraints, such as coastal freight pricing, infrastructure requirements and investment by industry.

We cannot rely on the physical network alone to deliver transport solutions

Whilst infrastructure provision is important, it is just one lever which can be pulled along with policy and service provision. There needs to be a focus on journey outcomes through appropriate modes and different models of service delivery.

Travel experiences need to be safe, as well as more personalised, flexible and easy to undertake. And the diverse needs of different customer groups all need to be addressed.

The way we deliver services will change, including Government's role. There will be a greater focus on customer outcomes – Government must anticipate and influence market forces to ensure the future transport landscape delivers on our objectives for the network. There is also a shift to TfNSW being the purchaser of services rather than the default provider.

Better land use planning will enable better management of the transport network and more efficient road space allocation will result in a reduced reliance on new infrastructure.

Maximising service delivery for community transport customers

Transport for NSW has invested in a new trip booking, vehicle scheduling and tracking technology for the community transport sector in NSW, known as CTABS (Centralised Trip Allocation & Booking System).

CTABS is a proven “Uber”-like system that enables community transport providers to improve the demand responsiveness of services to changing customer needs (e.g. short-notice bookings and cancellations). CTABS is about building capacity of community transport providers to meet future customer demand; both increasing services to existing customers and meeting the needs of a rapidly ageing population.

CTABS has potential to reduce costs of services for customers and government by enabling improved usage of vehicle and staff resources. For example drivers interact with a tablet in their vehicle so that staff in the office know where they are and when clients have been picked up or dropped off. Customer bookings can be added or removed from the driver's scheduled trip list based on where the driver is located.

If the signal to the tablet is lost in a mobile black spot, the tablet continues to record driver interactions and updates automatically once back in signal range. Drivers can also send automatic notifications to the office in the event of mechanical failure or an emergency.



Figure 49: Newcastle foreshore

CHAPTER

4

Service and
infrastructure
initiatives for
regional NSW

This section summarises the policy, service and infrastructure initiatives to support the customer outcomes, and includes initiatives that the NSW Government has committed for delivery in the next 10 years. There are also initiatives identified for investigation in the next 10 and 20 years and visionary initiatives beyond 20 years that will be subject to strategic business cases.

Initiatives to support the customer outcomes

We will investigate a range of initiatives to support the customer outcomes extending across the 40 year timeframe of Future Transport 2056, including both policy and service improvements as well as infrastructure improvements. These include initiatives that the NSW Government has committed to (over the next 10 years), initiatives for investigation for potential commitment or implementation in the 0-10 year and 10-20 year timeframes and visionary initiatives that may be investigated within the next 10 years but on preliminary evidence are likely to require implementation in the 20+ year timeframe. Further investigation of all initiatives will be undertaken within the next 10 years to ensure any major impacts in growth patterns or use are considered.



We will investigate a range of initiatives to support the customer outcomes.

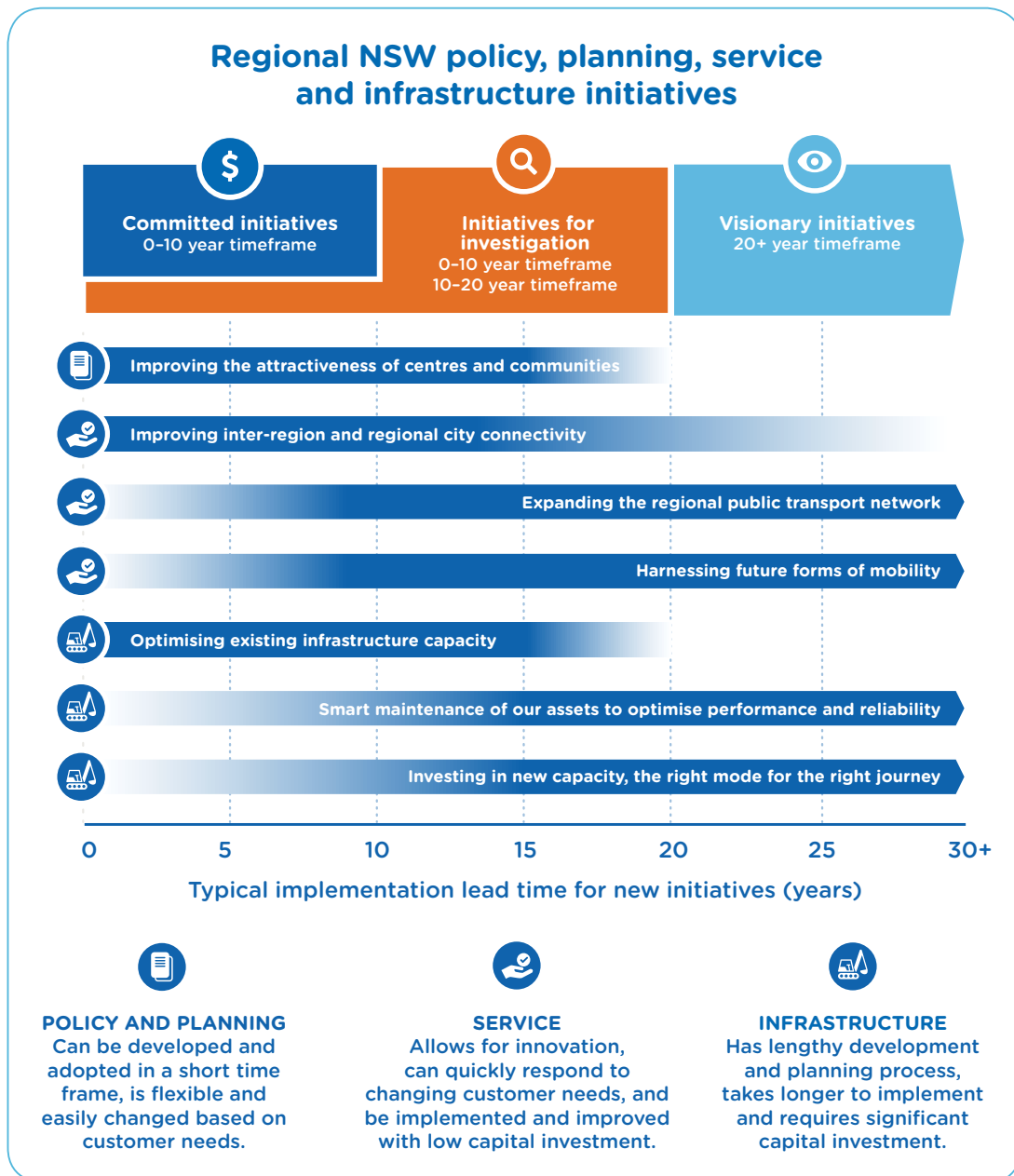


Figure 50: Initiatives to support the customer outcomes

A flexible, agile investment approach

A strategic investment prioritisation evaluation was undertaken for each proposed initiative, considering:

- ▶ How initiatives would serve customer needs and place-based visions over 40 years
- ▶ Multimodal corridor planning and the evolution of places, applying Movement and Place planning principles
- ▶ How well initiatives would meet future customer needs, against a range of likely scenarios, including technological and other disruptive events
- ▶ Benefits, alignment to the strategic objectives of the Regional Plans, and their ability to deliver on service outcomes
- ▶ The (high level) timeframe for project need, linked to interdependencies with other initiatives.

This process highlighted that there is far less data available to understand current and expected future regional travel patterns, compared to that available in Sydney, the Hunter and Illawarra. Future Transport 2056 will commit to rectifying this evidence-gap and identifying new data sources.

Our investment approach is designed to be flexible, responding to change and uncertainty. The draft timeframes are indicative, based on preliminary evidence, of when potentially these initiatives may be need to be implemented or committed.

Further investigation of all initiatives will be undertaken within the next 10 years to ensure any major impacts in growth patterns or use are considered.

Categorisation of initiatives



Committed initiatives (0-10yrs)

Initiatives that either have committed funding, are committed/ contractually committed, are for immediate detailed planning, or are part of key maintenance, renewal or safety programs. Some initiatives are subject to final business case and funding.



Initiatives for investigation (0-10, 10-20yrs)

Initiatives intended to be investigated for potential commitment or implementation within the next 20 years. Those listed in 0-10 horizon will be prioritised for more detailed investigation to determine if they are required in the next 20 years.



Visionary initiatives (20+ years)

Longer term initiatives that may be investigated within the next 10 years, but are unlikely to require implementation within 20 years.

Statewide Policy and Planning Initiatives

	0-10 years committed	0-10 years for investigation	10-20 years for investigation	20+ years visionary
ALL MODES				
Regional Transport Plans		●	○	○
Place plans		●	○	○
Access Prioritisation Plan		●	○	○
Regional Parking Guidelines		●	○	○
Transport Corridor Planning	●		○	○
ROAD				
Road Classification Review	●			
Road network management system		●	○	○
Fleet leasing policy		●	○	○
Fuel vouchers policy		●	○	○
Car share package		●	○	○
Town bypasses, identification of future need		●	○	○
Implementation of traffic incident and information services		●	○	○
PUBLIC TRANSPORT - BOOKING AND TICKETING				
Regional Booking System		●		
Mobility as a Service (MaaS)		●		
Next generation ticketing		●		
Fare alignment		●		
Cross border public transport pricing and regulation MoUs		●		
RAIL				
Rail Network Optimisation Program		●	○	○
Regional Rail Fleet Project	●			
BUS				
Country Passenger Infrastructure Grants Scheme	●		○	○
ON DEMAND				
School Bus and Community Transport Model development		●		
PUBLIC TRANSPORT - OTHER				
First stop Transport	●		○	○
MARITIME				
Maritime Safety Program		●	○	○
ACTIVE TRANSPORT				
Assisted Mobility Device Strategy		●	○	○
ASSET MANAGEMENT				
'Whole of life' Approach Plan		●	○	○
TECHNOLOGY				
CAV, electric vehicle and Intelligent Transport System trials		●		
CAV Readiness Program		●	○	
Electric Vehicle Policy		●	○	○
DATA				
Data collection improvements for Regional NSW	●		○	○

○ For further investigation if initiative is successful and/or required

Statewide Service Initiatives

	0-10 years committed	0-10 years for investigation	10-20 years for investigation	20+ years visionary
ALL MODES				
Deliver the Regional Passenger Transport Strategic Framework and Delivery Model	●		○	○
Deliver Hub and Spoke Model	●		○	○
AVIATION				
Increase availability of regional slots at Sydney's airports during peak hours	●		○	○
RAIL				
Rail Network Optimisation Program		●	○	○
Deliver Regional Rail Fleet Project	●			
ON DEMAND				
Demand responsive transport services	●		○	○
ACTIVE TRANSPORT				
Active Transport Sharing Scheme		●	○	○
TECHNOLOGY				
Aerial technology use		●	○	○

○ For further investigation if initiative is successful and/or required

Statewide Infrastructure Initiatives

	0-10 years committed	0-10 years for investigation	10-20 years for investigation	20+ years visionary
ALL MODES				
Continuation of port efficiency, access and integration initiatives		●	○	○
Deliver Place Plans		●	○	○
Deliver Access Prioritisation Plan		●	○	○
Deliver Transport Corridor Planning	●		○	○
ROAD				
Resilience Package		●	○	○
Towards Zero Infrastructure Program		●	○	○
Local Government Road Safety Program	●	◐	○	○
Sealing Country Roads Program		●	○	○
Bridges for the Bush Program	●	◐	○	○
Slopes and Culverts Condition Program		●	○	○
Fixing Country Roads	●	◐	○	○
Heavy vehicle rest areas	●	◐	○	○
Last Mile Productivity Program		●		
Deliver Road Network Management System		●	○	○
Safer Roads Program	●		○	○
Regional Road Freight Corridor Fund	●	◐	○	○
Saving Lives on Country Roads Program	●	◐	○	○
Implementation of Traffic Incident and Information Services		●	○	○
Deliver Town Bypasses		●	○	○
AVIATION				
Regional Airports Program	●			
RAIL				
Deliver New Intercity Fleet	●			
Fixing Country Rail	●	◐	○	○
Rail Network Optimisation Program		●	○	○
Deliver Regional Rail Fleet Project	●			
INTERCHANGES				
Transport Access Program	●		○	○
Deliver Inland Port		●		
MARITIME				
Deliver NSW Boating Now Program	●			
Deliver Maritime Safety Program		●	○	○
ACTIVE TRANSPORT				
Deliver Walking and Cycling Program		●	○	○
TECHNOLOGY				
Intelligent Transport Systems		●	○	○
Deliver CAV Readiness Program		●	○	
Deliver Electric Vehicle Policy		●	○	○
Deliver Regional Booking System		●		

○ For further investigation if initiative is successful and/or required
◐ Continuation of initiative, investigation of program funding

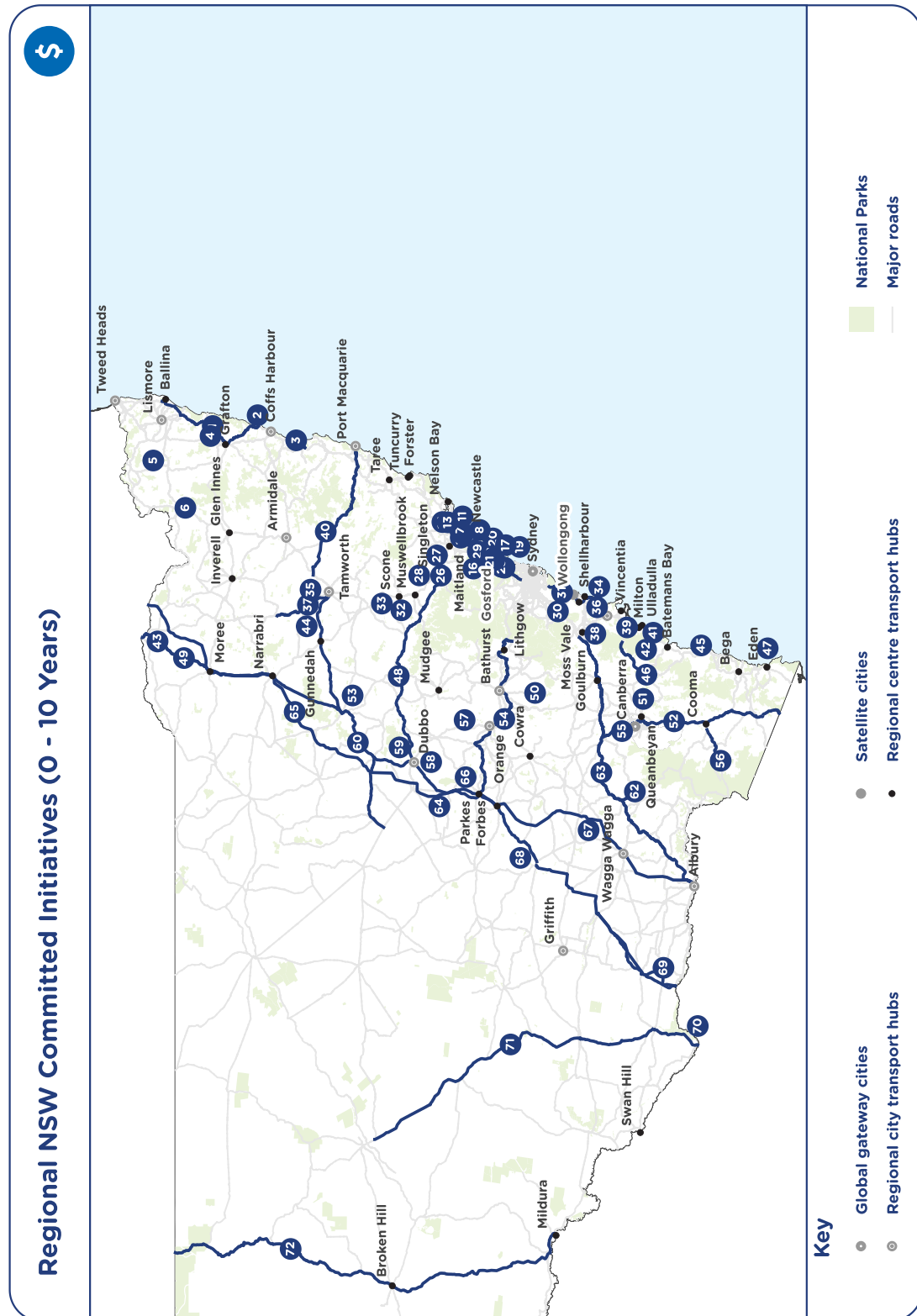


Figure 51: Initiatives committed (0-10 years)

Regional NSW committed Initiatives (0-10 years)



Committed initiatives are shown on the previous map. The detail of each is provided in the Appendix. Some are subject to a final business case and funding.

- | | | | |
|--|---|---|---|
| 1. Woolgoolga to Ballina (State and Federal funded) | 13. Hunter Pinch Points | 24. Manns Road, Central Coast Highway to Narara Creek Road (Planning) | 34. Albion Park Rail Bypass (Planning and Preconstruction) |
| 2. Coffs Harbour Bypass (Subject to final business case and Federal funding) | 14. M1, Hexham, Raymond Terrace upgrades | 25. Pacific Motorway Widening, Kariong Interchange to Somersby Interchange (State and Federal Funded) | 35. Tamworth Rail Freight Centre |
| 3. Warrell Creek to Nambucca Heads (State and Federal Funded) | 15. Wyong Road, Mingara Drive to Tumbl Road Upgrade | 26. New England Highway, Belford to Golden Highway Upgrade (Planning) | 36. Berry to Bomaderry Upgrade |
| 4. Summerland Way, Additional Clarence River Crossing (Grafton Bridge) | 16. Warnervale Link Road, Albert Warner Drive to Pacific Highway (Planning) | 27. New England Highway, Singleton Bypass (Planning) | 37. Barraba Branch Line |
| 5. Bruxner Highway, Replacement Bridge over Clarence River | 17. Pacific Highway, Wyong Town Centre (Planning) | 28. New England Highway, Gowrie Gates, Widen Rail Underpass | 38. Nowra Bridge over Shoalhaven River (Planning) (State and Federal Funded) subject to final business case and Federal funding |
| 6. New England Highway, Bolivia Hill Upgrade (State and Federal Funded) | 18. Pacific Motorway Widening and Reconstruction, Wyong Road to Doyalson Link Road (State and Federal funded) | 29. New Intercity Fleet | 39. Burrill Lake Bridge Replacement |
| 7. Nelson Bay Road improvements - Fern Bay to Williamtown | 19. Empire Bay Drive, The Scenic Road and Cochrane Street Intersection Upgrade | 30. Princes Motorway, Interchange at Base of Mount Ousley (Planning) | 40. Oxley Highway Safety and Realignment Works (Planning) |
| 8. Newcastle Cruise Terminal | 20. Kangy Angy Train Maintenance Facility for New Intercity Fleet | 31. Princes Motorway Improvements, Bulli Tops to Picton Road (Planning) (State and Federal Funded) | 41. Batemans Bay Bridge (Planning) |
| 9. Newcastle Light Rail | 21. Pacific Highway, Ourimbah Street to Glen Road | 32. New England Highway, Muswellbrook Bypass (Planning) | 42. Kings Highway, Replacement Clyde River Bridge |
| 10. Cormorant Road, Industrial Drive to Stockton Bridge (State and Federal funded) | 22. Pacific Highway, Parsons Road to Ourimbah Street (Planning) | 33. New England Highway, Scone Bypass (State and Federal Funded) | 43. Newell Highway, Mungie Back Creek to Boggabilla Heavy Duty Pavement (State and Federal Funded) |
| 11. Lower Hunter Freight Corridor Protection | 23. Pacific Highway and Manns Road, Narara Creek Road to Parsons Road (Planning) | | 44. Oxley Highway, Gunnedah Bridge over Rail |
| 12. Newcastle Inner City Bypass, Rankin Park to Jesmond | | | 45. Dignams Creek Realignment |

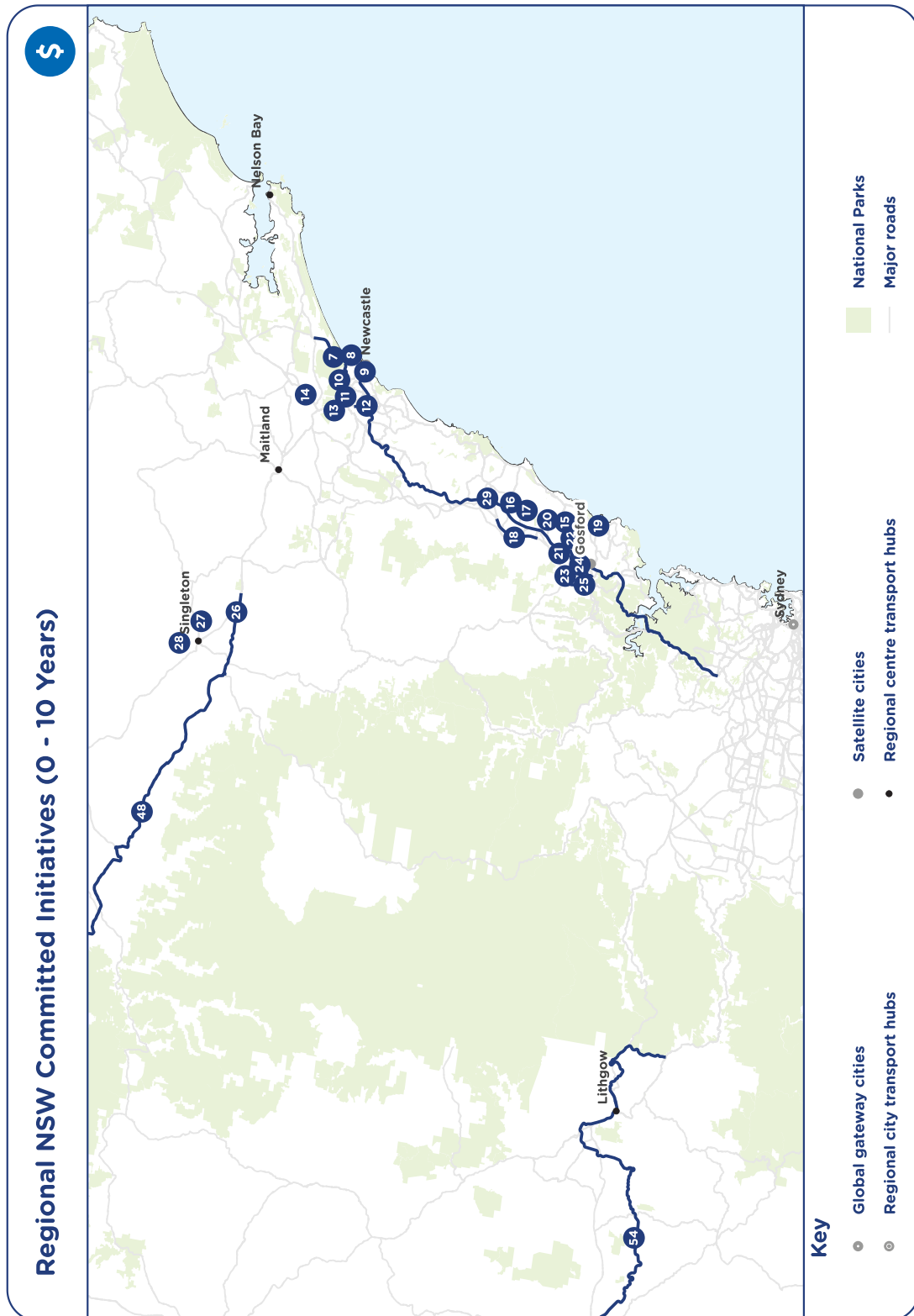


Figure 51: Initiatives committed (0-10 years) continued



Regional NSW committed Initiatives (0-10 years) continued

Committed initiatives are shown on the previous map. The detail of each is provided in the Appendix. Some are subject to a final business case and funding.

- 46. MR92 Nerriga Road improvements
- 47. Eden cruise facilities development
- 48. Golden Highway Safety and Productivity Works (State and Federal Funded)
- 49. Newell Highway Heavy Vehicle Pavement Upgrades - Narrabri-Moree, North of Moree (Planning)
- 50. Main Road 54 (Goulburn to Bathurst) Initial Sealing
- 51. Queanbeyan Bypass (Ellerton Drive Extension) (State, Federal and Local Government Funded)
- 52. Monaro Highway Overtaking Lanes and Safety Improvements
- 53. Newell Highway, Improvements through Coonabarabran (Planning)
- 54. Upgrades to Main West Line
- 55. Barton Highway Improvements (State and Federal Funded)
- 56. Kosciuszko Road Overtaking Lanes and Safety Improvements
- 57. Mitchell Highway, Guanna Hill Realignment
- 58. Regional Rail Maintenance Facility (Dubbo subject to planning approval)
- 59. Newell Highway, New Dubbo Bridge (Planning)
- 60. Newell Highway Overtaking Lanes
- 62. Gocup Road Upgrade
- 63. Hume Highway Heavy Duty Pavement (State and Federal Funded)
- 64. Newell Highway, Trewilga Realignment
- 65. Inland Rail (Federally funded)
- 66. Newell Highway, Parkes Bypass (Planning)
- 67. Junee North Triangle
- 68. Newell Highway, West Wyalong Heavy Vehicle Bypass
- 69. Narrandera - Tocumwal Railway Reactivation
- 70. Cobb Highway, New Bridge at Echuca - Moama
- 71. Cobb Highway seal extension
- 72. Silver City Highway seal extension

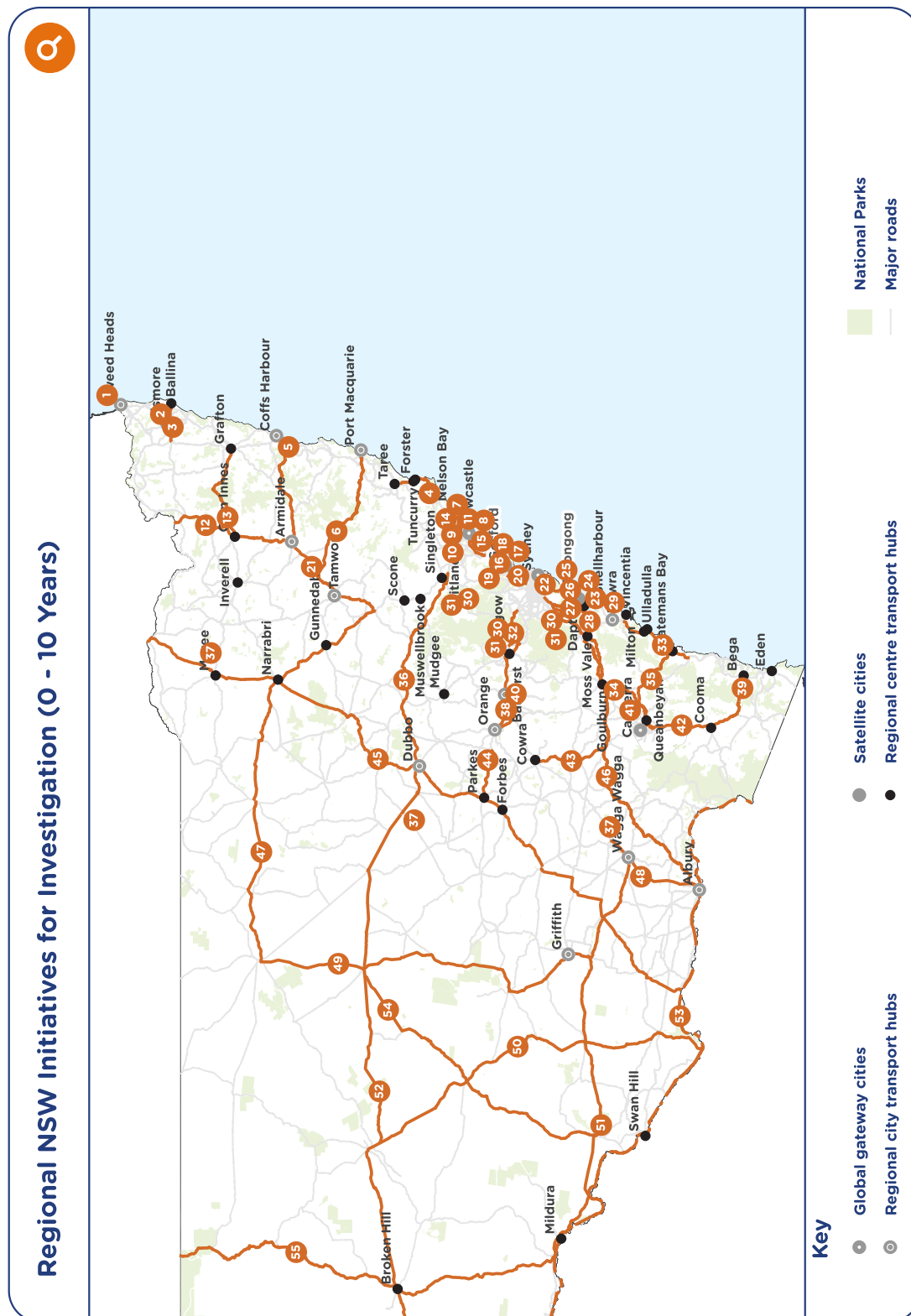


Figure 52: Initiatives for investigation for potential commitment (0-10 years)

Regional NSW Initiatives for investigation (0-10 years)



Initiatives for investigation for potential commitment within 10 years are shown on the previous map. The detail of each is provided in the Appendix.

- | | | | |
|--|--|--|--|
| ● 1. Tweed Transport Network Plan (encompassing the potential for light rail extension from Gold Coast Airport to Tweed Heads) | ● 14. M1, Hexham, Raymond Terrace upgrades | ● 29. Princes Highway Nowra Bridge replacement | ● 42. Monaro Highway improvements |
| ● 2. Upgrade of Bangalow Road between Bangalow and Lismore | ● 15. Greater Newcastle Place Plans | ● 30. Great Dividing Range long term solution study | ● 43. Lachlan Valley Way improvements |
| ● 3. Bruxner Highway Improvements (Ballina-Casino) | ● 16. Sydney-Central Coast-Newcastle Faster Rail Improvement | ● 31. Great Dividing Range long term solution corridor preservation | ● 44. Henry Parkes Way improvements |
| ● 4. The Lakes Way Corridor Improvements | ● 17. Bus Headstart for Central Coast | ● 32. Bells Line of Road improvements | ● 45. Newell Highway Improvements (in addition to those committed) |
| ● 5. Waterfall Way corridor improvements | ● 18. Central Coast Rapid Bus package | ● 33. Duplication of Princes Highway (Jervis Bay Road Intersection to Moruya) including bypass of Milton-Ulladulla | ● 46. Hume Highway Improvements |
| ● 6. Oxley Highway Improvements | ● 19. Central Coast Place Plans | ● 34. Sydney-Canberra Faster Rail Improvement | ● 47. Kamilaroi Highway Improvements |
| ● 7. Nelson Bay Road improvements - Williamstown to Bobs Farm | ● 20. M1 Motorway improvements (Hawkesbury River - Mt White) | ● 35. Kings Highway improvements | ● 48. Main South Freight Rail Capacity Enhancements in collaboration with ARTC |
| ● 8. Improvements to Newcastle Port | ● 21. New England Highway Improvements (Willow Tree to Armidale) | ● 36. Golden Highway improvements (continuation) | ● 49. Kidman Way improvements |
| ● 9. Bus headstart for Greater Newcastle | ● 22. Sydney-Wollongong Faster Rail Improvement | ● 37. Inland Rail Intermodal Facility investigations | ● 50. Cobb Highway sealing missing links |
| ● 10. Greater Newcastle Rapid Bus Package | ● 23. Wollongong Rapid Bus package | ● 38. Mt Victoria to Orange road corridor improvements to achieve travel time savings and road safety outcomes | ● 51. Sturt Highway improvements |
| ● 11. Newcastle Light Rail network extension | ● 24. Wollongong Place Plans | ● 39. Snowy Mountains Highway improvements (including Brown Mountain) | ● 52. Barrier Highway improvements (Dubbo-Broken Hill) |
| ● 12. New England Highway Improvements (Armidale to border) | ● 25. Bus headstart for Wollongong | ● 40. Extending Bathurst commuter rail to Orange | ● 53. Murray River Bridges Program |
| ● 13. Gwydir Highway Improvements (between Grafton and Glen Innes, Jackadgery) | ● 26. Bus priority measures on Appin Road | ● 41. Investigate extension of light rail from Canberra to Queanbeyan | ● 54. The Wool Track sealing (Balranald - Ivanhoe - Cobarr) |
| | ● 27. Picton Rd/Appin Rd Improvements | | ● 55. Silver City Highway sealing missing links |
| | ● 28. Moss Vale to Unanderra and Coniston Junction rail improvements | | |

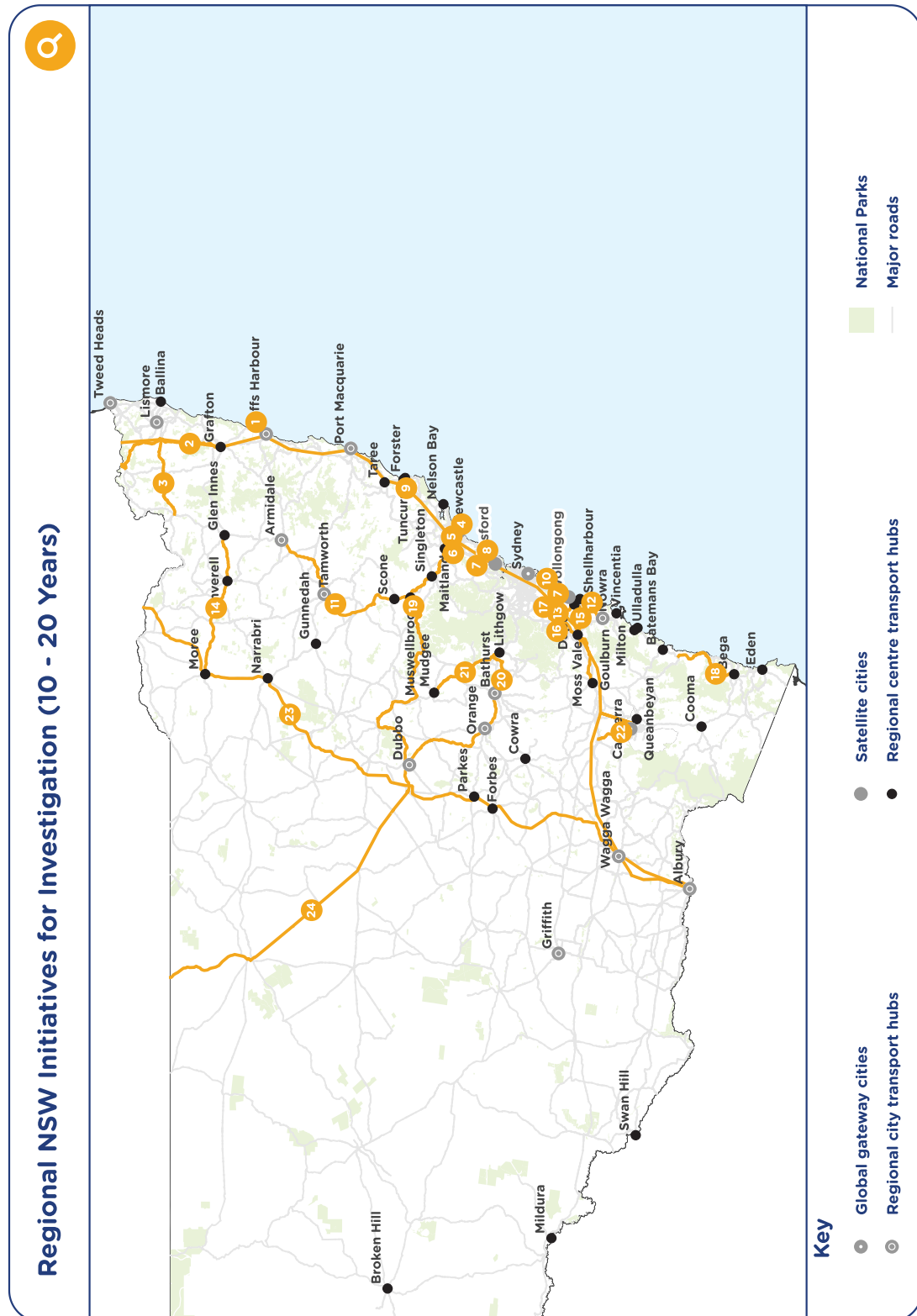


Figure 53: Initiatives for investigation for potential commitment (10-20 years)

Regional NSW Initiatives for investigation (10-20 years)



Initiatives for investigation for potential commitment within 10 to 20 years are shown on the previous map. The detail of each is provided in the Appendix.

- | | | |
|--|---|---|
| ● 1. MR92 Nerriga Road improvements | ● 11. M1 Princes SMART Motorway | ● 21. Electrification of intercity to Bathurst |
| ● 2. North Coast cruise infrastructure development | ● 12. Main Northern Line – improvements to address pinch points | ● 22. Castlereagh Highway Improvements (Mudgee-Lithgow) |
| ● 3. Summerland Way Improvements (Grafton-QLD border) | ● 13. Electrification of intercity to Bomaderry/Nowra | ● 23. Completion of Barton Highway duplication |
| ● 4. Bruxner Highway Improvements (Casino-Tenterfield) | ● 14. Completion of Maldon to Dombarton railway line | ● 24. Support the delivery of Inland Rail |
| ● 5. Newcastle Ferry Network extension | ● 15. Gwydir Highway Improvements (Inland) | ● 25. Mitchell Highway improvements |
| ● 6. Tomago Road Improvements – Pacific Highway to Williamtown | ● 16. Illawarra Hwy/Macquarie Pass improvements | |
| ● 7. Lower Hunter Freight Corridor | ● 17. M31 Hume SMART motorway | |
| ● 8. Outer Metro Roads Program | ● 18. Electrification of intercity to Goulburn | |
| ● 9. M1 – Newcastle SMART Motorway | ● 19. Duplication of Princes Highway (Moruya to Bega Bridge) | |
| ● 10. Corridor Preservation for Higher Speed Connections | ● 20. Dubbo to Newcastle rail connection | |

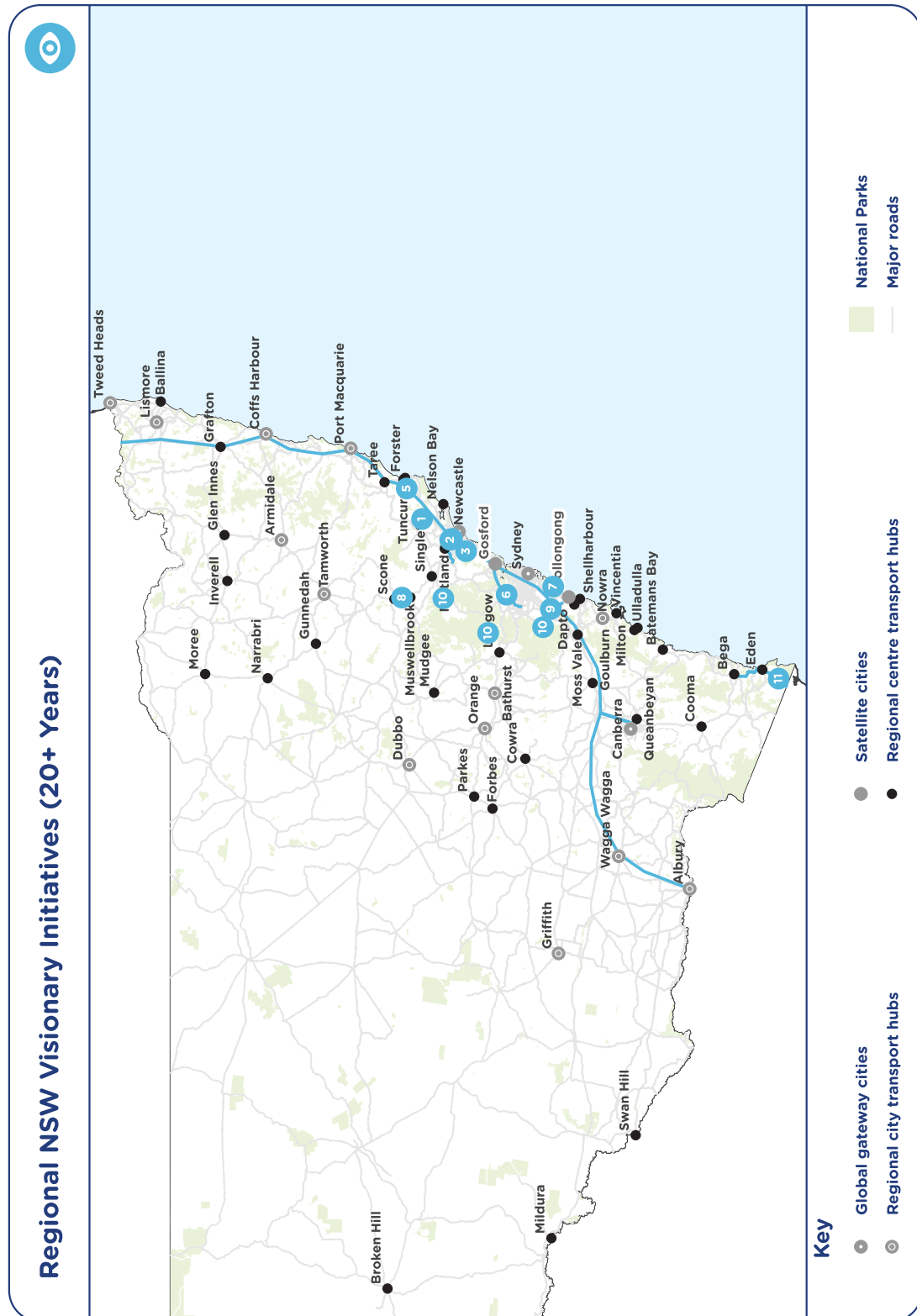


Figure 54: Visionary initiatives for investigation for potential commitment (20+ years)



Regional NSW Visionary Initiatives (20+ years)

Visionary initiatives for investigation for potential commitment beyond 20 years are shown on the previous map. The detail of each is provided in the Appendix.

1. New rail alignment of North Coast Line between Newcastle and Stroud Road - investigation corridor
2. Electrification of the Hunter Line to Telarah
3. New suburban type rail service for Greater Newcastle
4. Cessnock to Newcastle rail services via Kurri Kurri
5. Higher Speed Connections (east coast)
6. Outer Sydney Orbital from Great Western Highway to Central Coast
7. Illawarra Escarpment long term solution
8. Duplication of New England Highway Muswellbrook to Scone
9. Outer Sydney Orbital (motorway) from Hume Motorway to Illawarra
10. Delivery of Great Dividing Range long term solution
11. Duplication of Princes Highway (Bega to Victoria)

Initiatives connecting the Regions to Greater Sydney

People travel between Sydney, Newcastle, Central Coast and Wollongong for work, business, tourism, health and education. By 2056 this area will be home to a combined population of approximately 10 million people. The metropolitan areas of these regions also accommodate significant trade gateways which service freight across the State. Enhancing the transport connections between these cities will enable greater economic opportunities created by a combined population of 10 million people.

Connecting Greater Sydney and the Central Coast

Gosford has been identified as a Satellite city of Greater Sydney reflecting its status as the key city of the Central Coast region. Strong population growth in the Central Coast over the next 40 years will see the region's relationship with Greater Sydney grow. This is reflected in the increased travel demand by both private vehicle and public transport expected between Greater Sydney and Central Coast each day.

Initiatives for investigation to better connect these regions include:

- › New Intercity Fleet
- › Delivering the Hub and Spoke model
- › Delivering the Regional Rail Fleet Project
- › Faster Rail improvements between Sydney and Newcastle
- › Freight Separation Program (Northern Sydney Freight Corridor)
- › Outer Sydney Orbital
- › Delivery of the NorthConnex link between the M1 and M2
- › M1 Smart Motorway

Connecting Greater Sydney and the Illawarra

Wollongong has been identified as a Satellite city of Greater Sydney due to its proximity and improved road and rail initiatives. Improvements are identified to connect the region to the three cities of Sydney:

- › New Intercity Fleet replacement program
- › Faster Rail improvements between Sydney and Wollongong
- › More Trains, More Services Program between Sutherland and Hurstville to separate suburban passenger services from intercity services and freight rail movements
- › High frequency limited stop transport services between Campbelltown and the Illawarra
- › Lower frequency transport services from the Wollondilly Shire to the Illawarra via the southern road corridors and the Outer Sydney Orbital (southern link)
- › Investigation of the completion of the Maldon-Dombarton rail link between south western Sydney and the Illawarra
- › Delivering the Hub and Spoke model

- › Delivering the Regional Rail Fleet Project
- › Increasing capacity on the Southern Sydney Freight Line
- › Enhance links on Appin Road between the growth areas of West Appin, Menangle Park and Mt Gilead to Wollongong and investigation of the use of bus priority measures along the corridor
- › The Outer Sydney Orbital will also connect the Illawarra to Campbelltown
- › M1 Princes Motorway improvements
- › Princes Highway upgrade to 4 lanes and town bypasses
- › M1 Princes Smart Motorway

Connecting Greater Sydney and the Southern Highlands

The Southern Highlands will mark a transition point between the Greater Sydney and Canberra catchments. The Southern Highlands will have a more dominant access to Sydney, particularly connecting to the Western Parkland City and Western Sydney Airport.

The M31 Hume Highway and the Main South freight and passenger rail line provide the regional road and rail corridor that connects the Western Parkland and Central City to the Southern Highlands and Canberra.

- › New Intercity Fleet
- › Delivering the Hub and Spoke model
- › Delivering the Regional Rail Fleet Project
- › Electrification of the intercity network to Goulburn
- › Investigation of passenger rail link to Wilton
- › Faster Rail improvements between Sydney and Canberra
- › Increasing capacity on the Southern Sydney Freight Line
- › Enhancing the road corridor
- › M31 Hume Motorway/Highway improvements
- › M31 Smart Motorway

Connecting Greater Sydney and the Blue Mountains

The Great Western Highway and the Main Western Rail Line over the Blue Mountains connect the Western Parkland City and Western Sydney Airport to the Central West and Orana Region. This corridor provides freight connections to Port Botany and Port Kembla and Newcastle port, and will provide access to the new Western Sydney Airport and the Western Parkland City. The Bells Line of Road connects the region to the Western and Central Cities and offers alternative connections to Greater Sydney.

- › More Trains, More Services Program between Penrith and St Marys to separate inner urban passenger services from intercity services and freight rail movements
- › New Intercity Fleet and Regional Rail Fleet Project
- › Ongoing improvements to Main Western Line
- › Potential electrification of the intercity network to Bathurst
- › Further investigation into re-opening of the 'Cowra Lines', which includes the Blayney to Demondrille line
- › Ongoing improvements to assets (Bells Line of Road, Great Western Highway, Golden Highway)
- › Inland NSW connections – Strategic examination of options to improve connectivity for freight from inland NSW to Sydney, Newcastle and/or Wollongong. It will consider existing roads such as Great Western Highway, Bells Line of Road, Golden Highway, Lachlan Valley Way, Castlereagh Highway and Mid-Western Highway, as well as rail corridors Main Western, Dubbo-Newcastle, Cowra lines (including Blayney-Demondrille), Gulgong to Maryvale.

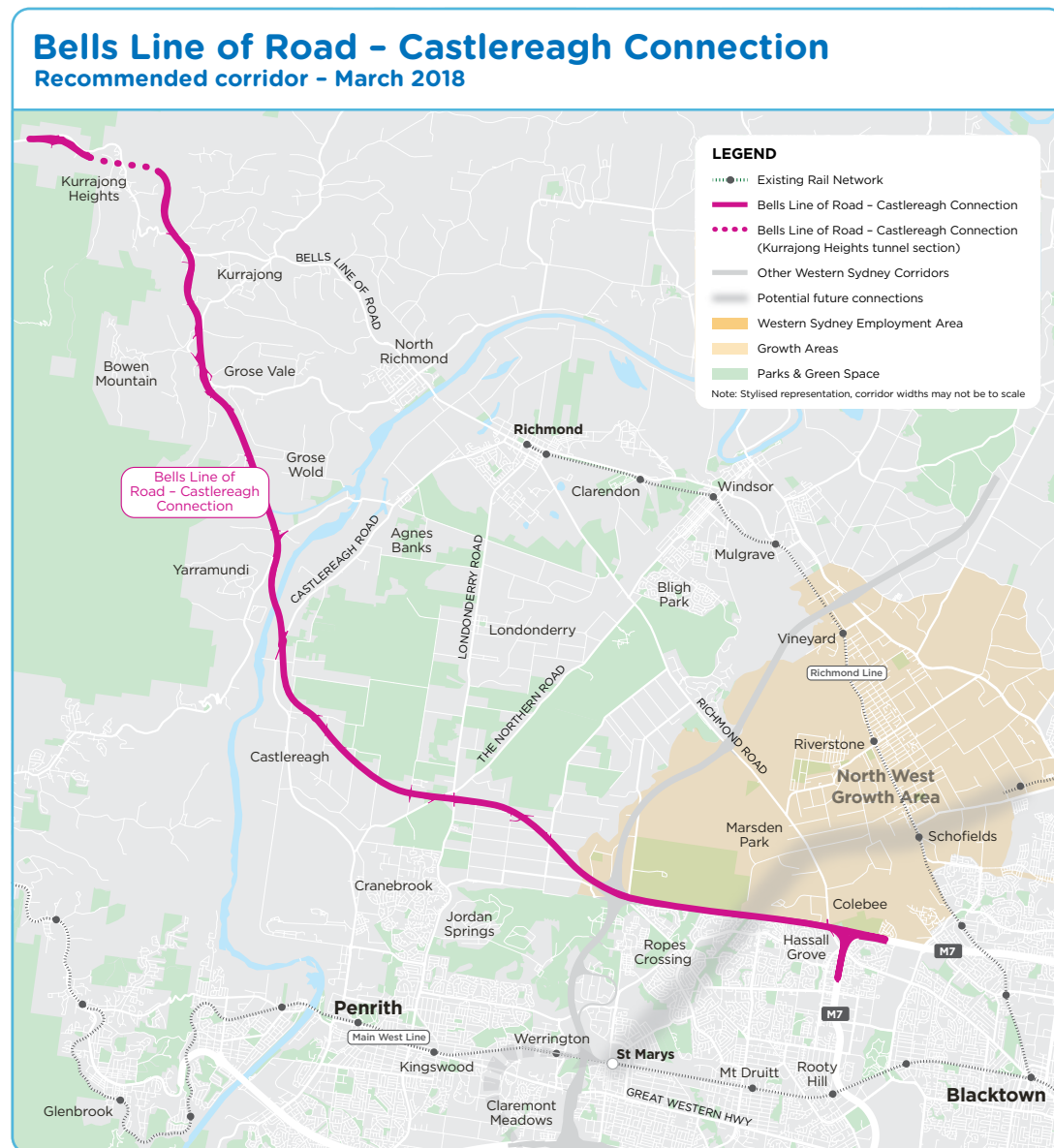


Figure 55: Bells Line of Road - Castlereagh Connection recommended corridor, March 2018

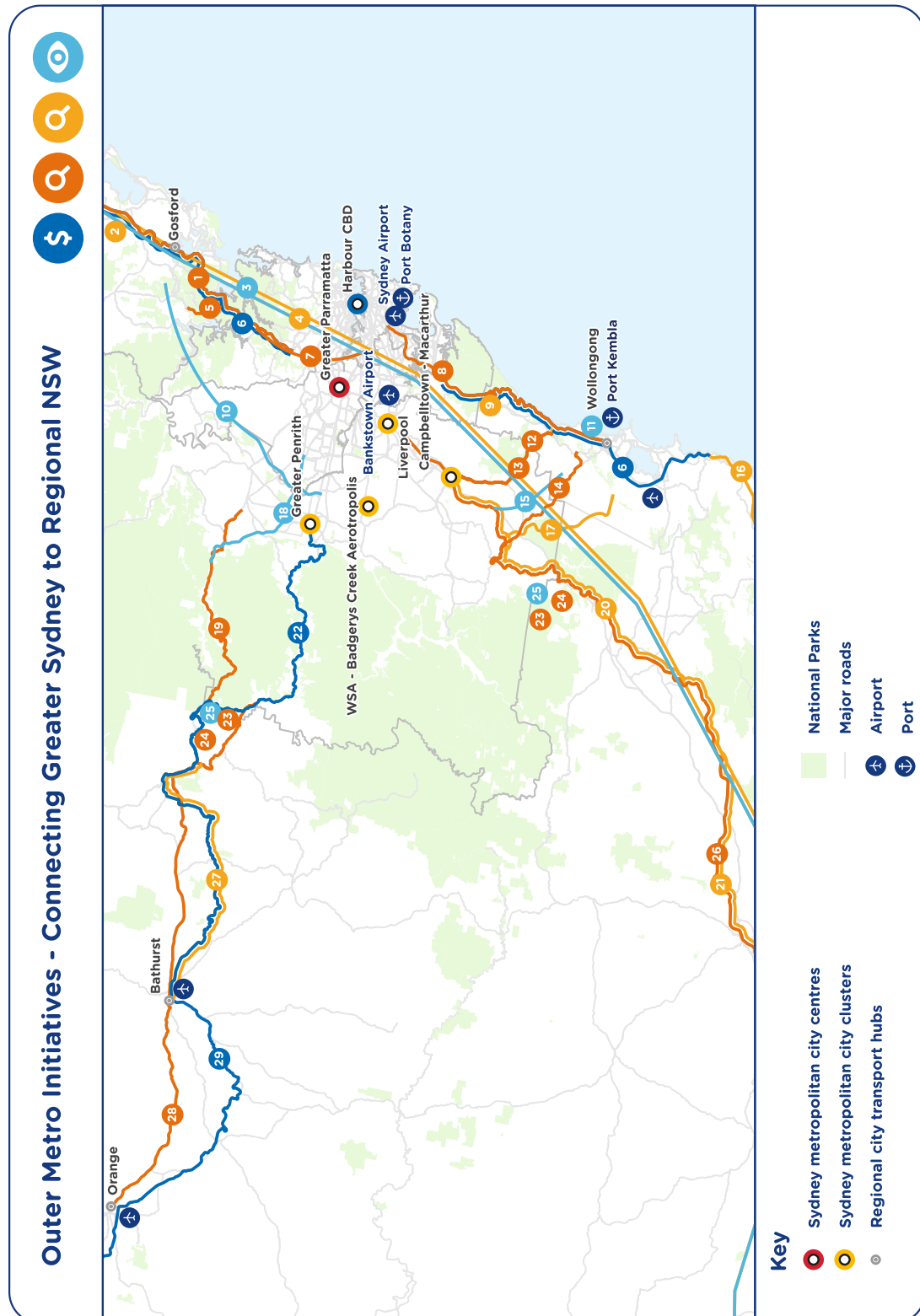


Figure 56: Connecting regional NSW to Greater Sydney

Outer Metro Initiatives – Connecting Greater Sydney to Regional NSW



Key

- Committed 0–10 years
- Initiatives for investigation 0–10 years
- Initiatives for investigation 10–20 years
- Visionary initiatives 20+ years

All initiatives for investigation are subject to business case development.

Initiatives

- | | | |
|--|--|--|
| 6. New Intercity Fleet | 19. Bells Line of Road improvements | 20. M31 Hume SMART motorway |
| 22. Upgrades to Blue Mountains Line | 23. Great Dividing Range long term solution study | 21. Electrification of intercity to Goulburn |
| 29. Upgrades to Main West Line | 24. Great Dividing Range long term solution corridor preservation | 27. Electrification of intercity to Bathurst |
| 1. Sydney-Central Coast-Newcastle Faster Rail Improvement | 26. Sydney-Canberra Faster Rail Improvement | 3. Higher Speed Connections (east coast) |
| 5. M1 Motorway improvements (Hawkesbury River – Mt White) | 28. Mt Victoria to Orange road corridor improvements to achieve travel time savings and road safety outcomes | 11. Illawarra Escarpment long term solution |
| 7. Northern Sydney Freight Corridor Stage 2 | 2. M1 – Newcastle SMART Motorway | 10. Outer Sydney Orbital from Great Western Highway to Central Coast |
| 8. Sydney-Wollongong Faster Rail Improvement | 4. Corridor Preservation for Higher Speed Connections | 15. Outer Sydney Orbital from Hume Motorway to Illawarra |
| 12. Improved bus connections between South West Sydney and Illawarra | 9. M1 Princes SMART Motorway | 18. Bells Line of Road-Castlereagh Connection |
| 13. Bus priority measures on Appin Road | 16. Electrification of intercity to Bomaderry/Nowra | 25. Delivery of Great Dividing Range long term solution |
| 14. Picton Rd and Appin Rd Improvements | 17. Completion of Maldon to Dombarton railway line | |

CHAPTER

5

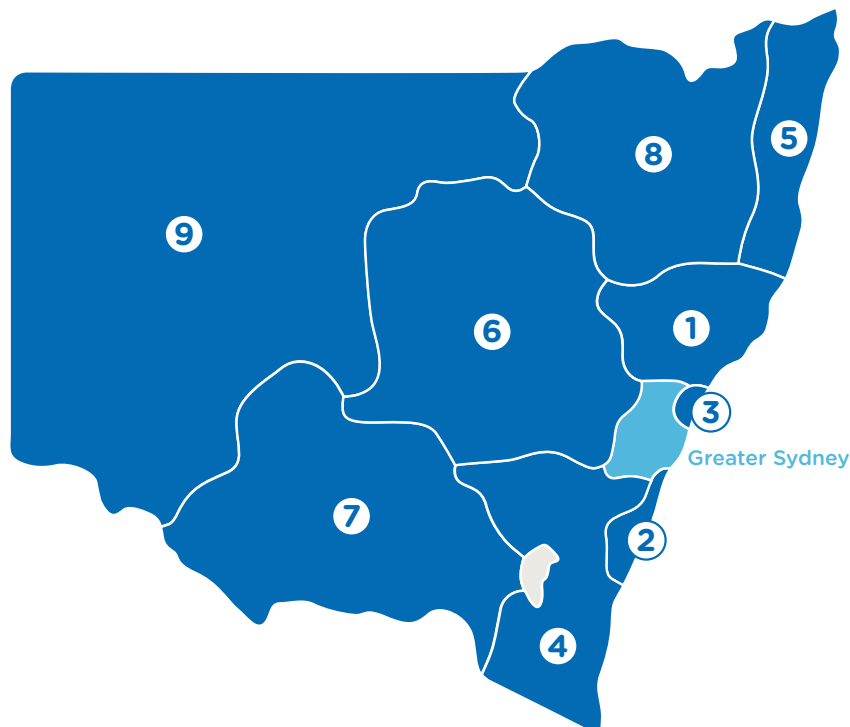
Service and
infrastructure
initiatives by
region

This section provides an overview of each of the nine regions, including:

- › A description of the characteristics of the region
- › A link to the relevant Department of Planning and Environment Regional Plan
- › An overview of the key centres and transport linkages for each region
- › A summary of the localised planning to be undertaken with local government, other state government agencies and other stakeholders in coming years
- › A map of initiatives in the region

This section should be read in conjunction with Chapter 4 which details infrastructure, policy and service initiatives that apply to all of regional NSW.

The Regions of NSW



- | | | |
|------------------------|-----------------------------|--------------------------|
| 1 Hunter | 4 South East and Tablelands | 7 Riverina Murray |
| 2 Illawarra-Shoalhaven | 5 North Coast | 8 New England North West |
| 3 Central Coast | 6 Central West and Orana | 9 Far West |



Hunter

The Hunter region includes the local government areas of Cessnock, Dungog, Lake Macquarie, Maitland, MidCoast, Muswellbrook, Newcastle, Port Stephens, Singleton and Upper Hunter. It has a population of over 730,000 people which is expected to increase to close to 950,000 by 2056. It is the largest regional economy in Australia and contains the Global Gateway city of Greater Newcastle, the capital of the region. It is home to the Awabakal, Worimi, Wonnarua, Biripi and Geawegal peoples.

The Hunter is Australia's leading regional economy. It contributes over \$32.3 billion to the NSW economy (2014–15), with a third coming from mining, manufacturing, health and social services. The region has strong local tourism, defence, education and advanced manufacturing industries centred on the University of Newcastle and Hunter Innovation Network as well as two Australian Defence Force bases, RAAF Willamtown and the Singleton Military Area.

The Hunter has strong local communities, valued heritage and a biodiversity rich environment. It has some of the most unique ecological systems in Australia that need to be managed and protected.

We are working closely with the Department of Planning and Environment to achieve the vision for the Hunter region. This vision is “the leading regional economy in Australia with a vibrant new metropolitan city at its heart”. It aims to capitalise on Greater Newcastle's port, vibrant waterfront and heritage to attract more residents, students, businesses, researchers, educators and entrepreneurs. We are working with the Department of Planning and Environment on its four goals for the Hunter region:

- ▶ The leading regional economy in Australia
- ▶ A biodiversity-rich natural environment
- ▶ Thriving communities
- ▶ Greater housing choice and jobs.

Global Gateway city

Greater Newcastle is a significant Global Gateway city. Greater Newcastle is the five local government areas of Cessnock, Lake Macquarie, Maitland, Newcastle and Port Stephens and has a population of around 575,000 people. It has a population catchment of over 1 million people and strong connections within NSW to Sydney, Central Coast, North Coast, New England North West and Central West and Orana.

Greater Newcastle is currently undergoing transformation from its heavy industrial past to an urbanised, service-based economy. It is benefited by its access to international markets through the port and airport, strong health and education precincts and economic development opportunities through its tourism, growth of specialised manufacturing and small-medium enterprises, defence facilities as well as a growing knowledge industry base.

There are further urban renewal opportunities to be realised. Transformative light rail and the introduction of frequent bus and ferry connections as well as opportunities to support and increase liveability through more sustainable travel behaviour are examples to ensure its success into the future.

Hub & spoke

A key to the future success of the Hunter is supporting efficient transport connections to, from and within the region. Working with Department of Planning and Environment, we have identified key hubs to support travel in the Hunter region. These include:

- ▶ Greater Newcastle: Broadmeadow (emerging), Central Maitland, Callaghan, Cessnock, Charlestown, East Maitland, Cardiff-Glendale (emerging), John Hunter Hospital, Kotara, Kurri Kurri, Morisset, Newcastle city centre, Nelson Bay, Raymond Terrace and the global gateway transport hubs of Newcastle Airport and Newcastle Port.
- ▶ Forster-Tuncurry, Muswellbrook, Scone, Singleton and Taree.

Connections to these key hubs will be provided by the best mode for the transport task, this may mean improving the existing connections available or working on delivering new services and connections. The existing connections available include:

- ▶ **Air:** Scheduled passenger flight services operate out of Newcastle and Taree Airports. Newcastle Airport has connections to Brisbane, Melbourne, Dubbo, Taree, Ballina, Gold Coast, Canberra and Adelaide (from March 2018). Taree Airport has connections to Sydney.
- ▶ **Road:** M1 Pacific Motorway, Pacific Highway, Hunter Expressway, New England Highway and Golden Highway.
- ▶ **Rail:** Intercity services between Scone/Dungog and Newcastle Interchange (Hunter line) and Sydney Central and Newcastle Interchange (Central Coast and Newcastle line). NSW TrainLink regional rail services between Sydney and Casino, Grafton, Brisbane, Armidale and Moree.
- ▶ **Coach:** NSW TrainLink regional coach services between Newcastle and Taree, private coach services between Newcastle and Dubbo and Brisbane.
- ▶ **Bus:** Local bus services operate across the region providing school bus services, in town transport and across Greater Newcastle.
- ▶ **Ferry:** Connections between Stockton and Queens Wharf.
- ▶ **Walking and cycling:** Various levels of infrastructure exists across the region to support walking and cycling.
- ▶ **On demand:** Including community transport, ridesharing services and taxis operate across the region.

Newcastle's new transport service delivery model

Newcastle Transport is the new integrated transport service for Newcastle, responsible for running buses, ferries and from early 2019, light rail. An operator has been awarded a 10 year contract to run Newcastle Transport, and will be responsible for designing and running an integrated transport system across all modes of travel.

Newcastle Transport improvements include:

- › Buses will cover more ground and there will be higher frequency services on key corridors.
- › Higher ferry frequency during the day, with services every 15 minutes.
- › Ferry refurbishment.
- › High frequency light rail, with services every 7.5 minutes.
- › 'Clock face' timetables that make the timetable easier to use and remember.
- › Increased operating hours and weekend night owl services.
- › New 'On-Demand' bus services during off peak periods in certain areas.

The operator's contract with Transport for NSW, requires them to meet minimum service standards and KPIs, while providing them with a level of autonomy to plan and run services. Importantly the contract contains increased performance standards and KPIs, including financial incentives to grow patronage, and therefore a strong incentive to improve services and deliver transport services locals want.

Future Transport Planning

In 2017 two key plans were released for consultation for Greater Newcastle – the Draft Greater Newcastle Future Transport Plan (Transport for NSW) and the draft Greater Newcastle Metropolitan Plan (Department of Planning and Environment). These plans provide the transport and land use vision for Greater Newcastle.

The Draft Greater Newcastle Future Transport Plan is a supporting plan that provides the overarching strategic transport network and vision that will guide future transport planning for the Greater Newcastle area. We will also work on developing a supporting plan for the Hunter region, outside Greater Newcastle.

Place-based plans, plans considering the implementation of the movement and place framework will be developed for prioritised key hubs across the Hunter region. These will be developed in conjunction with key stakeholders such as local government and Department of Planning and Environment.

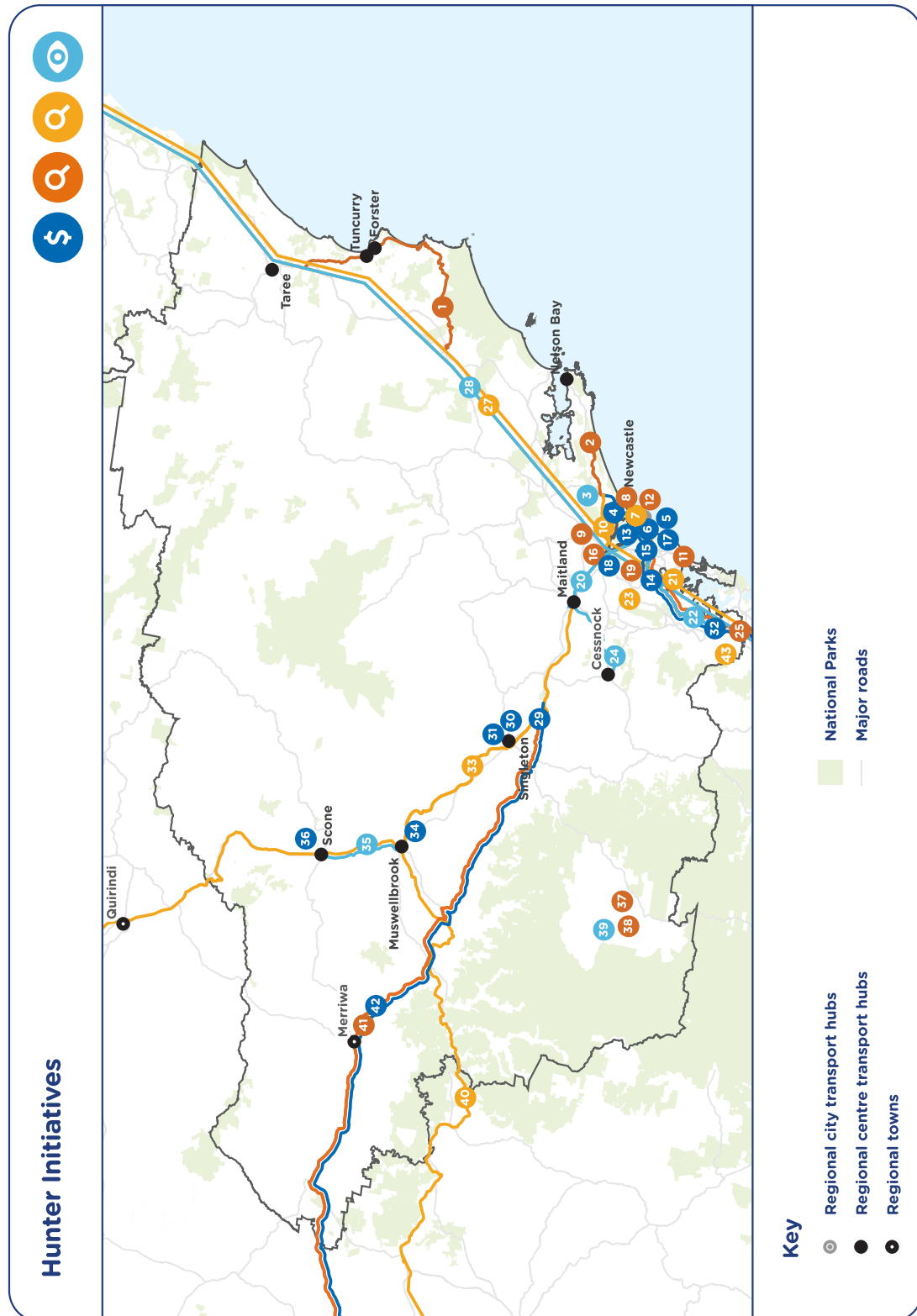
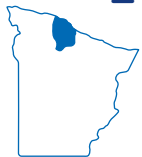


Figure 57: Hunter infrastructure initiatives



Hunter Region Initiatives



Key

Committed 0-10 years

Initiatives for investigation 0-10 years

Initiatives for investigation 10-20 years

Visionary initiatives 20+ years

All initiatives for investigation are subject to business case development.

Initiatives

- | | | |
|--|---|--|
| 29. New England Highway, Belford to Golden Highway Upgrade (Planning) | 16. M1, Hexham, Raymond Terrace upgrades | 40. Dubbo to Newcastle rail connection |
| 30. New England Highway, Singleton Bypass (Planning) | 19. Greater Newcastle Place Plans | 43. M1 – Newcastle SMART Motorway |
| 31. New England Highway, Gowrie Gates, Widen Rail Underpass | 25. Sydney-Central Coast-Newcastle Faster Rail Improvement | 3. New rail alignment of North Coast Line between Newcastle and Stroud Road – investigation corridor |
| 32. New Intercity Fleet | 37. Great Dividing Range long term solution study | 20. Electrification of the Hunter Line to Telarah |
| 34. New England Highway, Muswellbrook Bypass (Planning) | 38. Great Dividing Range long term solution corridor preservation | 22. New suburban type rail service for Greater Newcastle |
| 36. New England Highway, Scone Bypass (State and Federal Funded) | 41. Golden Highway improvements (continuation) | 24. Cessnock to Newcastle rail services via Kurri Kurri |
| 42. Golden Highway Safety and Productivity Works (State and Federal Funded) | 7. Newcastle Ferry Network extension | 28. Higher Speed Connections (east coast) |
| 1. The Lakes Way Corridor Improvements | 10. Tomago Road Improvements – Pacific Highway to Williamtown | 35. Duplication of New England Highway Muswellbrook to Scone |
| 2. Nelson Bay Road improvements – Williamtown to Bobs Farm | 21. Lower Hunter Freight Corridor | 39. Delivery of Great Dividing Range long term solution |
| 8. Improvements to Newcastle Port | 23. Outer Metro Roads Program | |
| 9. Bus headstart for Greater Newcastle | 27. Corridor Preservation for Higher Speed Connections | In addition to these region specific initiatives, statewide initiatives have been identified and are included in Chapter 4 of the Regional NSW Services and Infrastructure Plan. |
| 11. Greater Newcastle Rapid Bus Package | 33. Main Northern Line – improvements to address pinch points | |
| 12. Newcastle Light Rail network extension | | |
| 4. Nelson Bay Road improvements – Fern Bay to Williamtown | | |
| 5. Newcastle Cruise Terminal | | |
| 6. Newcastle Light Rail | | |
| 13. Cormorant Road, Industrial Drive to Stockton Bridge (State and Federal Funded) | | |
| 14. Lower Hunter Freight Corridor Protection | | |
| 15. Newcastle Inner City Bypass, Rankin Park to Jesmond | | |
| 17. Hunter Pinch Points | | |
| 18. M1, Hexham, Raymond Terrace upgrades | | |



Central Coast

The Central Coast has a population of around 340,000 people and will grow to approximately 500,000 people over the next 40 years. This strong population growth is a result of its close proximity to the state's two economic powerhouses, Greater Sydney and Hunter as well as the attractive lifestyle it offers. The region is home to the Darkinjung people.

In 2014-15 the region contributed \$8.6 billion to the NSW economy, primarily due to its specialisation in agribusiness and food, professional services, health and aged care and freight, logistics and distribution. Opportunities are available to better connect the region's residents and visitors and in doing so, support the growth of employment within the region.

We are working closely with the Department of Planning and Environment to achieve the vision for the Central Coast region of "a healthy natural environment, a flourishing economy and well-connected communities". Gosford is identified as the capital of the region and its renewal has and will continue to attract new residents, jobs, business and investment to the Central Coast. To support this, two growth corridors between Erina and Somersby as well as Tuggerah to Warnervale have been identified for increased investment in health, education, advanced manufacturing and service industries. We are working with the Department of Planning and Environment on its four goals for the Central Coast region:

- › A prosperous Central Coast with more jobs close to home
- › Protect the natural environment and manage the use of agricultural and resource lands
- › Well-connected communities and attractive lifestyles
- › A variety of housing choice to suit needs and lifestyles

Satellite city

In alignment with Department of Planning and Environment's identification of Gosford as the capital for the region, Gosford has been identified as a Satellite city of Greater Sydney. As a result, there is a need for improved efficiency of the transport network to, from and within Gosford and the Central Coast.

This includes:

- › Development of an integrated public transport network hierarchy, including:
 - A single operator taking multi-modal responsibility across the Central Coast.
 - Improved integration and interchange between modes/services to enable seamless customer experience.
 - Expanding 30 minute catchments for public transport.
 - Improved time of day coverage and service frequency, reduced journey times, and the deployment of on-demand, flexible services.
 - Facilitating car sharing services that are integrated with public transport.
- › Improved access to the northern and southern growth corridors with frequent public transport connections.
- › Improving the accessibility of the Central Coast to Greater Sydney and to the Global Gateway City of Greater Newcastle by public transport and private vehicle. We will work on improving travel times along the Sydney to Newcastle corridor. Seven deviations have been identified along the Central Coast and Newcastle rail line which when combined with the New Intercity Fleet could provide up to 40 minutes travel time savings between Broadmeadow and Central. Additionally, the Outer Sydney Orbital will provide a connection between the Western City and the Central Coast.
- › Supporting urban renewal and increased accessibility and liveability of key centres through improved transport connections.
- › Providing for the diverse travel needs of transport customers, including the large numbers of discretionary trips made throughout the day within the Central Coast as well as early morning and late evening commuters leaving the region.
- › Development of active transport networks.
- › Addressing pinch points in the road network and informing the program of road network optimisation improvements to support the maintenance of 30 minute catchments for car journeys.
- › Undertaking a car parking review to evaluate and prioritise car parking availability and use within centres and at key interchanges.
- › Introducing travel demand management policies and transport optimisation programs to re-balance demand against service and infrastructure provision.

To support this, a Central Coast transport network hierarchy has been developed.

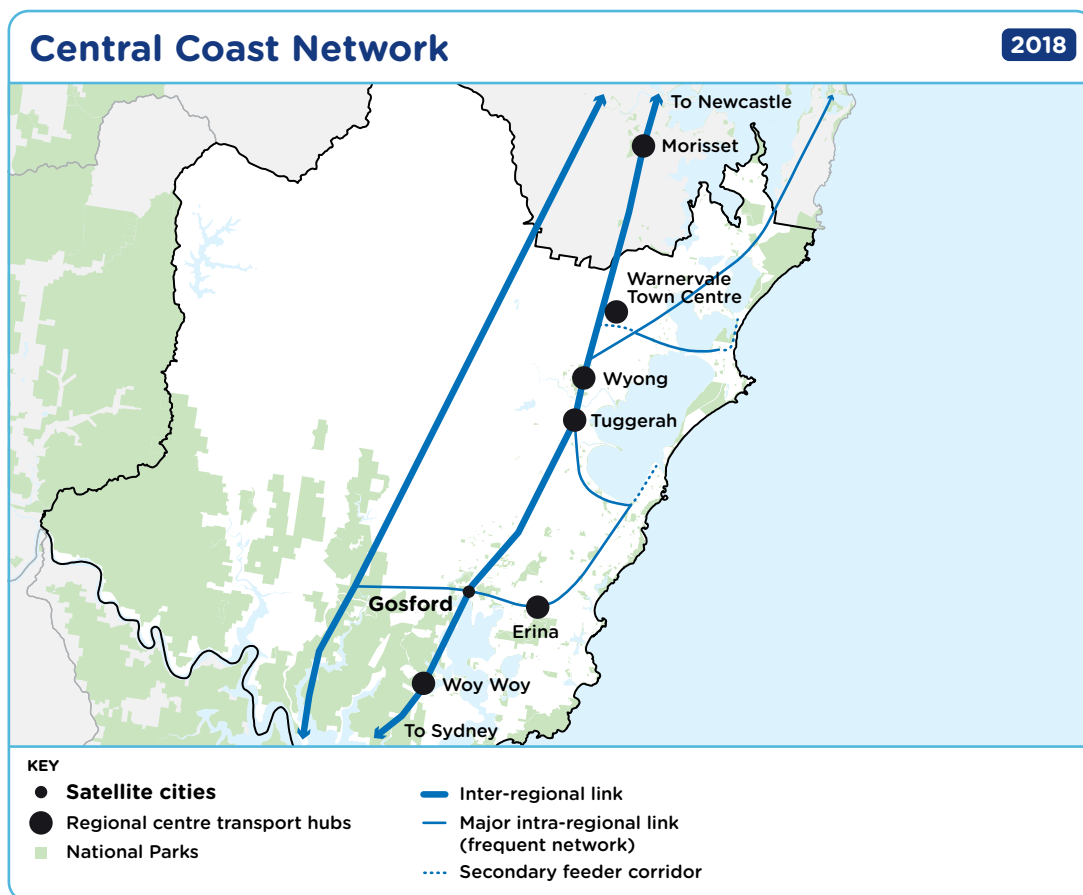


Figure 58: Network hierarchy for Central Coast

Hub & spoke

A key to the future success of the Central Coast is supporting efficient transport connections to, from and within the region. Working with Department of Planning and Environment, we have identified key hubs to support travel in the Central Coast region. These include:

- › Erina, Gosford, Tuggerah, Warnervale town centre, Woy Woy and Wyong.

Connections to these keys hubs will be provided by the best mode for the transport task, this may mean improving the existing connections available or working on delivering new services and connections. The existing connections available include:

- › **Air:** No scheduled, passenger services currently operate in the Central Coast. The Central Coast Airport at Warnervale provides opportunities for private flights and general aviation.
- › **Road:** M1 Pacific Motorway, Pacific Highway and Central Coast Highway.
- › **Rail:** Intercity services between Sydney Central and Newcastle Interchange (Central Coast and Newcastle line). NSW TrainLink regional rail services between Sydney and Casino, Grafton, Brisbane, Armidale and Moree.
- › **Bus:** Local bus services operate across the region.
- › **Ferry:** Connections between Woy Woy, Empire Bay, Wagstaff, Ettalong and Palm Beach.
- › **Walking and cycling:** Various levels of infrastructure exist across the region to support walking and cycling.
- › **On demand:** Including community transport, ridesharing services and taxis.

Future Transport Planning

A draft Central Coast Future Transport Plan will be developed as a supporting plan, discussing in more detail the transport future for the Central Coast region.

Place-based plans, plans considering the implementation of the movement and place framework will be developed for prioritised key hubs across the Central Coast region. These will be developed in conjunction with key stakeholders such as local government and Department of Planning and Environment.

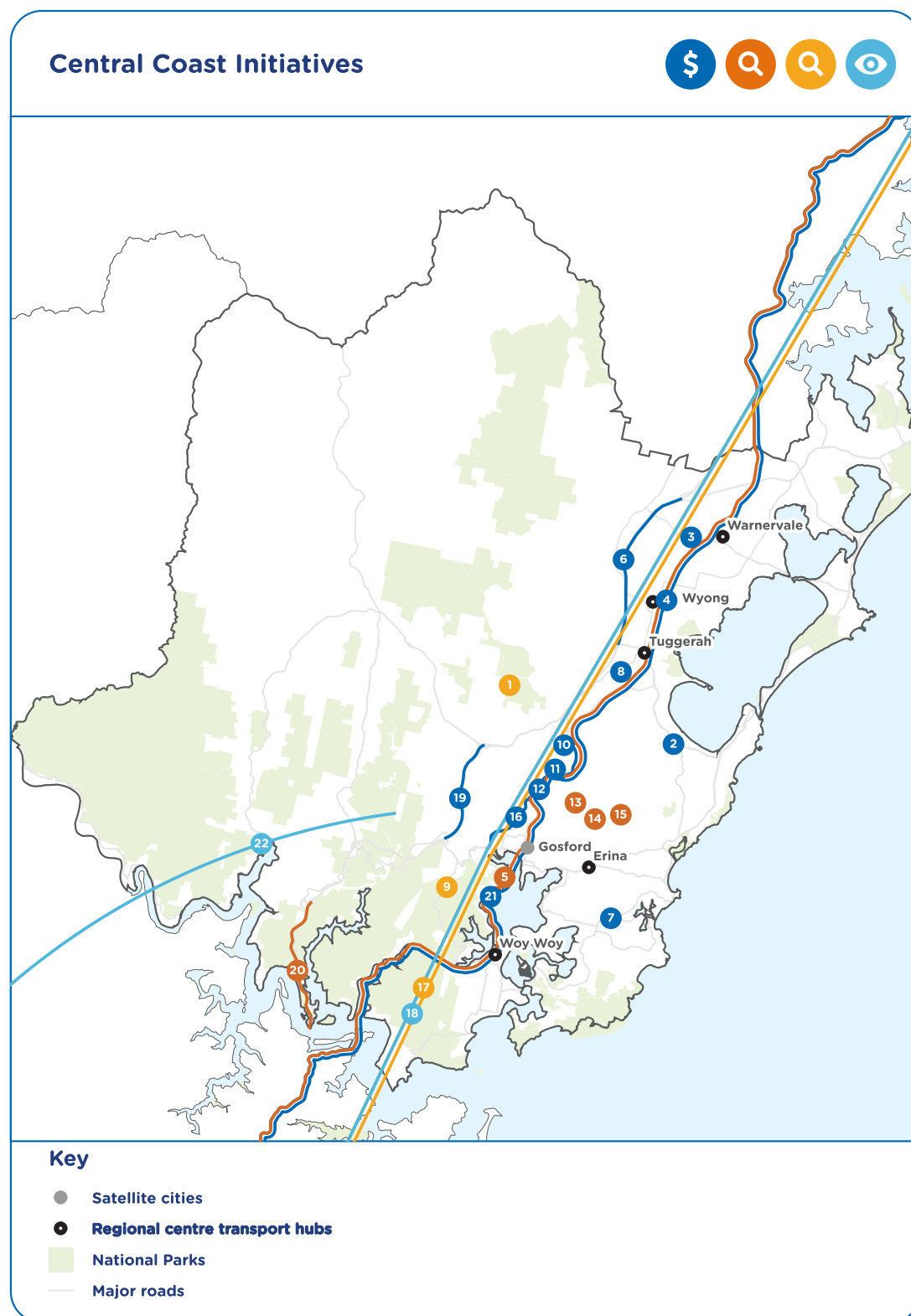
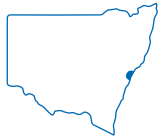






Figure 59: Central Coast infrastructure initiatives



Central Coast Region Initiatives



Key

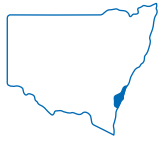
-  Committed 0–10 years
-  Initiatives for investigation 0–10 years
-  Initiatives for investigation 10–20 years
-  Visionary initiatives 20+ years

All initiatives for investigation are subject to business case development.

Initiatives

- | | |
|---|--|
| <ul style="list-style-type: none">● 2. Wyong Road, Mingara Drive to Tumby Road Upgrade● 3. Warnervale Link Road, Albert Warner Drive to Pacific Highway (Planning)● 4. Pacific Highway, Wyong Town Centre (Planning)● 6. Pacific Motorway Widening and Reconstruction, Wyong Road to Doyalson Link Road (State and Federal Funded)● 7. Empire Bay Drive, The Scenic Road and Cochrone Street Intersection Upgrade● 8. Kangy Angy Train Maintenance Facility for New Intercity Fleet● 10. Pacific Highway, Ourimbah Street to Glen Road● 11. Pacific Highway, Parsons Road to Ourimbah Street (Planning)● 12. Pacific Highway and Manns Road, Narara Creek Road to Parsons Road (Planning)● 16. Manns Road, Central Coast Highway to Narara Creek Road (Planning)● 19. Pacific Motorway Widening, Kariong Interchange to Somersby Interchange (State and Federal Funded)● 21. New Intercity Fleet | <ul style="list-style-type: none">● 5. Sydney-Central Coast-Newcastle Faster Rail Improvement● 13. Bus Headstart for Central Coast● 14. Central Coast Rapid Bus package● 15. Central Coast Place Plans● 20. M1 Motorway improvements (Hawkesbury River – Mt White)● 1. Outer Metro Roads Program● 9. M1 – Newcastle SMART Motorway● 17. Corridor Preservation for Higher Speed Connections● 18. Higher Speed Connections (east coast)● 22. Outer Sydney Orbital from Great Western Highway to Central Coast |
|---|--|

In addition to these region specific initiatives, statewide initiatives have been identified and are included in Chapter 4 of the Regional NSW Services and Infrastructure Plan.



Illawarra-Shoalhaven

The Illawarra-Shoalhaven region includes the local government areas of Kiama, Shellharbour, Shoalhaven and Wollongong. It has a population of around 405,000 people and is expected to grow to over 525,000 people by 2056. It is home to the Dharawal people.

The region contributed \$12.7 billion to the NSW economy (2014-15) and supports over 23,130 businesses (as at June 2016). Strategically located 70 minutes south of Sydney, it offers a competitive geographical and infrastructure base for businesses to benefit from global and domestic markets. The economy is driven by advanced manufacturing and knowledge-intensive businesses and has a strong Naval Defence sector at Shoalhaven, anchored by the home of Australian naval aviation at HMAS Albatross and the Albatross Aviation Technology Park (AATP), both in Nowra. Companies leverage the University of Wollongong's expertise in advanced processes advanced methods and technology to compete on a domestic and international scale.

Over 40 percent of the Illawarra-Shoalhaven region is recognised for its high environmental value, boasting an escarpment, coastline, waterways, lakes and rural hinterlands.

We are working closely with the Department of Planning and Environment to achieve the vision for the Illawarra-Shoalhaven region. This vision is “a sustainable future and a resilient community, capable of adapting to changing economic, social and environmental circumstances”.

Wollongong is the “economic and cultural heart” of the region, supporting the region with its education, health care, business and tourism precincts. We are working with the Department of Planning and Environment on its five goals for the Illawarra-Shoalhaven region:

- › A prosperous Illawarra-Shoalhaven
- › A region with a variety of housing choices, with homes that meet needs and lifestyles
- › A region with communities that are strong, healthy and well-connected
- › A region that makes appropriate use of agricultural and resource lands
- › A region that protects and enhances the natural environment.

Satellite city

In alignment with Department of Planning and Environment's identification of Wollongong as the capital for the region, Wollongong has been identified as a Satellite city of Greater Sydney.

There is a need for improved efficiency of the transport network to, from and within Wollongong and the Illawarra-Shoalhaven region. This includes:

- ▶ Development of an integrated public transport network hierarchy, including:
 - A single operator taking multi-modal responsibility across Wollongong
 - Improved integration and interchange between modes/services to enable seamless customer experience
 - Expanding 30 minute catchments for public transport
 - Improved time of day coverage and service frequency, reduced journey times, and the deployment of on-demand, flexible services
 - Facilitating car sharing services that are integrated with public transport.
- ▶ Improving the accessibility of Wollongong to the three cities of Greater Sydney by public transport and private vehicle. We will work on improving rail travel times between Sydney and Wollongong as well as supporting connections between Campbelltown and the Illawarra. Additionally, road improvements on Appin (including potential bus priority measures) and Picton Roads and the proposed Outer Sydney Orbital will improve connections to Sydney.
- ▶ Supporting urban renewal and increased accessibility and liveability of key centres through improved transport connections.
- ▶ Improved access to Port Kembla, an emerging international trade gateway.
- ▶ Development of active transport networks.
- ▶ Addressing pinch points in the road network and informing the program of road network optimisation improvements to support the maintenance of 30 minute catchments for car journeys.
- ▶ Undertaking a car parking review to evaluate and prioritise car parking availability and use within centres and at key interchanges.
- ▶ Introducing travel demand management policies and transport optimisation programs to re-balance demand against service and infrastructure provision.

To support this, a transport network hierarchy for the area has been developed.

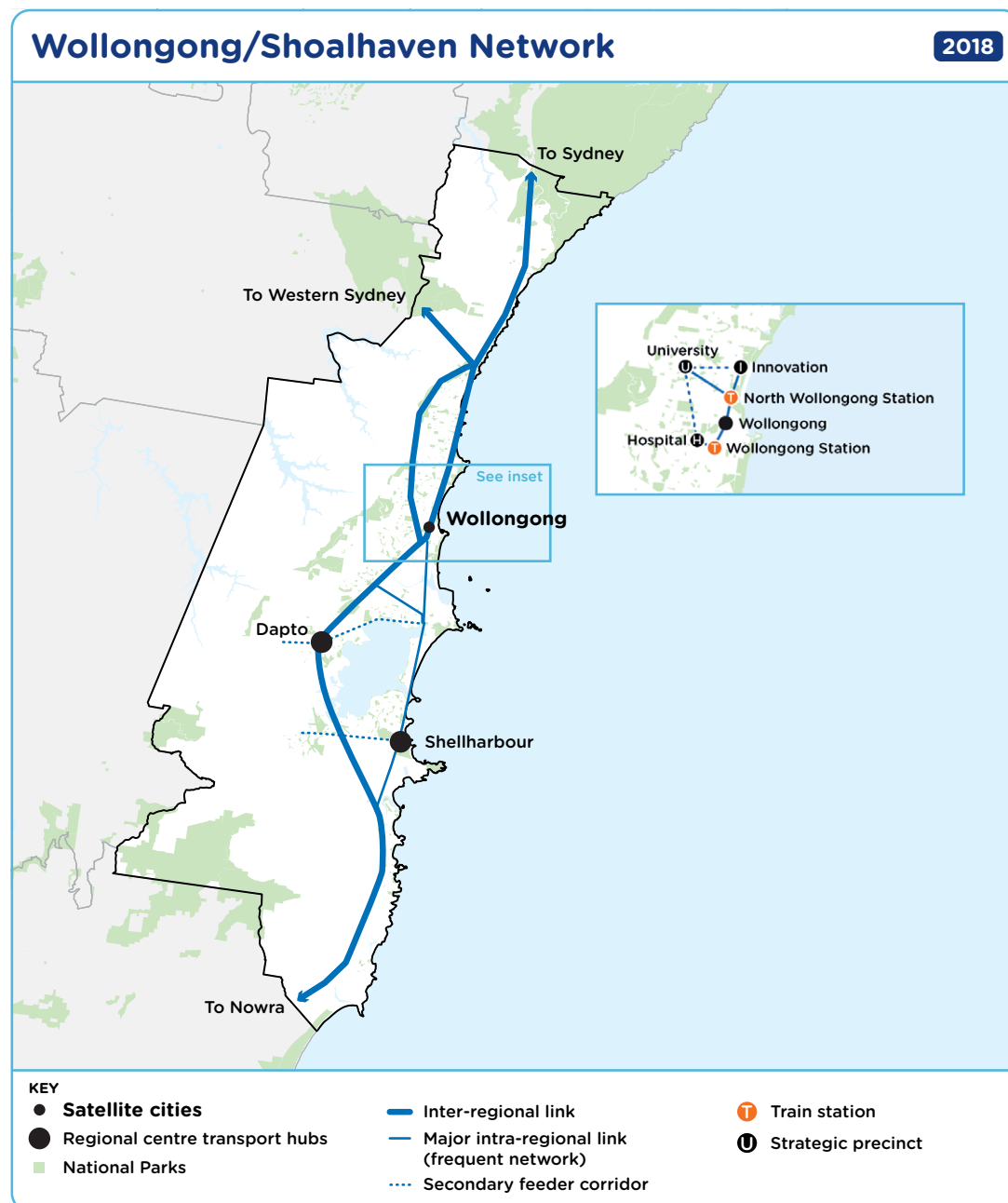


Figure 60: Network hierarchy for Wollongong and broader area

Hub & spoke

A key to the future success of the Illawarra-Shoalhaven region is supporting efficient transport connections to, from and within the region. Working with Department of Planning and Environment, we have identified key hubs to support travel in the Illawarra-Shoalhaven region. These include:

- › Dapto, Kiama, Nowra, Shellharbour, Ulladulla, Vincentia, Warrawong and Wollongong.

Connections to these key hubs will be provided by the best mode for the transport task, this may mean improving the existing connections available or working on delivering new services and connections. The existing connections available include:

- › **Air:** Scheduled passenger flight services operate out of Illawarra Regional Airport to Brisbane and Melbourne.
- › **Road:** M1 Princes Motorway, Princes Highway, Illawarra Highway, Picton Road, and Appin Road.
- › **Rail:** Intercity services between Sydney Central and Bomaderry (South Coast line).
- › **Coach:** NSW TrainLink provide coach services between Wollongong and Bowral, Moss Vale and Bundanoon. Private coaches provide services between Wollongong and Canberra, Sydney and Eden, Ulladulla and Bomaderry.
- › **Bus:** Local bus services operate across the region.
- › **Walking and cycling:** Various levels of infrastructure exist across the region to support walking and cycling.
- › **On demand:** Community transport, taxis as well as private operators are available across the region.

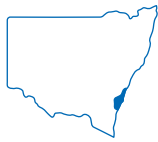
Future Transport Planning

A draft Illawarra-Shoalhaven Future Transport Plan will be developed as a supporting plan, discussing in more detail the transport future for the Illawarra-Shoalhaven region.

Place-based plans, plans considering the implementation of the movement and place framework will be developed for prioritised key hubs across the Illawarra-Shoalhaven region. These will be developed in conjunction with key stakeholders such as local government and Department of Planning and Environment.







Figure 61: Illawarra-Shoalhaven infrastructure initiatives



Illawarra-Shoalhaven Region Initiatives



























Key

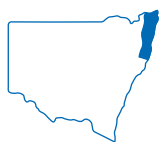
-  Committed 0–10 years
-  Initiatives for investigation 0–10 years
-  Initiatives for investigation 10–20 years
-  Visionary initiatives 20+ years

All initiatives for investigation are subject to business case development.

Initiatives

- | | |
|---|--|
| <ul style="list-style-type: none"> 2. New Intercity Fleet 8. Princes Motorway, Interchange at Base of Mount Ousley (Planning) 10. Princes Motorway Improvements, Bulli Tops to Picton Road (Planning) (State and Federal Funded) 12. Albion Park Rail Bypass (Planning and Preconstruction) 17. Berry to Bomaderry Upgrade 20. Nowra Bridge over Shoalhaven River (Planning) (State and Federal Funded) subject to final business case and Federal funding 22. Burrill Lake Bridge Replacement 24. M92 Nerriga Road improvements | <ul style="list-style-type: none"> 1. Outer Metro Roads Program 4. M1 Princes SMART Motorway 15. Electrification of Intercity to Bomaderry/Nowra 16. Completion of Maldon to Dombarton railway line 21. Illawarra Hwy/Macquarie Pass improvements |
| <ul style="list-style-type: none"> 3. Sydney-Wollongong Faster Rail Improvement 5. Wollongong Rapid Bus package 6. Wollongong Place Plans 7. Bus headstart for Wollongong 11. Bus priority measures on Appin Road 13. Picton Rd/Appin Rd Improvements 18. Moss Vale to Unanderra and Coniston Junction rail improvements 19. Princes Highway Nowra Bridge replacement 23. Duplication of Princes Highway (Jervis Bay Road Intersection to Moruya) including bypass of Milton-Ulladulla | <ul style="list-style-type: none"> 9. Illawarra Escarpment long term solution 14. Outer Sydney Orbital from Hume Motorway to Illawarra |

In addition to these region specific initiatives, statewide initiatives have been identified and are included in Chapter 4 of the Regional NSW Services and Infrastructure Plan.



North Coast

The North Coast region includes the local government areas of Ballina, Bellingen, Byron, Clarence Valley, Coffs Harbour, Kempsey, Kyogle, Lismore, Nambucca, Port Macquarie-Hastings, Richmond Valley and Tweed. It has a population of around 519,000 people and is expected to grow to close to 650,000 people by 2056. It is home to the Bundjalung, Githabul, Gumbaynggirr, Yaegl, Dunghutti and Biripi peoples.

In 2014-15 the North Coast region contributed \$14.3 billion to the NSW economy. The region boasts a diverse economy, strong in tourism, manufacturing, services, technology industries and agribusiness, leveraging its proximity to Queensland and the Global Gateway cities of the Gold Coast and Greater Newcastle.

The North Coast is a significant exporter of manufactured products. The manufacturing sector accounts for the majority of the region's exports, supported by a skilled workforce and an established presence in metal, transport (including aviation and marine applications) and timber products. The region has a strong and evolving agribusiness sector, contributing to the NSW economy through its livestock and fruit and nut production.

The region is Regional NSW's most popular tourist destination, attracting over 12 million visitors a year. It has a biologically diverse environment with vibrant communities, drawing in tourists from across the world. Upgrades to the Pacific Highway have resulted in increased accessibility across the region. The Australian and NSW governments have made commitments to rail trails in the region.

We are working closely with the Department of Planning and Environment to achieve the vision for the North Coast region. This vision is "the best region in Australia to live, work and place thanks to its spectacular environment and vibrant communities". The regional cities of Tweed Heads, Lismore, Coffs Harbour and Port Macquarie are the primary growth anchors, delivering new jobs, more diverse housing as well as high quality, essential services. These cities are complemented by Ballina and Grafton. The region's existing strong relationship with South East Queensland will continue to develop, bolstered by its strong demand for the North Coast's high quality agricultural products.

We are working with the Department of Planning and Environment on its four goals for the region:

- › The most stunning environment in NSW
- › A thriving, interconnected economy
- › Vibrant and engaged communities
- › Great housing choice and lifestyle options

Global Gateway city

Gold Coast, supported by Tweed Heads, is the Global Gateway city for northern NSW. We are working with stakeholders in both NSW and Queensland on improving transport connections between the North Coast and the Gold Coast, including investigating:

- › Extension of light rail from Gold Coast airport to Tweed Heads.
- › Corridor protection for higher speed connections along the east coast.
- › Bus and coach improvements to improve connectivity.
- › New servicing patterns and associated enabling infrastructure requirements to enable better connections and day return opportunities for regional communities.
- › Integrating and harmonising fares for cross border regions.
- › Harmonising cross border licencing, registration and regulatory requirements for maritime and roads.
- › Jointly prioritising infrastructure investment on either side of the borders.

Hub & spoke

A key to the future success of the North Coast region is supporting efficient transport connections to, from and within the region. Working with Department of Planning and Environment, we have identified key hubs to support travel in the North Coast region. These include:

- › Ballina, Coffs Harbour, Grafton, Lismore, Port Macquarie and Tweed Heads.

Connections to these key hubs will be provided by the best mode for the transport task, this may mean improving the existing connections available or working on delivering new services and connections. The existing connections available include:

- › **Air:** Scheduled passenger flight services operate out of Tweed Heads (Gold Coast Airport), Ballina, Lismore, Grafton, Coffs Harbour and Port Macquarie. In recognition of its growing importance as an entry point to the region, Ballina airport with passenger numbers at over 510,000 per annum, is undergoing an expansion through Restart NSW funding.
- › **Road:** Pacific Highway, Oxley Highway, Waterfall Way, Gwydir Highway, Summerland Way, Bruxner Highway, Bangalow Road and Numinbah Road.
- › **Rail:** NSW TrainLink regional rail services operate between Sydney and Brisbane, Casino and Grafton.

- › **Coach:** NSW TrainLink operates coach services within the region, between Grafton and Byron Bay, Casino and Tweed Heads, Casino and Surfers Paradise, Casino and Robina, Casino and Brisbane, Port Macquarie and Wauchope as well as Grafton and Moree. Private coaches operate between Sydney and Brisbane, Lismore and Brisbane, Byron Bay and Brisbane, Ballina and Brisbane, Casino and Brisbane, Lennox Head and Brisbane, Coffs Harbour and Brisbane, Ballina Airport and Bangalow, Ballina Airport and Byron Bay, Bangalow and Gold Coast Airport, Byron Bay and Gold Coast Airport and Tamworth and Coffs Harbour.
- › **Bus:** Local bus services operate across the region.
- › **Walking and cycling:** Various levels of infrastructure exist across the region to support walking and cycling, with the NSW Government providing support for the Tweed section of the Northern Rivers Rail Trail.
- › **On demand:** Community transport, taxi, rideshare (including the areas of Tweed, Port Macquarie and Coffs Harbour) as well as private operators.

Future Transport Planning

A region specific supporting transport plan and vision will be prepared for the North Coast region. Place-based plans, plans considering the implementation of the movement and place framework will be developed for prioritised key hubs across the North Coast region. Corridor plans on the spokes linking the North Coast region to neighbouring areas will also be undertaken.

These plans will be developed in conjunction with key stakeholders such as local government, the Department of Planning and Environment and the Queensland government.



Figure 62: Kempsey main street

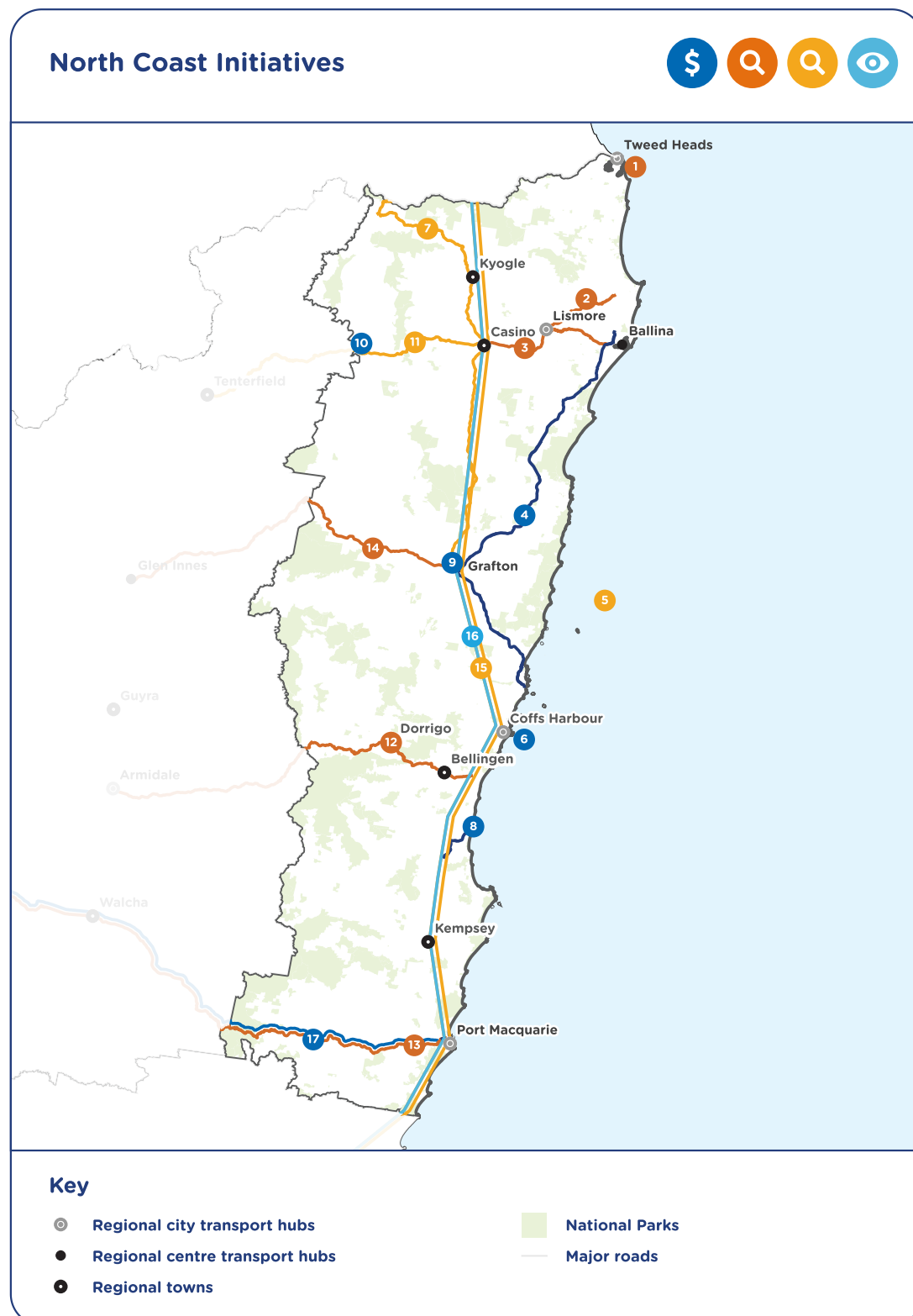
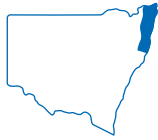






Figure 63: North Coast infrastructure initiatives



North Coast Region Initiatives




















Key

-  Committed 0–10 years
-  Initiatives for investigation 0–10 years
-  Initiatives for investigation 10–20 years
-  Visionary initiatives 20+ years

All initiatives for investigation are subject to business case development.

Initiatives

- | | |
|--|---|
| <ul style="list-style-type: none"> 4. Woolgoolga to Ballina (State and Federal Funded) 6. Coffs Harbour Bypass (Subject to final business case & Federal funding) 8. Warrell Creek to Nambucca Heads (State and Federal Funded) 9. Summerland Way, Additional Clarence River Crossing (Grafton Bridge) 10. Bruxner Highway, Replacement Bridge over Clarence River 17. Oxley Highway Safety and Realignment Works (Planning) | <ul style="list-style-type: none"> 5. North Coast cruise infrastructure development 7. Summerland Way Improvements (Grafton-QLD border) 11. Bruxner Highway Improvements (Casino-Tenterfield) 15. Corridor Preservation for Higher Speed Connections 16. Higher Speed Connections (east coast) |
|--|---|
- In addition to these region specific initiatives, statewide initiatives have been identified and are included in Chapter 4 of the Regional NSW Services and Infrastructure Plan.
-  **1.** Tweed Transport Network Plan (encompassing the potential for light rail extension from Gold Coast Airport to Tweed Heads)
 -  **2.** Upgrade of Bangalow Road between Bangalow and Lismore
 -  **3.** Bruxner Highway Improvements (Ballina-Casino)
 -  **12.** Waterfall Way corridor improvements
 -  **13.** Oxley Highway Improvements
 -  **214** Gwydir Highway Improvements (between Grafton and Glen Innes, Jackadgery)



South East and Tablelands

The South East and Tablelands region includes the local government areas of Bega, Eurobodalla, Goulburn Mulwaree, Hilltops, Queanbeyan-Palerang, Snowy Monaro, Upper Lachlan Shire, Wingecarribee and Yass Valley. It has a population of around 275,000 people and is expected to grow to over 355,000 people by 2056. It is home to the Yuin, Gundungurra, Ngunawal, Wiradjuri, Ngarigo and Bidwell peoples.

The South East and Region contributed \$8.6 billion to the NSW economy in (2014-15) and is home to over 25,000 businesses (as at June 2016). Key industry sectors are agribusiness and food, tourism, renewable energy and advanced manufacturing. It produces 38 percent of NSW's cherries and 25 percent of NSW's oysters. The South East and Tablelands region is also a renewable energy hub, home to the world's largest bio-reactor landfill project and Australia's largest hydro-electric generator, Snowy Hydro.

The South East and Tablelands boasts diverse landscapes with its coastline, green hinterlands, the Australian Alps and heritage towns. Travel to, from and around these landscapes presents difficult challenges due to the region's varying topography, diverse natural environments, weather and climate and pressures from tourism demand across the year.

The Port of Eden is an emerging cruise destination and home to one of the largest fishing fleets in NSW. The port accommodates a Royal Australian Navy wharf and is the primary woodchip export site in Australia, supporting a strong timber industry in the region. General cargo is processed at the multipurpose wharf in Twofold Bay and the port includes an eight-hectare cargo storage facility .

A large majority of the region's population live close to Australia's capital, Canberra, a Global Gateway city. This proximity means access to a range of employment opportunities, businesses and services, health care and education institutions, an international airport as well as world-class hospitality and cultural institutions. There are opportunities to further leverage the region's assets as well as its connections to Canberra, Melbourne, Illawarra-Shoalhaven and Sydney.

We are working closely with the Department of Planning and Environment to achieve the vision for the South East and Tablelands region. This vision is "a borderless region in Australia's most geographically diverse natural environment with the nation's capital at its heart". To achieve this vision, the Department of Planning and Environment has committed to collaborating with the ACT to leverage opportunities from the borderless 'Canberra region'. It has identified four goals for the region:

- › A connected and prosperous economy
- › A diverse environment interconnected by biodiversity corridors
- › Healthy and connected communities
- › Environmentally sustainable housing choices

Global Gateway city

Canberra, supported by Queanbeyan, is a significant Global Gateway city. We are working with stakeholders in both NSW and ACT on improving transport connections between Canberra and the South East and Tablelands, including investigating:

- › Extension of light rail from Canberra to Queanbeyan
- › Corridor protection for higher speed connections.
- › Bus and coach improvements to improve connectivity.
- › New servicing patterns and associated enabling infrastructure requirements to enable better connections and day return opportunities for regional communities.
- › Track straightening to improve rail journey times between Sydney and Canberra.
- › Highway improvements on Hume Motorway, Kings Highway, Barton Highway and Monaro Highway.
- › Integrating and harmonising fares for cross border regions.
- › Harmonising cross border licencing, registration and regulatory requirements for maritime and roads.
- › Jointly prioritising infrastructure investment on either side of the borders.

Hub & spoke

A key to the future success of the South East and Tablelands region is supporting efficient transport connections to, from and within the region. Working with Department of Planning and Environment, we have identified key hubs to support travel in the South East and Tablelands region. These include:

- › Canberra, Queanbeyan, Moss Vale, Goulburn, Batemans Bay, Cooma and Bega.

Connections to these key hubs will be provided by the best mode for the transport task, this may mean improving the existing connections available or working on delivering new services and connections. The existing connections available include:

- › **Air:** Scheduled passenger flight services operate out of Canberra, Cooma, Merimbula and Moruya.
- › **Road:** Hume Highway, Federal Highway, Monaro Highway, Princes Highway, Barton Highway, Kings Highway and Snow Mountains Highway.
- › **Rail:** NSW TrainLink regional rail services operate between Sydney and Melbourne, Canberra and Griffith. Intercity services operate between Sydney and Goulburn.
- › **Coach:** NSW TrainLink operates coach services within the region between Canberra Hospital and Eden, Queanbeyan and Cootamundra, Canberra and Bombala. Private coach companies run services between Sydney and Canberra, Melbourne and Eden as well as between Canberra and Wollongong and Narooma. Seasonal coach services operate between Canberra and Sydney to the ski fields. VLine, Victorian Government public transport, operate services between Melbourne and Batemans Bay and Canberra.
- › **Bus:** Local bus services operate across the region.
- › **Walking and cycling:** Various levels of infrastructure exist across the region to support walking and cycling.
- › **On demand:** Community transport, taxis and rideshare services.

Future Transport Planning

A region specific supporting transport plan and vision will be prepared for the South East and Tablelands region. Place-based plans, plans considering the implementation of the movement and place framework will be developed for prioritised key hubs across the South East and Tablelands region.

These plans will be developed in conjunction with key stakeholders such as local government, the Department of Planning and Environment and the ACT government as well as recent local government strategies such as Transport for Canberra's *Transport for a sustainable city 2012–2031*.



Figure 64: Kangaroo on Pebbly Beach, Batemans Bay







Figure 65: South East and Tablelands infrastructure initiatives



South East and Tablelands Region Initiatives



Key

-  Committed 0–10 years
-  Initiatives for investigation 0–10 years
-  Initiatives for investigation 10–20 years
-  Visionary initiatives 20+ years

All initiatives for investigation are subject to business case development.

Initiatives

- | | |
|---|--|
| <ul style="list-style-type: none">  11. Batemans Bay Bridge (planning)  12. Kings Highway, Replacement Clyde River Bridge  14. Dignams Creek Realignment  15. MR92 Nerriga Road improvements  17. Eden cruise facilities development  21. Main Road 54 (Goulburn to Bathurst) Initial Sealing  22. Queanbeyan Bypass (Ellerton Drive Extension) (State, Federal and Local Government Funded)  23. Monaro Highway Overtaking Lanes and Safety Improvements  26. Barton Highway Improvements (State and Federal Funded)  28. Kosciuszko Road Overtaking Lanes and Safety Improvements  31. Hume Highway Heavy Duty Pavement (State and Federal Funded)  3. Great Dividing Range long term solution study  4. Moss Vale to Unanderra and Coniston Junction rail improvements  5. Great Dividing Range long term solution corridor preservation  10. Duplication of Princes Highway (Jervis Bay Road Intersection to Moruya) including bypass of Milton-Ulladulla  16. Sydney-Canberra Faster Rail improvement  19. Kings Highway improvements | <ul style="list-style-type: none">  20. Snowy Mountains Highway improvements (including Brown Mountain)  24. Investigate extension of light rail from Canberra to Queanbeyan  25. Monaro Highway improvements  29. Lachlan Valley Way improvements  30. Hume Highway Improvements  1. Corridor Preservation for Higher Speed Connections  7. Illawarra Hwy/Macquarie Pass improvements  8. M31 Hume SMART motorway  9. Electrification of Intercity to Goulburn  13. Duplication of Princes Highway (Moruya to Bega Bridge)  27. Completion of Barton Highway duplication  2. Higher Speed Connections (east coast)  18. Duplication of Princes Highway (Bega Bridge to Victorian Border) |
|---|--|

In addition to these region specific initiatives, statewide initiatives have been identified and are included in Chapter 4 of the Regional NSW Services and Infrastructure Plan.



Riverina Murray

The Riverina Murray region includes the local government areas of Albury, Berrigan, Bland, Carrathool, Coolamon, Edward River, Federation, Greater Hume Shire, Griffith, Cootamundra-Gundagai, Hay, Junee, Leeton, Lockhart, Murray River, Murrumbidgee, Narrandera, Snowy Valleys, Temora and Wagga Wagga. It has a population of around 273,000 people, with the region's population expected to grow to over 280,000 people by 2056. The region's cities of Albury, Griffith and Wagga Wagga will continue to grow and support the surrounding communities with their business and service offering, connections and opportunities. The Riverina Murray region is home to the Nari Nari, Bangarang, Wolgalu, Ngunawal, Ngarigo, Ngiyampaa, Wongaibon, Yorta Yorta, Wiradjuri, Wamba Wamba, Barapa Barapa, Wadi Wadi, Muthi Muthi and Latji Latji peoples.

The Riverina Murray region contributed around \$11.8 billion to the NSW economy in 2014–15 supporting 27,000 businesses (as at June 2015). It is one of Australia's main food producing and agribusiness regions, home to a developing AgTech cluster, with additional strengths in advanced manufacturing, forestry, tourism, defence as well as transport, logistics and distribution. Known as the 'food bowl of NSW' it makes the largest regional contribution to agricultural production in NSW, with a gross value of \$3.8 billion. It is also the hub for the softwood forestry industry with 165,000 hectares of softwood production and growing demand for materials. Advanced manufacturing provides opportunities across the region, particularly near Albury, supporting the region's large defence presence.

The Riverina Murray is one of the most significant locations for freight and logistics in Australia, with major intermodals and corridors servicing the eastern seaboard of Australia. The region has a close relationship with the Global Gateway city of Canberra as well as Melbourne and Adelaide. Improvements to cross border travel will continue to be an opportunity into the future.

We are working closely with the Department of Planning and Environment to achieve the vision for the Riverina Murray region. This vision is "a diversified economy founded on Australia's food bowl, iconic waterways and a network of vibrant connected communities". They have identified four goals for the region:

- › A growing and diverse economy
- › A healthy environment with pristine waterways
- › Efficient transport and infrastructure networks
- › Strong, connected and healthy communities

Hub & spoke

A key to the future success of the Riverina Murray region is supporting efficient transport connections to, from and within the region. Working with Department of Planning and Environment, we have identified key hubs to support travel in the Riverina Murray region. These include:

- ▶ Albury, Griffith and Wagga Wagga

Connections to these key hubs will be provided by the best mode for the transport task, this may mean improving the existing connections available or working on delivering new services and connections. The existing connections available include:

- ▶ **Air:** Scheduled passenger flight services operate out of Albury, Griffith, Narrandera and Wagga Wagga.
- ▶ **Road:** Hume Highway, Sturt Highway, Newell Highway, Olympic Highway, Cobb Highway, Kidman Way, Mid Western Highway, Burley Griffin Way, Riverina Highway and Goldfields Way.
- ▶ **Rail:** NSW TrainLink regional rail services operate between Sydney and Melbourne and Sydney and Griffith. There is also a rail network that supports freight.
- ▶ **Coach:** NSW TrainLink operates coach services within the region, with Cootamundra acting as a hub for cross regional services. Services operate between Queanbeyan and Cootamundra, Wagga Wagga and Echuca, Albury and Echuca, Wagga Wagga and Griffith, Cootamundra and Mildura, Cootamundra and Dubbo, Cootamundra and Bathurst, Cootamundra and Condobolin, Cootamundra and Tumbarumba and Wagga Wagga and Tumbarumba. VLine (Victorian Government) operate coach services between the region and Victoria and private operators provide connections between Sydney and Melbourne, Melbourne and Canberra and the Victorian communities of Beechworth and Myrtleford.
- ▶ **Bus:** Local bus services operate across the region.
- ▶ **Walking and cycling:** Various levels of infrastructure exist across the region to support walking and cycling.
- ▶ **On demand:** Community transport, taxis as well as private operators are available across the region.

Future Transport Planning

A region specific supporting transport plan and vision will be prepared for the Riverina Murray region.

Place-based plans, plans considering the implementation of the movement and place framework will be developed for prioritised key hubs across the Riverina Murray region. These will be developed in conjunction with key stakeholders such as local government, Department of Planning and Environment and the Victorian government.

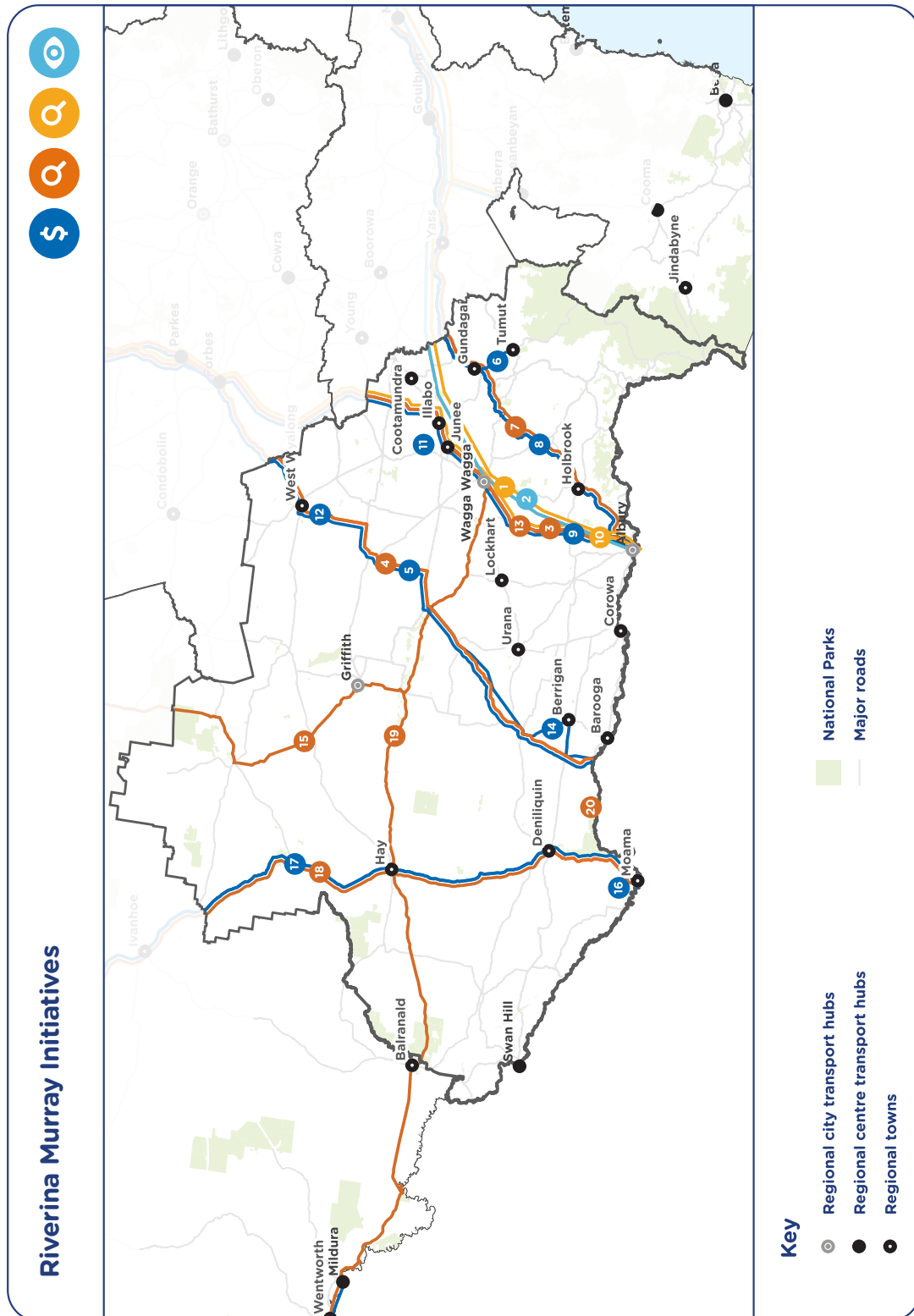






Figure 66: Riverina Murray infrastructure initiatives



Riverina Murray Region Initiatives





















Key

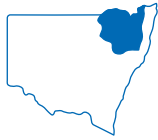
-  Committed 0-10 years
-  Initiatives for investigation 0-10 years
-  Initiatives for investigation 10-20 years
-  Visionary initiatives 20+ years

All initiatives for investigation are subject to business case development.

Initiatives

-  **5.** Newell Highway Overtaking Lanes
-  **6.** Gocup Road Upgrade
-  **8.** Hume Highway Heavy Duty Pavement (State and Federal Funded)
-  **9.** Inland Rail (Federally Funded)
-  **11.** Junee North Triangle
-  **12.** Newell Highway, West Wyalong Heavy Vehicle Bypass
-  **14.** Narrandera - Tocumwal Railway Reactivation
-  **16.** Cobb Highway, New Bridge at Echuca - Moama
-  **17.** Cobb Highway seal extension
-  **3.** Inland Rail Intermodal Facility investigations
-  **4.** Newell Highway Improvements (in addition to those committed)
-  **7.** Hume Highway Improvements
-  **13.** Main South Freight Rail Capacity Enhancements in collaboration with ARTC
-  **15.** Kidman Way improvements
-  **18.** Cobb Highway sealing missing links
-  **19.** Sturt Highway improvements
-  **20.** Murray River Bridges Program
-  **1.** Corridor Preservation for Higher Speed Connections
-  **10.** Support the delivery of Inland Rail
-  **2.** Higher Speed Connections (east coast)

In addition to these region specific initiatives, statewide initiatives have been identified and are included in Chapter 4 of the Regional NSW Services and Infrastructure Plan.



New England North West

The New England North West region includes the local government areas of Armidale Regional, Glen Innes Severn, Gunnedah, Gwydir, Inverell, Liverpool Plains, Moree Plains, Narrabri, Tamworth Regional, Tenterfield, Uralla and Walcha. It has a population of around 188,000 people and is expected to grow to around 210,000 people by 2056. Most of this population lives within the region's two cities: Tamworth and Armidale. The region is home to the Anaiwan, Banbai, Bundjalung, Githabul, Moonbahlene, Gumbaynggirr, Kamilaroi, Kwaimbul, Ngoorabal and Dunghutti peoples.

The region contributed over \$7 billion to the NSW economy in 2014–15. It is a premium agribusiness economy with emerging renewable energy and services sectors. It produces nearly a fifth of NSW's gross value of crops and 7.3% of livestock products, responding to growing demand in Asian markets. The established solar and wind energy infrastructure is supporting further renewables investment. Sapphire Wind Farm will be NSW's largest wind farm once operational in 2018, at 270 megawatts comprising 75 turbines able to power 110,000 homes.

New England North West is strategically well placed, located halfway between Sydney and Brisbane on key road and rail routes. There are opportunities available to expand its supply chains across national and global markets, with its freight networks and connections to the Hunter, Sydney as well as ports and airports in South East Queensland. Ensuring efficient cross border connections will continue to be important.

The region is also renowned for its natural environment, vibrant communities and centres that are rich in heritage.

We are working closely with the Department of Planning and Environment to achieve the vision for the New England North West region. This vision is “nationally valued landscapes and strong, successful communities from the Great Dividing Range to the rich black soil plains”. They have identified four goals for the region:

- ▶ A strong and dynamic regional economy
- ▶ A healthy environment with pristine waterways
- ▶ Strong infrastructure and transport networks for a connected future
- ▶ Attractive and thriving communities

Hub & spoke

A key to the future success of the New England North West region is supporting efficient transport connections to, from and within the region. Working with Department of Planning and Environment, we have identified key hubs to support travel in the New England North West region. These include:

- › Armidale, Glen Innes, Gunnedah, Inverell, Moree, Narrabri and Tamworth.

Connections to these key hubs will be provided by the best mode for the transport task, this may mean improving the existing connections available or working on delivering new services and connections. The existing connections available include:

- › **Air:** Scheduled passenger flight services operate out of Armidale, Tamworth Moree, Inverell and Narrabri.
- › **Road:** Newell Highway, New England Highway, Kamilaroi Highway, Gwydir Highway, Oxley Highway, Waterfall Way, Thunderbolts Way and Bucketts Way.
- › **Rail:** NSW TrainLink regional rail services operate between Sydney and Armidale and Sydney and Moree.
- › **Coach:** NSW TrainLink operates coach services within the region between Tamworth and Inverell, Armidale and Inverell, Armidale and Tenterfield, Narrabri and Wee Waa, Narrabri and Burren Junction as well as Moree and Grafton. Private coaches operate between Brisbane and Moree, Brisbane and Tenterfield, Brisbane and Tamworth, Toowoomba and Moree, Toowoomba and Tamworth, Toowoomba and Tenterfield, Brisbane and Sydney, Tamworth and Coffs Harbour and Tamworth and Brisbane.
- › **Bus:** Local bus services operate across the region.
- › **Walking and cycling:** Various levels of infrastructure exist across the region to support walking and cycling.
- › **On demand:** Community transport and taxis as well as private operators are available across the region.

Future Transport Planning

A region specific supporting transport plan and vision will be prepared for the New England North West region.

Place-based plans, plans considering the implementation of the movement and place framework will be developed for prioritised key hubs across the New England North West region. These will be developed in conjunction with key stakeholders such as local government and Department of Planning and Environment.

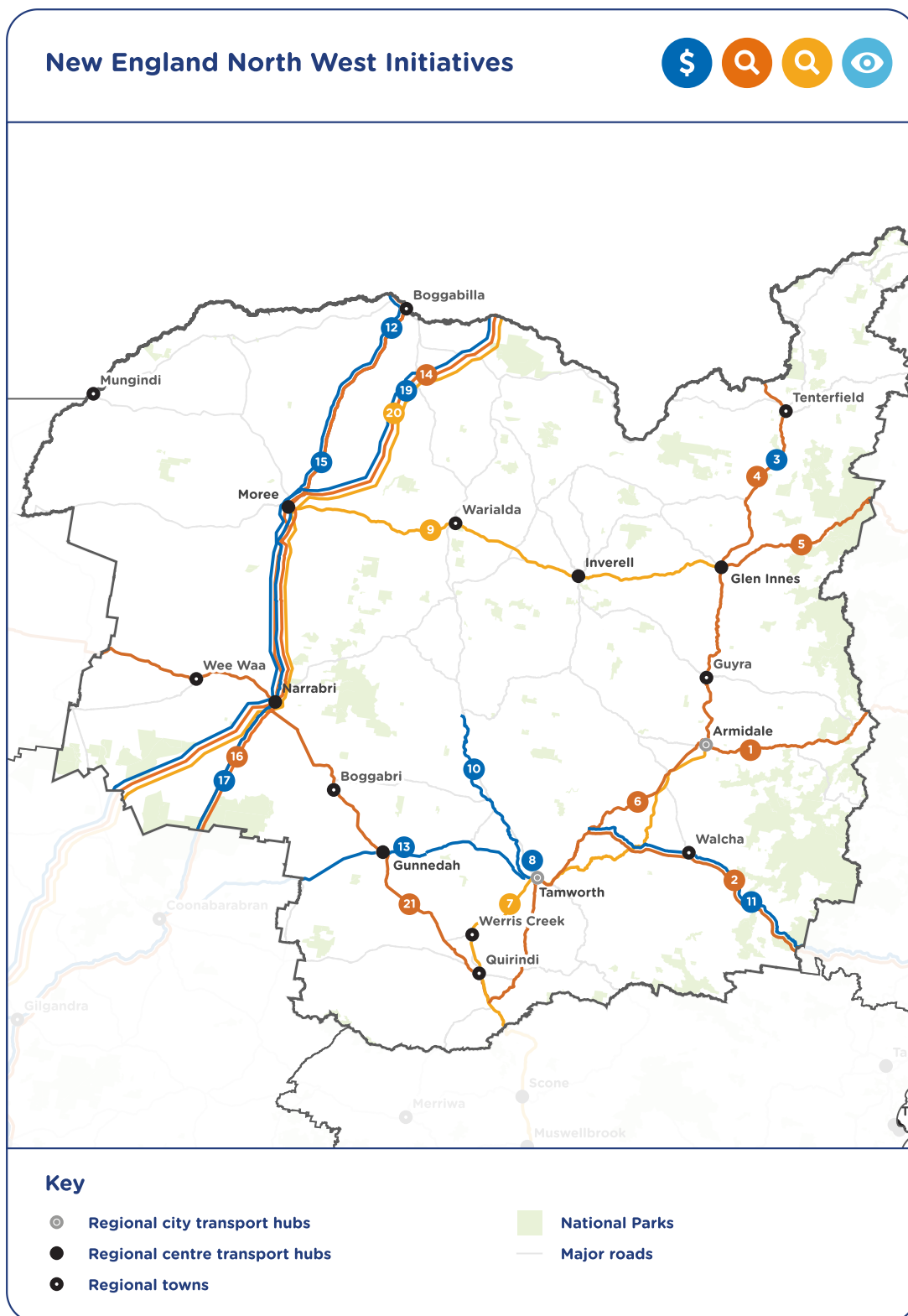






Figure 67: New England North West infrastructure initiatives



New England North West Region Initiatives























Key

-  Committed 0–10 years
-  Initiatives for investigation 0–10 years
-  Initiatives for investigation 10–20 years
-  Visionary initiatives 20+ years

All initiatives for investigation are subject to business case development.

Initiatives

- | | |
|---|---|
| <ul style="list-style-type: none">  3. New England Highway, Bolivia Hill Upgrade (State and Federal Funded)  8. Tamworth Rail Freight Centre  10. Barraba Branch Line  11. Oxley Highway Safety and Realignment Works (Planning)  12. Newell Highway, Mungle Back Creek to Boggabilla Heavy Duty Pavement (State and Federal Funded)  13. Oxley Highway, Gunnedah Bridge over Rail  15. Newell Highway Heavy Vehicle Pavement Upgrades – Narrabri-Moree, North of Moree (Planning)  17. Newell Highway Overtaking Lanes  19. Inland Rail (Federally funded)  1. Waterfall Way corridor improvements  2. Oxley Highway Improvements  4. New England Highway Improvements (Armidale to border)  5. Gwydir Highway Improvements (between Grafton and Glen Innes, Jackadgery)  6. New England Highway Improvements (Willow Tree to Armidale)  14. Inland Rail Intermodal Facility investigations  16. Newell Highway Improvements (in addition to those committed)  21. Kamilaroi Highway Improvements | <ul style="list-style-type: none">  7. Main Northern Line – improvements to address pinch points  9. Gwydir Highway improvements (Inland)  20. Support the delivery of Inland Rail <p>In addition to these region specific initiatives, statewide initiatives have been identified and are included in Chapter 4 of the Regional NSW Services and Infrastructure Plan.</p> |
|---|---|

New Integrated Road Planning Pilot

Namoi Unlimited the Joint Organisation represents seven councils (Gunnedah Shire, Gwydir Shire, Liverpool Plains Shire, Narrabri Shire, Tamworth Regional, Uralla Shire and Walcha Shire) with a population of over 100,000 people and an area of almost 60,000 square kilometres.

Roads and Maritime Services has been working in partnership with the Namoi Unlimited on a pilot program to provide an integrated road network strategy across the region. This plan builds on the goal of the member Councils to achieve Higher Mass Limit access across the region.

A network strategy identifying pinch points across the network that inhibit growth was created as a result of this work. The approach has been a new way in which Roads and Maritime has sought to work collaboratively with councils in a more integrated approach to address freight movements across a region, addressing first and last mile access issues along the way.

This pilot recognised the need to integrate local and state government road systems to create a seamless and safe journey for the road user that is both productive and reliable.

A copy of the final plan is available [here](#).



Figure 68: Tamworth Country Music Festival



Central West and Orana

The region includes the local government areas of:

- ▶ Central West: Bathurst Regional, Blayney, Cabonne, Cowra, Forbes, Lachlan, Lithgow, Oberon, Orange, Parkes and Weddin
- ▶ Orana: Bogan, Coonamble, Dubbo Regional, Gilgandra, Mid-Western Regional, Narromine, Warren and Warrumbungle Shire.

The region has a population of around 285,000 people and is expected to grow to over 320,000 people by 2056. The regional cities and centres will experience the highest rates of population growth and continue to perform as the service hubs for surrounding communities, providing access to jobs, health and education services as well as a range of businesses.

Central West and Orana is home to the Wiradjuri, Gamilaraay, Wangaaypuwan and Wayliwan peoples.

In 2014–15 the region contributed over \$14.5 billion to the NSW economy. Agribusiness, mining, tourism, food and wine as well as health and aged care are the predominant industries of the region, with it benefitting from its significant mineral deposits of coal, gold, copper, nickel, cobalt and lithium. It is also a strong tourism destination, with over \$1.2 billion spent by tourists in 2016/17.

We are working closely with the Department of Planning and Environment to achieve the vision for the Central West and Orana region. This vision is “the most diverse regional economy in NSW with a vibrant network of centres leveraging the opportunities of being at the heart of NSW”.

The development of the Melbourne to Brisbane Inland Rail has the potential to transform the Central West and Orana region into one of the key freight and logistics destinations in Australia. With associated transport infrastructure upgrades, there is potential to unlock further economic potential within the Central West and Orana region.

We are working with the Department of Planning and Environment on its four goals for the region:

- ▶ The most diverse regional economy in NSW
- ▶ A stronger, healthier environment and diverse heritage
- ▶ Quality freight, transport and infrastructure networks
- ▶ Dynamic, vibrant and healthy communities.

Hub & spoke

A key to the future success of the Central West and Orana region is supporting efficient transport connections to, from and within the region. Working with Department of Planning and Environment, we have identified key hubs to support travel in the Central West and Orana region. These include:

- › Bathurst, Dubbo, Forbes, Lithgow, Mudgee, Orange and Parkes

Connections to these key hubs will be provided by the best mode for the transport task, this may mean improving the existing connections available or working on delivering new services and connections. The existing connections available include:

- › **Air:** Scheduled passenger flight services operate out of Bathurst, Dubbo, Mudgee, Orange and Parkes airports.
- › **Road:** Mitchell Highway, Newell Highway, Olympic Highway, Mid Western Highway, Castlereagh Highway, Golden Highway and Lachlan Valley Way.
- › **Rail:** NSW TrainLink regional rail services operate between Sydney and Broken Hill and Sydney and Dubbo. Intercity services operate between Sydney and Bathurst.
- › **Coach:** 32 NSW TrainLink operates coach services within the region, primarily providing connections to NSW TrainLink rail services. Private coach operators provide connections between Sydney and Orange as well as Dubbo and Newcastle.
- › **Bus:** Local bus services operate across the region.
- › **Walking and cycling:** Various levels of infrastructure exist across the region to support walking and cycling.
- › **On demand:** Community transport and taxis, as well as private operators are available across the region.

Future Transport Planning

A region specific supporting transport plan and vision will be prepared for the Central West and Orana region.

Place-based plans, plans considering the implementation of the movement and place framework will be developed for prioritised key hubs across the Central West and Orana region. These will be developed in conjunction with key stakeholders such as local government and Department of Planning and Environment.

Improving connectivity from the regions

In addition to committed improvements and investigations identified for road and rail corridors in this Plan, a new visionary initiative is proposed for a strategic examination of options to increase freight connectivity across the Great Dividing Range from inland areas to Newcastle/Sydney/Wollongong.

This initiative will be wide-ranging and will consider:

- › Existing roads including Bells Line of Road, Great Western Highway, Golden Highway, Lachlan Valley Way, Castlereagh Highway, Mid-Western Highway
- › Operational rail lines including the Main Western Line, Dubbo to Newcastle line
- › Non-operational and proposed rail lines such as Cowra lines (Blayney to Demondrille), Gulgong to Maryvale.

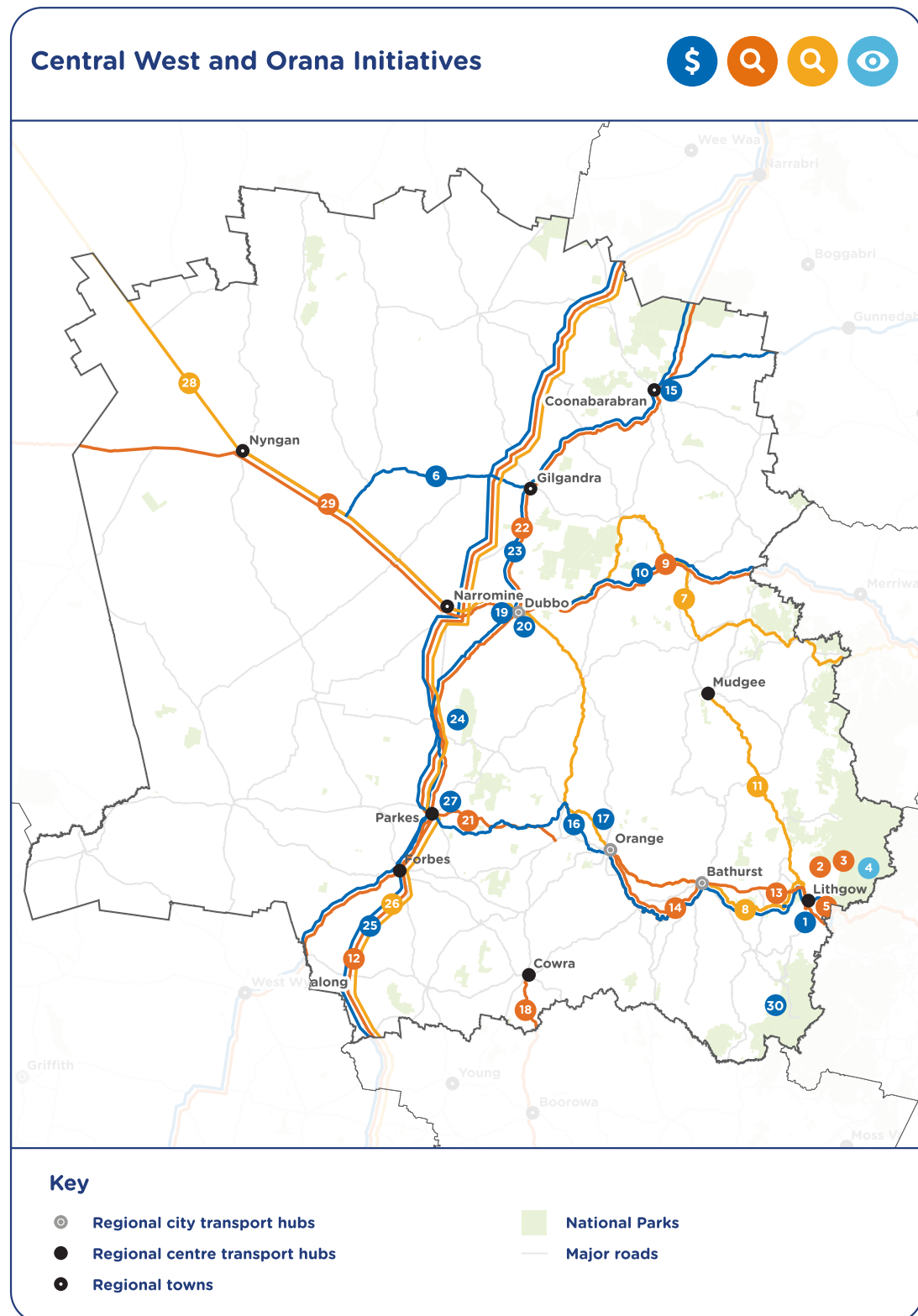
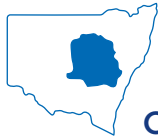






Figure 69: Central West and Orana infrastructure initiatives



Central West and Orana Region Initiatives



Key

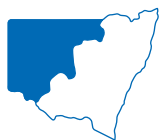
-  Committed 0–10 years
-  Initiatives for investigation 0–10 years
-  Initiatives for investigation 10–20 years
-  Visionary initiatives 20+ years

All initiatives for investigation are subject to business case development.

Initiatives

-  1. New Intercity Fleet
-  6. Oxley Highway Safety and Realignment Works (Planning)
-  10. Golden Highway Safety and Productivity Works (State and Federal Funded)
-  15. Newell Highway, Improvements through Coonabarabran (Planning)
-  16. Upgrades to Main West Line
-  17. Mitchell Highway, Guanna Hill Realignment
-  19. Regional Rail Maintenance Facility (Dubbo subject to planning approval)
-  20. Newell Highway, New Dubbo Bridge (Planning)
-  23. Newell Highway Overtaking Lanes
-  24. Newell Highway, Trewilga Realignment
-  25. Inland Rail (Federally funded)
-  27. Newell Highway, Parkes Bypass (Planning)
-  30. Main Road 54 (Goulburn to Bathurst) Initial sealing
-  2. Great Dividing Range long term solution study
-  3. Great Dividing Range long term solution corridor preservation
-  5. Bells Line of Road improvements
-  9. Golden Highway improvements (continuation)
-  12. Inland Rail Intermodal Facility investigations
-  13. Mt Victoria to Orange road corridor improvements to achieve travel time savings and road safety outcomes
-  14. Extending Bathurst commuter rail to Orange
-  18. Lachlan Valley Way improvements
-  21. Henry Parkes Way improvements
-  22. Newell Highway Improvements (in addition to those committed)
-  29. Barrier Highway improvements (Dubbo–Broken Hill)
-  7. Dubbo to Newcastle rail connection
-  8. Electrification of intercity to Bathurst
-  11. Castlereagh Highway Improvements (Mudgee–Lithgow)
-  26. Support the delivery of Inland Rail
-  28. Mitchell Highway improvements
-  4. Delivery of the Great Dividing Range long term solution

In addition to these region specific initiatives, statewide initiatives have been identified and are included in Chapter 4 of the Regional NSW Services and Infrastructure Plan.



Far West

The Far West is NSW's largest and most remote region. It is approximately 40 percent of the state of NSW and consists of the local government areas of Balranald, Bourke, Brewarrina, Broken Hill, Central Darling, Cobar, Unincorporated area, Walgett and Wentworth. It has a population of around 47,000 people and is expected to decline to around 36,000 people by 2056. It is home to the Wiradjuri, Kamilaroi, Muruwari, Ngemba, Barranbinya, Gunu, Barundji, Bandjigali, Wandjiwalgu, Karenggapa, Wadigali, Malyangaba, Wiljali, Danggali, Ngiyampaa, Barkandji, Barindji, Yitha Yitha, Muthi Muthi, Madi Madi, Kureinji, Dadi Dadi, Latje Latje, Meru, Wadi Wadi, Wiradjuri and Wemba Wemba peoples.

The large size and dispersed populations of the Far West region means it relies on its connections with cities in adjoining regions and states in order to access business and services such as health and education. This relationship plays out in three "sub regions" in the Far West:

- Local government areas of Walgett, Brewarrina, Bourke and Cobar have a strong relationship with Dubbo in the Central West and Orana region.
- Local government areas of Central Darling, the Unincorporated area and Broken Hill rely on Adelaide for their higher order businesses and services.
- Local government areas of Wentworth and Balranald have a strong cross border relationship with Victoria, relying on accessing the centres of Mildura and Swan Hill as well as Melbourne.

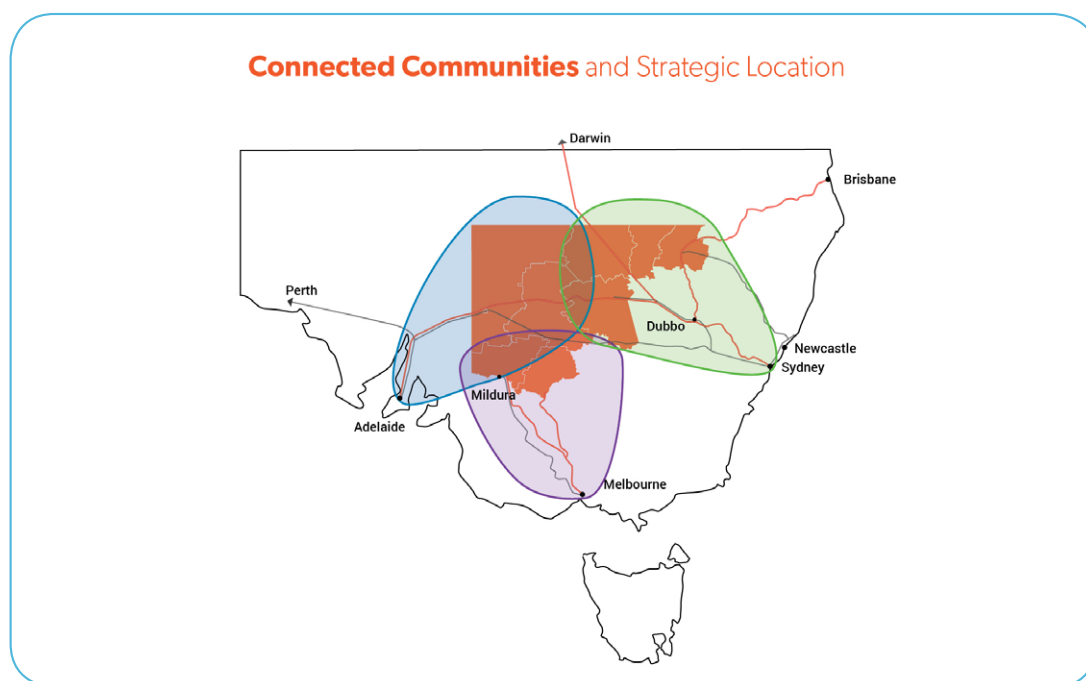


Figure 70: Far West relationship with other states and centres
(Source: Department of Planning and Environment 2017, Far West Regional Plan 2036)

The Far West region contributed over \$2 billion to the NSW economy in 2014–15. The region is the historical centre of Australian mining including the birthplace of BHP. It is rich in zinc, lead, silver and mineral sands. Other key sectors include renewable energy and tourism. Tourism opportunities are growing including indigenous tourism based on the region's rich Aboriginal culture and heritage.

The region has transport connections by air, road and rail to NSW, Victoria, Queensland, South Australia, supporting a diversifying agricultural sector in value-added food manufacturing. There are further opportunities in the production and processing of livestock, particularly goat meat, broad acre cropping including cotton, grains and oil seeds, grazing, horticulture (fruit and vegetables) and floriculture.

The Far West is also one of the most environmentally diverse region in NSW. Landscapes range from the 'outback' semi-arid desert areas to rich farmlands, rangelands and wetlands. It is traversed by one of Australia's longest river systems, the Barwon-Darling, home to some of the world's oldest heritage assets and dotted with historic mining and agricultural towns that are influenced by surrounding states and regions.

We are working closely with the Department of Planning and Environment to achieve the vision for the Far West region. This vision is "a unique part of Western NSW with a diverse economy, supported by the right infrastructure, an exceptional natural environment and resilient communities". To achieve this, we are working towards three goals:

- ▶ A diverse economy with efficient transport and infrastructure networks
- ▶ Exceptional semi-arid rangelands traversed by the Barwon-Darling River
- ▶ Strong and connected communities

Hub & spoke

A key to the future success of the Far West region is supporting efficient transport connections to, from and within the region. Working with Department of Planning and Environment, we have identified key hubs to support travel in the Far West region. These include the regional city of Broken Hill as well as the region's connections to Dubbo in the Central West and Orana region, Adelaide in South Australia and Mildura, Swan Hill and Melbourne in Victoria.

Connections to these keys hubs will be provided by the best mode for the transport task, this may mean improving the existing connections available or working on delivering new services and connections. The existing connections available include:

- ▶ **Air:** Scheduled passenger flight services operate out of Broken Hill airport. Mildura airport in Victoria also supports the region.
- ▶ **Road:** Barrier Highway, Sturt Highway, Silver City Highway, Cobb Highway, Kidman Way, Mitchell Highway, Castlereagh Highway, Kamilaroi Highway and Gwydir Highway.
- ▶ **Rail:** NSW TrainLink regional rail services operate between Sydney and Broken Hill.

- › **Coach:** NSW TrainLink operates coach services within the region, primarily providing connections to NSW TrainLink rail services. They include connections between Broken Hill and Dubbo, Bourke and Dubbo, Brewarrina and Coolabah, Lightning Ridge and Dubbo. A private coach operate provides services between Broken Hill and Adelaide.
- › **Bus:** Local bus services operate across the region.
- › **Walking and cycling:** Various levels of infrastructure exists across the region to support walking and cycling.
- › **On demand:** Community transport and taxis, as well as private operators are available across the region.

Future Transport Planning

A region specific supporting transport plan and vision will be prepared for the Far West region.

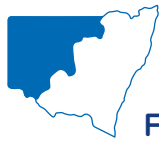
Place-based plans, plans considering the implementation of the movement and place framework will be developed for prioritised key hubs within the Far West region. These will be developed in conjunction with key stakeholders such as local government and Department of Planning and Environment.



Figure 71: Broken Hill town centre







Figure 72: Far West infrastructure initiatives



Far West Region Initiatives














Key

-  Committed 0-10 years
-  Initiatives for investigation 0-10 years
-  Initiatives for investigation 10-20 years
-  Visionary initiatives 20+ years

All initiatives for investigation are subject to business case development.

Initiatives

-  4. Cobb Highway seal extension
-  10. Silver City Highway seal extension
-  1. Kamilaroi Highway improvements
-  3. Kidman Way improvements
-  5. Cobb Highway sealing missing links
-  6. Sturt Highway improvements
-  7. Barrier Highway improvements (Dubbo-Broken Hill)
-  8. Murray River Bridges Program
-  9. The Wool Track sealing (Balranald - Ivanhoe - Cobar)
-  11. Silver City Highway sealing missing links
-  2. Mitchell Highway improvements

In addition to these region specific initiatives, statewide initiatives have been identified and are included in Chapter 4 of the Regional NSW Services and Infrastructure Plan.

CHAPTER

6

Next steps

The Regional NSW Services and Infrastructure Plan establishes a bold vision. We are already making significant progress in implementing the Plan, with many initiatives being delivered or committed to by the NSW Government.

Building on this, we will use the Plan to progress detailed planning for specific initiatives, consider funding and delivery options and track our performance in delivering on the customer outcomes. We will continue to engage with our customers, the community and stakeholders to ensure our plans are meeting the needs of customers and being responsive to new challenges and opportunities.

Continuing to engage with our customers

The Regional NSW Services and Infrastructure Plan is a 'living' plan that will continue to be updated as the region changes, technology evolves and new opportunities emerge. An agile and flexible approach is the hallmark of our approach to planning in Future Transport 2056.

This means we will continue to engage closely with our customers, the community and stakeholders, including federal departments, state departments and agencies, local councils and industry. This will be important for ensuring that customer, community and stakeholder insights inform more detailed planning and that this planning is integrated across government and with industry.

In consultation on the draft Plan, our customers told us that they want more input into the planning of infrastructure and services in regional NSW. By closely engaging with our customers as we update the Plan and progress detailed planning, we will be responsive to this feedback.

Contacting us

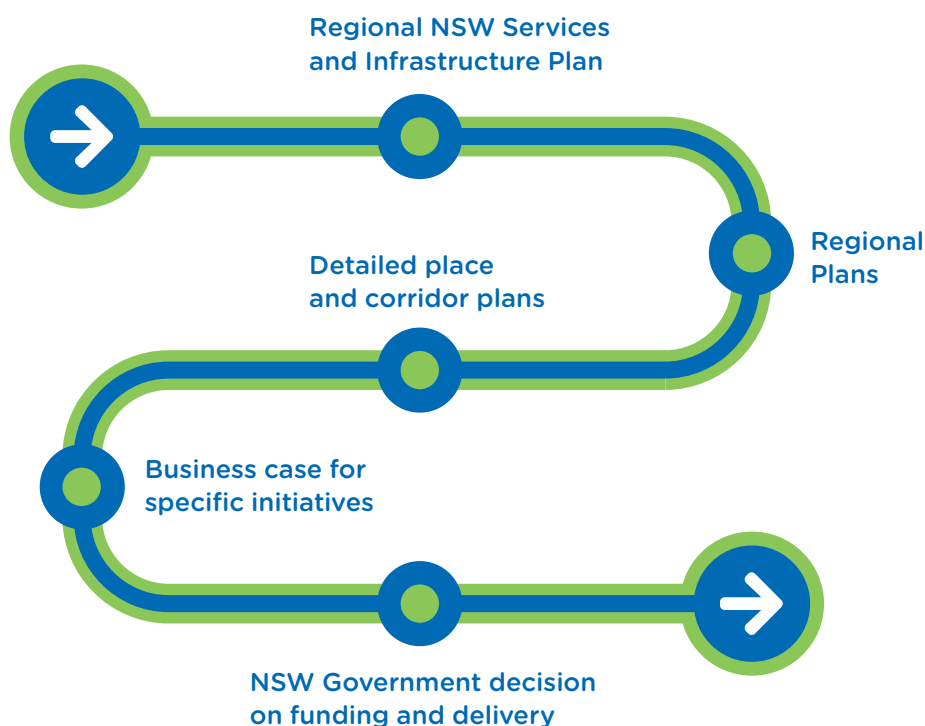
Visit our [website](#) for details on how to contact us. You can also contact us or access information about initiatives on [Facebook](#), [Twitter](#), [Instagram](#), [LinkedIn](#) and [YouTube](#).

Progressing our plans

Establishing customer outcomes and a vision for our transport system, and identifying and prioritising initiatives to deliver on these is just the first step in planning for the future. To ensure we are delivering the best outcomes for customers and the community, we will undertake detailed planning and feasibility studies for specific initiatives.

Our immediate priority will be to develop more detailed regional and place-based plans. As these plans are defined, we will then progress to detailed feasibility assessments of specific initiatives as part of the business case process. The business case process will ensure initiatives that are progressed for funding and delivery deliver value for money for the people of NSW.

Progressing our plans - next steps



IMPROVED COLLABORATION ACROSS GOVERNMENT

IMPROVED OUTCOMES FOR CUSTOMERS

Planning for Places – A tiered approach to planning transport for the regions

Guided by the Future Transport Strategy, Regional NSW Services and Infrastructure Plan and supporting plans, we will develop more detailed regional, corridor and place plans. These plans will focus on more regional and local transport needs and how these fit into the wider regional NSW transport vision. The plans will also enable us to assess in more detail what initiatives are most appropriate for addressing the transport needs of these corridors and places to align with land use planning. Importantly, they will also enable us to address community feedback on specific regional and local initiatives we should investigate.

Regional Plans

To be developed for each region to align with the Department of Planning and Environment's 20 year Regional Plans, the Regional Economic Development Strategies (REDS) and the Regional Development Framework to ensure transport planning supports growing regional economies and improves amenity for regional communities. These will be prepared in consultation with local government and Joint Organisations, other state government agencies and Australian Government bodies.

Place Plans

Plans considering the implementation of the movement and place framework will be developed for prioritised cities and centres within each region. These will be developed in conjunction with key stakeholders such as local government and Department of Planning and Environment.

Corridor plans

Rather than a specific road or train line, a corridor in the context of strategic planning is a broad, geographic linear area. Planning for the needs of a corridor ensures that different transport investments work together as part of an integrated solution. Mode-specific specialists will work alongside local experts to develop these plans.

Funding and delivery

Our commitment is to ensure the transport system is financially sustainable, meeting the needs of our customers and the community and enabling us to continue investing in services and infrastructure. That is why we have prioritised initiatives, to ensure we can stage delivery starting with those that we believe will deliver the greatest benefit.

As initiatives progress to business case phase, we will investigate a range of funding and delivery options as part of assessing whether initiatives will deliver value for money.

Staging of initiatives

Our plan prioritises initiatives on the basis of existing NSW Government commitments and the challenges that are most important to address. Initiatives are staged over 0–10, 10–20 and 20+ year periods, with existing infrastructure commitments, upgrades and service and policy initiatives a key focus in the first decade and further initiatives proposed for subsequent decades.

Infrastructure initiatives deliver significant benefits for our customers and the community, but they are capital-intensive and take time to plan and deliver, which is why initiatives are staged. On corridors where major new infrastructure is not yet needed, upgrades to existing infrastructure or service improvements may suffice.

As we undertake more detailed planning, we will review the proposed staging to ensure we are achieving the best outcomes for our customers.

Sources of funding

One of our objectives is to ensure the transport system is financially sustainable through informed decision-making and services and infrastructure being delivered, operated and maintained in a way that is affordable over the long-term.

There are many sources of funding for transport projects. User charging will remain a source of funding but will be complemented by other measures as the way we build and operate transport becomes more sophisticated. Mechanisms such as value sharing and development of government land to fund transport infrastructure will be investigated as we look for innovative and efficient ways to fund our transport projects.

Delivery mechanisms

As part of evaluating initiatives, we will consider a range of delivery mechanisms, consistent with the directions in the Future Transport Strategy. Where appropriate, we will partner with industry to delivery transport initiatives – whether this be enabling new services and infrastructure to be developed by industry or continuing to engage the private sector to deliver, operate and maintain services and infrastructure.

Local Government will also be a key partner for delivery of the Regional NSW Services and Infrastructure Plan. For initiatives related to cycling paths, local road upgrades, and local footpaths, local councils will be an essential partner.

Considering wider benefits of regional projects

Cost Benefit Analysis (CBA) helps decision makers by allowing systematic comparison, ranking options, promoting consistency, enhancing transparency and minimising project bias. CBA seeks to assess the economic, social and environmental benefits and costs over the lifetime of a proposal. In doing so, cost benefit analysis goes beyond just considering the direct effects, financial effects or effects on one party, to considering all impacts on the wellbeing of the entire society or community.

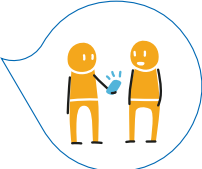


NSW cost benefit analysis now allows for cross-border costs and benefits to be taken into consideration when making investment decisions. In March 2017, NSW Treasury released an update of NSW Government Guide to Cost Benefit Analysis (the guide). This updated guide makes clear that, in terms of geographic scope, a CBA should focus on impacts (costs and benefits) to the NSW community (households, businesses, workers and/or governments). However, as a change from previous guidance, to fully inform NSW decision-makers, the CBA can now also include analysis of local and/or multi-jurisdictional impacts where relevant.


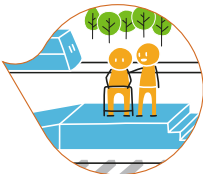
More information on cost benefit analysis principles may be found at: <https://www.treasury.nsw.gov.au/nsw-economy/economic-frameworks>


Measuring and monitoring our progress

To track our progress in delivering on the outcomes established by the Future Transport Strategy we have established specific targets and measures. We will continue to explore opportunities for using new forms of data to provide insights on the performance of the transport system and how we are tracking against targets.

In addition to Transport for NSW is the lead on three State Priorities. We will continue to report on our performance against these priorities, which include improving road travel reliability, on-time running of public transport and reducing road fatalities.

Future Transport 2056 Statewide Outcomes	Performance focus	Measures and indicators
Customer Focused 	Maintain or improve customer satisfaction levels	Customer Satisfaction <ul style="list-style-type: none"> › Monitor % of customers satisfied or highly satisfied using the Transport for NSW Customer Satisfaction Index
Successful Places 	Deliver transport initiatives that improve the liveability of places	Liveability of places <p>Monitor the application of Movement and Place principles to new or redesigned centres</p> <ul style="list-style-type: none"> › Increase the number of people able to access centres by walking, cycling and using public transport › Develop indicators for transport enabled health and liveability outcomes
Growing the Economy 	Provide efficient public transport and road connections for passengers and freight	Metropolitan 30 minute city <ul style="list-style-type: none"> › Monitor the % of population within Greater Sydney with 30 minute or less access to their nearest strategic centre by public or active transport Regional centre connectivity <ul style="list-style-type: none"> › Monitor the % of towns and centres with day return public transport services to the nearest regional city Freight movement efficiency <ul style="list-style-type: none"> › Develop efficiency and productivity measurements for freight under the Freight and Ports Plan.

Future Transport 2056 Statewide Outcomes	Performance focus	Measures and indicators
<p>Safety and Performance</p> 	<p>Deliver a safe and reliable network with zero trauma</p>	<p>Reduction in fatalities and serious injuries</p> <ul style="list-style-type: none"> › Monitor fatalities and serious injuries across the road and transport network <p>Journey time reliability</p> <ul style="list-style-type: none"> › Benchmark travel times for each mode <p>Public transport travel time competitiveness</p> <ul style="list-style-type: none"> › Compare public transport travel times to private vehicle travel times on major metropolitan and regional corridors
<p>Accessible Services</p> 	<p>Provide whole of journey accessibility for customers regardless of age or ability</p>	<p>Public and active transport accessibility to education, jobs, health and community services</p> <ul style="list-style-type: none"> › Develop new measures for active and public transport accessibility to education, jobs and services along with regional and metro service affordability and fare parity <p>Physical accessibility of infrastructure, vehicles and services</p> <ul style="list-style-type: none"> › Monitor infrastructure and service compliance with national disability standards <p>Services used and satisfaction of customers with specific needs</p> <ul style="list-style-type: none"> › Measure use and satisfaction by age, people with disability, people from Culturally and Linguistically Diverse (CALD) backgrounds and Aboriginal people

Future Transport 2056 Statewide Outcomes	Performance focus	Measures and indicators
Sustainability 	Improve financial sustainability of transport in NSW and its contribution to net zero emissions	Cost effectiveness <ul style="list-style-type: none">› Measure cost per service kilometre and overall cost recovery for public transport› Measure cost effectiveness of road expenditure Carbon emissions <ul style="list-style-type: none">› Measure energy efficiency of the vehicle fleet› Measure mode shift to active and public transport and electric vehicle use› Monitor transport-related greenhouse gas emissions and energy intensity

CHAPTER

7

Glossary

Glossary for Regional NSW Services and Infrastructure Plan

Term	Definition
30 Minute City	A planning concept for a city in which people can easily access the places they need to visit on a daily basis within 30 minutes travel from where they live. In the Greater Sydney context the focus is on the access to the nearest Centre within 30 minutes by public transport, walking or cycling.
Accessibility	The ability for everyone, regardless of disability, personal circumstances or where they live, to use and benefit from the transport system.
Access Prioritisation Plan	Strategic plan using the Movement and Place Framework that identifies initiatives to prioritise access to interchanges, corridors and key places. Will consider the need for access to be prioritised by high efficiency passenger and freight services as well as providing access for shared, connected, automated and electric vehicles.
Active transport	Transport that is human-powered, such as walking or cycling.
Active transport sharing scheme	Investment in an AMD and electric bike sharing scheme to incentivise uptake within context of an optimal policy and regulatory framework. May include active transport options as well as other AMDs more suitable for an ageing population.
Aerial mobility technology	The use of aerial technology such as drones for transport. They may be used to deliver emergency transport services, disaster responses or last mile freight deliveries.
Assisted Mobility Devices (AMD)	Forms of transport that facilitate individual personal transportation. Examples include powered wheelchairs, scooters, segways, bicycles and unicycles. Although many such devices are used by people with activity or mobility restrictions, mobility aids can be employed generally such as for transportation in place of private vehicles.

Term	Definition
Assisted Mobility Device (AMD) Strategy	Development of a policy and regulatory framework to manage the safe introduction and promotion of AMDs that considers advancing technology and automation.
Automation	Use of control systems, such as computers, robots or artificial intelligence to undertake processes previously done by humans. Transport technology may be fully or partially automated, with the latter involving some form of human input to or manage the technology.
Bridges for the Bush Program	NSW Government investment in critical infrastructure to remove significant freight pinch points or bottlenecks on the state road network and to improve the safety and reliability of some old bridge structures.
Bridge Upgrades	Upgrades of various bridges in regional NSW, including extension of the Bridges for the Bush Program and local road bridges.
Bus Headstart	Bus routes implemented in new growth areas to encourage early public transport use.
Car share	A model of car rental, with the ability to rent a car for a short period of time, often by the hour.
Car Share Package	Package to facilitate car share in regional NSW.
Catchment	The area from which a location or service attracts people.
CAV, electric vehicle and intelligent transport system trials	Trials of CAVs, electric vehicles (including buses) and intelligent transport systems to support safer and more efficient movement of people and goods.
CAV Readiness Program	Program to ensure CAV and autonomous vehicle readiness, including smarter roads and incorporating design standards to support CAVs to enable the strategic road network to adapt to accommodate the evolution of future CAVs for freight and passenger movement.

Term	Definition
Coastal geography	The area broadly represented as between the Great Dividing Range and the NSW coastline. It excludes Greater Sydney and the Outer Metropolitan area.
Committed initiatives (0–10 years)	Projects, service changes or policies that either have committed funding, are committed/ contractually committed, are for immediate detailed planning, or are part of key maintenance, renewal or safety programs. Some committed initiatives are subject to final business cases and funding.
Connected and Autonomous Vehicles (CAVs)	A connected vehicle is able to communicate wirelessly with other vehicles, infrastructure and/or devices. An automated vehicle has one or more element of the driving task that is automated and therefore does not require a human driver for at least part of the driving task. Levels of automation range from assisting the human driver with the driving task, through to fully and highly automated vehicles that can drive themselves. “Connected and automated vehicle” is widely used as a collective term to refer to the full range of different vehicles equipped with varying ranges and capabilities of connected and/or automated vehicle technologies.
Conurbation	The merging of separate cities generally through population growth and physical expansion to form an extended urban area.
Corridor	A broad, linear geographic area between places.
Country Passenger Transport Infrastructure Grant Scheme (CPTIGS)	Provides subsidies to support the construction or upgrade of bus stop infrastructure generally owned and maintained by local councils across country NSW to be accessible (DDA compliant). \$3,252,000 was available in most recent biennial funding round (2017/19).
Cross border public transport pricing and regulation MoUs	Establishment of Memorandums of Understanding between state governments where none exist to support seamless pricing and regulations for cross border travel.

Term	Definition
Customer	Everyone who uses transport services or infrastructure is a customer of the NSW transport system. Whenever a person drives, travels by train, bus or light rail, or walks or cycles they become a customer of the transport system. Our customers also use our transport networks for business purposes, to deliver goods and services, and to move freight across the State and beyond.
Customer outcomes	The economic, social and environmental benefits which customers can expect from the transport system and are used by planners to guide investment, policy and reform and service provision.
Demand responsive transport services (or on-demand)	Transport services that are responsive to the demands of individual customers, rather than a fixed timetable or route. They provide new or improved coverage to areas where traditional public transport is difficult to provide. They may act as feeder services to stronger public transport corridors.
Disability Discrimination Act (DDA) (1992)	A Commonwealth Act that makes it unlawful to discriminate against a person, in many areas of public life, including: employment, education, getting or using services, renting or buying a house or unit, and accessing public places, because of their disability.
Drone	An unmanned aerial vehicle (UAV) which may be remotely controlled or can fly autonomously.
Electric Vehicle Policy	The development and implementation of an electric vehicle policy that aims to maximise benefits for passenger and freight mobility, productivity and support liveable centres. It will also develop cost effective energy reduction solutions for passenger and freight services.
Fare alignment	Alignment of fares in regional NSW with those in the current Opal operational area. This will increase equity between regions, improve social inclusion and affordability as well as assist in encouraging greater use of public transport services.
Faster Rail	Major investments in track straightening and signalling improvements to maximise the operational capabilities of the New Intercity Fleet and new Regional Rail fleet between Sydney, Central Coast/ Newcastle, Canberra and Wollongong/Illawarra.

Term	Definition
First mile / last mile	A term applied to the first and final stage of a journey in which people or goods travel to a broad range of origins or destinations. An example of a last mile journey is the trip made between a train station and the final destination of a shopping centre or place of work.
First Stop Transport	Resources to teach people how to use public transport, as well as resources for helping others to use public transport. There is also a program that provides travel training. http://firststop.transportnsw.info/contacts-for-travel-training.html
Fixing Country Rail	NSW Government program that provides targeted funding for rail infrastructure enhancement projects that eliminate connectivity constraints on the NSW regional rail network.
Fixing Country Roads	NSW Government program that provides targeted funding to local councils to repair and upgrade regional NSW roads.
Fleet	The collective vehicles of a transport company or service.
Fleet leasing policy	Policy for the NSW Government Transport Cluster to use safer and lower emissions vehicles to result in reduced costs and improved health outcomes of staff and communities and to accelerate uptake in regional communities of safer and cleaner vehicles.
Flexible (or demand responsive) transport	Transport services that are run based on the demands of individual customers, rather than a fixed timetable or route.
Freight	Goods or cargo transported by truck, light commercial vehicles (e.g.vans and utes), cycle couriers, rail, aircraft or ship.
Fuel vouchers policy	Development of a policy considering the provision of fuel vouchers for people living in remote NSW.

Term	Definition
Geographies	Used in the Regional NSW Services and Infrastructure Plan to differentiate between the different areas of NSW. The geographies have different population densities and growth rates, which influences how transport is provided and transport networks are structured. They include the Remote, Inland, Coastal and Outer Metropolitan geographies.
Global gateway cities	Cities that provide state level services and facilities to support a broad population catchment while also having international connections through their airport and/or port. Canberra, Greater Sydney, Greater Newcastle and Gold Coast are global gateway cities that support NSW.
Greater Newcastle	The area comprising five local government areas of Cessnock, Lake Macquarie, Maitland, Newcastle and Port Stephens.
Greater Sydney	The 33 local government areas of Bayside, Blacktown, Blue Mountains, Burwood, Camden, Campbelltown, Canada Bay, Canterbury-Bankstown, Cumberland, Fairfield, Georges River, Hawkesbury, Hornsby, Hunters Hill, Inner West, Ku-ring-gai, Lane Cove, Liverpool, Mosman, Northern Beaches, North Sydney, Parramatta, Penrith, Randwick, Ryde, Strathfield, Sutherland, The City of Sydney, The Hills, Waverley, Willoughby, Wollondilly and Woollahra.
Greater Sydney Commission (GSC)	An independent organisation funded by the NSW Government, responsible for coordinating and aligning the planning that will shape the future of Greater Sydney.
Heavy vehicle rest areas	Provision of rest areas along key freight corridors. RMS is currently undertaking a refresh of the Heavy Vehicle Rest Area Strategy, with data collected on the use of various rest areas across the state. Usage surveys have also been undertaken to understand how the customer is utilising various rest areas, including service centres, and how we could plan them better. This information will be used to inform future planning for rest areas along state highways.

Term	Definition
High Productivity Vehicle (HPV)	A vehicle (eg a semi-trailer, truck and dog combination or B-double / B-triple) that is able to carry a greater payload than the maximum sized vehicle permitted on the particular road. This is due to being greater in length or height, and normally has a performance based operating system that enables the vehicle to track better across the road network. Due to the greater mass and size of these vehicles, there is an increased focus to ensure the road environment can facilitate these vehicles safely, for example overtaking lanes, rest areas, bridges and culverts.
Hub and Spoke Model	A transport network model that provides connections (spokes) to and from key centres (hubs). The spokes link to different hubs across an area, rather than focussing on one key hub. It provides regional trunk public transport services that connect to key centres which are supported by a network of intra-regional transport services that connect to smaller towns and villages. It aims to provide more convenient public transport arrival and departure times, including day return services to regional cities and centres.
Inland NSW connections	Strategic examination of options to connect inland NSW to Sydney, Newcastle and/or Wollongong. It will consider existing roads such as Great Western Highway, Bells Line of Road and Golden Highway as well as rail corridors.
Infrastructure NSW (iNSW)	An Independent statutory agency responsible for assisting the NSW Government with identifying and prioritising the delivery of critical public infrastructure for NSW.
Initiatives for investigation (0-10 years, 10-20 years)	Initiatives intended to be investigated for potential commitment or implementation within the next 20 years. Those listed in the 0-10 year horizon will be prioritised for more detailed investigation to determine if they are required in the next decade. They are prioritised based on their expected benefits or strategic importance. Initiatives proposed for investigation are unconstrained by affordability and will be subject to funding and strategic business cases that consider a range of possible solutions.
Inland geography	The area broadly represented as between the Great Dividing Range and the Remote geography in NSW.

Term	Definition
Inland Port	Cross-government initiative to create an Inland Port that provides processing of goods and customs services prior to arrival at coastal ports for shipping.
Inland rail	A proposed 1,700km freight rail link between Melbourne and Brisbane via regional Victoria, New South Wales and Queensland.
Intelligent Transport System	The application of computing, electronics, information technology and communications to solve transport problems. We will review and implement Intelligent Transport Systems for managing connected vehicles and infrastructure where it is cost effective to do so. An example of an Intelligent Transport System is Cooperative Intelligent Transport Systems (CITS). CITS allow vehicles to communicate with other vehicles and infrastructure. They enable greater safety and can optimise the management of pedestrian movement and vehicle traffic.
Interchange	A facility to transfer from one mode of transport, or one transport service, to another. For example, major rail station, bus facility or park and ride.
Intermodal terminal	An intermodal terminal is an area of land used to transfer freight between at least two modes of transport. It is typically used to describe the transfer of international shipping containers from road to rail and vice versa.
Journey to Work	Data collected as part of the Census every 5 years on where workers travel to work and by what mode.
Last Mile Productivity Initiative	Investigate the capacity of existing programs to improve first and last mile connectivity and efficiency for the freight network.
Level Crossing Improvement Program	Investigate the capacity of existing programs to improve first and last mile connectivity and efficiency for the freight network.

Term	Definition
Light rail	An urban railway transportation system using vehicles that are capable of sharing streets with vehicular traffic and pedestrians, but may also be operating on an exclusive right-of-way such as a segregated rail corridor, tunnel or elevated structure.
Liveability	The term 'liveability' is used in land use planning to focus on the people who live in an area, the places they spend time in, their health and quality of life as well as overall community wellbeing.
Local Government Road Safety Program	A partnership between Transport for NSW, Roads and Maritime Services and partnering local councils of NSW to provide information and assistance on safe road use to all road users.
Maritime Safety Program	Delivery of the NSW Regional Boating Plans.
Mobility as a Service (MaaS)	A business model for customers to access transport services in which customers can use a single account and booking interface to access a broad range of transport modes, none of which the customer owns. Examples would be allowing a customer to access public transport, car sharing and bike sharing all using the same system.
Mode share	The proportion of overall trips that are taken on a particular mode.
More Trains, More Services	The More Trains, More Services Program is a series of network-wide investments that will deliver additional capacity, reduce the complexity of rail operations and better connect the network. More Trains, More Services transforms the rail network by utilising world class technology to enable automated high capacity turn-up-and-go services. The reconfiguration of the rail network in metropolitan Sydney will lead to the separation of inner urban and intercity services with initial focus on increasing the capacity of Central Station and the transformation of the T1 Western, T4 Illawarra (including the South Coast Line) and T8 Airport lines.
Movement and Place Framework	A framework for planning, designing and operating our road network based on a 'one road network' approach. It considers how different parts of the network perform different functions – moving people and goods and being places for people, particularly in centres.

Term	Definition
New Intercity Fleet	A new fleet of long distance, intercity trains from Sydney to the Central Coast, Newcastle, the Blue Mountains and the South Coast. As part of the delivery of the fleet, we will investigate reduced rail journey times through rail timetable improvements and the implementation of rail network optimisation strategies. This may include re-orientating rail services to provide express services between key stations and connector services between other stations.
Next generation ticketing	Seamless ticketing system across all modes of transport in NSW. Will assist in capturing transport data in regional areas.
NSW Boating Now Program	Program to support initiatives that enhance the boating experience in NSW, including the delivery of recreational boating infrastructure across NSW waterways.
NSW Long Term Transport Master Plan	NSW's first integrated transport plan which brought together planning for freight and passenger movements across all modes of transport. Future Transport 2056 builds upon the 2012 Long Term Transport Masterplan and the commitments it has delivered.
NSW Transport Cluster	A group of agencies consisting of Transport for NSW, the operating agencies of Roads and Maritime Services, Sydney Trains, NSW Trains, and the State Transit Authority, the state's private transport operators, a number of project delivery offices for major transport projects, and the Port Authority of NSW.
On-demand transport	See definition for demand responsive.
Outer metropolitan areas / geography	An area encompassing the local government areas of Shellharbour, Wollongong, Central Coast, Lake Macquarie, Cessnock, Maitland, Newcastle and Port Stephens.
Outer Metro Parking Guidelines	Development of a strategy encompassing the Movement and Place Framework to guide local government in the delivery of parking in Outer Metro NSW.

Term	Definition
Outer Metro Roads Program	Program to identify improvements needed for the road networks within the Outer Metropolitan Area. Will include a car parking review to evaluate and prioritise car parking availability and use within centres and at key interchanges, including opportunities for car share, use of technology, shared use of car parking spaces and park and ride.
Personalised transport	An umbrella term used in this document to refer to a world in which technology is used to make transport services and the overall transport network responsive to the needs of customers. These customers may be individuals or companies, and they may be accessing the transport network as public transport users, road users, pedestrians, or for the movement of goods. Personalised transport means understanding the specific needs of each customer, and adapting the transport network and services it provides to suit those needs.
Place-making	Place-making preserves or enhances the character of public spaces, making them more accessible, attractive, comfortable and safe.
Point-to-point	Transport services that go directly from a passenger's origin to their destination. Outside of the private car, taxis and ridesharing services (Uber, Lyft) are the most common point-to-point transport modes.
Port Efficiency, Access and Integration Initiative	Road and rail projects to improve port access, efficiency and integration.
Place plan	<p>Plan to deliver an integrated transport network to improve access to/from/within key places or centres by all modes.</p> <p>It is the application of the Movement and Place Framework to improve the function of transport corridors to enhance the amenity of places. It will include the development of an active transport network, identifying the missing links and initiatives for behaviour change to support more sustainable travel options.</p> <p>Place plans will also include travel demand management policies and tools to support travel such as car sharing and to assist workers and employers better manage travel demand.</p>

Term	Definition
Precinct	A geographical area with boundaries determined by land use. For example, an area where there is an agglomeration of warehouses may be termed a freight precinct.
Rail Network Optimisation Program	Program that aims to improve efficiency in rail services.
Rapid bus package	Implementation of programs to prioritise access for buses over private vehicles.
Regional Airports Program	Improvements to increase the efficiency, accessibility, competition, commercial viability and sustainability of regional aviation in NSW. Includes supporting connections through the provision of funding to upgrade and maintain regional airport facilities. Funding from the Regional Tourism Infrastructure Fund.
Regional Booking System	Flexible transport booking system enabled across all service providers.
Regional NSW	The area of NSW outside Greater Sydney. It includes the nine regions of Central Coast, Hunter, North Coast, New England North West, Central West and Orana, Far West, Riverina Murray, South East and Tablelands and Illawarra-Shoalhaven.
Regional Parking Guidelines	Development of a strategy encompassing the Movement and Place Framework to guide local government in the delivery of parking in regional NSW.
Regional Passenger Transport Strategic Framework and Delivery Model	<p>The adoption of a framework and delivery model for passenger transport services in regional NSW that focuses on connectivity, flexibility and efficiency, access and equity, legibility and timeliness as well as information. It aims to provide:</p> <ul style="list-style-type: none">› Faster long distance trips› Greater access and span of hours› More frequent services› Improved services and facilities to enable increased capacity

Term	Definition
Regional Rail Fleet Project	Program to deliver a new regional rail fleet, including the replacement of the XPT, XPLOER and Endeavour trains, new rail stabling and maintenance facilities.
Regional Road Freight Corridor Fund	Program to upgrade key regional highways, ensuring regional producers can transport goods on time and in a cost effective manner.
Regional Transport Hubs	Regional cities that will perform a hub focus for transport into the future.
Regional Transport Plan	To be developed for each region to align with the Department of Planning and Environment's 20 year Regional Plans. These will be prepared in consultation with local government and Joint Organisations, other state government agencies and Australian Government bodies.
Remote geography	The area broadly represented as west of Dubbo and Griffith in NSW.
Resilience Package	Program to support immunity for flood prone regional roads.
Ridesharing	Business models similar to Uber and Lyft within which private citizens provide point-to-point transport services to other citizens.
Road Classification Review	A review of how roads are classified in NSW. The classification of roads determines responsibility and resource allocation.
Road hierarchy	A framework for categorising roads by function. Consistent with the Movement and Place Framework, the hierarchy consists of Motorways, Movement Corridors, Vibrant Streets, Local Streets and Places for People. Each type of road has a different movement and place function.
Road network management system	The implementation of a multi-modal system that enables live monitoring of network performance across all passenger and freight modes using motorways and highways.

Term	Definition
Rural Roads Network Enhancement Program	Program of works across the state to deliver enhancements and improvements e.g. overtaking lanes, shoulder widening, clear zones, curve realignment, intersection improvements etc.
Safer Roads Program	Program of road safety infrastructure projects to address key crash types across NSW.
Safe System Approach	Planning services and designing infrastructure to integrate with human behaviour to prevent trauma. A safe system approach aims to improve the safety of all parts of the system, so that if one part fails, the other parts will protect people from being killed or seriously injured.
Satellite city	The cities of Wollongong and Gosford that form part of the conurbation of Greater Sydney.
Saving Lives on Country Roads program	Program to install and upgrade safety features on country roads and reduce run off road crashes, crashes on curves and head on crashes.
School Bus and Community Transport Model development	Development of a model that considers the conversion of school bus and community transport services to provide access for all communities.
Sealing Country Roads Program	Program of works to progressively seal unsealed roads in regional NSW.
Service (or transport service)	Service in this document refers to transport services, generally public transport services. Examples include trains, buses, light rail and ferries. Services might also include shuttle buses and a range of privately operated but publicly accessible transport types.
Slopes and Culverts Condition Program	Program of works to progressively improve the conditions of slopes and culverts in the transport network.

Term	Definition
Slots	The right granted by an airport that allows an aircraft to land or depart during a specific time period.
Smart Motorway	Motorways that use embedded sensors, analytics and customer feedback tools to actively manage congestion and safety and respond to traffic incidents.
State Infrastructure Strategy	The State Infrastructure Strategy, developed by Infrastructure NSW, provides the NSW Government with independent advice on the infrastructure needs of the State over the next 20 years.
Three cities of Greater Sydney	The three cities envisaged by the Greater Sydney Commission are the established Eastern Harbour City, the developing Central River City and emerging Western Parkland City in and around the new airport. Each of these three cities will have their own unique identity and each must be planned to maximise liveability, productivity and sustainability.
Towards Zero Infrastructure Program	Program of additional road safety infrastructure measures for rural and regional roads to reduce head-on and run off road crashes. The program will be considered as part of the NSW Road Safety Plan 2021, which includes additional measures to improve road safety.
Trade Gateway	Trade gateways are locations with major ports or airports, and their surrounding precincts. They perform an essential and ongoing role to connect Sydney with locations across Australia and the world. Transport gateways are vital to Sydney's prosperity and often support large concentrations of complementary business activity and employment.
Transport Access Program	The Transport Access Program (TAP) is an initiative to provide a better experience for public transport customers by delivering accessible, modern, secure and integrated transport infrastructure such as stations, wharves and commuter car parks.
Transport Corridor Planning	A corridor in the context of strategic planning is a broad, geographic linear area rather than a specific road or train line. Planning for the needs of a corridor ensures that different transport investments work together as part of an integrated solution.

Term	Definition
Transport disadvantage	Describes a result when certain factors such as language, age and cost result in causing less choice for when, where and how customers travel.
Transport Taxi Subsidy Scheme (TTSS)	Support for NSW residents who are unable to use public transport because of a disability.
Visionary initiatives (20+ years)	Longer term initiatives that may be investigated within the next 10 years, but on preliminary evidence are unlikely to require implementation within 20 years. Some initiatives have been planned for investigation in the 20+ years as the funding or benefits may be too uncertain at this stage. Initiatives proposed for investigation are unconstrained by affordability and will be subject to funding and strategic business cases that consider a range of possible solutions.
Walking and Cycling Programs	Programs to improve walking and cycling connections.
Western Sydney Airport (WSA)	The designated name for the second Sydney airport, located within the suburb of Badgerys Creek.
'Whole of life' Approach Plan	Develop strategy that re-focuses asset management to adopt a 'whole of life' approach – plan, build and manage assets now and into the future that are safe and available, provide the desired operational performance in a reliable, sustainable, presentable and affordable manner.

CHAPTER

8

Appendix

Contents

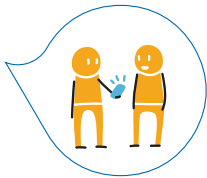
Regional NSW Customer Outcomes	212
Committed Initiatives – 0-10 years	214
Regional NSW	214
Hunter	215
Central Coast	216
Illawarra-Shoalhaven	217
North Coast	217
South East and Tablelands	218
Riverina Murray	219
New England North West	220
Central West and Orana	221
Far West	221
Future Transport Initiatives for Investigation	222
Regional NSW	222
Hunter	233
Central Coast	242
Illawarra-Shoalhaven	245
North Coast	251
South East and Tablelands	257
Riverina Murray	262
New England North West	265
Central West and Orana	269
Far West	274

Regional NSW Customer Outcomes

Future Transport 2056 Statewide outcomes

Regional NSW customer outcomes

Customer Focused



Convenient and responsive to customer needs

1. Flexible services are an integral part of the transport system helping to deliver reliability
2. A transport system that adapts to and embraces new technology

Successful Places



Sustaining and enhancing the liveability of our places

3. The appropriate movement and place balance is established enabling people and goods to move efficiently through the network whilst ensuring local access and vibrant places
4. Supporting centres with appropriate transport services and infrastructure

Growing the Economy



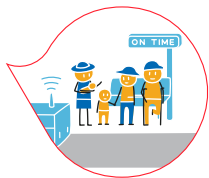
Sustaining and enhancing the liveability of our places

5. Changes in land use, population and demand, including seasonal changes, are served by the transport system
6. Economic development is enabled by regional transport services and infrastructure

Future Transport 2056 Statewide outcomes

Regional NSW customer outcomes

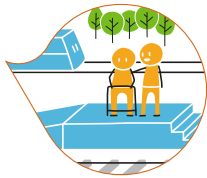
Safety and Performance



Safely, efficiently and reliably moving people and goods

7. A safe transport system for every customer with zero deaths or serious injuries on the network by 2056
8. A transport system that is resilient to significant weather events including floods, fog and bush fires

Accessible Services



Accessible for all customers

9. Accessibility to employment and services such as health, education, retail and cultural activities within Regional Cities and Centres

Sustainability



Makes the best use of available resources and assets

10. Customers enjoy improved connectivity, integrated services and better use of capacity
-

Committed Initiatives – 0-10 years

Some of these initiatives are subject to final business case and funding.

Regional NSW

Timing for Initiative	Region	Initiative	Initiative type
0-10yrs committed	Regional	Road Classification Review	Policy and planning
0-10yrs committed	Regional	NSW Boating Now Program	Infrastructure
0-10yrs committed	Regional	Regional Rail Fleet Project	Infrastructure
0-10yrs committed	Regional	Safer Roads Program	Infrastructure
0-10yrs committed	Regional	Saving Lives on Country Roads Program	Infrastructure
0-10yrs committed	Regional	Local Government Road Safety Program	Infrastructure
0-10yrs committed	Regional	Road Freight Safety and Productivity	Infrastructure
0-10yrs committed	Regional	Regional Road Freight Corridor Fund	Infrastructure
0-10yrs committed	Regional	Bridges for the Bush Program	Infrastructure
0-10yrs committed	Regional	Fixing Country Rail Program	Infrastructure
0-10yrs committed	Regional	Fixing Country Roads	Infrastructure
0-10yrs committed	Regional	Transport Access Program	Infrastructure
0-10yrs committed	Regional	Heavy vehicle rest areas	Policy and planning
0-10yrs committed	Regional	Transport corridor planning	Policy and planning
0-10yrs committed	Regional	Regional Passenger Transport Strategic Framework and Delivery Model	Service
0-10yrs committed	Regional	Hub and Spoke Model	Service
0-10yrs committed	Regional	Increase availability of regional slots at Sydney's airports during peak hours	Service
0-10yrs committed	Regional	Demand responsive transport services	Service
0-10yrs committed	Regional	Country Passenger Infrastructure Grants Scheme	Policy and planning
0-10yrs committed	Regional	First Stop Transport	Policy and planning
0-10yrs committed	Regional	Data collection improvements for regional NSW	Policy and planning
0-10yrs committed	Regional	Regional Airports Program	Infrastructure

Hunter

Timing for Initiative	Region	Initiative	Initiative type
0-10yrs committed	Central Coast, Hunter, Illawarra-Shoalhaven, Central West and Orana	New Intercity Fleet (Multi-region)	Infrastructure
0-10yrs committed	Hunter	Nelson Bay Road improvements - Fern Bay to Williamtown	Infrastructure
0-10yrs committed	Hunter	Newcastle Cruise Terminal	Infrastructure
0-10yrs committed	Hunter	Cormorant Road, Industrial Drive to Stockton Bridge (State and Federal Funded)	Infrastructure
0-10yrs committed	Hunter	Hunter Pinch Points	Infrastructure
0-10yrs committed	Hunter	New England Highway, Scone Bypass (State and Federal Funded)	Infrastructure
0-10yrs committed	Hunter	New England Highway, Gowrie Gates, Widen Rail Underpass	Infrastructure
0-10yrs committed	Hunter	New England Highway, Belford to Golden Highway Upgrade	Infrastructure
0-10yrs committed	Hunter	Newcastle Inner City Bypass, Rankin Park to Jesmond	Infrastructure
0-10yrs committed	Hunter	New England Highway, Muswellbrook Bypass (Planning)	Infrastructure
0-10yrs committed	Hunter	New England Highway, Singleton Bypass (Planning)	Infrastructure
0-10yrs committed	Hunter	M1, Hexham, Raymond Terrace upgrades	Infrastructure
0-10yrs committed	Hunter	Newcastle Light Rail	Infrastructure
0-10yrs committed	Hunter	Lower Hunter Freight Corridor Protection	Infrastructure
0-10yrs committed	Hunter, Central West and Orana	Golden Highway Safety and Productivity Works (State and Federal Funded)	Infrastructure

Central Coast

Timing for initiative	Region	Initiative	Initiative type
0-10yrs committed	Central Coast, Hunter, Illawarra-Shoalhaven, Central West and Orana	New Intercity Fleet (Multi-region)	Infrastructure
0-10yrs committed	Central Coast	Pacific Motorway Widening and Reconstruction, Wyong Road to Doyalson Link Road (State and Federal Funded)	Infrastructure
0-10yrs committed	Central Coast	Pacific Motorway Widening, Kariong Interchange to Somersby Interchange (State and Federal Funded)	Infrastructure
0-10yrs committed	Central Coast	Pacific Highway, Ourimbah Street to Glen Road	Infrastructure
0-10yrs committed	Central Coast	Wyong Road, Mingara Drive to Tumby Road Upgrade	Infrastructure
0-10yrs committed	Central Coast	Manns Road, Central Coast Highway to Narara Creek Road (Planning)	Infrastructure
0-10yrs committed	Central Coast	Warnervale Link Road, Albert Warner Drive to Pacific Highway (Planning)	Infrastructure
0-10yrs committed	Central Coast	Pacific Highway, Parsons Road to Ourimbah Street (Planning)	Infrastructure
0-10yrs committed	Central Coast	Pacific Highway and Manns Road, Narara Creek Road to Parsons Road (Planning)	Infrastructure
0-10yrs committed	Central Coast	Pacific Highway, Wyong Town Centre (Planning)	Infrastructure
0-10yrs committed	Central Coast	Empire Bay Drive, The Scenic Road and Cochrane Street Intersection Upgrade	Infrastructure
0-10yrs committed	Central Coast	Kangy Angy Train Maintenance Facility for New Intercity Fleet	Infrastructure

Illawarra-Shoalhaven

Timing for initiative	Region	Initiative	Initiative type
0-10yrs committed	Central Coast, Hunter, Illawarra-Shoalhaven, Central West and Orana	New Intercity Fleet (Multi-region)	Infrastructure
0-10yrs committed	Illawarra-Shoalhaven	Albion Park Rail Bypass (Planning and Preconstruction)	Infrastructure
0-10yrs committed	Illawarra-Shoalhaven	Nowra Bridge over Shoalhaven River (Planning) (State and Federal Funded) subject to final business case and Federal funding	Infrastructure
0-10yrs committed	Illawarra-Shoalhaven	Princes Motorway Improvements, Bulli Tops to Picton Road (Planning) (State and Federal Funded)	Infrastructure
0-10yrs committed	Illawarra-Shoalhaven	Berry to Bomaderry Upgrade	Infrastructure
0-10yrs committed	Illawarra-Shoalhaven	Princes Motorway, Interchange at Base of Mount Ousley (Planning)	Infrastructure
0-10yrs committed	Illawarra-Shoalhaven	Burrill Lake Bridge Replacement	Infrastructure
0-10yrs committed	South East and Tablelands, Illawarra-Shoalhaven	MR92 Nerriga Road improvements	Infrastructure

North Coast

Timing for initiative	Region	Initiative	Initiative type
0-10yrs committed	North Coast	Bruxner Highway, Replacement Bridge over Clarence River	Infrastructure
0-10yrs committed	North Coast	Woolgoolga to Ballina (State and Federal Funded)	Infrastructure
0-10yrs committed	North Coast	Warrell Creek to Nambucca Heads (State and Federal Funded)	Infrastructure
0-10yrs committed	North Coast	Summerland Way, Additional Clarence River Crossing (Grafton Bridge)	Infrastructure
0-10yrs committed	North Coast	Coffs Harbour Bypass (Subject to final business case & Federal funding)	Infrastructure
0-10yrs committed	North Coast, New England North West, Central West and Orana	Oxley Highway Safety and Realignment Works (Multi-region)	Infrastructure

South East and Tablelands

Timing for initiative	Region	Initiative	Initiative type
0-10yrs committed	South East and Tablelands	Batemans Bay Bridge (planning)	Infrastructure
0-10yrs committed	South East and Tablelands	Kosciuszko Road Overtaking Lanes and Safety Improvements	Infrastructure
0-10yrs committed	South East and Tablelands	Barton Highway Improvements (State and Federal Funded)	Infrastructure
0-10yrs committed	South East and Tablelands	Queanbeyan Bypass (Ellerton Drive Extension) (State, Federal and Local Government Funded)	Infrastructure
0-10yrs committed	South East and Tablelands	Eden cruise facilities development	Infrastructure
0-10yrs committed	South East and Tablelands	Monaro Highway Overtaking Lanes and Safety Improvements	Infrastructure
0-10yrs committed	South East and Tablelands	Kings Highway, Replacement Clyde River Bridge	Infrastructure
0-10yrs committed	South East and Tablelands, Illawarra-Shoalhaven	MR92 Nerriga Road improvements	Infrastructure
0-10yrs committed	South East and Tablelands, Central West and Orana	Main Road 54 (Goulburn to Bathurst) Initial Sealing	Infrastructure
0-10yrs committed	South East and Tablelands	Dignams Creek Realignment	Infrastructure
0-10yrs committed	Riverina Murray, South East and Tablelands	Hume Highway Heavy Duty Pavement (State and Federal Funded)	Infrastructure

Riverina Murray

Timing for initiative	Region	Initiative	Initiative type
0-10yrs committed	Riverina Murray	Gocup Road Upgrade	Infrastructure
0-10yrs committed	Riverina Murray	Newell Highway, West Wyalong Heavy Vehicle Bypass	Infrastructure
0-10yrs committed	Riverina Murray, South East and Tablelands	Hume Highway Heavy Duty Pavement (State and Federal Funded)	Infrastructure
0-10yrs committed	Riverina Murray, Central West and Orana, New England North West	Newell Highway Overtaking Lanes (Multi-region)	Infrastructure
0-10yrs committed	Riverina Murray	Cobb Highway, New Bridge at Echuca - Moama	Infrastructure
0-10yrs committed	Far West, Riverina Murray	Cobb Highway Seal Extension	Infrastructure
0-10yrs committed	Riverina Murray	Junee North Triangle	Infrastructure
0-10yrs committed	Riverina Murray	Narrandera - Tocumwal Railway Reactivation	Infrastructure
0-10yrs committed	Riverina Murray, New England North West, Central West and Orana	Inland Rail (Federal Funded)	Infrastructure

New England North West

Timing for initiative	Region	Initiative	Initiative type
0-10yrs committed	New England North West	Newell Highway, Mungle Back Creek to Boggabilla Heavy Duty Pavement (State and Federal Funded)	Infrastructure
0-10yrs committed	New England North West	New England Highway, Bolivia Hill Upgrade (State and Federal Funded)	Infrastructure
0-10yrs committed	New England North West	Oxley Highway, Gunnedah Bridge over Rail	Infrastructure
0-10yrs committed	North Coast, New England North West, Central West and Orana	Oxley Highway Safety and Realignment Works (Multi-region)	Infrastructure
0-10yrs committed	Riverina Murray, Central West and Orana, New England North West	Newell Highway Overtaking Lanes (Multi-region)	Infrastructure
0-10yrs committed	New England North West	Newell Highway Heavy Vehicle Pavement Upgrades – Narrabri-Moree, North of Moree (Planning)	Infrastructure
0-10yrs committed	New England North West	Barraba Branch Line	Infrastructure
0-10yrs committed	Riverina Murray, New England North West, Central West and Orana	Inland Rail (Federal Funded)	Infrastructure
0-10yrs committed	New England North West	Tamworth Rail Freight Centre	Infrastructure

Central West and Orana

Timing for initiative	Region	Initiative	Initiative type
0-10yrs committed	Central West and Orana	Mitchell Highway, Guanna Hill Realignment	Infrastructure
0-10yrs committed	Central West and Orana	Newell Highway, Improvements through Coonabarabran (Planning)	Infrastructure
0-10yrs committed	Central West and Orana	Newell Highway, Trewilga Realignment	Infrastructure
0-10yrs committed	Central West and Orana	Newell Highway, Parkes Bypass (Planning)	Infrastructure
0-10yrs committed	Central West and Orana	Newell Highway, New Dubbo Bridge (Planning)	Infrastructure
0-10yrs committed	Central Coast, Hunter, Illawarra-Shoalhaven, Central West and Orana	New Intercity Fleet (Multi-region)	Infrastructure
0-10yrs committed	Riverina Murray, Central West and Orana, New England North West	Newell Highway Overtaking Lanes (Multi-region)	Infrastructure
0-10yrs committed	North Coast, New England North West, Central West and Orana	Oxley Highway Safety and Realignment Works (Multi-region)	Infrastructure
0-10yrs committed	Hunter, Central West and Orana	Golden Highway Safety and Productivity Works (State and Federal Funded)	Infrastructure
0-10yrs committed	Central West and Orana	Regional Rail Maintenance Facility (Dubbo subject to planning approval)	Infrastructure
0-10yrs committed	Central West and Orana	Upgrades to Main West Line	Infrastructure
0-10yrs committed	Riverina Murray, New England North West, Central West and Orana	Inland Rail (Federal Funded)	Infrastructure
0-10yrs committed	South East and Tablelands, Central West and Orana	Main Road 54 (Goulburn to Bathurst) Initial Sealing	Infrastructure

Far West

Timing for initiative	Region	Initiative	Initiative type
0-10yrs committed	Far West	Silver City Highway Seal Extension	Infrastructure
0-10yrs committed	Far West, Riverina Murray	Cobb Highway Seal Extension	Infrastructure

Future Transport 2056 Initiatives for Investigation

The following initiatives have been proposed for further investigation as a result of planning work undertaken for Future Transport 2056.

Regional NSW

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Regional NSW	Regional Transport Plans	Policy and planning	To be developed for each region to align with the Department of Planning and Environment's 20 year Regional Plans. These will be prepared in consultation with local government and Joint Organisations, other state government agencies and Australian Government bodies.	Provide strategic transport guidance for each regional NSW region.	4, 5, 6, 9, 10
0-10yrs for investigation	Regional NSW	Saving Lives on Country Roads program (continuation)	Infrastructure	<p>Program to address the challenge of more than two thirds of fatalities occurring on country roads. Includes:</p> <ul style="list-style-type: none"> Safety infrastructure upgrades targeting high risk curves and key routes, including local roads Delivery of a targeted NSW country roads public education campaign Partnering with local councils, community groups and industry to support grass-roots Towards Zero initiatives. 	Safety improvements targeted at regional communities.	7
0-10yrs for investigation	Regional NSW	Local Government Road Safety Program (continuation)	Infrastructure	Partnership between Transport for NSW, RMS and participating local Councils in NSW. The program provides up to 50 percent funding contribution to the salary of a Road Safety Officer and funding for local road safety projects.	Safety improvements targeted at regional communities.	7

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Regional NSW	Regional Road Freight Corridor Fund (continuation)	Infrastructure	Program to upgrade key regional highways, ensuring regional producers can transport goods on time and in a cost effective manner.	Supports improvements to road freight corridors.	6
0-10yrs for investigation	Regional NSW	Road network management system	Infrastructure	The implementation of a multi-modal system that enables live monitoring of network performance across all passenger and freight modes using motorways and highways.	Supports the use of technology to inform decisions and enable responses. This will improve safety and support better economic outcomes.	2, 6
0-10yrs for investigation	Regional NSW	CAV Readiness Program	Policy and planning	Program to ensure CAV and autonomous vehicle readiness, including smart roads and incorporating design standards to support CAVs. This will enable the strategic road network to adapt to accommodate the evolution of future CAVs for freight and passenger movement.	Supports customers' ability to travel long distances using AV and CAVs while improving accessibility of CAVs and AVs.	2
0-10yrs for investigation	Regional NSW	Continuation of port efficiency, access and integration initiatives	Infrastructure	Road and rail projects focussed on improving port access, efficiency, and integration with the surrounding network.	Improves the movement of goods to and from ports by reducing congestion in the surrounding road and rail networks. These projects will also assist in improving safety of the roads supporting port operations. Supports international freight and passenger movement, reducing congestion on road and rail network and improved safety of road networks supporting port operations. Also results in improved supply chain efficiencies.	6, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Regional NSW	Regional booking system	Infrastructure	Investment to support implementation of electronic ticketing and online adaptive booking systems.	Using new technologies to improve services for customers through electronic ticketing and adaptive booking. It will also assist in data collection for operators.	2
0-10yrs for investigation	Regional NSW	Fixing Country Roads program (continuation)	Infrastructure	The program helps to fund projects that better connect local and regional roads to state highways and key freight hubs; such as silos, saleyards, rail heads, supermarket distribution centres, industrial parks and depots.	The Program will improve road safety, enables larger freight loads to be moved faster, reduce freight costs, takes pressure off roads, enables primary producers to earn more money and strengthen local economies by creating stronger employment opportunities.	6, 7
0-10yrs for investigation	Regional NSW	Fixing Country Rail program continuation	Infrastructure	Projects funded under Fixing Country Rail could include sidings, passing loops, the reopening of non-operational sections and network enhancements that allow the use of faster, longer and heavier trains.	Ongoing program to improve road safety, enable larger freight loads to be moved faster, reduce freight costs, take pressure off roads, enable primary producers to earn more money as well as strengthen local economies and create stronger employment opportunities.	6, 7
0-10yrs for investigation	Regional NSW	Bridges for the Bush continuation	Infrastructure	Upgrades of various bridges in regional NSW.	Ongoing program to enhance freight productivity by removing significant freight pinch points or bottlenecks on the state road network. It aims to improve the safety and reliability of old bridge structures. It results in reduced annual, recurrent maintenance costs.	8

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Regional NSW	Place Plans	Policy and planning	<p>Plan to deliver an integrated transport network to improve access to/from/within key places or centres by all modes across regional NSW.</p> <p>It is the application of the Movement and Place Framework to improve the function of transport corridors to enhance the amenity of places. It will include the development of an active transport network, identifying the missing links and initiatives for behaviour change to support more sustainable travel options.</p> <p>Place plans will also include travel demand management policies and tools to support travel such as car sharing and to assist workers and employers better manage travel demand.</p> <p>They will consider the need for access to be prioritised by high efficiency passenger and freight services as well as providing access for shared, connected, automated and electric vehicles.</p>	Supports improvements to places, including improved amenity and reduced vehicle through movements. Improves accessibility by providing alternative options to town access.	4
0-10yrs for investigation	Regional NSW	Rail Network Optimisation Program	Service	Program optimising service patterns for faster journey times and point to point connections to improve customer outcomes.	Supports quicker rail journey travel times and increased transport accessibility.	9

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Regional NSW	Demand responsive transport services	Service	Program to make flexible on demand transport available in all regions.	Enables people to have transport options, increasing their ability to access a range of services and infrastructure. Flexible transport services to provide new or improved coverage to areas where traditional public transport is difficult to provide.	1, 2
0-10yrs for investigation	Regional NSW	Towards Zero Infrastructure Program	Infrastructure	Program of additional road safety infrastructure measures for rural and regional roads to reduce head-on and run off road crashes.	The Towards Zero Infrastructure Program will contribute towards achieving the State Priority target of a 30 per cent reduction in fatalities across NSW as well as Vision Zero. The program will be considered as part of the NSW Road Safety Plan 2021, which includes additional measures to improve road safety.	7
0-10yrs for investigation	Regional NSW	Walking programs	Infrastructure	Integrate Cycling and Walking Programs for Regional Cities and Centres to complete missing links, create integrated transport networks and encourage sustainable travel.	Enables the provision of a more convenient, safer transport option and supports more accessible, liveable and productive towns, centres and cities through the reduction of congestion, freeing up capacity of the public transport system as well as on-street activity resulting in increased passive surveillance.	2
0-10yrs for investigation	Regional NSW	Cycling programs	Infrastructure	Integrate Cycling and Walking Programs for Regional Cities and Centres to complete missing links, create integrated transport networks and encourage sustainable travel.	Enables the provision of a more convenient, safer transport option and supports more accessible, liveable and productive towns, centres and cities through the reduction of congestion, freeing up capacity of the public transport system as well as on-street activity resulting in increased passive surveillance.	3

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Regional NSW	Car share package	Policy and planning	Support and facilitate car sharing programs around the state.	Enables transport choice as well as encourages reduced vehicle ownership resulting in improvements to streetscapes, supports use of public and active transport and environmental benefits of reduced car use.	2
0-10yrs for investigation	Regional NSW	Regional Parking Guidelines	Policy and planning	Deliver and implement regional parking guidelines across regional NSW.	Development of a strategy as to how parking in regional NSW should be delivered in order to get to the best use of existing and future transport assets, increase amenity in places as well as support freight and commercial businesses.	4
0-10yrs for investigation	Regional NSW	Resilience Package	Infrastructure	Improving immunity for flood prone regional roads.	Increasing resilience in regional NSW through improved connectivity and reduced isolation for communities affected by severe weather events such as floods, fog and bush fires. Makes assets more resilient to significant weather events to avoid service disruptions and negative impacts on communities and the State's economy. Supports improvements to safety in NSW as well as increases accessibility for customers travelling in regional NSW.	8
0-10yrs for investigation	Regional NSW	Sealing Country Roads Program	Infrastructure	Program of works to progressively seal unsealed roads in regional NSW.	Supports increased safety and accessibility for customers travelling on unsealed roads.	7, 8
0-10yrs for investigation	Regional NSW	Slopes and culverts condition program	Infrastructure	Program of works to progressively address/ improve the conditions of slopes and culverts in the network.	Supports increased safety for customers travelling on roads.	7

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Regional NSW	Last Mile Productivity Initiative	Infrastructure	Investigate capacity of existing programs to improve first and last mile connectivity and efficiency for freight network.	Supports freight productivity by simplifying and reducing barriers to movement of goods.	6
0-10yrs for investigation	Regional NSW	Heavy vehicle rest areas (continuation)	Infrastructure	Program to continue building heavy vehicle rest areas across relevant areas of the road network, including identifying locations for service centres along state highways.	Supports increased safety for customers using the road network.	7
0-10yrs for investigation	Regional NSW	Town Bypasses identification of future need	Policy and planning	The identification of town bypasses are a result of corridor strategies and road network plans as well as the movement and place framework. This work will take into account traffic which is through traffic, impacts on place, the need for freight efficiency and the capacity of the surrounding road network.	Town bypasses diverting heavy vehicle freight movements and other through traffic away from town centres, combined with improved placemaking features in bypassed centres, to improve traffic, safety, and urban amenity. It improves freight productivity and facilitates faster travel times.	3, 4
0-10yrs for investigation	Regional NSW	Implementation of traffic incident and information services	Policy and planning	Investigate implementation of traffic incident and information services for management of all road closures (ie floods and natural disasters).	Improves the efficiency of the National freight network.	2
0-10yrs for investigation	Regional NSW	Inland Port	Infrastructure	Cross-government initiative to create an Inland Port that provides processing of goods and customs services prior to arrival at coastal ports for shipping. Moorebank could serve this function.	Improve efficiency of freight movements from Inland regions to the coastal ports and vice versa.	6
0-10yrs for investigation	Regional NSW	Fuel vouchers policy	Policy and planning	Development of a policy considering the provision of fuel vouchers for people living in remote NSW.	Support easier access for people in remote areas to access necessary services such as health, education, retail and cultural activities.	9

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Regional NSW	Cross border public transport pricing and regulation MoUs	Policy and planning	Establishment of Memorandums of Understanding between state governments where none exist to support seamless pricing and regulations for cross border travel.	Support ease of access across other states and territories.	9, 10
0-10yrs for investigation	Regional NSW	School Bus and Community Transport Model development	Policy and planning	Development of a model that considers the conversion of school bus and community transport services to provide access for all communities.	Improve access for all regional NSW through better use of existing assets.	1, 2, 4, 9, 10
0-10yrs for investigation	Regional NSW	Maritime Safety Program	Infrastructure	Delivery of the NSW Regional Boating Plans and other maritime safety improvements.	Improvements to the safety of our waters.	7
0-10yrs for investigation	Regional NSW	Active Transport Sharing Scheme	Service	Investment in an assisted mobility device (AMD) and electric bike sharing scheme to incentivise uptake within context of an optimal policy and regulatory framework. May include active transport options as well as other AMDs more suitable for an ageing population.	Support increased active travel.	2, 3, 9, 10
0-10yrs for investigation	Regional NSW	Aerial technology use	Service	The use of aerial technology such as drones for transport. They may be used to deliver emergency transport services, disaster responses or last mile freight deliveries.	Supports better use of technology to assist in reducing congestion or delivering quicker responses.	1, 2, 7

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Regional NSW	Access Prioritisation Plan	Policy and planning	Strategic plan using the Movement and Place Framework that identifies initiatives to prioritise access to interchanges, corridors and key places. Will consider the need for access to be prioritised by high efficiency passenger and freight services as well as providing access for shared, connected, automated and electric vehicles.	Supports improvements to places, including improved amenity and reduced vehicle through movements and improved accessibility by providing prioritisation.	3, 4, 6, 7, 9, 10
0-10yrs for investigation	Regional NSW	Fleet Leasing Policy	Policy and planning	Policy for the NSW Government Transport Cluster to use safer and lower emissions vehicles to result in reduced costs and improved health outcomes of staff and communities and to accelerate uptake in regional communities of safer and cleaner vehicles.	Supports the use of safer and cleaner vehicles across NSW.	2, 7
0-10yrs for investigation	Regional NSW	Mobility as a Service (MaaS)	Policy and planning	<p>A business model for customers to access transport services in which customers can use a single account and booking interface to access a broad range of transport modes, none of which the customer owns. Examples would be allowing a customer to access public transport, car sharing and bike sharing all using the same system.</p> <p>It provides a single comprehensive source of public transport information, including cross border services.</p>	Supports accessibility of public transport use.	2, 9, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Regional NSW	Next generation ticketing	Policy and planning	Seamless ticketing system across all modes of transport in NSW. Will assist in capturing transport data in regional areas.	Supports accessibility of public transport use.	2, 9, 10
0-10yrs for investigation	Regional NSW	Fare alignment	Policy and planning	Alignment of fares in regional NSW with those in the current Opal operational area. This will increase equity between regions, improve social inclusion and affordability as well as assist in encouraging greater use of public transport services.	Supports public transport use.	8
0-10yrs for investigation	Regional NSW	Assisted Mobility Device Strategy	Policy and planning	Development of a policy and regulatory framework to manage the safe introduction and promotion of Assisted Mobility Devices that considers advancing technology and automation.	Supports accessibility by people using Assisted Mobility Devices.	2, 9
0-10yrs for investigation	Regional NSW	'Whole of life' Approach Plan	Policy and planning	Develop strategy that re-focuses asset management to adopt a 'whole of life' approach – plan, build and manage assets now and into the future that are safe and available, provide the desired operational performance in a reliable, sustainable, presentable and affordable manner.	Supports better use of assets.	2

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Regional NSW	CAV, electric vehicle and Intelligent Transport System trials	Policy and planning	Trials of CAVs, electric vehicles (including buses) and intelligent transport systems.	Supports safer and more efficient movement of people and goods.	2, 6, 9, 10
0-10yrs for investigation	Regional NSW	Electric Vehicle Policy	Policy and planning	The development and implementation of an electric vehicle policy that aims to maximise benefits for passenger and freight mobility, productivity and support liveable centres. It will also develop cost effective energy reduction solutions for passenger and freight services.	Supports passenger and freight mobility, productivity and liveable centres.	2, 9, 10

Hunter

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Hunter	Newcastle Light Rail network extension	Policy and planning	Extension of the Newcastle Light Rail network and corridor preservation.	Support identified urban renewal corridors and growth to the west of the City centre with a mode of transport that supports street activation. Enables increased connectivity between strategic centres of Greater Newcastle through an integrated servicing plan.	3, 4, 51
0-10yrs for investigation	Hunter, Central West and Orana	Golden Highway improvements (continuation)	Infrastructure	Upgrade the Golden Highway through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	The route has been identified as an important connection between the Central West and Orana region and Greater Newcastle and the Port of Newcastle. There is also a State target to facilitate the movement of high productivity vehicles on the highway in the long term due to the constraints that make such a connection between the Central West and Sydney via the Great Western Highway less cost effective. Corridor improvements will deliver greater journey time savings and road safety outcomes.	5, 6, 7

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Hunter	M1, Hexham, Raymond Terrace upgrades	Infrastructure	Upgrades to the strategic network of primary freight routes comprising of the New England Highway, M1 Pacific Motorway through to the Pacific Highway at Raymond Terrace and the strategic junction with the New England Highway and Hexham Straight.	<p>Improve travel times and reliability for the key movements at the strategic junction of M1, John Renshaw Drive, New England Highway and Pacific Highway (including Hexham Straight and Hexham Bridge to Masonite Road).</p> <p>Provide a route which reduces the overall freight transport time and cost for heavy vehicles along the Pacific Highway corridor, the New England Highway and other key strategic freight routes around the Greater Newcastle area, improving opportunity for increased freight capacity and efficiency.</p> <p>Provide long term route reliability along the Pacific Highway corridor (including Hexham Straight and Hexham bridge to Masonite Road) and the New England Highway.</p> <p>Improve road safety (reduce fatalities and serious injuries) for all road users including vulnerable road users.</p> <p>Provide more efficient access to key employment areas such as Tomago, Beresfield, Black Hill, the Port of Newcastle, and key employment areas of Greater Newcastle.</p>	3, 5

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Hunter	Greater Newcastle Rapid Bus Package	Infrastructure	Implementation of programs to prioritise access for buses over private vehicles in our Global Gateway and Satellite Cities.	Public transport investment in Newcastle, Central Coast and Wollongong. Support 30 minute access by public transport to the nearest centre for customers living in areas not served by train lines, by prioritising buses on selected roads. Improves the efficiency and reliability of journeys by public transport by enabling buses to be better separated from other road users and supports the sustainability of our transport system by attracting more customers to using public transport.	3, 4, 5, 9
0-10yrs for investigation	Hunter	Bus headstart for Greater Newcastle	Service	Growth Centre Buses. New routes implemented to support new homes as they are built.	Public transport investment in Newcastle, Central Coast and Wollongong to improve the sustainability of our transport system by attracting more customers to using public transport.	3, 4, 5, 10
0-10yrs for investigation	Hunter	Greater Newcastle Place Plans	Policy and planning	Plan and deliver improved access to/ from/within key precincts within Greater Newcastle by all modes.	Support the growth of the Global Gateway City of Greater Newcastle and reinforce its importance as the strategic centre for the region. Place planning to implement Movement and Place framework in regional NSW cities and centres – opportunity to improve the function of transport corridors to enhance the amenity of our centres.	3, 4, 5

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Hunter	The Lakes Way Corridor Improvements	Infrastructure	Upgrade The Lakes Way through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Supports the user needs of regional industries, populations, and tourists by improving safety, capacity, reliability and freight access along the corridor. Improves the connections between Regional Cities and Centres.	5, 10
0-10yrs for investigation	Hunter	Improvements to Newcastle Port	Policy and planning	Support the growth and diversification of port export operations, including bulk fuels, containers, agricultural commodities and general cargo.	Supports the development of Newcastle as Global Gateway city by utilising the existing and future infrastructure capacity of the road and rail networks in the Hunter and beyond. Alleviates congestion in the Sydney network.	5
0-10yrs for investigation	Hunter	Nelson Bay Road improvements - Williamtown to Bobs Farm	Infrastructure	Upgrade Nelson Bay Road between Williamtown and the Tomaree Peninsula, including safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate).	Improved safety for motorists, cyclists and pedestrians, better bays for bus passengers, reduced traffic delays and more reliable travel times for motorists using this section of Nelson Bay Road. Support the visitor economy.	5

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Central Coast, Hunter	Sydney-Central Coast-Newcastle Faster Rail Improvement	Infrastructure	A program of operational, fleet and targeted fixed infrastructure improvements (for example, new deviations to eliminate curvatures and flatten grades). This would include a new rail crossing of the Hawkesbury River.	Improved rail journey travel times and services and facilities to enable increased capacity. Will result in stronger connections and the development of greater economic synergies between Sydney and the Satellite City of Gosford and the Global Gateway City of Newcastle Assist in easing housing affordability pressure and provide a strategic connection between Sydney, the Satellite City of Gosford and the Global Gateway City of Newcastle.	5, 10
0-10yrs for investigation	Central West and Orana, Hunter, South East and Tablelands	Great Dividing Range long term solution study	Policy and planning	A strategic examination of options to improve freight connectivity across the Great Dividing Range from inland areas to Newcastle/Sydney/Wollongong.	Solution will resolve a long standing issue regarding access between Inland NSW and Coastal areas of the Greater Sydney conurbation.	4, 6, 10
0-10yrs for investigation	Central West and Orana, Hunter, South East and Tablelands	Great Dividing Range long term solution corridor preservation	Policy and planning	Corridor preservation to improve freight connectivity across the Great Dividing Range in order to connect inland areas to Sydney/Newcastle/Wollongong.	Solution will resolve a long standing issue regarding access between Inland NSW and Coastal areas of the Greater Sydney conurbation.	4, 6, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
10-20yrs for investigation	Central Coast, Hunter	M1 - Newcastle SMART Motorway	Infrastructure	The M1 Newcastle Smart Motorway project will introduce intelligent technology, known as a motorway management system. This includes variable speed limits, dynamic message signs and - where appropriate - ramp meters to meter traffic flows.	Support the financial sustainability of the transport system by better using existing motorway infrastructure. It will enable future forms of mobility, such as CAVs, to be available to customers by ensuring infrastructure is enabled to support this. Improve the safety of road users through technology that improves the management of congestion and helps reduce the risk of incidents.	2, 5, 7
10-20yrs for investigation	Hunter, New England, North West	Main Northern Line - improvements to address pinch points	Infrastructure	Support improvements to the rail network in the Upper Hunter to address rail freight pinch points.	Improved rail travel times for freight, reducing delays to passenger rail services. Support growth in rail freight and improve rail access to Newcastle port.	3, 9
10-20yrs for investigation	North Coast, Hunter, Central Coast, South East and Tablelands and Riverina Murray	Corridor Preservation for Higher Speed Connections	Policy and planning	Confirm and begin the preservation of a corridor, based on the corridor set out in the Australian Government's High Speed Rail Study Phase 2, for a high speed rail link between Melbourne, Sydney and Brisbane.	Supports reduced journey times for travel across NSW and into other states/ACT. Results in improvements to economy due to minimising lost time spent travelling and supports increased accessibility for people in regional NSW to access services and infrastructure within capital cities.	2, 5
10-20yrs for investigation	Hunter	Newcastle Ferry Network extension	Infrastructure	To extend ferry services between Stockton and Queens Wharf to Wickham. This will facilitate interchange with heavy rail services.	Supports 30 minute access by public transport to the nearest centre for customers living in areas not served by train lines, by creating new ferry connections. Improve the sustainability of our transport system by attracting more customers to using public transport.	5, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
10-20yrs for investigation	Hunter	Lower Hunter Freight Corridor	Infrastructure	Lower Hunter Freight Corridor which will enable a future dedicated freight rail line to be constructed between Fassifern and Hexham; bypassing Newcastle while improving regional and interstate links.	Provide essential rail capacity for passenger and freight train growth across the broader rail network. Increases the efficiency and reliability of the rail network by separating the majority of freight and passenger rail services on a congested area between Fassifern and Newcastle. Enhances urban amenity and liveability in the Newcastle region by removing most of the freight trains from within the urban area and at the Adamstown and Islington Junction level crossings.	5, 6
10-20yrs for investigation	Hunter	Tomago Road Improvements – Pacific Highway to Williamtown	Infrastructure	Upgrade Tomago Road between the Pacific Highway and Newcastle Airport at Williamtown.	Improved safety and reliability for freight, passenger movements. Improves the connection to the global gateway of Newcastle Airport and supports the visitor economy and defence industries.	5, 10
10-20yrs for investigation	Central Coast, Hunter, Illawarra-Shoalhaven	Outer Metro Roads Program	Infrastructure	Program to improve the local road network in Newcastle, Wollongong and Central Coast.	Reduces congestion in growing Global Gateway and Satellite cities by addressing pinch-points and improving place-based outcomes as well as connecting strategic centres.	4, 5, 10
10-20yrs for investigation	Central West and Orana, Hunter	Dubbo to Newcastle rail connection	Service	Develop existing coach connection between Dubbo and Newcastle into a passenger rail line.	Newcastle is the closest coastal city to Dubbo. There is growing passenger demand on this corridor which if developed can help alleviate congestion on the Main West line to Sydney.	5, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
20+yrs visionary	Hunter	New suburban type rail service for Greater Newcastle	Service	The development of the Lower Hunter Freight corridor will bring potential for suburban rail services to operate within Greater Newcastle.	Supports increased connectivity within region.	4, 5, 8, 9, 10
20+yrs visionary	Hunter	Electrification of the Hunter Line to Telarah	Infrastructure	Extension of the electrified Intercity Rail network to Telarah from Hamilton.	Provides a more convenient access point to the Intercity network within a Regional City, providing efficient and reliable rail access to the Global Gateway City for customers that live in the Lower Hunter. Supports an improvement in the sustainable movement of passengers through the extension of the electrification section of the rail network leading to reduce greenhouse gas emissions.	5, 10
20+yrs visionary	Hunter	Duplication of New England Highway Muswellbrook to Scone	Infrastructure	Duplication of New England Highway between Muswellbrook and Scone.	Improve the safety and efficiency of the New England Highway, improving freight productivity and supporting the mining and agriculture industry in the region. Improving movement between Regional Centres and improving connections to the Global Gateway City of Newcastle.	5
20+yrs visionary	Hunter	New rail alignment of North Coast Line between Newcastle and Stroud Road – investigation corridor	Infrastructure	Creating a more direct rail connection between the Lower Hunter Freight corridor at Hexham to Stroud Road.	Improved rail travel times for freight and passenger services, reducing delays to passenger rail services that are currently are delayed by freight movements. Supporting growth in rail freight and improving rail access to the Global Gateway City of Newcastle.	4
20+yrs visionary	Hunter	Cessnock to Newcastle rail services via Kurri Kurri	Service	Introduction of a passenger rail line between Cessnock and Newcastle.	Decreases the potential for conflict between heavy vehicles, passenger vehicles and pedestrians in this growing area.	4

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
20+yrs visionary	Central Coast, Hunter, North Coast, South East and Tablelands, Riverina Murray	Higher Speed Connections (east coast)	Infrastructure	Deliver a high speed transport connection along the East Coast of NSW (traversing Greater Sydney).	Provides future connectivity between Western Sydney and Central Coast, Newcastle and Canberra. Supports cross-border connections and connects Sydney, Global Gateway Cities and Regional Cities and Centres.	2, 5, 6, 9
20+yrs visionary	Central West and Orana, Hunter, South East and Tablelands	Delivery of Great Dividing Range long term solution	Infrastructure	Delivery of solution to improve freight connectivity across the Great Dividing Range in order to connect inland areas with Sydney/Newcastle/Wollongong.	Solution will resolve a long standing issue regarding access between Inland NSW and Coastal areas of the Greater Sydney conurbation.	4, 6, 10

Central Coast

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Central Coast	M1 Motorway improvements (Hawkesbury River – Mt White)	Infrastructure	Upgrading of the M1 Motorway between Hawkesbury River and Mount White to improve safety and facilitate the increase in speed restriction from 90km/hr to 110km/hr.	The M1 Upgrades will benefit commuters, holiday traffic, heavy vehicles and public transport users by removing one of the last remaining safety constraints from the M1 Pacific Motorway, improving traffic flow for better and more reliable trips, making it easier to move freight and allowing for predicted increases in traffic.	2, 7, 10
0-10yrs for investigation	Central Coast	Bus Headstart for Central Coast	Service	Growth Centre Buses for the Central Coast. New routes implemented to support new homes as they are built.	Supports 30 minute access by public transport to the nearest centre for customers living in areas not served by train lines, by prioritising buses on selected roads. Improves the efficiency and reliability of journeys by public transport by enabling buses to be better separated from other road users and improves the sustainability of our transport system by attracting more customers to using public transport.	3, 4, 5, 10
0-10yrs for investigation	Central Coast	Central Coast Rapid Bus package	Infrastructure	Implementation of programs to prioritise access for buses over private vehicles in our Global Gateway and Satellite Cities.	Improves the connectivity between key destinations and caters to changing demand in areas experiencing growth. Improves the sustainability of our transport system by attracting more customers to using public transport, reducing congestion on outer metro roads.	3, 4, 5, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Central Coast	Central Coast Place Plans	Policy and planning	Plan and deliver improved access to/ from/within key precincts within the Central Coast by all modes.	Supports the growth of the Satellite City of Gosford and reinforce its importance as the strategic centre for the region. Place planning to implement Movement and Place framework in regional NSW cities and centres - opportunity to improve the function of transport corridors to enhance the amenity of our centres.	3, 4, 5
0-10yrs for investigation	Central Coast, Hunter	Sydney-Central Coast-Newcastle Faster Rail Improvement	Infrastructure	A program of operational, fleet and targeted fixed infrastructure improvements (for example, new deviations to eliminate curvatures and flatten grades). This would include a new rail crossing of the Hawkesbury River.	Improved rail travel times to provide a time and cost competitive freight corridor (when compared with road). Improved rail services and facilities to enable increased capacity. Connect and develop greater economic synergies between Sydney and the Satellite City of Gosford and the Global Gateway City of Greater Newcastle as well as Sydney, supporting the easing of housing affordability pressure.	5, 10
10-20yrs for investigation	Central Coast, Hunter, Illawarra-Shoalhaven	Outer Metro Roads Program	Infrastructure	Program to improve the local road network in Newcastle, Wollongong and Central Coast.	Reducing congestion in growing Global Gateway and Satellite cities, addressing pinch-points, improving place-based outcomes and connecting strategic centres.	4, 5, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
10-20yrs for investigation	Central Coast, Hunter	M1 - Newcastle SMART Motorway	Infrastructure	The M1 Newcastle Smart Motorway project will introduce intelligent technology, known as a motorway management system. This includes variable speed limits, dynamic message signs and - where appropriate - ramp meters to meter traffic flows.	Supports the financial sustainability of the transport system by better using existing motorway infrastructure. Enables future forms of mobility, such as CAVs, to be available to customers by ensuring infrastructure is enabled to support this and improve the safety of road users through technology that improves the management of congestion and helps reduce the risk of incidents.	2, 5, 7
10-20yrs for investigation	North Coast, Hunter, Central Coast, South East and Tablelands and Riverina Murray	Corridor Preservation for Higher Speed Connections	Policy and planning	Confirm and begin the preservation of a corridor, based on the corridor set out in the Australian Government's High Speed Rail Study Phase 2, for a high speed rail link between Melbourne, Sydney and Brisbane.	Supports reduced journey times for travel across NSW and into other states/ACT. Results in improvements to economy due to minimising lost time spent travelling and supports increased accessibility for people in regional NSW to access services and infrastructure within capital cities.	2, 5
20+yrs visionary	Central Coast, Hunter, North Coast, South East and Tablelands, Riverina Murray	Higher Speed Connections (east coast)	Infrastructure	Deliver a high speed transport connection along the East Coast of NSW (traversing Greater Sydney).	Provides future connectivity between Western Sydney and Central Coast, Newcastle and Canberra. Supports cross-border connections and connects Sydney, Global Gateway Cities and Regional Cities and Centres.	2, 5, 6, 10
20+yrs visionary	Central Coast	Outer Sydney Orbital from Great Western Highway to Central Coast	Infrastructure	A future North - South orbital transport corridor around Sydney. The OSO transport corridor will have the ultimate potential to co-locate a future motorway, freight rail and where possible passenger rail. Ultimately connecting the Western City with the Central Coast.	Supports the efficient and reliable movement of freight bypassing Greater Sydney with a single dedicated outer bypass. Provides additional capacity for road transport between Greater Sydney and the Central Coast and provides a strategic connection between the Western City and the Satellite City of Gosford.	6, 10

Illawarra-Shoalhaven

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Illawarra-Shoalhaven	Princes Highway Nowra Bridge replacement	Infrastructure	A new bridge that will improve conditions on the Princes Highway over the Shoalhaven River at Nowra. As well as a new bridge, the project will look at improving congestion at the intersections at Illaroo Road, Bolong Road and Bridge Road / Pleasant Way.	Eliminates the maintenance difficulties with the old Nowra Bridge and supports easing the increasing congestion issues in peak times from local traffic. Removes the height and weight restrictions for trucks that cannot use the old Nowra Bridge and removes the high risk of damage and closure of the old Nowra Bridge from an impact by an over height vehicle. Accommodates increased demand and future traffic growth, supports the visitor economy and better connects Regional Cities and Centres.	4, 5
0-10yrs for investigation	Illawarra-Shoalhaven	Sydney-Wollongong Faster Rail Improvement	Infrastructure	A program of operational, fleet and targeted fixed infrastructure improvements (for example, new deviations to eliminate curvatures and flatten grades). This would include a new rail crossing through the Illawarra Escarpment.	Improved rail travel times to provide a time and cost competitive freight corridor (when compared with road). Improved rail services and facilities to enable increased capacity. Connect and develop greater economic synergies between Sydney and the Satellite City of Wollongong and Sydney, supporting the easing of housing affordability pressure.	5, 10
0-10yrs for investigation	South East and Tablelands, Illawarra-Shoalhaven	Moss Vale to Unanderra and Coniston Junction rail improvements	Infrastructure	Upgrade to the Moss Vale to Unanderra Line between Port Kembla and the Southern Highlands in conjunction with ARTC and Coniston Junction improvements to address rail freight pinch points.	Improved rail travel times capacity for freight, supporting the growth in rail freight and improving rail access to the Port Kembla. Coniston Junction improvements will improve freight flows between Port Kembla and Southern Highlands, and future Maldon-Dombarton rail link. Relieve congestion on the Main South Line into Sydney.	6, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Illawarra-Shoalhaven	Picton Rd/ Appin Rd Improvements	Infrastructure	Capacity improvements to Appin and Picton Road to support additional freight, public transport and private vehicle journeys. In collaboration with local council, upgrades to also focus on supporting liveability of centres that roads pass through, as well as safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate).	Supports access to jobs and services in the Illawarra for the growing population in the South West of Greater Sydney, particularly in the Wingecarribee LGA. Supports the efficiency and reliability of freight and passenger journeys between the South West of Greater Sydney and the Illawarra by addressing capacity constraints on the corridor and improves the safety of customers using Appin and Picton road. Connects and develops greater economic synergies between Greater Sydney and the Satellite City of Wollongong.	5, 7, 10
0-10yrs for investigation	Illawarra-Shoalhaven	Bus headstart for Wollongong	Service	Growth Centre Buses. New routes implemented to support new homes as they are built.	Public transport investment in Newcastle, Central Coast and Wollongong. Improves the sustainability of our transport system by attracting more customers to using public transport. Reduces congestion on outer metro road, improving connectivity between key destinations. Caters to changing customer demands in growing areas.	4, 5, 9
0-10yrs for investigation	Illawarra-Shoalhaven	Wollongong Place Plans	Policy and planning	Plan and deliver improved access to/ from/within key precincts within Wollongong by all modes.	Supports the growth of the Satellite City of Wollongong and reinforce its importance as the strategic centre for the region. Place planning to implement Movement and Place framework in regional NSW cities and centres – opportunity to improve the function of transport corridors to enhance the amenity of our centres.	3, 4, 5

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Illawarra-Shoalhaven	Wollongong Rapid Bus package	Infrastructure	Implementation of programs to prioritise access for buses over private vehicles in our Global Gateway and Satellite Cities.	Public transport investment in Newcastle, Central Coast and Wollongong. Supports 30 minute access by public transport to the nearest centre for customers living in areas not served by train lines, by prioritising buses on selected roads. Improves the efficiency and reliability of journeys by public transport by enabling buses to be better separated from other road users. Improve the sustainability of our transport system by attracting more customers to using public transport.	3, 4, 5, 9
0-10yrs for investigation	Illawarra-Shoalhaven	Bus priority measures on Appin Road	Infrastructure	Introduce bus priority measures along Appin Road.	Improves the sustainability of our transport system by attracting more customers to using public transport. Reduces congestion on outer metro roads and improves connectivity between key destinations. Caters to changing customer demands in growing areas.	9
0-10yrs for investigation	Illawarra-Shoalhaven, South East and Tablelands	Duplication of Princes Highway (Jervis Bay Road Intersection to Moruya), including bypass of Milton-Ulladulla	Infrastructure	Duplication of Princes Highway (Jervis Bay Road Intersection to Moruya) including bypass of Milton-Ulladulla.	Supports safety improvements and decreases freight and passenger vehicle travel times.	5, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
10-20yrs for investigation	Illawarra-Shoalhaven	M1 Princes SMART Motorway	Infrastructure	The M1 Princes Smart Motorway project will introduce intelligent technology, known as a motorway management system. This includes variable speed limits, dynamic message signs and - where appropriate - ramp meters to meter traffic flows.	Supports the financial sustainability of the transport system by better using existing motorway infrastructure. Enables future forms of mobility, such as CAVs, to be available to customers by ensuring infrastructure is enabled to support this and improve the safety of road users through technology that improves the management of congestion and helps reduce the risk of incidents.	2, 7, 10
10-20yrs for investigation	Illawarra-Shoalhaven, South East and Tablelands	Illawarra Hwy/ Macquarie Pass improvements	Infrastructure	Improvement of the road crossing of the Illawarra Escarpment at Macquarie Pass, including safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate).	Improves the safety, reliability and efficiency of the Illawarra Highway. Provides efficient and reliable road access to and from the Satellite City of Wollongong to the Global Gateway of Canberra and Regional Centre of Goulburn. Improves the productivity for road based freight movements to and from Port Kembla. Improves access to the South Coast to support the visitor economy.	8, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
10-20yrs for investigation	Illawarra-Shoalhaven	Completion of Maldon to Dombarton railway line	Infrastructure	Complete the Maldon to Dombarton Railway, a 35-kilometre single-track rail line between the Main South Line at Maldon (in the Southern Highlands) and Dombarton (near Port Kembla), in the Illawarra region.	Enables higher passenger train service frequencies on the T4 Illawarra Line by diverting rail freight movements between the Illawarra and Greater Sydney to the Maldon-Dombarton link. Improves the efficiency and reliability of rail freight movements between the Illawarra, Greater Sydney and regions to the north and west of Sydney with a dedicated, more direct freight rail link. Supports the potential future growth of container movements to and from Port Kembla by providing dedicated 24/7 freight rail access between the port and intermodal terminals in the west of Sydney. Improves connections to Satellite City of Wollongong. Improves connections between Satellite City of Wollongong and the Western City.	5, 10
10-20yrs for investigation	Illawarra-Shoalhaven	Electrification of intercity to Bomaderry/Nowra	Infrastructure	Extension of the electrified Intercity Rail network to Bomaderry from Kiama.	Provides a more convenient access point to the Intercity network within a Regional City (Nowra). Provides efficient and reliable rail access to the Satellite City for customers that live on the South Coast and supports an improvement in the sustainable movement of passengers through the extension of the electrification section of the rail network leading to reduce greenhouse gas emissions.	10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
10-20yrs for investigation	Central Coast, Hunter, Illawarra-Shoalhaven	Outer Metro Roads Program	Infrastructure	Program to improve the local road network in Newcastle, Wollongong and Central Coast.	Reducing congestion in growing Global Gateway and Satellite cities, addressing pinch-points, improving place-based outcomes and connecting strategic centres.	4, 5, 10
20+yrs visionary	Illawarra-Shoalhaven	Outer Sydney Orbital from Hume Motorway to Illawarra	Infrastructure	A future North - South orbital transport corridor around Sydney. The OSO transport corridor will have the ultimate potential to co-locate a future motorway, freight rail and where possible passenger rail. Ultimately connecting the Western City with the Illawarra.	Supports the efficient and reliable movement of freight bypassing Greater Sydney with a single dedicated outer bypass. Provides additional capacity for road transport between Greater Sydney and the Illawarra as demand on Appin and Picton road grows and provides a strategic connection between the Western City and the Satellite City of Wollongong.	6, 10
20+yrs visionary	Illawarra-Shoalhaven	Illawarra Escarpment long term solution	Infrastructure	Develop a long term high capacity road solution for the crossing of the Illawarra Escarpment.	Provides efficient and reliable road access to the Satellite City of Wollongong for customers that live on the South Coast. Improves the safety, reliability and efficiency of the road networks, improves the productivity for road based freight movements to and from Port Kembla and improve access to the South Coast to support the visitor economy.	7, 8

North Coast

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	North Coast, New England North West	Oxley Highway Improvements	Infrastructure	Upgrade the Oxley Highway between Tamworth and Port Macquarie. Improvements will focus on intersections and bridge approach barriers, flood immunity, improving road alignment and overtaking opportunities, as well as safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate). Will also investigate improvements for cyclist connectivity and better pedestrian facilities particularly through town centres as well as upgrades required to cater for growth in the Port Macquarie and Tamworth urban areas. Also includes ongoing maintenance to slope stability on the mountain between Walcha and Wauchope.	The upgrades will help to facilitate movements on this key east-west corridor including improving road safety, travel times and reliability (including reducing the risk of road closures due to flooding or rock-falls) and freight access. The corridor is important for connecting the Regional Cities of Port Macquarie over the Great Dividing Range to Tamworth as well as connecting beyond to North Western NSW. The upgrades will support the user needs of regional industries (including agriculture, equine and mining), populations, and tourists assisting regional development, economic growth and community activity.	5, 7, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	North Coast, New England North West	Waterfall Way corridor improvements	Infrastructure	Upgrading Waterfall Way between the Pacific Highway at Raleigh and the New England Highway at Armidale through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate). Planning for minor realignment between the Pacific Highway and Bellingen including accommodating for active transport users to promote safe connections.	The upgrades will help to facilitate movements on this key east-west corridor including improving safety, capacity, reliability and freight access. The corridor is important for connecting the Regional Cities of Armidale and Coffs Harbour and the Regional Centre of Grafton. It is an important connection from inland NSW to the coast and is a major tourist drive travelling through numerous National Parks. The upgrades will support the user needs of regional industries, populations, and tourists enabling regional development, economic growth and community activity.	5, 7, 10
0-10yrs for investigation	North Coast	Tweed Transport Network Plan (encompassing the potential for light rail extension from Gold Coast Airport to Tweed Heads)	Policy and planning	The development of a Tweed Transport Network Plan which will consider, amongst other initiatives, extension of the current Gold Coast Light rail project to Tweed Heads. This would connect northern NSW to the Gold Coast Airport enabling easier cross-border travel. The Network Plan will also identify appropriate cross border public transport network initiatives to alleviate current inconsistencies between the two state operating systems.	The Plan will be informed by evidence based planning of cross-border transit network options, and will inform a program of on-road public transport improvements, influencing the allocation of road space to bus priority and/or longer-term heavy and/or light rail extensions. The Plan will consider capital investment options (including potential light rail extensions) and service improvements to better serve customers within Tweed, including cross-border transport services.	3, 4, 5, 9

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	North Coast	Bruxner Highway Improvements (Ballina-Casino)	Infrastructure	<p>Improvements to the Bruxner Highway between Ballina and Casino, through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate). Intersection improvements at high traffic locations, flood immunity works and asset maintenance works.</p> <p>The improvements will also investigate options to improve capacity and safety for travellers between the coast and inland communities, particularly those accessing key services.</p>	Supports regional development, economies and community activity. Safely and sustainably manages a key east-west transport link and supports intra-regional freight and passenger movement. Improves connections between Regional centres and Regional cities as well as east-west connections.	5, 7, 10
0-10yrs for investigation	North Coast	Upgrade of Bangalow Road between Bangalow and Lismore	Infrastructure	<p>Upgrade the corridor between Lismore and Bangalow through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.</p>	<p>The upgrades will help to facilitate movements on this key east-west corridor including improving road safety, travel times and reliability (including reducing the risk of road closures due to flooding) and freight access. The corridor is important for connecting the Regional City of Lismore with the Pacific Motorway and further north to the Regional City of Tweed Heads and the Gold Coast. The upgrades will support the user needs of regional industries, populations, and tourists assisting regional development, economic growth and community activity. It will improve access to the major employment centre of Lismore as well as Southern Cross University.</p>	5, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	North Coast, New England North West	Gwydir Highway Improvements (between Grafton and Glen Innes, Jackadgery)	Infrastructure	<p>Upgrade the Gwydir Highway between Grafton and Glen Innes through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.</p> <p>These initiatives will also seek to improve the route for freight productivity and access.</p>	The upgrades will help to facilitate movements on this key east-west corridor including improving road safety, travel times and reliability (including reducing the risk of road closures due to flooding) and freight access. The corridor is important for connecting the New England tablelands and western plains with the Regional Centre of Grafton and beyond to the Pacific Motorway on the coast. It provides an important east-west freight link across the Great Dividing Range and connects a series of interstate highways and important inter-regional corridors with inland Regional and Town Centres. The upgrades will provide safer journeys for all road users and support the development of road based freight connections to Inland Rail at Parkes. The upgrades will support the user needs of regional industries, populations, and tourists assisting regional development, economic growth and community activity and will reduce maintenance requirements in the future.	7, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
10-20yrs for investigation	North Coast	Summerland Way Improvements (Grafton-QLD border)	Infrastructure	Upgrading of the Summerland Way which operates as a key freight link for the timber, cattle farming and meat manufacturing industries. Measures include lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	<p>The upgrades will help to facilitate movements on this key north-south corridor including improving road safety, travel times and reliability (including reducing the risk of road closures due to flooding) and freight connections. The corridor is important for connecting the Regional City of Lismore and the Regional Centre of Grafton and is an alternative to the Pacific Highway.</p> <p>The upgrades will support regional development, economies and community activity. They will safely and sustainably manage a key north to south freight and transport link and support cross-border freight and passenger movement into South East Queensland.</p>	5, 7, 10
10-20yrs for investigation	North Coast, Hunter, Central Coast, South East and Tablelands and Riverina Murray	Corridor Preservation for Higher Speed Connections	Policy and planning	Confirm and begin the preservation of a corridor, based on the corridor set out in the Australian Government's High Speed Rail Study Phase 2, for a high speed rail link between Melbourne, Sydney and Brisbane.	Supports reduced journey times for travel across NSW and into other states/ACT. Results in improvements to economy due to minimising lost time spent travelling and supports increased accessibility for people in regional NSW to access services and infrastructure within capital cities.	2, 5
10-20yrs for investigation	North Coast	North Coast cruise infrastructure development	Infrastructure	Provide transport access connections to position an international cruise destination in the North Coast.	Supports the visitor economy of the North Coast, with a focus on adventure cruise ships.	6

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
10-20yrs for investigation	North Coast	Bruxner Highway Improvements (Casino-Tenterfield)	Infrastructure	Improvements to the Bruxner Highway between Tenterfield and Casino, including safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate).	The upgrades will help to facilitate movements on this east-west corridor including improving safety, capacity, reliability and freight access. The corridor is important for connecting the Regional Centre of Casino to the west and the north-south New England Highway. The upgrades will support the user needs of regional industries (particularly intra-regional freight and passenger movement), populations, and tourists enabling regional development, economic growth and community activity. They will safely and sustainably manage a key east to west freight and transport link.	5, 7, 10
20+yrs visionary	Central Coast, Hunter, North Coast, South East and Tablelands, Riverina Murray	Higher Speed Connections (east coast)	Infrastructure	Deliver a high speed transport connection along the East Coast of NSW (traversing Greater Sydney).	Provides future connectivity between Western Sydney and Central Coast, Newcastle and Canberra. Supports cross-border connections and connects Sydney, Global Gateway Cities and Regional Cities and Centres.	2, 5, 6, 10

South East and Tablelands

Timing for initiative	Location	Initiative	Initiative type	Description	Benefit	Customer Outcomes
0-10yrs for investigation	South East and Tablelands, Illawarra-Shoalhaven	Moss Vale to Unanderra and Coniston Junction rail improvements	Infrastructure	Upgrade to the Moss Vale to Unanderra Line in between Port Kembla and the Southern Highlands in conjunction with ARTC and Coniston Junction improvements to address rail freight pinch points.	Improved rail travel times capacity for freight, supporting the growth in rail freight and improving rail access to the Port Kembla. Coniston Junction improvements will improve freight flows between Port Kembla and Southern Highlands, and future Maldon-Dombarton rail link. Relieve congestion on the Main South Line into Sydney.	6, 10
0-10yrs for investigation	South East and Tablelands	Sydney-Canberra Faster Rail Improvement	Infrastructure	A program of operational, fleet and targeted fixed infrastructure improvements (for example, new deviations to eliminate curvatures and flatten grades).	Improved rail travel times, services and facilities to enable increased capacity. Connect and develop greater economic synergies between Sydney and the Global City of Canberra as well as improve cross-border connections.	4, 5, 9
0-10yrs for investigation	South East and Tablelands	Kings Highway improvements	Infrastructure	Upgrade the Kings Highway through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor. Deliver greater journey time savings and improve the connections between regional cities and centres and the Global Gateway City of Canberra. Recognises Kings highway as an efficient and effective route to improve productivity and support the visitor economy in the region.	5, 7, 10

Timing for initiative	Location	Initiative	Initiative type	Description	Benefit	Customer Outcomes
0-10yrs for investigation	South East and Tablelands	Snowy Mountains Highway improvements (including Brown Mountain)	Infrastructure	Upgrade the Snowy Mountains Highway from Cooma to Bega through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Deliver greater journey time savings and improve safety, capacity, reliability and freight access along the corridor. Improve the connections between Regional Centres and the Global Gateway City of Canberra and recognise the Snowy Mountains Highway as an efficient and effective route to improve productivity and support the visitor economy in the region. Facilitate access to the Eden Cruise Facility.	5, 7, 10
0-10yrs for investigation	South East and Tablelands	Monaro Highway improvements	Infrastructure	Upgrade the Monaro Highway from Canberra to Cooma through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Deliver greater journey time savings and improve safety, capacity, reliability and freight access along the corridor. Improve the connections between Regional Centres and the Global Gateway City of Canberra. Recognise the Monaro Highway as an efficient and effective route to improve productivity and support the visitor economy in the region and facilitate access to Eden Cruise Facility and Snowy Mountains resorts and towns.	5, 7, 10
0-10yrs for investigation	South East and Tablelands, Central West and Orana	Lachlan Valley Way improvements	Infrastructure	Upgrade the Lachlan Valley Way through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor and improve the connections between Regional Cities and Centres. Recognise the role of Lachlan Valley Way as an efficient and effective freight route to improve productivity and support the agriculture industry in the region.	5, 7, 10

Timing for initiative	Location	Initiative	Initiative type	Description	Benefit	Customer Outcomes
0-10yrs for investigation	South East and Tablelands	Investigate extension of light rail from Canberra to Queanbeyan	Policy and planning	Extension of the Canberra Light Rail network to Queanbeyan.	Supports identified urban renewal corridors and growth to the east of the City with a mode of transport that supports street activation. Enables future connectivity between strategic centres and Global City of Canberra. Integrates regional city public transport network and aims to reduce road congestion.	3, 5, 9
0-10yrs for investigation	Illawarra-Shoalhaven, South East and Tablelands	Duplication of Princes Highway (Jervis Bay Road Intersection to Moruya), including bypass of Milton-Ulladulla	Infrastructure	Duplication of Princes Highway (Jervis Bay Road Intersection to Moruya) including bypass of Milton-Ulladulla.	Supports safety improvements and decreases freight and passenger vehicle travel times.	5, 10
0-10yrs for investigation	Central West and Orana, Hunter, South East and Tablelands	Great Dividing Range long term solution	Policy and planning	A strategic investigation to improve freight connectivity across the Great Dividing Range in order to connect inland areas with Sydney/Newcastle/Wollongong.	Solution will resolve a long standing issue regarding access between Inland NSW and Coastal areas of the Greater Sydney conurbation.	4, 6, 10
0-10yrs for investigation	Central West and Orana, Hunter, South East and Tablelands	Great Dividing Range long term solution corridor preservation	Policy and planning	Corridor preservation to improve freight connectivity across the Great Dividing Range in order to connect inland areas with Sydney/Newcastle/Wollongong.	Solution will resolve a long standing issue regarding access between Inland NSW and Coastal areas of the Greater Sydney conurbation.	4, 6, 10

Timing for initiative	Location	Initiative	Initiative type	Description	Benefit	Customer Outcomes
10-20yrs for investigation	South East and Tablelands	M31 Hume SMART motorway	Infrastructure	The M31 Hume Smart Motorway project will introduce intelligent technology, known as a motorway management system. This includes variable speed limits, dynamic message signs and - where appropriate - ramp meters to meter traffic flows.	Supports the financial sustainability of the transport system by better using existing motorway infrastructure. Enables future forms of mobility, such as CAVs, to be available to customers by ensuring infrastructure is enabled to support this and improve the safety of road users through technology that improves the management of congestion and helps reduce the risk of incidents.	2, 6, 7
10-20yrs for investigation	Illawarra-Shoalhaven, South East and Tablelands	Illawarra Hwy/ Macquarie Pass improvements	Infrastructure	Improvement of the road crossing of the Illawarra Escarpment at Macquarie Pass, including safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate).	Improves the safety, reliability and efficiency of the Illawarra Highway. Provides efficient and reliable road access to and from the Satellite City of Wollongong to the Global Gateway of Canberra and Regional Centre of Goulburn. Improves the productivity for road based freight movements to and from Port Kembla. Improves access to the South Coast to support the visitor economy.	8, 10
10-20yrs for investigation	South East and Tablelands	Electrification of intercity to Goulburn	Infrastructure	Extension of the electrified Intercity Rail network to Goulburn from Macarthur.	Provides a more convenient access point to the Intercity network within a Regional Centre (Goulburn) and efficient and reliable rail access to the Western City for customers that live in the Southern Tablelands and Southern Highlands. Supports an improvement in the sustainable movement of passengers through the extension of the electrification section of the rail network leading to reduce greenhouse gas emissions.	10

Timing for initiative	Location	Initiative	Initiative type	Description	Benefit	Customer Outcomes
10-20yrs for investigation	South East and Tablelands	Completion of Barton Highway duplication	Infrastructure	Duplication of the Barton Highway between Canberra and the Hume Motorway.	Decreases freight and passenger vehicle travel times and the potential for conflict between heavy vehicles, passenger vehicles and pedestrians in this built-up area. Improves the efficiency of the National Freight network.	5
10-20yrs for investigation	North Coast, Hunter, Central Coast, South East and Tablelands and Riverina Murray	Corridor Preservation for Higher Speed Connections	Policy and planning	Confirm and begin the preservation of a corridor, based on the corridor set out in the Australian Government's High Speed Rail Study Phase 2, for a high speed rail link between Melbourne, Sydney and Brisbane.	Supports reduced journey times for travel across NSW and into other states/ACT. Results in improvements to economy due to minimising lost time spent travelling and supports increased accessibility for people in regional NSW to access services and infrastructure within capital cities.	2, 5
10-20yrs for investigation	South East and Tablelands	Duplication of Princes Highway (Moruya to Bega Bridge)	Infrastructure	Duplication of Princes Highway from Moruya to Bega Bridge.	Supports safety improvements and decreases freight and passenger vehicle travel times.	5, 10
20+yrs visionary	South East and Tablelands	Duplication of Princes Highway (Bega Bridge to Victorian Border)	Infrastructure	Duplication of Princes Highway from Bega Bridge to Victorian border.	Supports safety improvements and decreases freight and passenger vehicle travel times.	5, 10
20+yrs visionary	Central Coast, Hunter, North Coast, South East and Tablelands, Riverina Murray	Higher Speed Connections (east coast)	Infrastructure	Deliver a high speed transport connection along the East Coast of NSW (traversing Greater Sydney).	Provides future connectivity between Western Sydney and Central Coast, Newcastle and Canberra. Supports cross-border connections and connects Sydney, Global Gateway Cities and Regional Cities and Centres.	2, 5, 6, 10
20+yrs visionary	Central West and Orana, Hunter, South East and Tablelands	Delivery of Great Dividing Range long term solution	Infrastructure	Delivery of solution to improve freight connectivity across the Great Dividing Range in order to connect inland areas to Sydney/Newcastle/Wollongong.	Solution will resolve a long standing issue regarding access between Inland NSW and Coastal areas of the Greater Sydney conurbation.	4, 6, 10

Riverina Murray

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Riverina Murray, Far West	Murray River Bridges Program	Infrastructure	The upgrading and replacement of key bridges across the Murray River to increase connectivity for communities and facilitate the movement of freight.	Aims to improve safety, capacity, efficiency, reliability and freight access and improve the connections between Regional Cities and Centres. Improve cross-border connections and access to employment and government services on either side of the cross-border region.	8
0-10yrs for investigation	Riverina Murray, Far West	Sturt Highway improvements	Infrastructure	Upgrade the Sturt Highway through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor, improve the connections between Regional Cities and Centres, recognise the Sturt Highway as an efficient and effective freight route to improve productivity and support the agriculture industry in the region as well as improve east-west connections.	4, 7, 10
0-10yrs for investigation	Far West, Riverina Murray	Cobb Highway sealing missing links	Infrastructure	Sealing of the remaining sections of the Cobb Highway.	Supports the user needs of regional industries, populations, and tourists and aims to improve safety, capacity, reliability and freight access along the corridor. Increases resilience in regional NSW.	7, 8
0-10yrs for investigation	Riverina Murray	Main South Freight Rail Capacity Enhancements in collaboration with ARTC	Infrastructure	Main South rail duplication between Junee and Victorian Border and allow for double stacking of containers on Inland Rail alignment track. Bridge upgrades to increase height (7.1m from track) upgrades.	Increasing freight movements along the Inland rail alignment will start to strain the existing line from late 2020's. Regional passenger services will require more frequent commuter services between key hubs like Wagga Wagga and Albury.	6, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Riverina Murray, Central West and Orana, New England North West	Newell Highway Improvements (in addition to those committed)	Infrastructure	Upgrade the remaining sections of the Newell Highway Corridor. This would include a series of measures including town bypasses, lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor, deliver greater journey time savings, support the freight supply chains to and from the Inland Rail, improve the connections between Regional Cities and Centres, develop the corridor to operate as an efficient and effective National freight route to improve productivity and support the agriculture industry and improve cross-border connections.	6, 7, 10
0-10yrs for investigation	South East and Tablelands, Riverina Murray	Hume Highway Improvements	Infrastructure	Upgrade the Hume Highway Corridor to improve safety and efficiency to cater for growing passenger demand, including implementation of safety measures identified from Safe System design principles for corridor planning.	Aims to improve safety, capacity, reliability and freight access along the corridor, improve the connections between Regional Cities and Centres, develop the corridor to operate as an efficient and effective National freight route to improve productivity, improve cross-border connections, improve freight efficiency and improve interchanges	5, 7
0-10yrs for investigation	Far West, Riverina Murray	Kidman Way improvements	Infrastructure	Upgrade the Kidman Way through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor, deliver greater journey time savings, improve the connections between Regional Cities and Centres and creates a connection to Griffith from the National Freight Network.	7, 8

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	New England North West, Central West and Orana and Riverina Murray	Inland Rail Intermodal Facility investigations	Policy and planning	Investigation of appropriate locations for the private development of intermodal facilities.	Supports improved economic opportunities for freight customers.	6
10-20yrs for investigation	New England North West, Central West and Orana and Riverina Murray	Support the delivery of Inland Rail	Infrastructure	Support initiatives to deliver Inland Rail, including upgrades to bridges along Inland Rail alignment to support double stacking.	Supports improved economic opportunities for freight customers.	6, 10
10-20yrs for investigation	North Coast, Hunter, Central Coast, South East and Tablelands and Riverina Murray	Corridor Preservation for Higher Speed Connections	Policy and planning	Confirm and begin the preservation of a corridor, based on the corridor set out in the Australian Government's High Speed Rail Study Phase 2, for a high speed rail link between Melbourne, Sydney and Brisbane.	Supports reduced journey times for travel across NSW and into other states/ACT. Results in improvements to economy due to minimising lost time spent travelling and supports increased accessibility for people in regional NSW to access services and infrastructure within capital cities.	2, 5
20+yrs visionary	Central Coast, Hunter, North Coast, South East and Tablelands, Riverina Murray	Higher Speed Connections (east coast)	Infrastructure	Deliver a high speed transport connection along the East Coast of NSW (traversing Greater Sydney).	Provides future connectivity between Western Sydney and Central Coast, Newcastle and Canberra. Supports cross-border connections and connects Sydney, Global Gateway Cities and Regional Cities and Centres.	2, 5, 6, 10

New England North West

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	New England North West	New England Highway Improvements (Willow Tree to Armidale)	Infrastructure	Upgrade the New England Highway between Willow Tree and Armidale through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Supports the user needs of regional industries, populations, commuters and tourists. Aims to improve safety, capacity, reliability and freight access along the highway and acknowledges community value and use of areas in and around the corridor. Improves the connections between Regional Cities and Centres.	3, 4, 5, 6, 7
0-10yrs for investigation	New England North West	New England Highway Improvements (Armidale to border)	Infrastructure	Upgrading of the New England Highway between Armidale and The Queensland border, including safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate).	Supports the user needs of regional industries, populations, commuters and tourists. Aims to improve safety, capacity, reliability and freight access along the highway and acknowledges community value and use of areas in and around the corridor. Improves the connections between Regional Cities and Centres. Supports cross-border movements of passengers and freight.	5, 7, 10
0-10yrs for investigation	North Coast, New England North West	Gwydir Highway Improvements (between Grafton and Glen Innes, Jackadgery)	Infrastructure	Upgrade the Gwydir Highway between Grafton and Glen Innes through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor and improve the connections between Regional Cities and Centres.	7, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Riverina Murray, Central West and Orana, New England North West	Newell Highway Improvements (in addition to those committed)	Infrastructure	Upgrade the remaining sections of the Newell Highway Corridor. This would include a series of measures from as large as town bypasses, lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor, deliver greater journey time savings, support the freight supply chains to and from the Inland Rail and improve the connections between Regional Cities and Centres. Develop the corridor to operate as an efficient and effective National freight route to improve productivity and support the agriculture industry and improve cross-border connections.	6, 7, 10
0-10yrs for investigation	New England North West	Kamilaroi Highway Improvements	Infrastructure	Upgrade the Kamilaroi Highway between Narrabri and Willow Tree through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Supports the user needs of regional industries, populations, and tourists and aims to improve safety, capacity, reliability and freight access along the corridor; Acknowledges community value and use of areas in and around the corridor and aims to improve the connections between Regional Cities and Centres.	5, 7, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	North Coast, New England North West	Waterfall Way corridor improvements	Infrastructure	Upgrading Waterfall Way between the Pacific Highway at Raleigh and the New England Highway at Armidale through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate). Planning for minor realignment between the Pacific Highway and Bellingen including accommodating for active transport users to promote safe connections.	The upgrades will help to facilitate movements on this key east-west corridor including improving safety, capacity, reliability and freight access. The corridor is important for connecting the Regional Cities of Armidale and Coffs Harbour and the Regional Centre of Grafton. It is an important connection from inland NSW to the coast and is a major tourist drive travelling through numerous National Parks. The upgrades will support the user needs of regional industries, populations, and tourists enabling regional development, economic growth and community activity.	5, 7, 10
0-10yrs for investigation	North Coast, New England North West	Oxley Highway Improvements	Infrastructure	Upgrade the Oxley Highway between Tamworth and Port Macquarie. Improvements will focus on intersections and bridge approach barriers, flood immunity, improving road alignment and overtaking opportunities, as well as safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate). Will also investigate improvements for cyclist connectivity and better pedestrian facilities particularly through town centres as well as upgrades required to cater for growth in the Port Macquarie and Tamworth urban areas. Also includes ongoing maintenance to slope stability on the mountain between Walcha and Wauchope.	The upgrades will help to facilitate movements on this key east-west corridor including improving road safety, travel times and reliability (including reducing the risk of road closures due to flooding or rock-falls) and freight access. The corridor is important for connecting the Regional Cities of Port Macquarie over the Great Dividing Range to Tamworth as well as connecting beyond to North Western NSW. The upgrades will support the user needs of regional industries (including agriculture, equine and mining), populations, and tourists assisting regional development, economic growth and community activity.	5, 7, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	New England North West, Central West and Orana and Riverina Murray	Inland Rail Intermodal Facility investigations	Policy and planning	Investigation of appropriate locations for the private development of intermodal facilities.	Supports improved economic opportunities for freight customers.	6
10-20yrs for investigation	New England North West	Gwydir Highway Improvements (Inland)	Infrastructure	Upgrade the Gwydir Highway between Moree and Glen Innes through a series of measures such as lane and seal widening with clear zone works, improving safety measures (including at level crossings), additional overtaking lanes and intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor and improve the connections between Regional Cities and Centres.	5, 7, 10
10-20yrs for investigation	Hunter, New England North West	Main Northern Line - improvements to address pinch points	Infrastructure	Support improvements to the rail network in the Upper Hunter to address rail freight pinch points.	Improved rail travel times for freight, reducing delays to passenger rail services. Support growth in rail freight and improve rail access to Newcastle port.	3, 9
10-20yrs for investigation	New England North West, Central West and Orana and Riverina Murray	Support the delivery of Inland Rail	Infrastructure	Support initiatives to deliver Inland Rail, including upgrades to bridges along Inland Rail alignment to support double stacking.	Supports improved economic opportunities for freight customers.	6

Central West and Orana

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Central West and Orana	Mt Victoria to Orange road corridor improvements to achieve travel time savings and road safety outcomes	Infrastructure	Upgrade of the Great Western and Mitchell Highways between the western end of the Blue Mountains at Mount Victoria, to better connect and support the regional cities and centres of Lithgow, Bathurst and Orange. Upgrade will include safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate).	Supports the user needs of regional industries, populations, commuters and tourists. Aims to improve safety, capacity, reliability and freight access along the highway, and deliver greater journey time savings. Acknowledges community value and use of areas in and around the corridor. Improve east-west connections.	5, 7
0-10yrs for investigation	Central West and Orana	Henry Parkes Way improvements	Infrastructure	Upgrade Henry Parkes Way through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor and improve the connections between Regional Cities and Centres. Deliver greater journey time savings.	5, 6, 7
0-10yrs for investigation	Far West, Central West and Orana	Barrier Highway improvements (Dubbo-Broken Hill)	Infrastructure	Upgrade the Barrier Highway through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Supports the user needs of regional industries, populations, commuters and tourists and aims to improve safety, capacity, reliability and freight access along the highway. Improves the connections between Regional Cities and Centres.	7, 8

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Riverina Murray, Central West and Orana, New England North West	Newell Highway Improvements (in addition to those committed)	Infrastructure	Upgrade the remaining sections of the Newell Highway Corridor. This would include a series of measures from as large as town bypasses, lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor, deliver greater journey time savings and support the freight supply chains to and from the Inland Rail. Improve the connections between Regional Cities and Centres and develop the corridor to operate as an efficient and effective National freight route to improve productivity and support the agriculture industry. Improve cross-border connections.	6, 7, 10
0-10yrs for investigation	South East and Tablelands, Central West and Orana	Lachlan Valley Way improvements	Infrastructure	Upgrade the Lachlan Valley Way through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor and improve the connections between Regional Cities and Centres. Recognise the Lachlan Valley Way as an efficient and effective freight route to improve productivity and support the agriculture industry in the region and improve connections between Regional centres and Regional cities.	5, 7, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Hunter, Central West and Orana	Golden Highway improvements (continuation)	Infrastructure	Upgrade the Golden Highway through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	The route has been identified as an important connection between the Central West and Orana region and Greater Newcastle and the Port of Newcastle. There is also a State target to facilitate the movement of high productivity vehicles on the highway in the long term due to the constraints that make such a connection between the Central West and Sydney via the Great Western Highway less cost effective. Corridor improvements will deliver greater journey time savings and road safety outcomes.	5, 6, 7
0-10yrs for investigation	Central West and Orana	Bells Line of Road improvements	Infrastructure	Upgrade the Bells of Line of Road to improve east-west connections between Central West and Greater Sydney. Improvements would include land and shoulder widening with clear zone works.	Supports improved access between the Central West and Orana with Greater Sydney for freight and passenger vehicles.	5, 7
0-10yrs for investigation	Central West and Orana	Extending Bathurst commuter rail to Orange	Service	Supporting service changes to support day return travel between Orange and Greater Sydney.	Supports increased connectivity between Central West and Orana with Greater Sydney. Supports improved safety outcomes, with less long distance private vehicle trips made.	7, 9, 10
0-10yrs for investigation	New England North West, Central West and Orana, and Riverina Murray	Inland Rail Intermodal Facility investigations	Policy and planning	Investigation of appropriate locations for the private development of intermodal facilities.	Supports improved economic opportunities for freight customers.	
0-10yrs for investigation	Central West and Orana, Hunter, South East and Tablelands	Great Dividing Range long term solution study	Policy and planning	A strategic investigation to improve freight connectivity across the Great Dividing Range in order to connect inland areas to Sydney/ Newcastle/Wollongong.	Solution will resolve a long standing issue regarding access between Inland NSW and Coastal areas of the Greater Sydney conurbation.	4, 6, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Central West and Orana, Hunter, South East and Tablelands	Great Dividing Range long term solution corridor preservation	Policy and planning	Corridor preservation to improve freight connectivity across the Great Dividing Range in order to connect inland areas to Sydney/Newcastle/Wollongong.	Solution will resolve a long standing issue regarding access between Inland NSW and Coastal areas of the Greater Sydney conurbation.	4, 6, 10
10-20yrs for investigation	Central West and Orana	Castlereagh Highway Improvements (Mudgee-Lithgow)	Infrastructure	Upgrade the Castlereagh Highway through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Supports the user needs of regional industries, populations, and tourists and aims to improve safety, capacity, reliability and freight access along the corridor. Improves the connections between Regional Cities and Centres.	5, 7, 10
10-20yrs for investigation	Central West and Orana	Electrification of intercity to Bathurst	Infrastructure	Extension of the electrified Intercity Rail network to Bathurst from Lithgow.	Provide a more convenient access point to the Intercity network from a Regional City. Provides efficient and reliable rail access to the Western City and WSA for customers that live in the Central West and Orana and supports an improvement in the sustainable movement of passengers through the extension of the electrification section of the rail network leading to reduce greenhouse gas emissions.	3, 5, 7
10-20yrs for investigation	Central West and Orana, Hunter	Dubbo to Newcastle rail connection	Service	Develop existing coach connection between Dubbo and Newcastle into a passenger rail line.	Newcastle is the closest coastal city to Dubbo. There is growing passenger demand on this corridor which if developed can help alleviate congestion on the Main West line to Sydney.	5, 10

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
10-20yrs for investigation	New England North West, Central West and Orana and Riverina Murray	Support the delivery of Inland Rail	Infrastructure	Support initiatives to deliver Inland Rail, including upgrades to bridges along Inland Rail alignment to support double stacking.	Supports improved economic opportunities for freight customers.	6
10-20yrs for investigation	Far West, Central West and Orana	Mitchell Highway improvements	Infrastructure	Upgrade the Mitchell Highway through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor and improve the connections between Regional Cities and Centres. Recognises the Mitchell Highway as an efficient and effective freight route to improve productivity and support the agriculture industry in the region.	5, 7, 10
20+yrs visionary	Central West and Orana, Hunter, South East and Tablelands	Delivery of Great Dividing Range long term solution	Infrastructure	Delivery of solution to improve freight connectivity across the Great Dividing Range in order to connect inland areas to Sydney/Wollongong/Newcastle.	Solution will resolve a long standing issue regarding access between Inland NSW and Coastal areas of the Greater Sydney conurbation.	4, 6, 10

Far West

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Far West, Central West and Orana	Barrier Highway improvements (Dubbo-Broken Hill)	Infrastructure	Upgrade the Barrier Highway through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Supports the user needs of regional industries, populations, commuters and tourists and aims to improve safety, capacity, reliability and freight access along the highway. Improves the connections between Regional Cities and Centres.	7, 8
0-10yrs for investigation	Far West	Silver City Highway sealing missing links	Infrastructure	Sealing of the remaining sections of the Silver City Highway.	Supports the user needs of regional industries, populations, and tourists and aims to improve safety, capacity, reliability and freight access along the corridor. Increases resilience in regional NSW.	7, 8
0-10yrs for investigation	Far West, Riverina Murray	Cobb Highway sealing missing links	Infrastructure	Sealing of the remaining sections of the Cobb Highway.	Supports the user needs of regional industries, populations, and tourists and aims to improve safety, capacity, reliability and freight access along the corridor. Increases resilience in regional NSW.	7, 8
0-10yrs for investigation	Far West	The Wool Track sealing (Balranald - Ivanhoe - Cobar)	Infrastructure	The Wool Track is 240 km long and is the shortest route between South Australia and Queensland via Balranald, Ivanhoe and Cobar and is currently unsealed.	Supports the user needs of regional industries, populations, and tourists and aims to improve safety, capacity, reliability and freight access along the corridor.	7, 8

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
0-10yrs for investigation	Far West, Riverina Murray	Kidman Way improvements	Infrastructure	Upgrade the Kidman Way through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor, deliver greater journey time savings, improve the connections between Regional Cities and Centres and creates a connection to Griffith from the National Freight Network.	7, 8
0-10yrs for investigation	Riverina Murray, Far West	Sturt Highway improvements	Infrastructure	Upgrade the Sturt Highway through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor, improve the connections between Regional Cities and Centres, recognise the Sturt Highway as an efficient and effective freight route to improve productivity and support the agriculture industry in the region as well as improve east-west connections.	5, 7, 10
0-10yrs for investigation	Riverina Murray, Far West	Murray River Bridges Program	Infrastructure	The upgrading and replacement of key bridges across the Murray River to increase connectivity for communities and facilitate the movement of freight.	Aims to improve safety, capacity, efficiency, reliability and freight access and improve the connections between Regional Cities and Centres. Improve cross-border connections and access to employment and government services on either side of the cross-border region.	8

Timing for initiative	Region	Initiative	Initiative type	Summary description of initiative	Benefit	Customer Outcomes
10-20yrs for investigation	Far West, Central West and Orana	Mitchell Highway improvements	Infrastructure	Upgrade the Mitchell Highway through a series of measures such as lane and seal widening with clear zone works, safety measures identified from Safe System design principles for corridor planning (including ATLM, wide centreline, median barriers and 2+1 treatment where appropriate), intersection improvements at highly traffic locations, flood immunity works and asset maintenance works.	Aims to improve safety, capacity, reliability and freight access along the corridor, improve the connections between Regional Cities and Centres and recognise the Mitchell Highway as an efficient and effective freight route to improve productivity and support the agriculture industry in the region.	5, 7, 10



Regional NSW Services and Infrastructure Plan

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