ATTACHMENTS

UNDER SEPARATE COVER

Ordinary Council Meeting

26 March 2024



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		(1121111) 1101(7)	

Customer Journey Resilience Plan

New England Northwest NSW

February 2024





transport.nsw.gov.au

Acknowledgement of Country

Transport for NSW acknowledges the traditional custodians of the land on which we work and live.

We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of NSW.

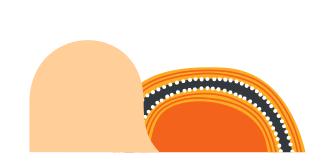
Many of the transport routes we use today – from rail lines, to roads, to water crossings – follow the traditional Songlines, trade routes and ceremonial paths in Country that our nation's First Peoples followed for tens of thousands of years.

Transport for NSW is committed to honouring Aboriginal peoples' cultural and spiritual connections to the lands, waters and seas and their rich contribution to society.

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Version	Amendment notes
15122023_NENW_CJRP_DRAFTv2.1	Draft for Review. Results are preliminary only.

Definitions

* These definitions have been adapted from the NPWS Cultural Fire Management Policy and the New England North West Regional Plan 2041.

Term	Definition	
Authority	Means the right to act in a specified way, delegated from one person or persons within the organization in the community.	
Active Transport	Transport that is human powered, such as walking and cycling.	
Climate Change	A change in the state of climate that can be identified by changes in the mean/variability of its properties, and that persists for an extended period, typically decades or longer.	
Community (low risk) cultural burning	Means the objective is to enable Aboriginal community participation in culturally informed burning activities with Transport for NSW*.	
Cultural burning	Means a custodial fire management and practice undertaken by Aboriginal people to produce a known cultural landscape management objective.	
Cultural fire management	Means the involvement of Aboriginal people in fire management. The term cultural fire management is a broad term, it can cover the full spectrum of Aboriginal community involvement in fire management from consultation with communities about their needs and values in NPWS fire management activities to community presence on the fire ground for a low-risk cultural burn*.	
Culturally informed burning	Means is any burn with cultural burning objectives and Aboriginal community partnership in planning and approval. Culturally informed burning may not always have Aboriginal people involved on the fire ground. Community (low risk) cultural burning has the objective to enable Aboriginal community participation in culturally informed burning activities*.	
Cultural land management	Means a custodial management practice or activities that are carried out by Aboriginal people, Aboriginal community-based or community-controlled organization or group.	
Customers	Means any user of the regional transport network of roads and railways. Customer segments in the Future Transport Strategy and are identified within Customer Journey Resilience Plans. Customer segments are also identified in the Future Transport Strategy (see below).	

Term	Definition		
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Customer Journeys	Means the 'end-to-end' experience for the customer and their interactions with the transport network and services required to complete the 'end-to- end' journey.		
Disruption	Means the disturbance of a natural disaster which interrupt a customer's ability to undertake a designated journey on the NSW transport network.		
High risk communities	Means communities identified by stakeholders across regional NSW, where one access and egress by road is deemed to make people more vulnerable to being disrupted in the event of a natural disaster.		
Land and sea management	Means the use and development of land that involves the caring of natural assets and the management of treats such as weeds, pests, vegetation, and erosion.		
Natural hazard	A natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.		
One network approach	Means that from Transport for NSW and a customer's perspective a transport asset, service or piece of infrastructure facilitates the desire, intent, or need to travel and how they undertake that journey. A 'One Network' approach does not limit the considerations of customers and journeys to who manages and operates the infrastructure, the service, or the asset. A 'One Network' approach is one that considers the collective of transport assets, services and infrastructure that facilitate the desire, intent or need for a customer to travel, and how they take a journey.		
	 It is acknowledged that: A customer takes journeys across a transport network, during 'normal periods' and sometimes during natural disasters. Who owns, manages and or operates parts of the transport network required by a customer to undertake these journeys, is mostly unknown and possibly irrelevant to a customer. Customer journeys can be disrupted and disbanded by natural disasters and because there is vulnerability on the transport network. 		

Term	Definition
	 Points of vulnerability the transport network can be identified from various sources, media reports, engaging and consulting with customers, stakeholders, Local Government Authorities (LGAs) an within Transport for NSW.
	 Customers would like vulnerability addressed to enable journeys to return to 'normal' after a natural disaster, as soon as practicable and as possible.
Population projections	 Population projections describe likely changes in the size and age profiles of communities across NSW. Projections are not targets. They are based on assumptions about future births, deaths and migration. They may also include the potential impact of current or announced government policy. These assumptions vary from place to place – for example, an area with a large university that attracts overseas students will have different assumptions to an area that attracts retired Australians.
	Unexpected events and new government policy may alter the future levels o population growth. The NSW Government regularly reviews population projections to remain responsive to these changes.
Resilience	 Means the ability of assets, infrastructure systems and services, (or as we term it the 'transport network'), to adapt and respond to the disruption. Incorporating or building resilience in the Future Transport Strategy means Factoring resilience into the operations and maintenance of existing assets and the design of new assets (P5.4) Increasing collaboration across government to minimize disruption and improve evaluation in emergencies (P5.2) Improving major regional highways and bridges to keep freight an logistics running (P5.3) Focusing on asset renewals and replacements, and on resilience and 'building back better' (P5.3) Improving supply chain visibility through better digital systems and data management (E1.6) Supporting the uptake of new technologies such as connected and automated vehicles to boost productivity (E1.5) To identify where and how to incorporate the above will mean: identifying the locations of vulnerability assessing risk to natural disaster, and affirming this with stakeholders applying mitigations (such as those listed in the Future Transport Strategy including for example operational actions such as vegetation management, improved signage, and or Aboriginal cultural practice.



Document	Description and Relevance	Link
Customer Journey Resilience Plans_Background	This document describes the background as to what, why, when, and how Transport for NSW is developing Customer Journey Resilience Plans. This document also describes the process to develop a Customer Journey Resilience Plan for a part of regional NSW.	Customer Journey Resilience Plans_Background
REPORT_NENW_CJR Plans_Risk Assessment Summary	Customer Journey Resilience Plans are developed from a risk perspective, a summary of the risk assessments to prioritise customer journeys in a Local Government Area is provided in this document.	REPORT_NENW_CJR Plans_Risk Assessment Summary
Customer Journey Resilience Plan_New England Northwest	THIS DOCUMENT This is the Customer Journey Resilience Plan for the New England Northwest of NSW.	Customer Journey Resilience Plan_New England Northwest

1. Purpose of this Document

The purpose of this document, *Customer Journey Resilience Plan*, is to identify and assess vulnerability, risks of natural hazards (including fires and flood) and the impact of natural disasters on Customer Journeys in regional NSW. This is intended to provide Transport for NSW with data and information to make transport across regional NSW more resilient and reliable.

In the context of a changing climate and higher frequency and intensity of natural disasters, transport for NSW aims to improve the resilience and reliability of the regional NSW transport system in order to:

- Support economic prosperity,
- Create sustainable communities,
- Minimise disruption, and
- Enable customers to remain connected in times of natural disasters.

The Customer Journey Resilience Plans in this document have been informed by mapping of natural disasters from spatial databases, road and infrastructure data, and consultations with partners in Local Government to verify vulnerable and affected assets.

2. About the New England Northwest Region

Local Government Areas	City, towns, and communities	Population 2021 ²	Population Projections 2041
Armidale Regional Council	Armidale, Ben Lomond, Black Mountain, Guyra, Ebor, Hillgrove, Llangothlin, Wollomombi	29,612	31,352
Glen Innes Shire Council	Glen Innes, Emmaville, Deepwater	8,880	8,963
Gunnedah Shire Council	Gunnedah, Breeza, Carroll, Curlewis, Emerald Hill, Kelvin, Mullaley, Tambar Springs	12,691	13,466
Gwydir Shire Council	Bingara, Warialda, Gravesend, Cobbadah, Upper Horton,	5,306	5,576

2.1 People and Population¹

Customer Journey Resilience Plan – [INSERT REGION]

¹ The NSW Department of Planning and Environment produces population, household and implied dwelling projections using information about births, deaths, and migration including how many people are likely to be living in NSW, how old they are likely to be, where in NSW they are likely to live, the types of household they may live in and the potential demand on housing from the changing population. These are not future population targets. Instead, the population projections are a set of Common Planning Assumptions which the New South Wales Government and others use to plan services.

² Refer to 2021 <u>Census Results</u> for population data.

tor	N	S	W	

Local Government Areas	City, towns, and communities	Population 2021 ²	Population Projections 2041
	Croppa Creek, North Star, Coolatai		
Inverell Shire Council	Inverell, Ashford, Gilgai, Yetman, Tingha, Delungra	17,756	17,581
Liverpool Plains Shire Council	Quirindi, Werris Creek, Willow Tree, Wallabadah, Caroona, Walhallow, Currabubula, Premer, Spring Ridge	7,825	7,025
Moree Plains Shire Council	Moree, Mungindi, Boggabilla, Ashley Biniguy, Boomi, Pallamallawa, Garah, Gurley, Weemalah	13,016	17,076
Narrabri Shire Council	Narrabri, Wee Waa, Boggabri, Pilliga, Gwabegar, Baan Baa, Bellata	13,019	12,102
Tamworth Regional Council	Tamworth, Manilla, Kootingal, Barraba, Nundle	62,769	71,956
Tenterfield Shire Council	Tenterfield, Drake, Urbenville Torrington, Mingoola, Liston, Legume, Jennings	6,397	4,834
Uralla Shire Council	Uralla, Bundarra, Arding, Rocky River, Kingstown, Invergowrie, Kentucky	5,902	4,680
Walcha Council	Walcha, Woolbrook, Nowendoc	3,046	2,904
	TOTAL	187,219	197,515

Industry Considerations 2.2

Regional Economic Development Strategy ³	Endowments ⁴	Engine Industry ⁵	Emerging Industry
Northern New_ England High Country_ Regional Economic_ Development_ Strategy 2018–2022	Climate – high altitude, cool temperate climate at a subtropical latitude Water – high reliable rainfall Mineral deposits Location and accessibility on the New England Highway, close to SE Queensland Tourism and lifestyle Glen Innes Airport	 Agriculture Horticulture - fruit and tree nuts Livestock - sheep, beef and grain Food product manufacturing Accommodation Road freight transport 	Tourism Aged Care Renewable Energy
Southern New England Regional Economic Development Strategy 2018-2022	Climate National Parks, World Heritage Areas, State Forests Location and accessibility on the New England Highway, close to SE Queensland Education, lifestyle and facilities Institutions and research clusters	 Agriculture Livestock Other livestock farming Mushrooms, vegetables, fruit and tree nuts Tertiary education 	[Data to be appraised from Rebel or Cynthia by Tues 1 Nov]
Lower North West Regional Economic Development Strategy 2018–2022	Location, accessibility, and connectivity Highly productive agricultural land Mineral resources Lifestyle attributes.	Agriculture and agri- business Mining Transport and logistics Tourism	Growth across the engine industries
<u>Upper North West</u> <u>Regional Economic</u> <u>Development</u>	Highly productive agricultural land Water	Agriculture farming and manufacturing	Tourism Renewable energy production,

Customer Journey Resilience Plan – [INSERT REGION]

 ³ NSW Regional Economic Development Strategies – Regional NSW
 ⁴ The Centre Economics Regional Development (CERD) in its Regional Economic Growth Enablers Report (2017) found that: the future of individual regional economies is inexorably linked to their natural endowments and attempts to retain or establish

 ¹⁵ Some NSW Government programs use the REDS to determine the targeted industries that are most likely to support economic growth in a region. Engine industries vary by region, normally have a competitive advantage and tend to trade their goods outside the local area or sell their services to non-locals.

Regional Economic Development Strategy ³	Endowments ⁴	Engine Industry ⁵	Emerging Industry
<u>Strategy 2018–2022</u>	Transport and logistics Industry-specific institutions Mineral and gas resources Renewable energy Tourism		Manufacturing, and processing Coal-seam gas

2.3 NSW Common Planning Assumptions

The Common Planning Assumptions are used in the development of new NSW government policies, strategies, and business cases.

Local Government Area	Fiscal and economic	Population and housing (2041 estimates)	Regional and land use	New infrastructure in planning or development
Moree Plains	Moree LGA is one of the top agricultural producing areas in Australia. Large-scale cereal and chickpea crops as well as cotton are significant export and domestic industries.	17,076 Priority to deliver housing options to promote development to contribute to Moree, Mungindi, Boggabilla, Ashley, Biniguy, Boomi, Pallamallawa, Garah, Gurley and Weemalah.	Expand nature-based adventure and cultural tourism places such as Moree Artesian Aquatic Centre and the Moree Water Park.	The NSW government has committed funding to plan for the upgrade of the Newell Highway between Narrabri and Moree.
Gwydir	Gwydir Shire LGA has a strong and growing economy based on agriculture and supports the 'Golden Triangle' around North Star, famous for its high yielding crops such as wheat, barley, sorghum, maize, chickpea peas, canola and cotton.	5,576 Priority to deliver housing options to promote development to contribute to Gravesend, Cobbadah, Upper Horton, Croppa Creek, North Star, Coolatai and Warialda Rail. Deliver a variety of housing options in Bingara and Warialda, to attract young families and support the ageing population.	Continue to develop access and logistics infrastructure on appropriate sites to encourage new industry opportunities throughout the region and within the Namoi Regional Job Precinct.	Plan to upgrade the Gwydir Highway between Grafton and Glen Innes through a series of measures such as lane and seal widening with clear zone works.

Customer Journey Resilience Plan – [INSERT REGION]

Local Government Area	Fiscal and economic	Population and housing (2041 estimates)	Regional and land use	New infrastructure in planning or development
Inverell	Inverell LGA has a strong and growing economy based on agriculture, particularly beef cattle and cropping. It is the operating centre for a large beef processing company, the largest employer in Inverell.	17,581 Priority to deliver housing options to promote development to contribute to Ashford, Gilgai, Yetman, Tingha and Delungra.	Expand nature-based, adventure and cultural tourism places and enhance visitor experiences by leveraging the area's environmental and iconic assets including Copeton Dam.	Leverage the REZ and wind, solar and other renewable energy production opportunities.
Tenterfield	Tenterfield LGA has a strong and growing economy based on agriculture and mineral resource production, retail trade, and the health, education and tourism industries.	4,834 Priority to deliver housing options to promote development to contribute to Tenterfield, Drake, Urbenville, Torrington, Mingoola, Liston, Legume and Jennings.	Expand cultural and Aboriginal tourism and nature-based adventure, including eco- tourism and mountain bike trails.	Leverage the REZ and wind, solar and other renewable energy production opportunities.
Glen Innes Severn	Its location atop the Great Dividing Range has seen growth in wind farming and other renewables, with the region's first wind farm is under construction and two more planned.	8,963 Priority to deliver housing options to promote development to contribute to Emmaville and Deepwater.	Identify opportunities to expand tourism by leveraging environmental and iconic assets such as the Australian Standing Stones and neighbouring national parks.	Identify and promote wind, solar, bioenergy and other renewable energy production opportunities as part of the REZ.
Armidale Regional	The largest employers are within the agricultural, health and education industries, with	31,352 Priority to deliver housing options to promote	Support the New England Regional Arts Museum and other arts organisations to	Leverage the REZ and to identify and promote wind, solar and other renewable

Local Government Area	Fiscal and economic	Population and housing (2041 estimates)	Regional and land use	New infrastructure in planning or development
	the focus on education founded on the University of New England, numerous public and private schools, the NSW TAFE Digital Hub and the opportunities of the NBN.	development to contribute to Ben Lomond, Black Mountain, Guyra, Ebor, Hillgrove, Llangothlin, and Wollomombi.	position the LGA as a recognised arts and cultural centre in regional Australia.	energy production opportunities.
Uralla	Uralla LGA enjoys strong social and economic links with Armidale LGA. Its primary rural industries are fine wool, lamb and beef production.	4,680 Priority to deliver housing options to promote development to contribute to Arding, Rocky River, Kingstown, Invergowrie and Kentucky.	Expand nature-based, adventure and cultural tourism.	Encourage renewable energy developments that are compatible with the LGA's lifestyle and valued environmental assets.
Narrabri	Narrabri has been announced as a future Special Activation Precinct. It will utilise its proximity to national and international markets via the Inland Rail, to targeting manufacturing, value-added production, and freight and logistics industries.	12,102 Priority to deliver housing options to promote development to contribute to Wee Waa, Pilliga, Bellata, Gwabegar, Baan Baa, and Boggabri.	Support the sustainable and effective management of water resources to enable drought- proofing.	Safety upgrades to the Kamilaroi Highway, as part of the Safer Roads Program have commenced. Stage 1 has been completed. Stage 3 is under construction, and Stages 2 and 4 on track for completion in 2023.
Gunnedah	Agriculture and resources underpin a strong and growing economy which benefits from	13,466 Priority to deliver housing options to promote	Foster the growth of knowledge-based, education and health-related industries	Continue to develop logistics, freight and transport infrastructure, such as the

Customer Journey Resilience Plan – [INSERT REGION]

Local Government Area	Fiscal and economic	Population and housing (2041 estimates)	Regional and land use	New infrastructure in planning or development
	connections to local, national and international markets via the Oxley and Kamilaroi highways and the North-West (Mungindi) rail line.	development to contribute to Breeza, Carroll, Culewis, Emerald Hill, Kelvin, Mullaley, and Tambar Springs. Priority to develop a housing strategy.	and related activity around Gunnedah District Hospital and Gunnedah TAFE Campus.	Gunnedah Airport, to encourage new industry opportunities throughout the region and within the Namoi Regional Job Precinct.
Liverpool Plains	The LGA is located within the Namoi Regional Job Precinct, which will strengthen the economy, by identifying new locations to support the growth of the agricultural industry.	7,025 Priority to deliver housing options to promote development to contribute to Willow Tree, Wallabadah, Caroona, Walhallow, Currabubula, Premer and Spring Ridge. Diversity of housing in Quirindi and Werris Creek.	Expand nature-based, adventure and cultural tourism places and activities to enhance visitor experiences.	Leverage the existing Werris Creek Intermodal Hub and the ongoing development of access and logistics infrastructure.
Tamworth Regional	Tamworth's strong agricultural foundations in poultry, beef cattle, lamb processing and cropping are well supported by rail, road and air networks. Located in the Namoi Regional Job Precinct, which will help to grow the agricultural industry and protect it from incompatible land uses.	71,956 Priority to deliver housing options to promote development to contribute to Manilla, Kootingal, Barraba, Nundle, and other areas.	Foster the data-driven growth of knowledge-based, education and health-related industries around Tamworth Base Hospital, University of Newcastle's Tamworth Education Centre and TAFE NSW.	Support the development of th Tamworth Global Gateway Parl associated employment precincts and supporting infrastructure.

Customer Journey Resilience Plan – [INSERT REGION]

Local Government Area	Fiscal and economic	Population and housing (2041 estimates)	Regional and land use	New infrastructure in planning or development
Walcha	The LGA is in the Namoi Regional Job Precinct, and the New England REZ, which will unlock a significant pipeline of large-scale renewable energy and storage projects, and new local opportunities.	2,904 Priority to deliver housing options to promote development to contribute to Nowendoc.	Walcha has abundant environmental assets, such as Oxley Wild Rivers and Werrikimbe National Parks and contains World Heritage-listed rainforest. Priority to expand nature-based adventure, cultural tourism places, and food and wine opportunities.	Leverage on the REZ and nev wind, solar and other renewable energy production opportunities.

Customer Journey Resilience Plan – [INSERT REGION]

3. Transport Priorities⁶

3.1 State Road Priorities

Plan	Challenges	Relevance to the NENW
<u>New England</u> <u>Highway (HW9)</u> <u>Draft Corridor</u> <u>Strategy (Oct 2016)</u>	Road safety around regional centres and major towns, high crash rates around Singleton, Muswellbrook, Scone, and Tamworth. Higher Productivity Vehicle (HPV) access for Performance Based 2B heavy vehicles (PBS) along the route is limited by road geometry, grades, intersection configurations, pavement strength and thickness. The highway passes through several urban areas (large and small) creating conflict with local traffic, pedestrians and cyclists.	NORTH SOUTH LINK Major route for customers. In the New England Northwest it links Tamworth, Uralla, Armidale, Guyra, Glen Innes and Tenterfield. Links NSW and Queensland.
NSW Newell (HW17) Highway Corridor Strategy (May 2015)	There are flood immunity issues along the entire route. The highway is currently susceptible to nuisance flooding as well as flooding from larger events including swollen river systems and sheet flow over expansive flood plains. Road closures for traffic crashes, spillages, bushfires, flooding and other incidents along the corridor currently require large detours because there is a lack of closely spaced support networks and local and regional roads. High value vegetation conservation communities exist along the Newell Highway corridor, that require protection.	SOUTHWEST LINK The Newell Highway is a major route linking Victoria and Queensland through Narrabri and Moree From Coonabarabran, Narrabri, Bellata, Gurley, Moree, Camurra and Boggabilla to the Queensland Border at Goondiwindi.
Oxley Highway (HW11) Draft Corridor Strategy (March 2016), Waterfall Way Draft Corridor Strategy (July 2017)	There are flood immunity issues along the entire route. The highway is currently susceptible to nuisance flooding as well and flooding from larger events including swollen river systems and sheet flow over expansive flood plains. There are many defective culverts on the Oxley Highway. The clear zones along the Oxley Highway corridor contain hazards such as large trees which can cause road safety issues.	EAST WEST LINK From Port Macquarie, through Wauchope (High Street), onto Walcha (Fitzroy Street) to the New England Highway at Bendemeer At Tamworth, via Marius Street and to Gunnedah onto Mullaley to the Newell Highway

⁶ Sourced from <u>New England Road Network Strategy (nsw.gov.au)</u>,

Plan	Challenges	Relevance to the NENW
	Management of roadside drainage and slope stability issues particularly on the Wauchope to Walcha range.	At Gilgandra via Collie and Warren to the Mitchell Highway at Nevertire
<u>Gwydir Highway</u> (<u>HW12</u>) <u>Washpool Flood</u> <u>Mitigation – Gwydir</u> <u>Highway</u>	Flood immunity issues were prevalent along a section of the Gwydir Highway at Washpool, with local residents, tourists and freight operators often cut off after heavy rainfall. However, works have since been completed, which involved; replacing the existing three cell box culvert, raising and widening the highway with addition of 1.5m wide sealed shoulders, and upgraded roadside draining. The project was completed on 10 Sept"mber'2023.	EAST WEST LINK From Pacific Highway west at Grafton to Charles Street, South Grafton, continuing west via Ramornie, Jackadgery, Gler Innes, Inverell and Warialda to the Newell Highway at Moree. From the Newell Highway at Moree via Collarenebri to the Castlereagh Highway north of Walgett.
Bruxner Highway (HW16) <u>Ballina Road and the</u> <u>Bruxner Highway</u>	The Bruxner Highway located in Northern NSW and provides a key movement corridor between Lismore and Ballina, linking with the Pacific Highway. The NSW Government is providing \$5 million to fund vital road and safety improvements along the Bruxner Highway, including an upgrade to the Ballina Road intersection at Alstonville. The proposed design improves safety at the Ballina Road intersection, by permanently removing the right turn out of Ballina Road that has resulted in two fatal crashes in recent years. The on ramp at Ellis Road has minimal environmental impacts, including no impacts to nearby waterways, and no travel time impacts to vehicles using the Bruxner Highway.	EAST WEST LINK From the Pacific Highway west of Ballina through Tabulum, Drake and into Tenterfield where it meets the New England Highway
Kamilaroi Highway (HW9) <u>Kamilaroi Highway</u> <u>safety Upgrade – Baan Baa to Turrawan</u>	Following a Route Safety Review of the Kamilaroi Highway, the NSW Government is funding \$26.4 million to boost safety on a 17km stretch between Baan Baa and Turrawan under the Safer Roads Program. In 2014, Transport for NSW, in collaboration with Centre for Road Safety, completed a Route Safety Review of the Kamilaroi Highway. This review identified the need to review the road network infrastructure and enhance road user	SOUTHWEST Link from the New England Highway (HW9) at Willow Tree, Quirindi and Breeza to the Oxley Highway (HW11) east of Gunnedah, then from the Oxley Highway at Gunnedah via Boggabri to the Newell Highway.

Plan	Challenges	Relevance to the NENW
	behaviour campaigns, especially those targeting driver behaviour, speeding and fatigue between Baan Baa and Turrawan.	At Narrabri West, then from the Newell Highway at Narrabri via Wee Waa, Merah North, Burren Junction and Cryon to the Castlereagh Highway. From the Castlereagh Highway at Walgett, crossing the Barwon River near Walgett, then along the north-western side of the Barwon River to Brewarrina, then along the southern side of the Darling River to the Mitchell Highway (HW7) at Bourke.
Carnarvon Highway	Road upgrade works on one of the most important freight routes in the Moree Plains Shire, the Carnarvon Highway, were completed in 2019 near Moree (\$3.5 million Carnarvon Highway upgrade).	NORTHWEST From the Newell Highway at Moree, via Ashley Moppin and Garah to the Queensland Border at Mungindi. Over the border, the road travels hundreds of kilometres to central Queensland.
Waterfall Way <u>Waterfall Way</u> <u>Corridor Strategy</u>	The Waterfall Way provides a key east west connection between two of the major highways in northern NSW – the Pacific Highway and the New England Highway. It connects rural communities and provides a transport route for the timber and agricultural industries.	EAST WEST LINK East West connection between the Pacific Highway near Coffs Harbour and the New England Highway in Armidale

3.2 Regional Road Priorities

Regional Priorities	Description/Relevance to the NENW ⁷
Thunderbolts Way (RR7719) (Gloucester – Walcha Road)	Thunderbolts Way from Gloucester provides the shortest route from Sydney to the New England and continues through Walcha, Uralla, and Bundarra to Inverell.

⁷ Sourced from <u>Road Network Strategy 2020</u>, New England Joint Organisation.

Regional Priorities	Description/Relevance to the NENW ⁷		
	 From the Gloucester – Walcha Road (RR7719) north of Nowendoc to the Nundle – Tamworth Road (MR105) at Dungowan. 		
Fossickers Way	Fossickers Way is a tourist route that runs from Nundle to Warialda in the north and then east to Inverell and Glen Innes.		
The Buckets Way (90)	From the Pacific Highway near 12 Mile Creek via Booral, Stroud and Gloucester and Krambach to the Pacific Highway at Nabiac (that part between 12 Mile Creek and Krambach.		
Black Stump Way	Black Stump Way provides journey connections between Dubbo and Tamworth (through Gunnedah) for commuters and road freight operators.		
Cypress Way (329)	Cypress Way connects the rural town of Gwabegar to the rural town of Pillaga located in the Narrabri Shire.		
Grain Valley Road (7709)	Grain Valley Road connects Kamilaroi Highway at Boggabri to Oxley Highway at Nombi via Willala and Ghoolendaadi. The road is a significant route for bus and truck drivers, as well as residents and tourists, connecting the Mullaley and Boggabri townships.		
Ashford Road (137)	Ashford Road connects the Gwydir Highway to the rural town of Ashfor located within the Inverell Shire.		
Mt Lindesay Road (622)	Mt Lindesay Road connects New England Highway in Tenterfield to Summerland Way.		
Old New England Highway (7708)	Connects Waterfall Way at Armidale to New England Highway at North Armidale via Marsh Street and Glen Innes Road.		
Emmaville Road (7706)	Connects the Gwydir Highway at Glen Innes to the town of Emmaville.		
North Star Road (7705)	Connects Bruxner Highway to Warialda Road via North Star (Gwydir Shire).		

Local Road Priorities 3.3

Local Priorities	Description/Relevance to the NENW
Duri-Dungowan Road ⁸	A popular route for heavy vehicles travelling between the New England Highway and Werris Creek Road, the unsealed 6.1km section of the road

⁸ Sourced from <u>Tamworth Regional Council: Major Road Upgrades</u>.

Customer Journey Resilience Plan – New England Northwest NSW

Local Priorities	Description/Relevance to the NENW
	between the New England Highway and Gowrie Road currently deteriorates quickly and requires a high rate of regular maintenance.
Kingstown Road	Strengthening and resealing of the highest priority sections on Kingstown Road as part of the 2023 Fixing Local Roads. The 6.9km stretch of road is currently one of the most highly maintained roads in the Tamworth region. This project is currently in the design phase and has received funding of \$2.8 million from the NSW Government's Fixing Local Roads Program and \$999,970 from Tamworth Regional Council.
Watsons Creek Road	With the road being the only primary access from the village of Watsons Creek to Bendemeer and the New England Highway, sealing the road wil provide a much more reliable pavement surface for residents and improve travel times, safety and driver comfort.
Moonbi to Hallsville	Dangerous corners, culverts and intersections on local roads between Moonbi and Hallsville will be improved, including Davidsons Lane, Upper Moore Creek Road, and Moonbi Gap Road. This project has received \$2 million by the Australian Government's Heavy Vehicle Safety Productivity Program, to be matched by an additional \$2 million investment from Tamworth Regional Council.
Werris Creek Road	Werris Creek Road is the main route between Tamworth, Werris Creek and Quirindi and is a major freight route for our region. Improvements included line marking, signage, a new road surface and the installation of guardrail.
Kempsey Road	Kempsey Road diverges from Armidale Road, beginning in Comara and the road ends in Wollomombi. The Kempsey-Armidale Road is important since it connects Armidale to the coast which is important for tourism and agriculture. The road was heavily damaged during the 2019-20 bushfires and subsequent flooding in 2020 and 2022. The condition of the road has severely deteriorated and has emergency work undertaken for the road to be open to the public. The Armidale Regional Council is working to re-establish the 45km of road back to its pre-disaster condition. ⁹
Terry Hie Hie Road	The Moree Terry Hie Hie Road is a sealed road that connects with the Gwydir Highway and the Moree – Terry Hie Hie Road. Reconstruction and sealing of a 3.2km section of Terry Hie Hie Road (\$1.3 million) as part of the Fixing Local Roads Projects. ¹⁰
Culgoora Road	Culgoora Road diverges off the Newell Highway and is the primary access to the Culgoora State Forest. Improvements are being made to

⁹ Sourced from <u>Kempsey Road Project (Armidale) - Kempsey Shire Council working with the Macleay Valley community (nsw.gov.au)</u> and <u>Kempsey Road - Armidale Regional Council (nsw.gov.au)</u>
 ¹⁰ Sourced from <u>Round 1 Successful Projects. Fixing Local Roads</u>.

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Local Priorities	Description/Relevance to the NENW		
	resurface and widen the roads to 9 meters. These improvements are expected to be completed by March 2024. ¹¹		
Old Ballandean Road	Old Ballandean Road connects Mount Lindesay Road to the New England and Bruxner Highway (Tenterfield Shire).		
Strathbogie Road	Strathbogie Road connects Glen Innes to Wellingrove and Emmaville (North West of Glen Innes).		
Red Range Road	Red Range Road connects Red Range to Glen Innes in an East to West trajectory, providing a link to smaller towns and villages including Lambs Valley and Red Range.		
Boorolong Road	Boorolong Road connects Armidale to North of Boorolong (North West of Armidale). A local road construction upgrade of Boorolong Creek Bridge on Boorolong Road, commenced in 2023. The existing timber bridge will be replaced by a single lane concrete girder bridge (expected completion in 2024). ¹²		
Baldersleigh Road	Baldersleigh Road connects Guyra to Thunderbolts Way (in a West-ward direction) towards Bundarra.		
Rockvale Road	Rockvale Road is considered an important part of the NENW road network as it provides a regular route for many residents and commercial operators and can be a particularly valuable regional link when the New England Highway is closed. In 2020, a \$1.2 million project was commenced to improve traffic safety by sealing a 1.4km section at the northern end of the road. ¹³		
Kings Plains Road	Kings Plains Road connects Inverell Shire to Wellingrove Cemetery in a North Eastern direction.		
Copeton Dam Road	The Copeton Dam Road connects with the Bundarra Road and the Gwydir Highway. As part of the Fixing Local Roads program, heavy patching and crack sealing, grading of existing shoulder including table drain, removing surface defects, and incorporating new fill material to ensure a smooth surface and assist with the removal of water from the edge of the roadway. ¹⁴		

3.4 **Rail Priorities**

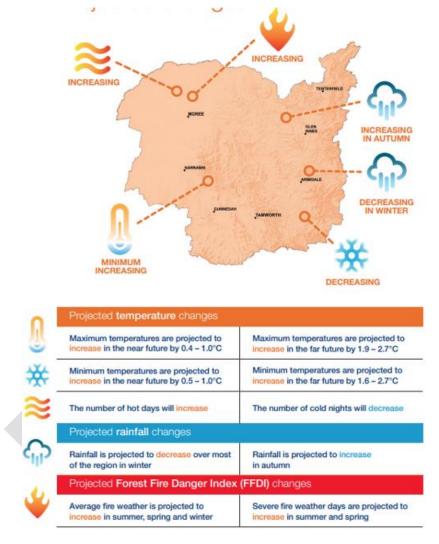
Sourced from <u>Works: Culgoora. Leards Forest. Old Narrabri and Turrawan roads | NSC (nsw.gov.au)</u>
 Sourced from <u>Armidale Regional Council, Boorolong Creek Bridge Renewal project.</u>
 Sourced from <u>Mirage News, 'Rockvale Road Seal to Enhance Regional Link'</u>.
 Sourced from <u>Round 1 Successful Projects. Fixing Local Roads</u>.

Local Priorities	Description/Relevance to the NENW
Inland Rail: Narrabri to North Star (N2NS)	The Narrabri to North Star (N2NS) section of Inland Rail will upgrade approximately 185 kilometres of existing rail corridor and construct 1.7 kilometres of new track near Moree, New South Wales. The project is being delivered in two phases. Estimated Total Cost is \$693 million. Modelling estimates there could be in excess of 2,500 jobs created, with a majority of these coming from undercover horticulture.

4. Climate Change Assessment and Impact

The <u>Adapt NSW future climate projections</u> is used as the source document for commentary here.

4.1 Projected Climate Changes for the New England Northwest region



For the full snapshot and more information about the modelling go to <u>climatechange.environment.nsw.gov.au</u>.

4.2 What does this mean for the Customer Journey Resilience Plan for the New England Northwest region?

The outcome of the above is that in the future the region is expected to experience natural disasters to impact Customer Journey such as:

Drought

- Changes in water run-off
- Increasing frequency and severity of extreme weather events such as; heat waves, strong winds, lightning strikes, bushfires, rainfall, and flash flooding.

The Climate Change in Australia¹⁵, CSIRO resource, Eastern Australia Super Cluster region supports this assessment and says:

- Average temperatures will continue to increase in all seasons.
- More hot days and warm spells.
- Fewer frosts.
- Average winter and spring rainfall is projected to decrease, changes in summer and autumn rainfall is possible but its unclear.
- Increased intensity of extreme rainfall events.
- There will be a harsher fire-weather climate in the future.

¹⁵ https://www.climatechangeinaustralia.gov.au/en/projections-tools/regional-climate-change-explorer/super-

clusters/?current=ESC&tooltip=true&popup=true

5. Natural Disaster Resilience Rating for each Local Government Area

Communities in areas of **low disaster resilience** may be limited in their capacity to use available resources to cope with adverse events and are limited in their capacity to adjust to change through learning, adaptation, and transformation. Limitations to disaster resilience may be contributed by entrenched social and economic disadvantage, less access to or provision of resources and services, lower community cohesion and limited opportunities for adaptive learning and problem solving.

Communities in areas of **moderate disaster resilience** have some capacity to use available resources to cope with adverse events, and some capacity to adjust to change through learning, adaptation and transformation. Moderate disaster resilience is generally contributed by moderate levels of coping and adaptive capacity, which in turn are associated with moderate levels of economic capital, moderate provision of and access to services, moderate community cohesion and variable encouragement for adaptive learning and problem solving.

Communities in areas of **high disaster resilience** have strong capacity to use available resources to cope with adverse events, and strong capacity to adjust to change through learning, adaptation and transformation. High disaster resilience is generally contributed by high levels of coping and adaptive capacity, which in turn are associated with high levels of economic capital, high provision of and access to services, high community cohesion and significant encouragement for adaptive learning and problem solving.

Local Government Area	Disaster Resilience Index ¹⁶
Armidale Regional Council	MODERATE
Glen Innes Shire Council	LOW
Gunnedah Shire Council	MODERATE
Gwydir Shire Council ¹⁷	LOW
Inverell Shire Council	LOW
Liverpool Plains Shire Council	LOW
Moree Plains Shire Council	LOW
Narrabri Shire Council	LOW
Tamworth Regional Council	LOW – MODERATE
Tenterfield Shire Council ¹⁸	LOW

¹⁶ Data is retrieved from the Australian Disaster Resilience Index, Natural Hazards Research Australia.

¹⁷ Disaster Resilience Index for Gwydir Shire Council is not provided in the SA2 analysis, it is assumed that Inverell West incorporates Gwydir Shire Council, the Disaster Resilience Index for Gwydir Shire Council applied is Low.

¹⁸ Disaster Resilience Index for Tenterfield Shire Council does not appear to have been published in the mapping (SA2 analysis). For this purpose, it is assumed that Tenterfield Shire Council is incorporated into Glen Innes, Grafton and Casino areas.

Local Government Area	Disaster Resilience Index ¹⁶
Uralla Shire Council ¹⁹	LOW
Walcha Council	LOW

¹⁹ Disaster Resilience Index for Uralla Shire Council does not appear to have been published in the mapping. For this purpose, it is assumed that Uralla Shire Council's Disaster Resilience Index is the same the neighbouring council of Walcha, Low.

6. Key Customer Segments²⁰

6.1 Transport Customers

In the New England North-west of NSW the majority of customer are those that use the road network, with their cars, trucks, buses and motorbikes. In regional areas, roads are also used by walkers and cyclists. Roads and the road network are critical for the economy for freight, commodities, and services.

Customer Segment	Description	Reason for Travel	Mode of Travel
Commuters	Customers who travel from 'end to end' for work, education, health, engagement, and connection on a regular basis from their place of residence.	Movement of People Movement of Goods	Road, air
Transient	Customers are those person/s who are travelling for pleasure into and out of the area for an undefined period.	Movement of People	Road
Safety and emergency	Customers are those person/s travelling into and out of an area for the purposes of an emergency and or public safety. This also includes travel for custodial purposes to and from corrections centres and police stations.	Movement of People Movement of Goods	Road
Freight	Customers are those that transit in light and heavy vehicles and interact with railways and airports for the purposes of commerce.	Movement of Goods	Road, rail

6.2 Commuter Customers²¹

Local Government Area	Car	Walk	Truck	Motorbike scooter	Public Transport
Armidale Regional	7,081	470	94	70	84
Glen Innes	2,184	186	69	28	10

²⁰ The Transport for NSW Future Transport Strategy identifies customer segments and their purpose

²¹ ABS Census 2021, Method of travel to work on the day of the Census

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Local Government Area	Car	Walk	Truck	Motorbike scooter	Public Transport
Gunnedah Shire Council	4,166	175	77	np	157
Gwydir Shire Council	1,150	122	37	14	9
Inverell Shire Council	5,039	261	97	57	16
Liverpool Plains Shire Council	1,917	157	59	np	18
Moree Plains Shire Council	3,826	252	81	np	34
Narrabri Shire Council	4,097	233	79	np	139
Tamworth Regional Council	19,440	717	389	153	111
Tenterfield Shire Council	1,532	116	47	np	22
Uralla Shire Council	1,500	87	39	14	8
Walcha Council	725	93	23	10	3

6.3 Transient Customers²²

Local Government Area	Domestic Day Visitors	Domestic Overnight Visitors	International Visitors
Armidale Regional	295,000	348,000	11,000
Glen Innes Severn	np	93,000	np
Gunnedah Shire Council	109,000	111,000	np

²² Tourism Research Australia Local Government Area Profiles, Tourism/Transient Persons who are travelling for pleasure into and out of the area for an undefined period, per annum.

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Local Government Area	Domestic Day Visitors	Domestic Overnight Visitors	International Visitors
Gwydir Shire Council	np	np	np
Inverell Shire Council	149,000	143,000	np
Liverpool Plains Shire Council	np	58,000	np
Moree Plains Shire Council	np	177,000	4,000
Narrabri Shire Council	130,000	165,000	np
Tamworth Regional Council	510,000	727,000	14,000
Tenterfield Shire Council	np	115,000	3,000
Uralla Shire Council	np	np	np
Walcha Council	np	38,000	np

6.4 Safety and Emergency Customers

Agency	Locations	Link
Ambulance	Armidale, Ashford, Barraba, Bingara, Boggabri, Glen Innes, Gunnedah, Guyra, Inverell, Manilla, Moree, Mungindi, Narrabri, Quirindi, Tamworth City, Tamworth South, Tenterfield, Walcha, Warialda, Wee Waa Community Responders: Deepwater, Nundle, Tambar Springs, Uralla,	https://www.ambulance.nsw. gov.au/ data/assets/pdf file/ 0004/509278/DE222-Metro- and-Regional-Station-Maps- Jan-2021 V14.pdf
Fire and Rescue	Armidale, Barraba, Bingara, Boggabri, Glen Innes, Gunnedah, Guyra, Inverell, Manilla, Moree, Narrabri, Quirindi, Tamworth, Tamworth South, Tenterfield, Uralla, Walcha, Warialda, Wee Waa, Werris Creek	https://www.fire.nsw.gov.au/ page.php?id=9205
Police	Oxley Command: Barraba, Bellata, Bendemeer, Boggabri, Curlewis, Gunnedah, Gwabegar, Kootingal, Manilla, Narrabri, Nowendoc, Nundle, Pilliga, Quirindi, Somerton, Tambar Springs, Tamworth, Walcha, Walcha Road, Wee Waa, Werris Creek	https://www.police.nsw.gov.a u/about us/regions comman ds districts/western region/o xley

Customer Journey Resilience Plan – New England Northwest NSW

Agency	Locations	Link
	New England Command: Armidale, Ashford, Bingara, Boggabilla, Boomi, Bundarra, Deepwater, Delungra, Emmaville, Garah, Glen Innes, Gravesend, Guyra, Inverell, Moree, Mungindi, Pallamallawa, Tenterfield, Tingha, Uralla, Warialda, Yetman	https://www.police.nsw.gov.a u/about us/regions comman ds districts/western region/m ew england
Rural Fire Service (RFS)	Liverpool Range District: Gunnedah Fire Control Centre (FCC), Carroll, Coocooboonah, Curlewis, Gunnedah, Gunnible, Kelvin, Milroy, Mullaley, Nowley, Piallaway, Quia, Tambar Springs, Willala Namoi Gwydir District: Gwydir FCC, Avon Downs, Bangheet, Bingara, Boonal, Cobbadah, Coolatai, Crooble, Croppa Creek, Diamond Swamp, Dinoga, Elcombe, Gineroi – Gwydir, Gragin, Gravesend, Keera, Koloona, Kurrajong – Gwydir, Macarthur, Milguy South, Milgalar, Mosquito Creek, Mungle, Myalla, North Star, North Star South, Oakey Creek, Pallal, Pepperbox, Rocky Creek – Gwydir, Stonefield, Upper Horton, Warialda, Wea, Whitlow, Moree Plains FCC, Ashley, Berrygil Creek, Boggabilla, Boomi, Bullarah, Collymongle, Currugundi, Garah, Gurley, Mallawa, Moree, Mungindi, Namoi/Gwydir Support, Oodnadatta, Pallamallawa & District, Terry- Hie-Hie, Tulloona, Tyreel, Weemelah, Whalan Creek, Woodlands – Moree, Narrabri FCC, Baan Baa, Bellata – East, Bellata – West, Bellata Town, Bobbiwaa, Boggabri, Bohena, Brooklyn – Narrabri, Bullawa-Eulah Creek, Culgoora, Deep Creek – Narrabri, Grattai (Narrabri), Gwabegar, Jacks Creek, Maules Creek, Merah North, Merimborough, Myall Vale, Nandewar, Narrabri HQ, Pilliga, Spring Plains East, Spring Plains West, Tibbereena, Turrawan, Wallah, Wee Waa, Yarrie Lake, Wynella New England District: Armidale FCC, Baldersleigh, Ben Lomond, Black Mountain, Boorolong, Commissioners Waters, Dangarsleigh, Devils Pinch, Dumaresq, Ebor, Enmore, Gara, Guyra, Herbert Park, Hillgrove, Jeogla, Lower Creek, Lyndhurst – Dumaresq, New England Aviation, New England Catering Unit, New England Chainsaw,	https://www.rfs.nsw.gov.au/. data/assets/pdf file/0003/17 0481/RFS BrigadesList.pdf

Customer Journey Resilience Plan – New England Northwest NSW

Agency	y Locations Link			
	New England Com Engagement, New England Communication, New England Logistics, New			
	England Raft			
	Point Lookout, Tenterden, Tingha,			
	Wards Mistake, Warrane, Wollomombi,			
	Wongwibinda			
	Uralla FCC: Balala, Bundarra, Diggings,			
	Kentucky, Torryburn Walcha FCC: Bergen,			
	Ingleba, Moona-Winterbourne, Nowendoc,			
	Yarrowitch / Tia			
	Northern Tablelands District:			
	Glen Innes Severn FCC: Bald Nob, Deepwater,			
	Dundee, Emmaville, Glen Elgin, Glen Innes, Glencoe – Glen Innes, Matheson, Mt Mitchell,			
	Red Range, Reddestone, Shannon Vale,			
	Wellingrove, Wytaliba			
	Inverell FCC: Ashford, Bonshaw, Bukkulla,			
	Delungra, Elsmore, Gilgai, Graman, Gum Flat,			
	Inverell, Kings Plains – Inverell, Nullamanna,			
	Oakwood, Rocky Creek – Inverell, Stannifer,			
	Twin Rivers – Inverell, Wallangra, Yetman			
	Tenterfield FCC: Barney Downs, Drake, Frazers			
	Cutting, Homestead, Leefield/Mt Mckenzie,			
	Legume, Liston / Wylie Creek, Mingoola, Pretty Gully, Pyes Creek, Sandy Flat/Bolivia,			
	Stannum/Torrington, Steinbrook, Urbenville			
	Tamworth District:			
	Tamworth FCC: Attunga, Barraba, Bendemeer,			
	Borah – Tamworth, Burindi, Crow Mountain,			
	Dungowan, Duri, Garoo, Gowrie, Halls Creek,			
	Hanging Rock – Tamworth, Kingswood,			
	Kootingal/Moonbi, Limbri / Mulla Creek,			
	Loomberah, Manilla, Moore Creek, Mt Lindsay, Namoi River, Niangala, Nundle, Ogunbil,			
	Piallamore, Rushes Creek, Somerton,			
	Tamworth City, Tamworth Support, Thirldene,			
	Warrabah, Warral, Watsons Creek, Weabonga,			
	Winton, Woodsreef, Woolbrook – Tamworth,			
	Woolomin / Duncans Creek,			
State Emergency	Western Zone Headquarters (Dubbo)	https://www.ses.nsw.gov.au/a		
Service (SES)	Local Units in the Namoi: Armidale-	bout-us/our-zones/		
	Dumaresq, Barraba, Boggabri, Gunnedah,			
	Guyra, Liverpool Plains Shire, Manilla,			
	Narrabri, Nundle, Pilliga, Tambar Springs,			
	Tamworth, Tingha, Uralla, Walcha, Wee Waa			

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Agency	Locations	Link
	<i>Local Units in the North West:</i> Ashford, Bingara, Boggabilla, Deepwater, Garah, Glen Innes, Inverell, Moree, Mungindi, Tenterfield, Warialda, Yetman	

6.5 **Freight Customers**

Freight Route	Freight Journey Estimates ²³
New England Highway	Freight journeys are estimated at between 2,000 to 50,000 movements per annum.
Oxley Highway	Freight journeys are estimated at between 2,000 to 50,000 movements per annum.
Gwydir Highway	Freight journeys are estimated at between 2,000 to 10,000 movements per annum
Newell Highway	Freight journeys are estimated at over 50,000 movements per annum.
Kamilaroi Highway	Freight journeys are estimated at between 2,000 to 50,000 movements per annum
Carnarvon Highway	Freight journeys are estimated at between 2,000 to 10,000 movements per annum

Freight Origin Journey Estimates²⁴ 6.6

Freight Route	2021 Freight Estimates	2041 Freight Estimates	
New England and North West – Far West and Orana	Agricultural Commodities totalling 43kt annually.	Agricultural Commodities totalling 59kt annually.	
New England and North West – Murray	Agricultural Commodities totalling 2kt annually.	Agricultural Commodities totalling 3kt annually.	

 ²³ Data sourced from Transport for NSW: <u>https://www.transport.nsw.gov.au/data-and-research/freight-data-10/nsw-telematics</u>
 ²⁴ Data sourced from Transport for NSW: <u>https://www.transport.nsw.gov.au/data-and-research/freight-data-19/strategic-freight-forecasts/strategic-forecasts/strategi</u>

Freight Route	2021 Freight Estimates	2041 Freight Estimates
New England and North West – Riverina	Agricultural Commodities totalling 22kt annually.	Agricultural Commodities totalling 30kt annually.

7. Identified Critical Customer Journeys

7.1 Hazard Identification Tool

To assist with the identification of journeys and the relationships between vulnerability, communities and the transport network, the Network Resilience Program and the Resilience Hub have developed the <u>Hazard Visualization- ROM (nsw.gov.au</u>).

The tool is a collection of layers that include the State and Local Government Administrative boundaries, hazards, vulnerability to bushfire and flooding, land use, and transport layers to assist in understanding the threats to high-risk communities and customer journeys.

7.2 Customer Journeys and High Risk Communities

The following Customer Journeys were identified through consultation with Local Government and Councils. The following information is to be used to assist with preparedness against natural hazards and is not intended for the use of emergency planning. The purpose of identifying High Risk Communities is to capture the exhaustive list of communities and assets vulnerable from natural disasters, and thus the State and Regional transport network that connects to the identified vulnerabilities. The Customer Journeys indicate common journeys that transport customers travel within each Local Government Area.

This section should be revised as new plans are released by TfNSW and Councils, new customer journeys are identified or changed, upon implementation of resilience initiatives, changes in population over time, and following any natural disasters within the region or council.

Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
Armidale Reg	ional Council	!		
North South Journey between Uralla, Guyra	Flood	Black MountainGuyraHillgrove	Wandsworth RoadBaldersleigh RoadOld Hillgrove Road	
	to Black Mountain (through Armidale)	Fire	 Aberfoyle Armidale Ben Lomond Black Mountain Guyra 	 Glassers Road Newholme Road Weirs Road Maybole Road Sunnyside Road Wandsworth Road Brockley Road Green hills Road Malpas Dam Road
		Snow and Ice	• Armidale	• New England Highway
East to West Journey between	Flood	• Hillgrove	• Old Hillgrove Road	
	Abington to Wollomombi, including	Fire	EborHillgroveWollomombi	 Air Services Road Brackin Street Ebor Falls Road Ebor Street

Customer Journey Resilience Plan – New England Northwest NSW

Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
	Oxley Wild Rivers		Oxley Wild Rivers National Park	 Long Point Road Point Lookout Road School Road Tanners Road Threlfall Road Waterfall Way Wollomombi Village Road
Gunnedah Sh	ire Council			
Black Stump Way	Journey from Premer to Willala, via Tambar Springs and Emerald Hill	Floods	 Emerald Hill Tambar Springs 	• Goolhi Road • Trinkey Forest Road
		Fire	 Premer Tambar Springs Willala 	 Bundella Road Bundella Street Ellerslie Street Premer Avenue Premer Road Sleightholmes Road Black Stump Way High Street Quarry Street Scratch Road Willala Road
Gunnedah	Journey from Black Jack Road to Kelvin, via Gunnedah	Fire	BlackjackGunnedah	 Evans Road Harrie Rowland Place Apex Road Barlow Road Everleigh Road Kamilaroi Road
Kamilaroi	Journey from Breeza to Gunnedah, via Curlewis	Fire	BreezaCurlewisGunnedah	 Cementary Road McCormack Lane Railway Street Voca Road Kamilaroi Hwy
Kelvin	Journey in Kelvin	Fire	• Kelvin	• Mountain Forest Road
Oxley	Journey from Carroll to	Fire	GunnedahMullaleyCarroll	Keepit Dam RoadBlack Stump Way

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Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
	Mullaley, via Gunnedah			Finlay RoadOxley Highway
Boggabri	Journey in Boggabri	Flood	• Boggabri	Black Stump Way
Gwydir Shire	e Council			
Fossickers Way North	,,	Flood	 Warialda Upper Horton North Star Bundarra Upper Bingara Bingara Upper Bingara National Park Coolatai 	 Alan Cunninghams Gap Road Elcombe Road Eulourie Road Forest Creek Road Glenelg Road Hope Street Kilarney Gap Road Meyers Road North Star Road Upper Bingara Road Wallangra Road
		Fire	 Warialda Pallamallawa Delungra Bingara Dinoga Coolatai Yallaroi 	 Airstrip Road Allan Cunningham Road Apollo Avenue Arthur Wheatley Drive Cypres Road Gwydir Highway High Street Lewis Road North Star Road Queen Street Red Bank Road Upper Bingara Road Warialda Road Yallaroi Road
Gwydir Copeton	Journey from Pallamallawa to Delungra, via Biniguy, Gravesend, Warialda,	Flood	 Bundarra Bingara Warialda Copeton Dam Gravesend 	 Bingara Road Delungra Road Mosquito Creek Road Riverview Road Sheep Stations Creek Road Wearnes Road Yagobe Crossing Road
	Fire	 Copeton Dam Copeton Warialda	 Copeton Dam Road Mosquito Creek Road Toolimbah Road 	
Inverell Shir	e Council			
Ashford	Ashford • Journey from	Fire	AshfordAtolwoodBonshaw	Ashford RoadEmmaville RoadKneipp Street

Customer Journey Resilience Plan – New England Northwest NSW

Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
	Kwiambal National Park to Yetman, via Wallangra Journey from Graman to Yetman,		 Dthinnaiwan National Park Graman Kwiambal National Park Wallangra Yetman 	 Limestone Road Pindari Dam Road Sandy Creek Road The Pocket Road Wallangra Road Mount Hallam Road Bruxner Highway Holdfast Road Yetman Road
	including Ashford, Atholwood, Bonshaw, Dthinna Dthinnawan National Park	Flood	 Ashford Graman Inverell to Yetman Yetman 	 Ashford Road Bonshaw Road Martyn Street Yetman Road Bruxner Highway North Star Road
Bruxner	Journey from Bonshaw to Yetman, via Texas, Dthinna Dthinnawan National Park	Fire Flood	 Yetman Bonshaw Dthinnaiwan Nature Reserve Yetman 	 MacIntyre Lane Warialda Street Bruxner Highway Holdfast Road Ropes Road
Gwydir	Journey in Gwydir Highway	Fire	• Delungra	• Gwydir Highway
Inverell Gilgai Tingha	Northern journey from Burral Yurrul National Park to Tingha, via Wallangra. Southern journey from Bundarra to Tingha, via Inverell, Copeton Dam, Gilgai, Elsmore. Goonoowigal State Conservation	Fire	 Burral Yurrul National Park Copeton Dam Elsmore Gilgai Goonoowigall State Conservation Area Inverell Stannifer Tingha 	 Albian Flat Road Browns Lane Bundarra Road Burtenshaw Road Copeton Dam Road Cunninghams Lane Elsmore Road Fraser Street Garnet Street Goonoowigall Road Guyra Hill Road Guyra Road Hall Street Kempton Road Leviathan Road Old Bundarra Road Old Mill Road Old Stanifer Road Park Street Ponds Road

Customer Journey Resilience Plan – New England Northwest NSW

Customer

Journey /

Journey

Natural

Disaster

Location of High Risk

Communities and

Single Road Access to Assets

Transport for NSW

Cluster		Threat	Assets	
	Area, Stannifer.			 Rifle Range Road Ruby Street Sayers Lane Short Street Staggs Lane Stannifer Road Wetzlers Drive Woodford Place Yetman Road
Yetman	Journey in Yetman	Flood	• Yetman	• Warialda Road
Narrabri Shire	e Council			
Area 1	Journey between Narrabri and Burren Junction, via Wee Waa	Flood	• Wee Waa	 Culgoora Road Kamilaroi Highway Pilliga Road Rosa Street
betwee Coona and W includ Pilliga	Journey between Coonamble and Walgett, including Pilliga, Curphogen	Fire	 Pilliga National Park Timmallallie National Park - Southern Part of Moree LGA Gwabegar 	 Newell Highway Rocky Road Cypress Way Howes Street Silo Road
	Gwabegar, Wee Waa, Burren Junction	Flood	PilligaGwabear	 Come by Chance Road Cypress Way Kamilaroi Highway Wombo Road Dangar Street
Area 3	Journey between Couradda to Willala, including communities Mount Kapuatar, Eulah Creek, Boggabri	Fire	 Couradda Eulah Creek Bullawa Creek Mt Kaputar Willala 	 Boundary Road Carinya Road Kaputar Road Main Road Scratch Road
Area 4	Journey between	Fire	Bobbiwaa State Conservation AreaBohena Creek	Belah RoadNuable RoadTrantham Road

Customer Journey Resilience Plan – New England Northwest NSW

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Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
	Mullaley and Yarrie Lake, including Leard State		 Leard Forest Narrabi Yarrie Lake 	Endeavour RoadSmiths LaneTurrawan Road
	Forest, Bobbiwa State Conservation Area, Narrabi, Bohena Creek	Flood	• Mullaley • Narrabri • Coal Mines	 Oxley Highway Kamilaroi Highway Killarney Gap Road Newell Highway Violet Street Rangari Road Mooloolabah Street
Moree Plains	Shire Council			
Tycannah	North / South between	Fire	BerrigalGurley	• Gamilaroi Road • Glenroy Road
	Moree and Narrabri	Flood	Terry Hie HieNarrabri to Moree	 Romaka Road Terry Hie Hie Road Newell Highway
Mehi/Gwydir	North / South between	Fire	• Moree • Bullarah	Boree RoadWatercourse Road
	Moree and Mungindi, and Boggabilla East / West between Collarenebri, Morree, and Pallamallawa	Flood	 Moree Bendygleet Garah Biniguy Ashley Pallamallawa Bullarah Mungindi Boggabilla Collarenebri 	 Balo Street Bendygleet Road Bingerang Street Biniguy Avenue Boomi Road Boree Road Carnarvon Highway Coolibah Street (north) Coolibah Street (south) Edward Street Gwydir Highway Gwydirfield Road Hassell Street Kamilaroi Drive Mehi Crescent Newell Highway Tycannah Street Warialda Street Watercourse Road
Macintryre	Macintryre East / West between	Fire	• Toomelah	• Tucka Tucka Road
	Mungindi and Toomelah	Flood	 Boomi Boggabilla Weemelah Toomelah Mungindi Yetman 	 Boonangar Road Bruxner Highway Caloona Boomi Road Caloona Road Carnarvon Highway Simpson Street Tucka Tucka Road

Customer Journey Resilience Plan – New England Northwest NSW

Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
				• Yarouah Street
Tamworth Re	gional Council		'	
Extended Tamworth	Northern journey from Barraba to Duri, including Thirldene, Horton Falls NP, Manilla, Attunga, Moore Creek, Limbri, Dungowan Southern journey from Niangala to Duri, including Ogunbil,	Fire	 Attunga Bowling Alley Point Dungowan Duri Gowrie Hanging Rock Horton Falls Limbri Loomberah Manilla Moore Creek Niangala Nundle Ogunbil Thirldene Woolomin 	 Barry Road Horton Falls Road Limbri Road Manilla Road Manilla Road Ogunbil Road Ogunbil Road Forest Way Clonmeen Road Cut Road Toby Road Upper Moore Creek Road Dungowan Dam Road Nundle Road Rangari Road Rockview Road Sweeneys Lane Forster Street Fredrick Street Jenkin Street Loomberah Road Duri-Dungowan Road
	Hanging Rock, Gowrie, Nundle, Bowling Alley Point, Loomberah	Flood	• Woolomin • Manilla	 Nundle Road Warrabah Road
New England	Northern journey from Watsons Creek to Kootingal, via Bendemeer, Moonbi.	Fire	 Bendemeer Kootingal Moonbi Timbumburi Tintinhull Watson Creek 	 13304 New England Highwa, Bullimbulla Road Halls Creek Road Hazelglen Road Millers Road New England Highway Old Farm Road Roseneath Road Tintinhull Road
	Southern journey from	Flood	• Timbumburi	• Oxley Highway
	Timbumburi.	Snow and Ice	BendemeerMoonbi	• New England Highway
Tamworth City	Northern journey from Moore Creek	Fire	CalalaDarukaKingswood	 Calala Lane Daruka Road Endeavour Drive Forest Road

Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
	to Daruka, including Oxley Vale. Southern journey from Nemingha to Daruka, including Calala, South Tamworth, Tamworth.		 Moore Creek Nemingha Oxley Vale Tamworth 	 Manilla Road Marathon Street Moore Creek Road Nundle Road Scenic Road Spains Lane Upper Moore Creek Road Whitehouse Lane Woodside Road
		Flood	 Tamworth Calala Kingswood 	 Burgmans Lane Calala Lane Gunnedah Road Jewry Street Kable Avenue Kio-ara Lane Peel Street Roberts Road Scotts Road Whitehouse Lane
Oxley	Journey in Somerton	Fire	• Somerton	Milkmaid Street
	Somerton	Flood	• Somerton	• Oxley Highway
Walcha Counc	il			
Oxley	Eastern journey from Carrai National Park to Yarrowitch, including Kangaroo Flat, Werrikimbe National Park. Western journey from Woolbrook to Yarrowitch, including Walcha Road, Walcha.	Fire	 Carrai National Park Kangaroo Flat Oxley Wild Rivers National Park Walcha Road Werrikimbe National Park Woolbrook Yarrowitch 	 Carrai Road Warbo Brook Road Bloomfield Road Clonmel Road Green Gully Road Kangaroo Flat Road Oxley Wild Rivers National Park Trails Warwick Road Brackendale Road Oxley Highway Wollum Road Fenwick's Road Mooraback Road Pine Hills Road Woolbrook Road Chandlers Road Enfield Road
Thunderbolts	Journey from Riamukka to	Flood	• Nowendoc	Giro RoadNowendoc Road
	Long Flat, including	Fire	LongflatNiangala	Oxley HighwayRubys Nob Road

Customer Journey Resilience Plan – New England Northwest NSW

Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
	Nowendoc, Niangala, Oxley Wild Rivers NP.		 Nowendoc National Park Oxley Wild Rivers National Park Riamukka 	 Giro Road Nowendoc Road Nuggety Gully Road Tops Road Walcrow Mummel Road Western Boundary Road Wildcattle Creek Road Wrights Road Green Gully Track Kangara Vale Road Moona Plains Road Brackendale Road
Glen Innes Se	vern Shire Coun	cil		
Gwydir	wydir Journey from Washpool National Park to Matheson, including Moogem, Glen Elgin, Mount Mitchell, Glen Innes, Wellingrove.	Flood	Glen ElginWellingroveGlen InnesMatheson	 Frog Hollow Road Kings Plains Road Strathbogie Rd Waterloo Road
		Fire	 Washpool National Park Gibraltar Range Mount Mitchell Glen Innes Moogem Glen Elgin 	 Gwydir Highway Camp Road Mulligans Drive Raspberry Lookout Road Glen Elgin Road
Glen Innes Road	Journey in Glen Innes	Flood	• Glen Innes	Golf Links RoadGrafton Street
		Fire	• Glen Innes	• Watsons Drive
New England	Journey from Glen Innes to Deepwater,	Flood	DundeeDeepwater	 Severn River Road Wellington Vale Road Yarraford Road
including Dundee	Fire	 Rangers Valley Deepwater Glen Innes Dundee 	 Bullock Mountain Road Carrot Farm Road New England Highway Sunset Road 	
Emmaville Emmaville to Shannon Vale, via Reddestone	Flood	• Emmaville	Emmaville RoadStrathbogie Road	
	Fire	 Emmaville Mount Mitchell Shannon Vale 	 Aqua Park Road Deloraine Road Emmaville Tip Road Emmaville Road Gulf Road Gwydir Highway Moore Street Quirk Street Rose Valley Road 	

Customer Journey Resilience Plan – New England Northwest NSW

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Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
				• Wellington Vale Road
Old Grafton	Journey in	Flood	• Diehard	Old Grafton Road
Road	Diehard Roads	Fire	• Wytaliba	Old Grafton Road
Red Range	Journey from Glencoe to Glen Innes, via Stonehenge	Flood	• Glen Innes • Glencoe	 Glen Legh Road Mount Mitchell Road Pinkett Road Red Range Road Stonehenge Road
Blue Hills	Journey in Glen Innes	Fire	• Glen Innes	 Blacks Road Blue Hills Road Bradleys Lane Rodgers Road Wetherspoon Road Wilga Street
Liverpool Pla	ins Shire Council			
Liverpool Journeys from Plains Shire Premer to Council 3 Breeza including Pine Ridge, Colly	Premer to Breeza including Pine	Flood	 Breeza Pine Ridge Caroona Spring Ridge Premer 	 Bulunbulan Road Bundella Road Coonabarabran Road Darby Road Purlewaugh Road Walhallow Road
	Ridge, Caroona	Fire	 Premer Caroona Spring Ridge Colly Blue Caroona Yannergee 	 Bundella Road Bundella Street Caroona Mission Road Collaroy Road Coonabarabran Road Darby Road Ellerslie Street Premer Avenue Railway Avenue Walhallow Road Woods Road
Liverpool Plains Shire Council 4	ire Werris Creek to Wallabadah,	Flood	Werris CreekQuipollyWallabadah	 Gap Road Lowes Creek Road Paynes Road Taylors Lane Wallabadah Road
via Quipolly	Fire	Werris CreekQuipolly	Lowes Creek RoadNorth Street	
Liverpool Plains Shire	Journey in Quirindi	Flood	• Quirindi	Henry StreetWerris Creek Road
Council 5		Fire	• Quirindi	 George Street Grandview Place

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Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
				 Kamilaroi Highway Munro Street Nowland Street Ray Carter Drive
Liverpool Plains Shire Council 6	Journey from Murrurundi to Big Jacks Creek, including Warrah Creek, Warrah, Willow Tree	Flood	 Warrah Creek Big Jacks Murrurundi Willow Tree Warrah Creek 	 Warrah Creek Road Merriwa Creek Road New England Highway Raphie Howard Drive Warrah Creek Road
Tenterfield Co	ouncil			
Tenterfield 1	Journey from New England Highway to	Flood	 Boonoo Boonoo National Park Urbenville 	 Boonoo Boonoo Falls Road Tooloom Street
	Tooloom Street, via Dundee, Deepwater, Bolivia, Tenterfield	Fire	 Jennings Liston Boonoo Boonoo National Park Maryland National Park Ruby Creek Legume Jennings Giraween Urbenville Mount Lindsay 	 Ballendean Street Bondi Road Boonoo Boonoo Falls Road Maryland Cullendore Road McKechnie Road Morowood Road Mount Lindsay Road New England Highway Overcliffe Road Pyramids Road Rivertree Road Tooloom Street Tourist Road
Tenterfield 2	Journey from Farnell Road	Flood	• Tabulam • Drake	Bruxner HighwayLong Gully Road
	to Tabulam, including , Tenterfield, Drake.	Fire	 Boorook Drake Tabulam Emu Creek Washpool National Park Kerewong State Forest Paddys Flat Frasers Cutting Rocky River Girard State Forest Sandy Flat 	 Boorook Road Bruxner Highway Bruxner Road Bushy Drive Chauval Road Cyril Smith Circuit Emu Creek Road Farnell Road Gundingbo Avenue Jubullum Street Leslie Creek Road Long Gully Road McLeods Creek Road Mud Flat Road Ogilvie Road Old Bruxner Road

Customer Journey Resilience Plan – New England Northwest NSW

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Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
				 Paddy's Flat Road Pateman Road Rocky River Road Rover River Road Sugar Bag Road
Tenterfield 3	Journey from	Flood	• Bolivia	• New England Highway
	Sandy Hill to Torrington, including Deepwater, Bolivia, Tenterfield	Fire	 Sandy Flat Bolivia Torrington Emmaville Bolivia Deepwater Stannum 	 Bluff River Road Currs Road Emmaville Road Glen Innes Road Mount Spirabo Road New England Highway Red Rock Road Sandy Flat Road Torrington Road
Tenterfield 4	Journey from Mole River to Mingoola	Flood	• Mingoola • Mole River	 Mingoola Station Road Mole River Road
Tenterfield 5	Journey from Bald Rock Road to Tenterfield, including Bruxner Highway Journey from Boanoo	Flood	• Tenterfield	 Bruxner Highway Douglas St Drummond Street High Street Manners Street Miles Street Molesworth Street Naas Street New England Highway Old Ballandean Road Pelham Street
	Boonoo Boonoo to Tenterfield, including Talmoi Road	Fire	• Tenterfield	 Bald Rock Road Basket Swamp Road Talmoi Road
Uralla Shire C	ouncil			
New England Highway	Journey within Invergowrie	Fire	InvergowrieWest Invergowrie	 Bundarra Road Kareela Road Moffatt Road Rocklea Road Stringybark Ridge Road
Thunderbolts Way	Journey north and south on	Flood	• Bundarra	Bakers Creek RoadThunderbolts Way
	Thunderbolts Way between	Fire	BundarraBakers Creek	Barraba RoadBingara Road

Customer Journey Resilience Plan – New England Northwest NSW

Customer Journey / Cluster	Journey	Natural Disaster Threat	Location of High Risk Communities and Assets	Single Road Access to Assets
	Balala and Dinoga		 Bassendean Balala Kingstown Dinoga 	 Box Forest Road Brown Street Bundarra Road Dawkins Street Hilton Road Kingstown Road Thunderbolts Way Upper Bingara Road
Uralla Journey within Uralla	Fire	• Uralla	 Kingstown Road Lookout Road New England Highway Rowan Avenue Thunderbolts Way 	
		Flood	• Kentucky	• Terrible Vale Road

8. Risk Assessment

The TERM framework is utilised assess the likelihood and consequence of each identified Customer Journey, to achieve an overall risk rating. Further detail of the Risk Assessment Framework can be found in the CJRP Background and Methodology. Further detail of the risk analysis conducted on the Customer Journeys can be found in the Appendix: New England North West Risk Analysis.

This section should be revised as new plans are released by TfNSW and Councils, new customer journeys are identified or changed, upon implementation of resilience initiatives, changes in population over time, and following any natural disasters within the region or council.

Local Government Area	Customer Journey	Likelihood Summary ²⁵	Consequence Summary ²⁴	Risk Rating
Armidale Regional Council	North South	L3, based on quantitative frequency of Natural Disaster Declarations	C1, based on \$1.1 billion total freight value and everyday service delivery	A
	East West	L3, based on quantitative frequency of Natural Disaster Declarations	C1, based on \$1.1 billion total freight value and safety consequences	A
Glen Innes Shire Council	Gwydir Strathbogie Road Gwydir Highway	L2, based on quantitative frequency of Natural Disaster Declarations	C1, based on \$700 million freight value	А
	Glen Innes	L2, based on quantitative frequency of Natural Disaster Declarations	C1, based on \$700 million freight value	А
	New England	L2, based on quantitative frequency of Natural Disaster Declarations	C1, based on \$700 million freight value	А

²⁵ Likelihood and Consequence Risk Assessment Ratings are based on the highest risk rating within that category.

Transport for NSW				
Local Government Area	Customer Journey	Likelihood Summary ²⁵	Consequence Summary ²⁴	Risk Rating
	Emmaville	L2, based on quantitative frequency of Natural Disaster Declarations	C1, based on \$700 million freight value	А
	Old Grafton Road	L2, based on quantitative frequency of Natural Disaster Declarations and council assessment of qualitative expectation	C1, based on \$700 million freight value	A
	Red Range	L2, based on quantitative frequency of Natural Disaster Declarations	C1, based on \$700 million freight value	А
	Blue Hills	L2, based on quantitative frequency of Natural Disaster Declarations	C1, based on safety consequences	А
Gunnedah Shire Council	Black Stump Way	L2, based on 5 Natural Disaster Declarations from 2018 – 2023	C1, based on \$1 billion freight value outbound from Gunnedah	А
	Gunnedah	L2, based on 5 Natural Disaster Declarations from 2018 – 2023	C1, based on \$1 billion freight value outbound from Gunnedah	А
	Kamilaroi	L2, based on 5 Natural Disaster Declarations from 2018 – 2023	C1, based on \$1 billion freight value outbound from Gunnedah	А
	Kelvin	L2, based on 5 Natural Disaster Declarations from 2018 – 2023	C1, based on \$1 billion freight value outbound from Gunnedah	А

Customer Journey Likelihood Summary²⁵ Consequence Summary²⁴ **Risk Rating** Local Government Area Oxley L2, based on 5 Natural Disaster Declarations C1, based on \$1 billion freight value А from 2018 - 2023 outbound from Gunnedah Boggabri L2, based on 5 Natural Disaster Declarations C1, based on \$1 billion freight value А from 2018 - 2023 outbound from Gunnedah Gwydir Shire Fossickers Way North L3, based on qualitative expectation and C1, based on \$0.9 billion value of freight А Council quantitative frequency of Natural Disaster and safety consequences Declarations Gwydir Copeton L3, based on qualitative expectation and C1, based on \$0.9 billion value of freight А quantitative frequency of Natural Disaster Declarations Inverell Shire Ashford L2, based on quantitative frequency of C1, based on \$1.9 billion value of freight А Council natural disasters L2, based on quantitative frequency of C1, based on \$1.9 billion value of freight Bruxner А natural disasters Gwydir L2, based on quantitative frequency of C1, based on \$1.9 billion value of freight А natural disasters L2, based on quantitative frequency of Inverell Gilgai Tingha C1, based on \$1.9 billion value of freight А natural disasters

Customer Journey Likelihood Summary²⁵ Consequence Summary²⁴ **Risk Rating** Local Government Area Yetman L2, based on quantitative frequency of C1, based on \$1.9 billion value of freight А natural disasters Liverpool Plains Liverpool Plains Shire Council 3 L3, based qualitative expectation and C1, based on \$0.9 billion value of freight А Shire Council quantitative frequency of Natural Disaster Declarations L3, based qualitative expectation and Liverpool Plains Shire Council 4 C1, based on \$0.9 billion value of freight А quantitative frequency of Natural Disaster Declarations L3, based qualitative expectation and Liverpool Plains Shire Council 5 C1, based on \$0.9 billion value of freight А quantitative frequency of Natural Disaster Declarations Liverpool Plains Shire Council 6 L3, based qualitative expectation and C1, based on \$0.9 billion value of freight А quantitative frequency of Natural Disaster Declarations L2, based on 7 Natural Disaster Declarations Moree Plains Shire Mehi/Gwydir C1, based on \$2.7 billion in economic value Α Council from 2018 - 2023 Tycannah L2, based on 7 Natural Disaster Declarations C1, based on \$2.7 billion in economic value Α from 2018 - 2023

Customer Journey Likelihood Summary²⁵ Consequence Summary²⁴ **Risk Rating** Local Government Area Macintryre L2, based on 7 Natural Disaster Declarations C1, based on \$2.7 billion in economic value Α from 2018 - 2023 Narrabri Shire Area 1 L2, based qualitative expectation and C1, based on \$1.4 billion value of freight А (Narrabri - Wee Waa - Burren Council quantitative frequency of Natural Disaster and everyday service delivery Junction) Declarations L2, based qualitative expectation and Area 2 C1, based on \$1.4 billion value of freight А quantitative frequency of Natural Disaster Declarations L2, based qualitative expectation and Area 3 C1, based on \$1.4 billion value of freight А quantitative frequency of Natural Disaster Declarations Area 4 L2, based qualitative expectation and C1, based on \$1.4 billion value of freight А quantitative frequency of Natural Disaster and everyday service delivery Declarations Extended Tamworth L2, based on qualitative frequency and C1, based on \$3.5 billion freight task value Tamworth А **Regional Council** quantitative frequency of Natural Disaster and safety consequences Declarations New England L2, based on quantitative frequency of C1, based on \$3.5 billion freight task value А Natural Disaster Declarations and safety consequences

Transport

for NSW **Customer Journey** Likelihood Summary²⁵ Consequence Summary²⁴ **Risk Rating** Local Government Area Tamworth City L2, based on qualitative frequency and C1, based on \$3.5 billion freight task value, А quantitative frequency of Natural Disaster safety consequences and everyday service Declarations delivery L2, based on quantitative frequency of C1, based on \$1.4 billion value of freight Oxley А Natural Disaster Declarations L3, based on qualitative frequency and **Tenterfield Shire** Tenterfield 1 C1, based on \$0.6 billion freight value А quantitative frequency of Natural Disaster Council Declarations L3, based on qualitative frequency and Tenterfield 2 C1, based on \$0.6 billion freight value А quantitative frequency of Natural Disaster Declarations L3, based on qualitative frequency and Tenterfield 3 C1, based on \$0.6 billion freight value А quantitative frequency of Natural Disaster Declarations L3, based on qualitative frequency and Tenterfield 4 C1, based on \$0.6 billion freight value А quantitative frequency of Natural Disaster Declarations Tenterfield 5 L3, based on qualitative frequency and C1, based on \$0.6 billion freight value А quantitative frequency of Natural Disaster Declarations

Local **Customer Journey** Likelihood Summary²⁵ Consequence Summary²⁴ **Risk Rating** Government Area Uralla Shire New England Highway L4, based on quantitative frequency of C1, based on \$0.2 billion freight value В Council Natural Disaster Declarations Thunderbolts Way L4, based on quantitative frequency of C1, based on \$0.2 billion freight value В Natural Disaster Declarations C1, based on \$0.2 billion freight value Uralla L4, based on quantitative frequency of В Natural Disaster Declarations L3, based on council assessment of Walcha Council Oxley C1, based on \$600 million value of freight А qualitative expectation and safety consequences Thunderbolts L3, based on council assessment of C1, based on \$600 million value of freight А qualitative expectation and quantitative and safety consequences frequency of Natural Disaster Declarations

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9. Future Resilience Options

This section provides options and opportunities that could be developed or implemented to mitigate the impact on customer journeys from natural disasters.

The information provided in this section should be regarded as an initial scoping tool alongside priority customer journeys to assist with where to focus allocation of Network Resilience Program resourcing, while incorporating input from key stakeholders to TfNSW. Other areas may be a priority for business case and funding based on regional and local needs, other projects underway, and asset management planning.

The following factors should be taken into consideration when further assessing appropriate resilience options and may be incorporated in any multi-criteria analysis:

- detailed flood and bushfire studies (consider flood planning levels i.e. AEP or Probable Maximum Flood),
- council planning and acceptable risk levels
- hazard onset and impact timeframes
- effectiveness of any existing mitigations in place
- complementary mitigations to reduce risk
- mitigation that impacts evacuation capacity may provide a comprehensive risk management for a community across several hazard types
- target timeframes for planning, completion, and realisation of benefits
- cost-benefit analysis benefits
- detailed traffic modelling (road and freight usage) and network analysis (evacuation routes, diversions, alternate access and egress) especially where detour planning is considered
- compounding and cascading nature of hazards (e.g. a storm that acts as a catalyst for floods and landslides).

This section should be revised as new plans are released by TfNSW and Councils, new customer journeys are identified or changed, upon implementation of resilience initiatives, changes in population over time, and following any natural disasters within the region or council. Moreover, it is recommended that highly technical resilience solutions, such as bridge upgrades or strengthening, are reviewed by the Network Management Team.

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
Armidale Regional Council	North to South	Fire risk: • Detour planning	Fire risk: • Vegetation Management Flood risk: • Bridge upgrades • Resurface damaged roads	N/A	Fire and flood risk:Warning signageBushfire sensors
	East to West	Fire and flood risk: • Detour planning	Fire risk: • Vegetation Management • Lane widening • New routes Flood risk: • Bridge upgrades	N/A	Fire and flood risk:Warning signageBushfire sensors

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
			Resurface damaged roads		
Glen Innes Shire Council	Gwydir	Fire and flood risk: • Detour planning	Fire risk: risk: • Vegetation Management • Shoulder widening Flood risk: • Erosion protection • Resurfacing of roads • Floodways	N/A	 Fire and flood risk: Warning signage Specialised drone for fire suppression Bushfire sensors
	Glen Innes	Fire and flood risk: • Detour planning	Fire risk: • Vegetation Management	N/A	Fire and flood risk: • Warning signage

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
			 Shoulder widening Flood risk: Erosion protection Resurfacing of roads Floodways 		 Specialised drone for fire suppression Bushfire sensors
	New England	Fire and flood risk: • Detour planning	Fire risk: • Vegetation Management • Shoulder widening Flood risk: • Erosion protection	N/A	 Fire and flood risk: Warning signage Specialised drong for fire suppressi Bushfire sensors

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
			Resurfacing of roadsFloodways		
	Emmaville	Fire and risk: • Detour planning	Fire risk: • Vegetation Management Flood risk: • Erosion protection • Resurfacing of roads • Floodways	N/A	 Fire and flood risk: Warning signage Specialised drone: for fire suppression Bushfire sensors
	Old Grafton Road	Fire and flood risk: • Detour planning	Flood risk: • Erosion protection	N/A	Fire and flood risk: • Warning signage

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
	Red Range	Flood risk: • Detour planning	Fire risk: • Vegetation Management Flood risk: • Erosion protection • Resurfacing of roads • Floodways	N/A	Food risk: • Warning signage
	Blue Hills	Fire risk: • Detour planning	Fire risk: • Vegetation management	N/A	Fire risk: Bushfire sensors Warning signage Specialised drones for fire suppression
Gunnedah Shire Council	Black Stump Way	Fire risk: • Detour planning	Fire risk:	N/A	Fire and flood risk:

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
			 Vegetation Management Flood risk: Landscape management Bridge upgrade 		 Communication and education Warning signage Bushfire sensors
	Boggabri		 Landscape management Bridge upgrade 	N/A	Fire and flood risk: • Communications • Warning signage
	Gunnedah	Fire and flood risk: • Detour planning	 Fire risk: Lane or shoulder widening Vegetation management Flood risk: 	N/A	Fire and flood risk: • Communications • Education • Warning signage • Bushfire sensors

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
			 Drainage upgrade Bridge upgrade Land management 		
	Kamilaroi	Fire and flood risk: • Detour planning	 Fire and flood risk: Drainage management Bridge upgrade Lane widening 	N/A	Fire and flood risk: • Communications • Education • Warning signage • Bushfire sensors
	Kelvin	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management • Lane widening	N/A	Fire and flood risk: • Warning signage • Bushfire sensors
	Oxley	Fire risk: • Detour planning	Fire risk:	N/A	Fire and flood risk: • Warning signage

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
		Flood risk: • Detour planning	 Vegetation management Lane widening New routes Flood risk: Bridge upgrades 		Bushfire sensors
Gwydir Shire Council	Fossickers Way North	N/A	Fire risk: • Vegetation Management • Lane widening Flood risk: • Landscape management • Floodway • Erosion control	N/A	Fire and flood risk:Warning signageBushfire sensorsFlood sensors

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
	Gwydir Copeton	N/A	Fire risk: • Vegetation Management • Lane widening • Road resurfacing Flood risk: • Floodway • Landscape management • Erosion control	N/A	 Fire and flood risk: Warning signage Bushfire and flood sensors
Inverell Shire Council	Ashford	N/A	Fire risk: • Vegetation Management • Lane widening • Road upgrade Flood risk:	N/A	Fire and flood risk:Warning signageBushfire sensorsFlood sensors

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
			 Road resurfacing Bridge strengthening 		
	Bruxner	N/A	Fire risk: • Vegetation Management • Lane widening Flood risk: • Bridge / crossing upgrade or strengthening • Road resurfacing • Road upgrade	N/A	Fire and flood risk:Warning signageBushfire sensorsFlood sensors
	Gwydir	N/A	Fire risk: • Vegetation Management	N/A	Fire and flood risk: • Warning signage • Bushfire sensors

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
	Inverell Gilgai Tingha	Fire and flood risk: • Detour management	Fire risk: • Vegetation Management	N/A	Fire and flood risk: • Warning signage • Bushfire sensors
	Yetman	N/A	N/A	N/A	Flood risk: • Warning signage • Flood sensors
Liverpool Plains Shire Council	Liverpool Shire Council 3	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Erosion protection	N/A	 Fire and flood risk: Bushfire sensors Warning signage Specialised drones for fire suppressio
	Liverpool Plains Shire Council 4	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk:	N/A	Fire and flood risk: • Bushfire sensors • Warning signage

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
			• Erosion protection		Specialised drones for fire suppressio
	Liverpool Plains Shire Council 5	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Erosion protection	N/A	 Fire and flood risk: Bushfire sensors Warning signage Specialised drone for fire suppression
	Liverpool Plains Shire Council 6	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Erosion protection • Resurfacing of roads	N/A	 Fire and flood risk: Bushfire sensors Warning signage Specialised drone for fire suppression

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
			• Floodways		
Moree Plains Shire Council	Tycannah	Fire and flood risk: • Detour planning	Fire risk: Vegetation management Lane widening Flood risk: Landscape management Erosion control 	N/A	Fire and flood risk:Warning signageCommunicationsBushfire sensors
	Mehi / Gwydir	Fire and flood risk: • Detour planning	 Flood risk: Landscape management Lane widening Draining network upgrade Bridge upgrade 	N/A	 Fire and flood risk: Warning signage Communications and education Bushfire sensors

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
	Macintryre	 Flood risk: Detour planning Alternative route identified (Mungindi to Garah) 	Flood risk: Landscape management Lane widening Bridge upgrade	N/A	 Fire and flood risk: Warning signage Communications and education Bushfire sensors
Narrabri Shire Council	Area 1	Flood risk:Detour planningAlternative route identified	Flood risk: • Road widening • Erosion protection • Floodway	N/A	Flood risk: Automated signage with flood sensors Communications Education
	Area 2	Fire and flood risk:Detour planningAlternative route identified	Fire risk: • Vegetation management Flood risk: • Road Widening	N/A	 Fire and flood risk: Automated signage with fire sensors Automated signage with flood sensors Communications Education

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
	Area 3	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Road Widening	N/A	 Fire and flood risk: Automated signage with fire sensors Automated signage with flood sensors Communications Education
	Area 4	Fire and flood risk:Detour planningAlternative route identified	Fire risk: • Vegetation management Flood risk: • Road Widening	N/A	 Fire and flood risk: Automated signag with fire sensors Automated signag with flood sensors Communications Education
Tamworth Regional Council	Tamworth City	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management	N/A	Fire and flood risk: Automated signag with fire sensors

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
			Flood risk: • Erosion control • Lane Widening		 Automated signage with flood sensors Communications Education
	New England	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Erosion control • Bridge upgrades	N/A	 Fire and flood risk: Automated signag with fire sensors Automated signag with flood sensors Communications Education
	Extended Tamworth	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Erosion control	N/A	 Fire and flood risk: Automated signag with fire sensors Automated signag with flood sensors Communications

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
			ResurfacingBridge upgrades		Education
	Oxley	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Erosion control • Bridge upgrades	N/A	 Fire and flood risk: Automated signag with fire sensors Automated signag with flood sensors Communications Education
Tenterfield Shire Council	Tenterfield 1	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Bridge / crossing upgrade	N/A	 Fire and flood risk: Fire and flood sensors Warning signage Communication and education

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
	Tenterfield 2	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Erosion control • Bridge / crossing upgrade	N/A	 Fire and flood risk: Fire and flood sensors Warning signage Communication and education
	Tenterfield 3	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management • Road widening Flood risk: • Erosion control • Bridge / crossing upgrade	N/A	Fire and flood risk:Fire and flood sensorsWarning signage

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
	Tenterfield 4	N/A	Fire risk: • Vegetation management Flood risk: • Erosion control	N/A	Flood risk: • Flood sensors • Warning signage
	Tenterfield 5	N/A	Fire risk: • Vegetation management		Fire and flood risk: • Flood sensors • Warning signage
Uralla Shire Council	New England Highway	N/A	Fire risk: • Vegetation management	N/A	 Fire risk: Specialised drones for fire suppression Warning signage Bushfire sensors
	Thunderbolts Way	Fire and flood risk: • Detour planning	Fire risk:	N/A	Fire and flood risk: • Bushfire sensors

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternatives i.e., communications and education, mandatory evacuations
			 Vegetation management Flood risk: Erosion protection Floodways Bridge upgrades 		 Specialised drone: for fire suppression Warning signage
	Uralla	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Erosion protection • Floodways • Bridge upgrades	N/A	 Fire and flood risk: Bushfire sensors Specialised drone for fire suppression Warning signage

Local Government Area	Customer Journey	Redundant, alternative, or secondary roads identified, restructuring, or reconfiguring the network, assets, or services	Transport and safety related works i.e., lane widening, safety initiatives, barriers, detour planning	Multi-modal solutions or alternatives i.e., integration of rail, waterways, and air services	Any non-transport solutions or alternative i.e., communications an education, mandatory evacuations
Walcha Council	Oxley	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Bridge upgrade (stronger flood barriers) • Erosion control	N/A	 Fire and flood risk: Communications Education Automated signa, with fire sensors Automated signa, with flood sensor
	Thunderbolt	Fire and flood risk: • Detour planning	Fire risk: • Vegetation management Flood risk: • Erosion control	N/A	 Fire and flood risk: Communications Education Automated signa with fire sensors Automated signa with flood sensor

10. Other Stakeholders' Considerations

Placeholder: Insert any additional considerations to be made with NENW, as per stakeholder and council feedback (from workshops, htc.)	1

11. Additional Information

Additional Information	Source
The exhaustive and comprehensive council data is located within the ROM Spatial Tool	[Link to Spatial Tool]



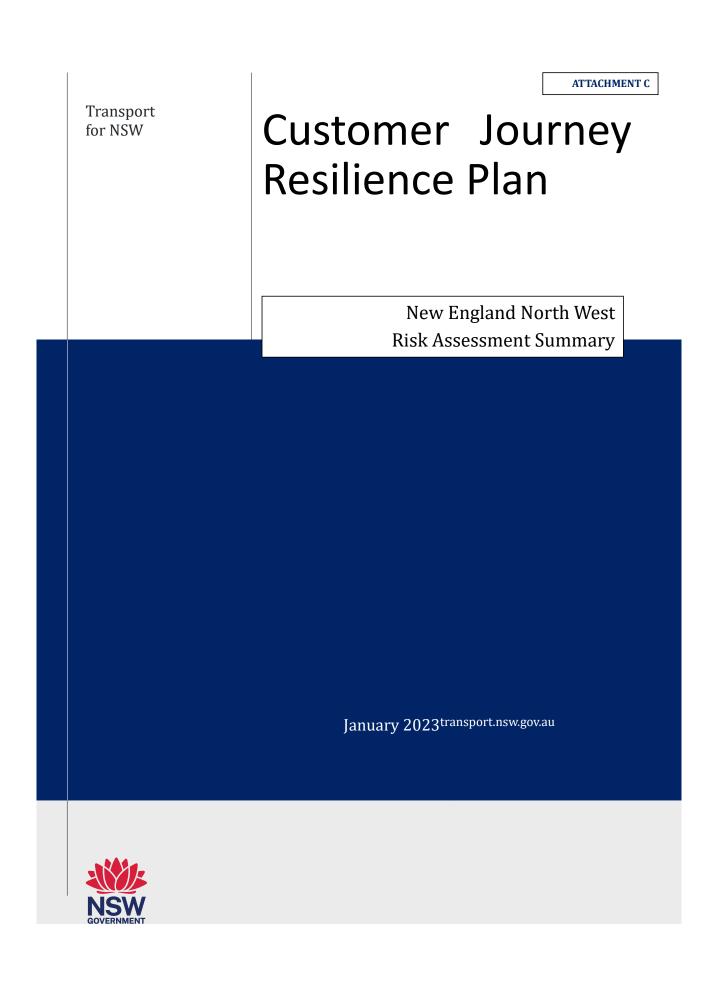


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Acknowledgement of Country

Transport for NSW acknowledges the traditional custodians of the land on which we work and live.

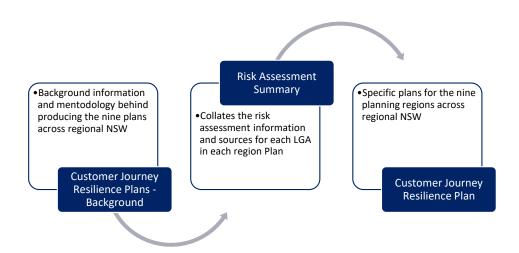
We pay our respects to Elders past and present and celebrate the diversity of Aboriginal people and their ongoing cultures and connections to the lands and waters of NSW.

Many of the transport routes we use today – from rail lines, to roads, to water crossings – follow the traditional Songlines, trade routes and ceremonial paths in Country that our nation's First Peoples followed for tens of thousands of years.

Transport for NSW is committed to honouring Aboriginal peoples' cultural and spiritual connections to the lands, waters and seas and their rich contribution to society.

About this Document

Customer Journey Resilience Plans are built with a risk-based approach which is described in the Customer Journey Resilience Plan – Background. The results of this are recorded in the Customer Journey Resilience Plan for each region of NSW.



Customer Journey Risk Assessment – [region] Report

1. Councils in New England North West Region, NSW

1.1 Engagement and Consultation

Local Government Area	Engagement and Consultation	Date
Armidale Regional Council	Draft vulnerability register Risk Workshop Presentation of the Draft Plan Support for the Draft Plan	[INSERT TEXT]
Gunnedah Council	[INSERT TEXT]	[INSERT TEXT]
Council		

2. Armidale Regional Council

2.1 Customer Journey #1: North to South

High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Armidale Armidale Armidale Black Mountain Black Mountain	Armidale Wongabinda Black Mountain Thalgarrah Field Studies Ce Kirby Rural Research Static (UNE)		 New England highway - Armidale to Glen Innes Gara Dam Pump Station Newholme Rural Research Station (UNE) Armidale Plantation 	y • Booroolong Nature Reserve

Likelihood

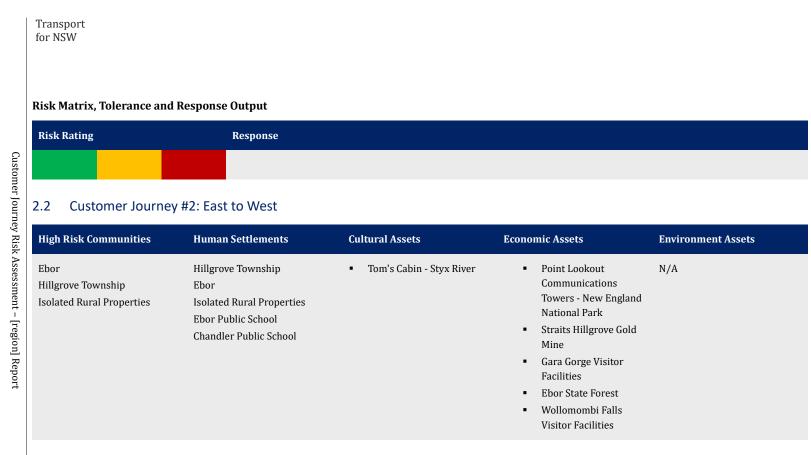
A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the North to South Customer Journey.

TERM Rating (Descriptor)	Source Documents	Likelihood	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L4 – Unlikely	There is no change to days above 35°C in the mountain regions of the New England North West, around Armidale. No major changes in the FFDI. Cold nights are projected to decrease across the New England North West by an average of 9 days per year by 2030. Slight increase in annual rainfall by +1.6%.

Transport for NSW			
TERM Rating (Descriptor)	Source Documents	Likelihood	Analysis
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L3 – Likely	Date accessed: 4/12/23 4 Natural Disaster Declarations in the last 6 years (2018 - 2023). This includes severe weather and flooding and storms. Date accessed: 1/12/23

	Transport for NSW			
	Consequences			
	Consequence	Source Documents	Consequence	Analysis
Customer Journe	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C1 – Catastrophic	Approximately 4 killed and 6 seriously injured (2018 - 2022). Date accessed: 4/12/23
Customer Journey Risk Assessment – [r	Everyday Service Delivery High Risk Communities	Traffic (TFNSW) Volumes Report Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C5 – Minor	Total closures lasting 1 day with alternative route available. Date accessed: 6/12/23
[region] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Transport for NSW			
Consequence	Source Documents	Consequence	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C4 – Moderate	New England Highway owned by TfNSW Armidale Regional Council has a Road Asset Management Plan. Date accessed: 6/12/23
Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$1.1 billion total freight value from Armidale Regional Council. Date accessed: 6/12/23
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C4 – Moderate	Gara Dam Pump Station and Malpas Dam Pump Station.



Likelihood

A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the East to West Customer Journey.

Source Documents	[likelihood]	Analysis
Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L4 – Unlikely	There is no change to days above 35°C in the mountain regions of the New England North West, around Armidale. No major changes in the FFDI. Co nights are projected to decrease across the New England North West by an average of 9 days per yes by 2030. Slight increase in annual rainfall by +1.6%
<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u>	L3 – Likely	Date accessed: 4/12/23 4 Natural Disaster Declarations in the last 6 years (2018 - 2023). This includes severe weather and flooding and storms.
	Climate change in my region	Climate change in my region L4 – Unlikely AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data Model (NARCliM) data Historic incidents of fire by LGA L3 – Likely NSW Natural disaster_ L3 – Likely

Consequences

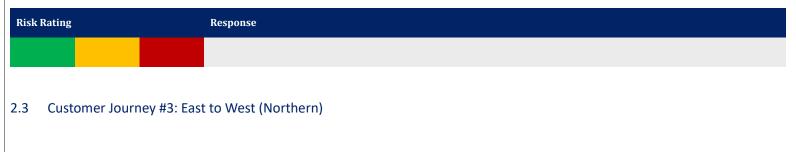
Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	Approximately 1 killed and 13 seriously injured (2018 - 2022).
			Date accessed: 4/12/23
Everyday Service Delivery	<u>Traffic (TFNSW) Volumes Report</u> Road classifications	C6 – Insignificant	No significant road closures recorded.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
High Risk Communities	TfNSW Network Restriction Reports TfNSW Spatial Data Tool		Date accessed: 6/12/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C5 – Minor	Several endangered species are located in Booroloolong Nature Reserve. Fire Management practices in place. Date accessed: 6/12/23
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C5 – Minor	A few cultural heritage assets identified along the journey. Date accessed: 6/12/23
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C4 – Moderate	Thunderbolts Way owned by councils, large investment in place. Waterfall Way corridor strategy by TfNSW. Date accessed: 6/12/23
Economic value to the economy	<u>Regional Plans</u> <u>NSW Regional Economic</u> <u>Development Strategies</u>	C1 – Catastrophic	\$1.1 billion total freight value from Armidale Regiona Council.

Transport

for NSW Consequence **Source Documents** [consequence] Analysis TraNSIT Web (csiro.au) Date accessed: 6/12/23 Value of Agricultural **Commodities Produced, Australia** Strategic Freight Forecasts commodity forecast map Strategic Freight Forecasts – commodity origin map Strategic Freight Forecasts commodity destination map Chandler Public School. Technology and C3 – Major **NSW Population Projections** public utility Transport for NSW Projects and including initiatives map electricity, water School Infrastructure Projects supply and Health Infrastructure Projects production/treat ment, TfNSW Spatial Data Tool telecommunicatio ns

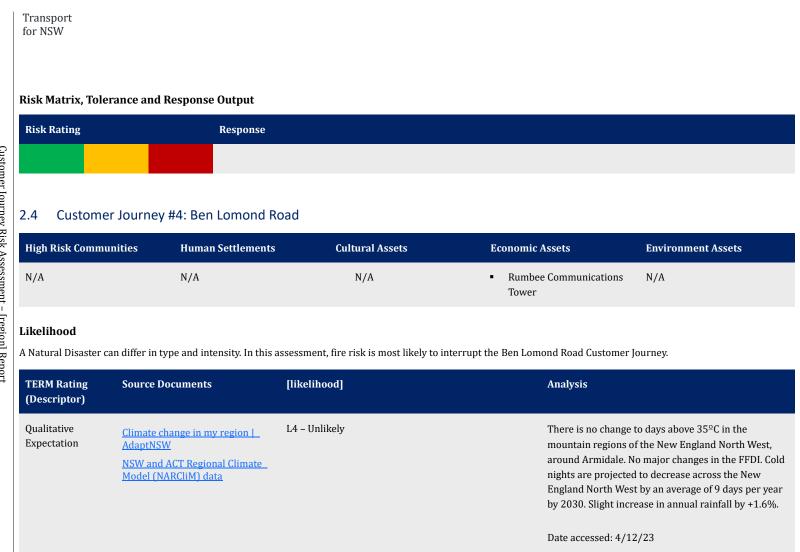
Risk Matrix, Tolerance and Response Output



High Risk Commu Guyra Aberfoyle	unities Human Settlemen Guyra	nts Cultural Assets N/A	Economic AssetsMalpas Dam and Pump Station	Environment Assets N/A
Likelihood A Natural Disaster of TERM Rating (Descriptor)	can differ in type and intensity. In th Source Documents	iis assessment, fire and flood risk is m [likelihood]	ost likely to interrupt the East to West (Nort Analysis	hern) Customer Journey.
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L4 – Unlikely	mountain regions around Armidale. nights are projecte England North We	e to days above 35°C in the of the New England North West, No major changes in the FFDI. Co ed to decrease across the New est by an average of 9 days per yea crease in annual rainfall by +1.6%
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L3 – Likely		Declarations in the last 6 years is includes severe weather and ns.

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Customer Journey Risk Assessment – [region] Report	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	Approximately 1 killed and 2 seriously injured (2018 - 2022). Date accessed: 4/12/23
	Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C2 – Severe	Road closures lasting 6 days with limited alternative routes available. Date accessed: 6/12/23
	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along the journey. Date accessed: 6/12/23
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along the journey. Date accessed: 6/12/23

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 - Major	Armidale Regional Council has a Road Asset Management Plan. Unclear if there is investment for Guyra road but future works have been identified. Date accessed: 6/12/23
Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$1.1 billion total freight value from Armidale Regional Council. Date accessed: 6/12/23
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C1 – Catastrophic	Point Lookout Communications Towers.



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	Transport for NSW			
	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Journey Risk Assessment – [region] Report	Quantitative Frequency	Historic incidents of fire by LGA NSW Natural disaster declarations	L3 – Likely	4 Natural Disaster Declarations in the last 6 years (2018 - 2023). This includes severe weather and flooding and storms.
ırney		TfNSW Spatial Data Tool		Date accessed: 1/12/23
/ Risk Ass	Consequences			
ssmer	Consequence	Source Documents	[consequence]	Analysis
ıt – [regi	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	9 seriously injured (2018 - 2022).
gion] F				
] Re				Date accessed: 6/12/23
Report	Everyday Service Delivery	Traffic (TFNSW) Volumes Report	C6 – Insignificant	Date accessed: 6/12/23 No significant road closures recorded.
] Report	Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C6 – Insignificant	

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Cultural assets include Aborigin non-indigenous historical, and other cultural assets Financial	nal, NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Armidale Regional Council has a Road Asset Management Plan. Unclear if there is investment for Ben Lomond road but future works have been identified. Date accessed: 6/12/23
Economic value the economy	to Regional Plans NSW Regional Economic_ Development Strategies TraNSIT Web (csiro.au) Value of Agricultural_ Commodities Produced. Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$1.1 billion total freight value from Armidale Regional Council. Date accessed: 6/12/23

Consequence	Source Documents	[consequence]	Analysis	
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C4 – Moderate	Rumbee Com	nmunications Tower.
Risk Rating	nce and Response Output Response	d		
Risk Rating	Response Journey #5: Kempsey Roa		Economic Assets	Environment Assets

A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Kempsey Road Customer Journey.

Cus	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Journey Risk Ass	Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L4 – Unlikely	There is no change to days above 35° C in the mountain regions of the New England North West, around Armidale. No major changes in the FFDI. Cold nights are projected to decrease across the New England North West by an average of 9 days per year by 2030. Slight increase in annual rainfall by +1.6%.
Assessmen				Date accessed: 4/12/23
nt – [region] Report	Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u>	L3 – Likely	4 Natural Disaster Declarations in the last 6 years (2018 - 2023). This includes severe weather and flooding and storms.
port		TfNSW Spatial Data Tool		Date accessed: 1/12/23

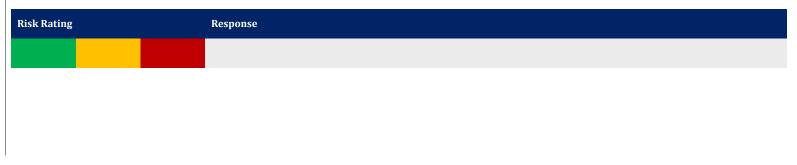
Consequences

Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	2 seriously injured (2018 - 2022).
			Date accessed: 6/12/23
Everyday Service Delivery	<u>Traffic (TFNSW) Volumes Report</u> Road classifications	C1 – Catastrophic	Roads closed > 10 days due to bush fire. Limited alternative routes available.

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Custom	High Risk Communities	TfNSW Network Restriction Reports TfNSW Spatial Data Tool		Date accessed: 6/12/23
Customer Journey Dick Accordment Fronten Deport	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C5 – Minor	Several endangered species are located in Cunnawarra NP. Fire Management practices in place. Date accessed: 6/12/23
n b b b b b b b b b b b b b b b b b b b	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C5 – Moderate	Several cultural heritage assets in NP. Date accessed: 6/12/23
	Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Armidale Regional Council has a Road Asset Management Plan. Major plans for Kempsey Road upgrades. Date accessed: 6/12/23
	Economic value to the economy	<u>Regional Plans</u> <u>NSW Regional Economic</u> <u>Development Strategies</u>	No Rating	The journey within the national parks is likely to provide less economic value to the economy from this LGA.

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Customer Journey Risk Assessment -		TraNSIT Web (csiro.au) Value of Agricultural_ Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map		Date accessed: 6/12/23
ssment – [region] Report	Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant	No critical technology or public utility infrastructure identified as high risk within the journey. Date accessed: 6/12/23

Risk Matrix, Tolerance and Response Output



Transport for NSW 3. Gunnedah Council Customer Journey #1: Black Stump Way 3.1 High Risk Communities Human Settlements **Cultural Assets Economic Assets Environment Assets** Emerald Hill Emerald Hill N/A N/A Trinkey Forest Premer Premer **Tambar Springs** Tambar Springs Willala Township **Trinkey Forest** Isolated Rural Properties Likelihood A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Black Stump Way Customer Journey. **TERM Rating Source Documents** Likelihood Analysis (Descriptor) Qualitative Mean temperatures are projected to rise by 0.7°C by 2030 in the New England and L2 – Very Likely Climate change in my region Expectation AdaptNSW North West LGA, but little change in annual rainfall by 2030. Hot days are projected to increase across the region by an average of 7 days per year by 2030. NSW and ACT Regional Climate Change in number of days a year where max temp >35 degree is expected to be 1 Model (NARCliM) data to 5 days in the near future (2020 - 39). Date accessed: 27/11/23

Customer Journey Risk Assessment - [region] Report

TERM Rating (Descriptor)	Source Documents	Likelihood	Analysis
Quantitative Frequency	Historic incidents of fire by LGA NSW Natural disaster. declarations TfNSW Spatial Data Tool	L3 – Likely	5 Natural Disaster Declarations in the last 6 years in Gunnedah LGA (2018 - 2023). This includes severe flooding and storms. Date accessed: 27/11/23

Transport for NSW				
Consequences				
Consequence	Source Documents	Consequence	Analysis	
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 6 seriously injured (2018 - 2022). Date accessed: 23/11/23	
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C6 – Insignificant	No historical road closure incidents recorded. Date accessed: 27/11/23	
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management .</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C4 – Moderate	Hazard reduction burning in place, areas with very high OFH and some endangered species in Trinket State. Date accessed: 30/11/23	
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C5 – Minor	Some cultural heritage assets. Mention of potential unrecorded cultural assets in area. Date accessed: 30/11/23	

Transport for NSW			
Consequence	Source Documents	Consequence	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans <u>TfNSW Media Release</u>	C3 - Major	Grain Valley Road is regional road, included in road network strategy. Upgrades to Black Stump Way. Date accessed: 28/11/23
Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$1 billion freight value outbound from Gunnedah. Date accessed: 28/11/23
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C3 – Major	No identified high-risk technology or public utility assets. Willala Township rated Major consequence. Date accessed: 28/11/23

Transport for NSW					
Risk Matrix, Tol	erance and Res	sponse Output			
Risk Rating		Response			
3.2 Custom	er Journey #2	: Gunnedah			
High Risk Comm	nunities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Around Black Jac Gunnedah Avard		Lundy House Gunnedah Avard Estat Kelvin	N/A te	 Porcupine Lookout communications Blackjack Mountain Radi Site 	N/A 0
Likelihood A Natural Disaster	can differ in type	and intensity. In this asses	ssment, fire and flood risk is m	ost likely to interrupt the Gunnedah Custo	mer Journey.
TERM Rating (Descriptor)	Source Docu	ments [li	kelihood]	Analysis	
Qualitative Expectation	<u>AdaptNSW</u>	<u>C Regional Climate</u>	: – Very Likely	2030 in the New little change in a projected to inc of 7 days per yes a year where ma	The same projected to rise by 0.7° w England and North West LGA, b annual rainfall by 2030. Hot days rease across the region by an ave ar by 2030. Change in number of ax temp >35 degree is expected t e near future (2020 - 39).

Transport for NSW

TERM Rating

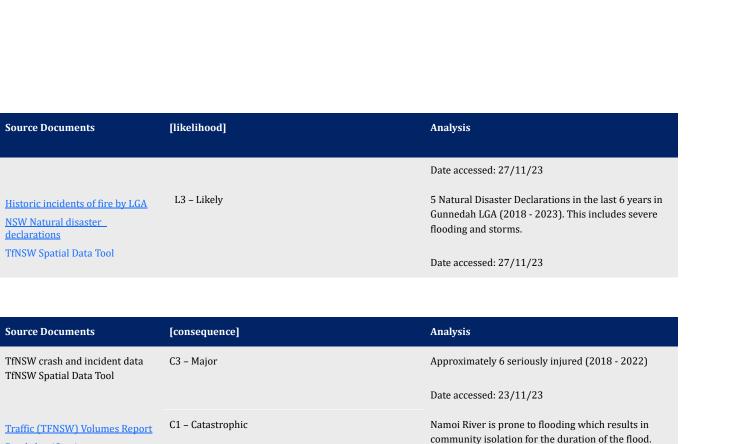
(Descriptor)

Quantitative

Consequences

declarations

Frequency



Customer Journey Risk Assessment – [region] Report

Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 6 seriously injured (2018 - 2022)
			Date accessed: 23/11/23
Everyday Service Delivery	<u>Traffic (TFNSW) Volumes Report</u> Road classifications	C1 – Catastrophic	Namoi River is prone to flooding which results in community isolation for the duration of the flood.
High Risk Communities	TfNSW Network Restriction Reports		Date accessed: 27/11/23
	TfNSW Spatial Data Tool		
Environment is natural considerations, environmental	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u>	C6 – Insignificant	No environmental assets identified along journey.
	<u>NPWS Plans of Management</u>		

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
vulnerability, or sensitivities			
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans <u>Gunnedah Shire Council Major</u> <u>Projects</u>	C3 – Major	Kelvin road investment and upgrade by Gunnedah Shire Council. Date accessed: 28/11/23
Economic value to the economy	Regional Plans NSW Regional Economic Development Strategies TraNSIT Web (csiro.au) Value of Agricultural Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map	C1 – Catastrophic	\$1 billion freight value outbound from Gunnedah. Date accessed: 28/11/23

Transport for NSW				
Consequence	Source Documents	[consequence]	Analysis	
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	Strategic Freight Forecasts – commodity origin map Strategic Freight Forecasts – commodity destination map NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C3 - Major	Porcupine Cor Blackjack mou Date Accessed	ıntain: Moderate
Risk Matrix, Toler Risk Rating	rance and Response Output Response			
3.3 Customer High Risk Commu	Journey #3: Kamilaroi	Cultural Assets	Economic Assets	Environment Assets
Breeza	Isolated rural Propert		Kamilaroi	N/A

á

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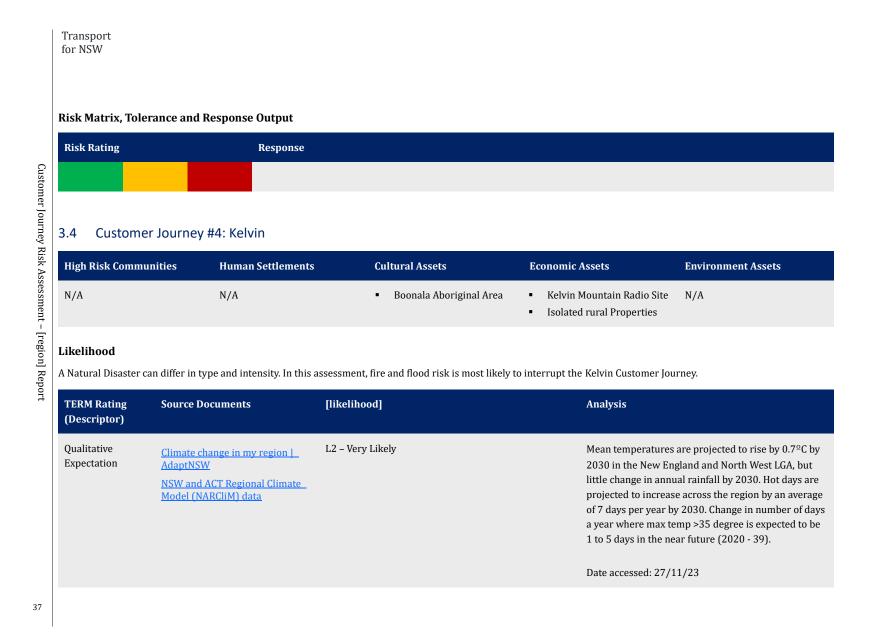
Isolated rural Properties

Breeza

High Risk Commun	ities Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Curlewis Township	Curlewis Township		 Gunnedah Industrial Estate 	
Likelihood				
			t likely to interrupt the Kamilaroi Custome	r Journey.
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis	
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L2 – Very Likely	2030 in the New En little change in ann projected to increa of 7 days per year h a year where max t	s are projected to rise by 0.7° C ngland and North West LGA, bu ual rainfall by 2030. Hot days a se across the region by an avera by 2030. Change in number of d emp >35 degree is expected to ear future (2020 - 39).
			Date accessed: 27/	11/23
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u>	L3 – Likely		Declarations in the last 6 years 18 - 2023). This includes seven s.
	TfNSW Spatial Data Tool		Date accessed: 27/	11/23

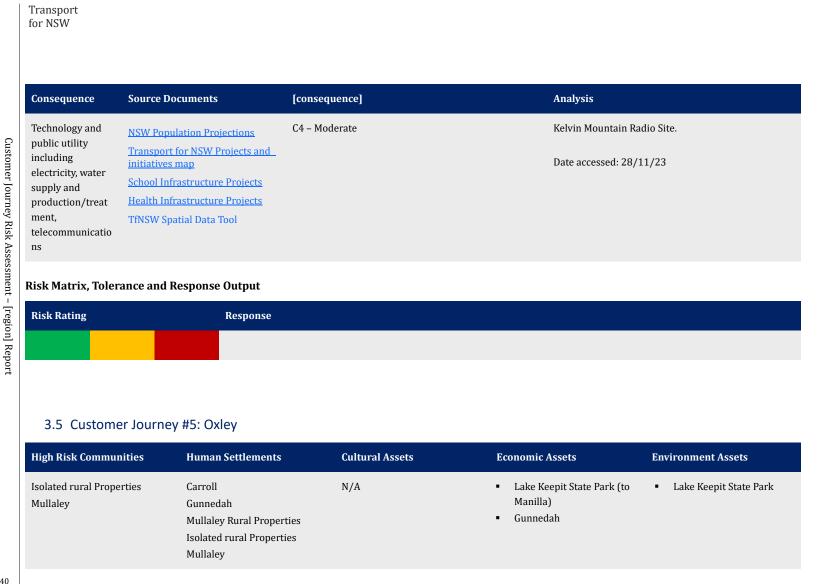
	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Customer Jo	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	Approximately 9 seriously injured and 1 killed (2018 - 2022). Date accessed: 23/11/23
Customer Journey Risk Assessment – [region] Report	Everyday Service Delivery High Risk Communities	Traffic (TFNSW) Volumes Report SBS News Articles Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C1 – Catastrophic	End point of journey is Gunnedah which is prone to floods that isolate the community. Date accessed: 27/11/23
·egion] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C6 – Insignificant	Kamilaroi highway owned by TfNSW, planned improvements to the highway. Date accessed: 28/11/23
Economic value to the economy	Regional PlansNSW Regional Economic_ Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural_ Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$1 billion freight value outbound from Gunnedah.Source: TraNSIT CSIRO Data. Filtered by Gunnedah and road freight.Date accessed: 28/11/2023
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C3 – Major	No identified high-risk technology or public utility assets. Curlewis Township rated Major consequence. Date accessed: 28/11/2023



	Transport for NSW			
	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Journey Rick Assessment - [region] Report	Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L3 - Likely	5 Natural Disaster Declarations in the last 6 years in Gunnedah LGA (2018 - 2023). This includes severe flooding and storms. Date accessed: 27/11/23
Diels Deep	Consequences			
cempr	Consequence	Source Documents	[consequence]	Analysis
+ - Treg	Safety	TfNSW crash and incident data	C3 - Major	Approximately 1 seriously injured (2018 - 2022).
		TfNSW Spatial Data Tool		Date accessed: 27/11/23
rion Demort	Everyday Service	TfNSW Spatial Data Tool <u>Traffic (TFNSW) Volumes Report</u>	C6 – Insignificant	
zion] Renort	Everyday Service Delivery High Risk Communities			Date accessed: 27/11/23

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C4 – Moderate	A few cultural assets in area vulnerable to frequent fires. Date accessed: 30/11/23
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Kelvin road investment and upgrade by Gunnedah Shire Council. Date accessed: 28/11/23
Economic value to the economy	Regional Plans NSW Regional Economic_ Development Strategies TraNSIT Web (csiro.au) Value of Agricultural Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$1 billion freight value outbound from Gunnedah. Source: TraNSIT CSIRO Data. Filtered by Gunnedah and road freight. Date accessed: 28/11/23



	unities Human Settlements	Cultural Assets	Economic Assets	Environment Assets
	Lake Keepit State Par Manilla) Carroll Namoi Cotton Gin	k (to		
Likelihood				
A Natural Disaster	can differ in type and intensity. In this	assessment, fire and flood risk is most l	likely to interrupt the Oxley Custom	er Journey.
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis	
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L2 – Very Likely	2030 in the N little change i projected to i of 7 days per	atures are projected to rise by 0.7°C b ew England and North West LGA, but n annual rainfall by 2030. Hot days ar ncrease across the region by an averag year by 2030. Change in number of da
				max temp >35 degree is expected to b the near future (2020 - 39).
				the near future (2020 - 39).
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u>	L3 – Likely	1 to 5 days in Date accessed 5 Natural Disc	the near future (2020 - 39). d: 27/11/23 aster Declarations in the last 6 years in A (2018 - 2023). This includes severe

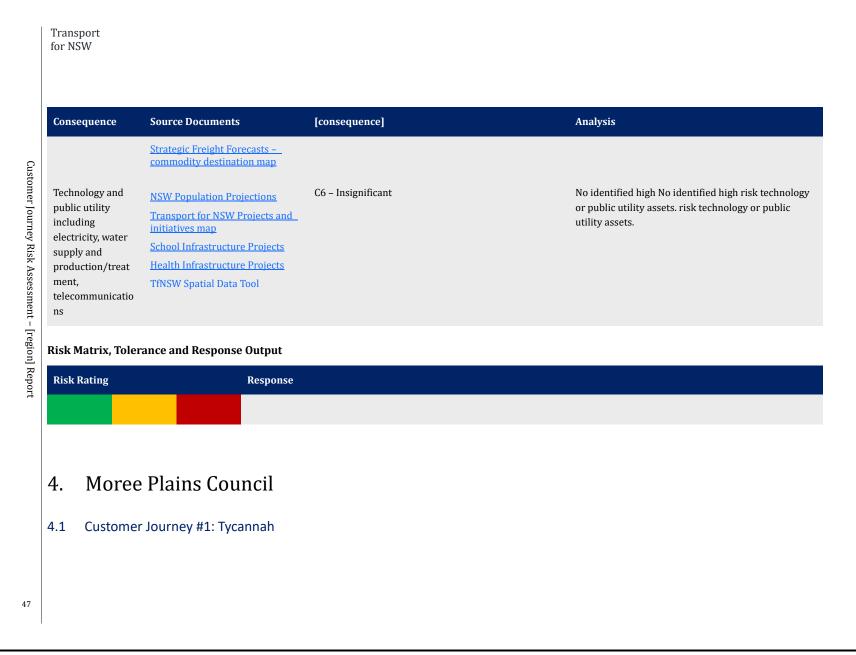
	Transport for NSW			
	Consequences			
	Consequence	Source Documents	[consequence]	Analysis
Customer Jou	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	Approximately 12 seriously injured (2018 - 2022). Date accessed: 27/11/23
Customer Journey Risk Assessment – [region] Report	Everyday Service Delivery High Risk Communities	Traffic (TFNSW) Volumes Report Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C1 – Catastrophic	End point of journey is Gunnedah which is prone to floods that isolate the community. Date accessed: 27/11/23
- [region] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u> Saving our Species Project Lake Keepit Hakea	C5 – Minor	Some endangered species. Date accessed: 30/11/23
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C6 – Insignificant	Oxley Highway, owned by TfNSW, draft corridor strategy as per 2016. Date accessed: 28/11/23
Economic value to the economy	Regional Plans NSW Regional Economic_ Development Strategies TraNSIT Web (csiro.au) Value of Agricultural_ Commodities Produced, Australia Strategic Freight Forecasts commodity origin map Strategic Freight Forecasts commodity origin map	C1 – Catastrophic	\$1 billion freight value outbound from Gunnedah. Source: TraNSIT CSIRO Data. Filtered by Gunnedah and road freight. Date accessed: 28/11/23
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant	No identified high-risk technology or public utility assets. Date accessed: 28/11/23.

	Transport for NSW				
	Risk Matrix, Tole	rance and Response Output			
	Risk Rating	Response			
Custon					
Customer Journey Rick Assessment	3.6 Custom	er Journey #6: Boggabri			
iek Aco	High Risk Commu	nities Human Settlements	Cultural Assets	Economic Assets	Environment Assets
ecemp	N/A	Boggabri	N/A	N/A	N/A
nt – [region] Renor	Likelihood A Natural Disaster ca	an differ in type and intensity. In this a	assessment, flood risk is most like	ely to interrupt the Boggabri Customer	⁻ Journey.
Renort	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis	
	Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L2 – Very Likely	2030 in th little chang projected of 7 days p a year whe 1 to 5 days	peratures are projected to rise by 0.7°C by e New England and North West LGA, but ge in annual rainfall by 2030. Hot days are to increase across the region by an average per year by 2030. Change in number of days ere max temp >35 degree is expected to be s in the near future (2020 - 39).

	Transport for NSW			
	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Jou	Quantitative Frequency	Historic incidents of fire by LGA NSW Natural disaster declarations	L3 – Likely	5 Natural Disaster Declarations in the last 6 years in Gunnedah LGA (2018 - 2023). This includes severe flooding and storms.
urney Ri		TfNSW Spatial Data Tool		Date accessed: 27/11/23
lisk Asse	Consequences			
ssmen	Consequence	Source Documents	[consequence]	Analysis
구				
region	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	Approximately 4 seriously injured and 1 killed (2018 - 2022).
[region] Repo	Safety		C2 – Severe	
[region] Report	Safety Everyday Service Delivery High Risk Communities	TfNSW Spatial Data Tool Traffic (TFNSW) Volumes Report Road classifications TfNSW Network Restriction	C2 – Severe C1 – Catastrophic	- 2022).
Customer Journey Risk Assessment – [region] Report	Everyday Service Delivery High Risk	TfNSW Spatial Data Tool <u>Traffic (TFNSW) Volumes Report</u> Road classifications		 2022). Date accessed: 27/11/23 History of total closure for 14 days during flood. Unspecified if alternative routes are available for

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
C	vulnerability, or sensitivities			
Customer Journey Dick Accoment Freedom Benert	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.
	Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Kamilaroi highway owned by TfNSW, planned improvements to the highway. Upgrades to Black Stump Way. Date accessed: 28/11/23
	Economic value to the economy	Regional PlansNSW Regional Economic_ Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural_ Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin map	C1 – Catastrophic	\$1 billion freight value outbound from Gunnedah. Source: TraNSIT CSIRO Data. Filtered by Gunnedah and road freight.Date accessed: 28/11/23



Transport for NSW				
High Risk Commun	ities Human Settlement	s Cultural Assets	Economic Assets	Environment Assets
N/A	Narrabri to More Isolated Rural Pr		N/A	 Kirramingly Nature Reserve
Likelihood	a differ in time and interacity. In this	accomment fire and flood vick is most l	help to interment the Treennah Cur	otom on Loumour
TERM Rating	Source Documents	assessment, fire and flood risk is most l [likelihood]	Analysis	stomer Journey.
(Descriptor)				
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L3 – Likely	increase acro days per year temperatures	around Moree, hot days are projected oss the region by an average of 10-20 r, with an average increase in annual s and a slight increase in the Forest Fin x (FFDI). Little change in annual rainfa
			Date accesse	d: 17/11/23
Quantitative Frequency	Historic incidents of fire by LGA NSW Natural disaster declarations	L3 – Likely	the Moree Pla	saster Declarations in the last 6 years i ains Shire Council (2018 - 2023). This hfires, severe flooding and storms.
	TfNSW Spatial Data Tool		Date accesse	d: 17/11/23
	mow Spatial Data 1001		Date accessed	d: 17/11/23

	Transport for NSW			
	Consequences			
	Consequence	Source Documents	[consequence]	Analysis
Customer Iournev	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	Evidence of fatal crash between Moree and Narrabri in 2018. 15 seriously injured in Moree between 2018 and 2022. Date accessed: 17/11/23
Customer Iournev Risk Assessment – fregic	Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C3 - Major	Total road closure during fire resulting in heavy traffic. Date accessed: 20/11/23
[region] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C3 - Major	Multiple nature reserves located along journey. Management plans include intention to develop fire regimes. Date accessed: 20/11/23
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory	C4 – Moderate	Few cultural assets located along journey. Date accessed: 20/11/23

	Transport for NSW				
	Consequence	Source Documents	[consequence]	Analysis	
Custom	Financial	Maritime heritage database	C6 – Insignificant	Newell Highway is owned by TfNSW, and has major investment in place.	
er Iournev Risk		Plans Local Government Asset Management Plans		Date accessed: 20/11/23	
Customer Journey Risk Assessment – [region] Report	Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	(Moree Plains = \$2.7 bil) TraNSIT. Date accessed: 20/11/23	
	Technology and public utility including electricity, water supply and production/treat ment,	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant	No major technology and public utility assets identified in this customer journey.	

Garah Village Ashley Village Garah to Mungindi Moree to Garah Moree Industrial area South bank Moree

Moree

Moree to Collarenebri Moree to Pallamallawa

	Transport for NSW				
	Consequence	Source Documents	[consequence]	Analysis	
2	telecommunicatio ns				
-	Risk Matrix, Toler	ance and Response Output			
	Risk Rating	Response			
	4.2 Customer	Journey #2: Mehi/ Gwydi	r		
	High Risk Commur	nities Human Settlement	s Cultural Assets	Economic Assets	Environment Assets
, n] Dt	N/A	Stanley Village - Top Moree central Bendygleet Biniguy Village	Camp Site • Midkin Natu • Waterbird L	· · · · · · /	 Midkin Nature Reserve Gwydir Wetlands State Conservation Area

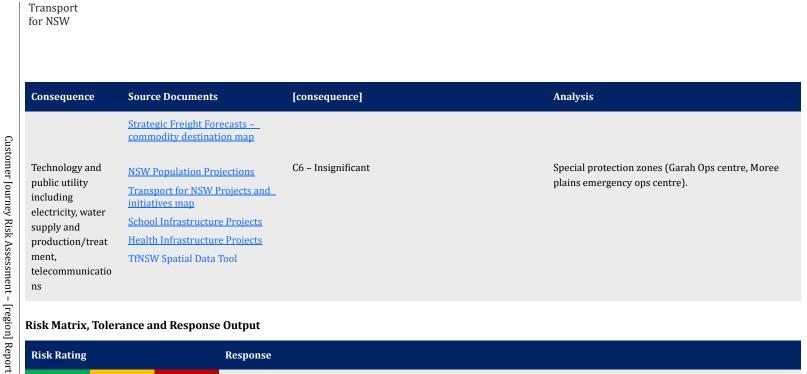
Customer Journey Risk Assessment – [region] Report

Transport for NSW				
High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
	Near Moree Racecourse			
	South bank Moree			
	Moree north			
	South bank Moree			
	Moree to Boggabillia			
	Pallamallawa Township			
	SES Garah Operations Centre			
	Moree Plains Shire Council			
	Emergency Operations Centre			

Customer Journey Risk Assessment	South bank Moree Moree north South bank Moree Moree to Boggabill Pallamallawa Town SES Garah Operatio Moree Plains Shire Emergency Operati	ship ns Centre Council	
	r can differ in type and intensity. In th Source Documents	is assessment, fire and flood [likelihood]	l risk is most likely to interrupt the Mehi/Gwydir Customer Journey. Analysis
Qualitative Expectation	<u>Climate change in my region </u> <u>AdaptNSW</u> <u>NSW and ACT Regional Climate</u> <u>Model (NARCliM) data</u>	L3 – Likely	In the region around Moree, hot days are projected to increase across the region by an average of 10-20 days per year, with an average increase in annual temperatures and a slight increase in the Forest Fire Danger Index (FFDI). Little change in annual rainfall expected. Date accessed: 20/11/23

	Transport for NSW			
	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Iou	Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L3 – Likely	7 Natural Disaster Declarations in the last 6 years in the Moree Plains Shire Council (2018 - 2023). This includes bushfires, severe flooding and storms.
rnev Ris		intow Spatial Data 1001		Date accessed: 17/11/23
k Asse	Consequences			
ssmen	Consequence	Source Documents	[consequence]	Analysis
<u> </u>				
- [region]	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	Single fatality between Mungindi to Ashley, with more than 1 seriously injured.
– [region] Report	Safety		C2 – Severe	
- [region] Report	Everyday Service Delivery	TfNSW Spatial Data Tool <u>Traffic (TFNSW) Volumes Report</u> Road classifications	C2 – Severe C5 – Minor	than 1 seriously injured.
Customer Journey Risk Assessment – [region] Report	Everyday Service	TfNSW Spatial Data Tool <u>Traffic (TFNSW) Volumes Report</u>		than 1 seriously injured. Date accessed: 21/11/23 Total road closures based on previous flood incidents

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
,	vulnerability, or sensitivities			
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C4 – Moderate	Asset identified in Bushfire Management Plan with very high risk rating.
	Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C6 – Insignificant	Highways owned by TfNSW with investments and plans.
	Economic value to the economy	Regional Plans NSW Regional Economic. Development Strategies TraNSIT Web (csiro.au) Value of Agricultural. Commodities Produced, Australia Strategic Freight Forecasts commodity forecast map Strategic Freight Forecasts commodity origin map	C1 – Catastrophic	(Moree Plains = \$2.7 bil) TraNSIT. Date accessed: 20/11/23





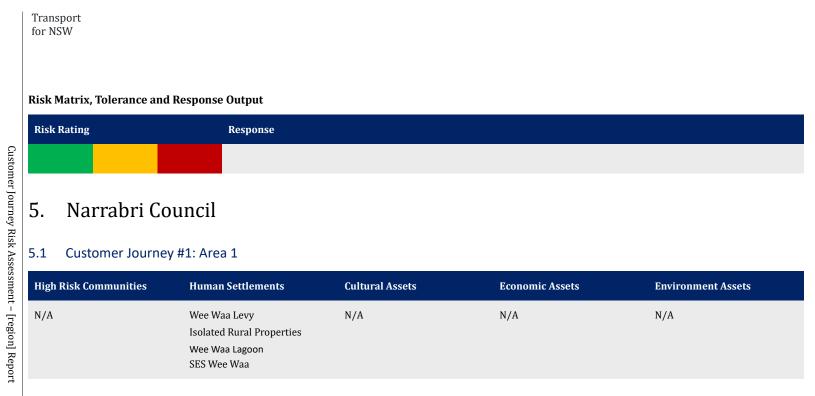
4.3 Customer Journey #3: Macintryre

High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Toomelah Township	SES Mungindi Operations Centre SES Boggabilla Operations Centre Boomi Village Boggabilla to Yetman	N/A	N/A	N/A

High Risk Comm	inities Human Settlemen	ts Cultural Assets	Economic Assets	Environment Assets
	Boomi to Mungindi Toomelah Townshi Isolated Rural Prop Garah to Mungindi Mungindi Townshi	p berties		
Likelihood				
A Natural Disaster o	an differ in type and intensity. In th	is assessment, fire and flood risk is most	likely to interrupt the Macintryre Cu	ustomer Journey.
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis	
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L1 – Almost Certain	increase acro days per year, temperatures	ss the region by an average of 10-20 ; with an average increase in annual s and a slight increase in the Forest Fir
	AdaptNSW NSW and ACT Regional Climate		increase acro days per year temperatures Danger Index	; with an average increase in annual s and a slight increase in the Forest Fire : (FFDI). Little change in annual rainfal
	AdaptNSW NSW and ACT Regional Climate	-	increase acro days per year, temperatures Danger Index expected. Date accessed 7 Natural Disa the Moree Pla	ss the region by an average of 10-20 ; with an average increase in annual s and a slight increase in the Forest Fire (FFDI). Little change in annual rainfal

	Transport for NSW			
	Consequences			
	Consequence	Source Documents	[consequence]	Analysis
Customer lo	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	2 seriously injured in 2018 from road user crashes. Date accessed: 21/11/23
Customer Journev Risk Assessment – [region] Report	Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C5 – Minor	Total road closures based on previous flood incidents with alternative route available (unspecified time). Date accessed: 21/11/23
- [region] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management . Plans NPWS Plans of Management Aboriginal heritage information . management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C5 – Minor	Highways owned by TfNSW, however, cannot locate management plans for roads.
Economic value to the economy	Regional Plans NSW Regional Economic_ Development Strategies TraNSIT Web (csiro.au) Value of Agricultural_ commodities Produced, Australia Strategic Freight Forecasts commodity origin map Strategic Freight Forecasts commodity origin map Strategic Freight Forecasts commodity destination map	C1 – Catastrophic	(Moree Plains = \$2.7 bil) TraNSIT. Date accessed: 20/11/23
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant	Special protection zones (Boggabilla and Mungindi Ops Centre).



Likelihood

A Natural Disaster can differ in type and intensity. In this assessment, flood risk is most likely to interrupt the Narrabri Area 1 Customer Journey.

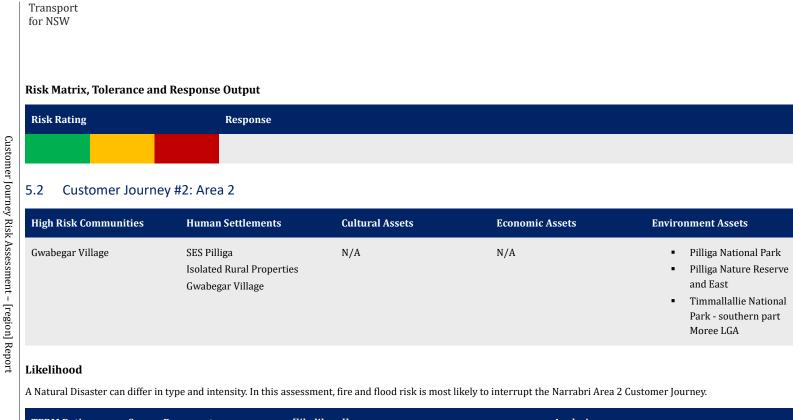
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L2 – Very Likely	Hot days are projected to increase across the region by an average of 10-20 days per year. Mean temperatures are projected to rise by 0.7°C by 2030 in the New England and North West LGA, but little change in annual rainfall by 2030.

Transport for NSW			
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L3 – Likely	9 Natural Disaster Declarations in the last 6 years (2018 - 2023). This includes bushfires, severe weather, flooding and storms. Date Accessed: 27/11/23
	for NSW TERM Rating (Descriptor) Quantitative	for NSW TERM Rating (Descriptor) Source Documents Quantitative Frequency Historic incidents of fire by LGA NSW Natural disaster_ declarations NSW Natural disaster_ declarations	for NSW TERM Rating (Descriptor) Source Documents [likelihood] Quantitative Frequency Historic incidents of fire by LGA NSW Natural disaster_ declarations L3 - Likely

Transport

	for NSW			
	Consequences			
	Consequence	Source Documents	[consequence]	Analysis
Customer ou	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	Single fatality and/or more than 20 serious injuries. Date accessed: 23/11/23
Customer Journey Risk Assessment – [region] Report	Everyday Service Delivery High Risk Communities	Traffic (TFNSW) Volumes Report Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C2 – Severe	GeoHub road status incidents. Date accessed: 29/11/23
	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management . Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey. Date Accessed: 29/11/23
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C6 – Insignificant	TfNSW own Kamilaroi Highway, investment into maintenance of highway,
Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$1.4 billion freight value outbound from Narrabri. Date accessed: 28/11/23
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant	No major technology and public utility assets identified. Wee Waa Levee identified, however this involves flood prevention, rather than water supply. Date accessed: 8/01/24.



TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L2 – Very Likely	Council Assessment

	Transport for NSW			
	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Journey Risk Assessment – [region] Report	Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L2 – Very Likely	9 Natural Disaster Declarations in the last 6 years (2018 - 2023). This includes bushfires, severe weather, flooding and storms.
				Date accessed: 27/11/23
	Consequences			
essmei	Consequence	Source Documents	[consequence]	Analysis
ent – [region] R	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 4 seriously injured (2018 - 2022).
				Data accessed, 22/11/22
n] Rep				Date accessed: 23/11/23
n] Report	Everyday Service Delivery	<u>Traffic (TFNSW) Volumes Report</u> Road classifications	C2 – Severe	Date accessed: 23/11/23 Extensive road closures in flood incidents. Limited alternative routes available for heavy vehicles.
n] Report		<u>Traffic (TFNSW) Volumes Report</u>	C2 – Severe	Extensive road closures in flood incidents. Limited

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
			Date accessed: 29/11/23
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Cypress Way, Pilliga Road captured in road strategy. Both roads have maintenance plans.
Economic value to the economy	Regional Plans NSW Regional Economic. Development Strategies TraNSIT Web (csiro.au) Value of Agricultural. Commodities Produced. Australia Strategic Freight Forecasts commodity origin map. Strategic Freight Forecasts commodity destination map.	C1 – Catastrophic	\$1.4 billion freight value outbound from Narrabri. Date accessed: 28/11/2023

Transport for NSW				
Consequence	Source Documents	[consequence]	Analysis	
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant	No identified high-ri	sk tech or public utility assets.
Risk Matrix, Tole	erance and Response Output			
Risk Rating	Response			
5.3 Custome High Risk Commu	er Journey #3: Area 3 Inities Human Settlemen	ts Cultural Assets	Economic Assets	Environment Assets
N/A	Mt Kaputar Nationa camping ground	l Park • Deriah Aboriginal Area • Willala Aboriginal Area	 Mt Kaputar Communications Broadcast Australia Facility Mt. Kaputar (Mt Dowe) 	 Bullawa Creek State Conservation Area Couradda National Park

Moema National Park

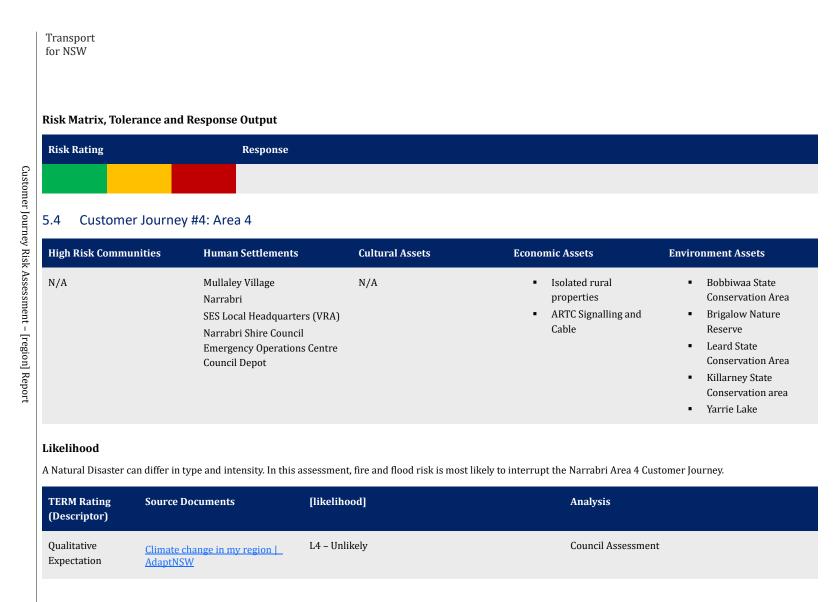
Mt Kaputar

Transport for NSW Likelihood A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Narrabri Area 3 Customer Journey. **TERM Rating Source Documents** [likelihood] Analysis (Descriptor) Qualitative L2 – Very Likely **Council Assessment** Climate change in my region Expectation AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data Quantitative L2 – Very Likely 9 Natural Disaster Declarations in the last 6 years Historic incidents of fire by LGA (2018 - 2023). This includes bushfires, severe Frequency NSW Natural disaster weather, flooding and storms. declarations TfNSW Spatial Data Tool Date accessed: 27/11/23

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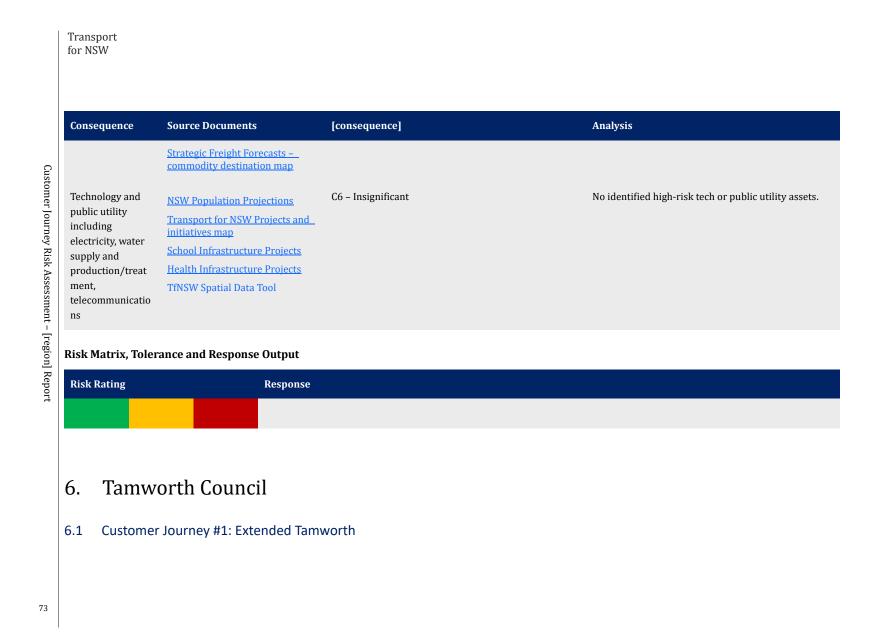
Transport for NSW			
Consequences			
Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 4 seriously injured (2018 - 2022) Date accessed: 23/11/23
Everyday Service Delivery High Risk Communities	Traffic (TFNSW) Volumes Report Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C4 – Moderate	Total road closures have occurred with alternative routes available adding 1-3 hours of travel time Date accessed: 29/11/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C3 – Major	Areas like the Bullawa Creek State Conservation Area have significant floral species richness with a range of vulnerable fauna species in Willala. No hazard reduction burning plans in place. Date accessed: 29/11/23
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C3 – Major	Willala Aboriginal Area hosts historic graffiti that easily weathers and other historic features that are partially destroyed. Date accessed: 29/11/23

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C1 – Catastrophic	Kaputar Road owned by Council, cannot identify evidence of plans and investment.
Economic value to the economy	Regional PlansNSW Regional Economic_ Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural_ Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$1.4 billion freight value outbound from Narrabri.
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C2 – Severe	Broadcast Australia Facility Mt Kaputar / Governor Radio Repeater Site, Priority 1B and 1C.



	Transport for NSW			
	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Journey Risk Assessment – [region] Report	Quantitative Frequency	NSW and ACT Regional Climate Model (NARCliM) data Historic incidents of fire by LGA NSW Natural disaster declarations TfNSW Spatial Data Tool	L2 – Very Likely	9 Natural Disaster Declarations in the last 6 years (2018 - 2023). This includes bushfires, severe weather, flooding and storms. Date accessed: 27/11/23
essment	Consequences			
- [regi	Consequence	Source Documents	[consequence]	Analysis
- [region] Report	Consequence Safety	Source Documents TfNSW crash and incident data TfNSW Spatial Data Tool	[consequence] C3 – Major	Analysis Approximately 4 seriously injured (2018 - 2022). Date accessed: 23/11/23
- [region] Report	Safety Everyday Service Delivery	TfNSW crash and incident data		Approximately 4 seriously injured (2018 - 2022).
– [region] Report	Safety Everyday Service	TfNSW crash and incident data TfNSW Spatial Data Tool <u>Traffic (TFNSW) Volumes Report</u>	C3 – Major	Approximately 4 seriously injured (2018 - 2022). Date accessed: 23/11/23 Severe flooding in Narrabri results in community
- [region] Report	Safety Everyday Service Delivery High Risk	TfNSW crash and incident data TfNSW Spatial Data Tool Traffic (TFNSW) Volumes Report Road classifications TfNSW Network Restriction Reports	C3 – Major	Approximately 4 seriously injured (2018 - 2022). Date accessed: 23/11/23 Severe flooding in Narrabri results in community isolation with no alternative routes available.

Transport for NSW				
	Consequence	Source Documents	[consequence]	Analysis
<u><u></u></u>	vulnerability, or sensitivities			
	Cultural assets include Aboriginal, non-indigenous	<u>NSW Bushfire Risk Management</u> <u>Plans</u>	C5 – Minor	Several Aboriginal cultural heritage sites located in environmental assets.
Cintomor Journay Dials Accordment [region] Depart	historical, and other cultural assets	NPWS Plans of Management Aboriginal heritage information management system State heritage inventory		Date accessed: 29/11/23
	Financial	Maritime heritage database Transport for NSW Corridor Plans Local Government Asset Management Plans	C2 – Severe	Grain Valley Road owned by Council and included in network strategy plan. Investment unclear.
-	Economic value to the economy	Regional Plans NSW Regional Economic Development Strategies TraNSIT Web (csiro.au) Value of Agricultural Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map	C1 – Catastrophic	\$1.4 billion freight value outbound from Narrabri. Date accessed: 28/11/23
		commonly origin map		



Transport for NSW

Hanging Rock VillageHanging Rock Community HallN/AMiddleton PrivateN/ALindesayDuri Public SchoolPlantations (North and South)Plantations (North and South)LindesayWollomin Public SchoolNundle State Forest (East and West)-Niangala VillageNundle Public SchoolDungowan Dam Catchment-Moore CreekLoomberah Community Hall (RFS)Dungowan Dam CatchmentOgunbil Community Hall (RFS)Chaffey DamDungowan Public SchoolMt Baldwin Communications TowerHanging Rock VillageNtagaarah RepeaterHorton Falls Rd-Nangarah RepeaterLimbri VillageNiangala Village-Dungowan Sport and Rec Ground-Niangala VillageWoolominNiangala VillageWoolomin VillageWoolomin VillageWoolomin VillageWoolomin VillageWarrabahWarrabahHorton Falls RdWoolomin VillageWoolomin VillageWoolomin Village <t< th=""><th>High Risk Communities</th><th>Human Settlements</th><th>Cultural Assets</th><th>Economic Assets</th><th>Environment Assets</th></t<>	High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
	Lindesay Lindesay Lindesay Niangala Village	Duri Public SchoolNiangala Public SchoolWollomin Public SchoolNundle Public SchoolLoomberah Community Hall(RFS)Ogunbil Community Hall (RFS)Dungowan Public SchoolLynchwood Scout CampHanging Rock VillageHorton Falls RdLimbri VillageAttunga VillageNiangala VillageWoolominWoolomin VillageOgunbil Village	N/A	 Plantations (North and South) Nundle State Forest (East and West) Dungowan Dam Catchment Chaffey Dam Mt Baldwin Communications Tower Nangarah Repeater Community Hall (RFS) Dungowan Sport and 	N/A

Likelihood

A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Extended Tamworth Customer Journey.

	Transport for NSW			
	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Journey Risk Assessment	Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L2 – Very Likely	Mean temperatures are projected to rise by 0.7°C by 2030 in the New England and North West LGA, but little change in annual rainfall by 2030. Hot days are projected to increase across the region by an average of 7 days per year by 2030.
Risk Assessment -	Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L2 – Very Likely	13 Natural Disaster Declarations between 2018 and 2023. Date accessed: 23/11/23
- Fe				

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Transport for NSW

Consequences

Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C1 – Catastrophic	Approximately 28 seriously injured and 4 killed from Barraba through to Attunga along Manilla Rd, turnoff to Moonbi, and then south on New England Highway to Nemingha (2018 - 2022) Date accessed: 23/11/23
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C4 – Moderate	2 day closures with alternative route available. Date accessed: 30/11/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C3 – Major	Nundle Satte Forest is a habitat to several endangered to critically endangered animal species. Fire management plans are in place (RFMS) but not extensive. Date accessed: 29/11/23
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management . <u>Plans</u> <u>NPWS Plans of Management</u> <u>Aboriginal heritage information</u> <u>management system</u>	C6 – Insignificant	No cultural assets identified along journey.

	Transport for NSW					
	Consequence	Source Documents	[consequence]	Analysis		
Circto		<u>State heritage inventory</u> <u>Maritime heritage database</u>				
mer Inirnev Rick	Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C4 – Moderate	Manilla Road - Regional road. No asset management plan.		
Customer Tourney Rick Assessment - Fredion Benort	Economic value to the economy	Regional PlansNSW Regional Economic_ Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural_ Commodities Produced, AustraliaStrategic Freight Forecasts commodity forecast mapStrategic Freight Forecasts commodity origin mapStrategic Freight Forecasts commodity destination map	C1 – Catastrophic	\$3.5 billion freight task value in Tamworth (road only). Date accessed: 23/11/23		
	Technology and public utility including electricity, water supply and production/treat ment,	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects	C1 – Catastrophic	Mt Baldwin Comms Tower (Moderate) Niangala Public School rated at catastrophic consequence. Date accessed: 23/11/23		

Transport for NSW				
Consequence	Source Documents	[consequence]	Analysis	
telecommunicatio ns	TfNSW Spatial Data Tool			
Risk Matrix, Tolera	ance and Response Output			
Risk Rating	Respons	e		
6.2 Customer	Journey #2: New Englar	d		
High Risk Commun	ities Human Settleme	nts Cultural Assets	Economic Assets	Environment Assets
Watson Creek Villag	e Wtason Creek Vill Timbumburi Publ Tintinhull Public Bendemeer Town Moonbi Village Pindari Estate	ic School School	ion • Mt Bullimbulla Communications Tower (Moonbi Trig) • Moonbi Observatory	N/A

Likelihood

A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the New England Customer Journey.

Transport for NSW			
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L3 – Likely	Council Assessment
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L2 – Very Likely	13 Natural Disaster Declarations between 2018 and 2023. Date accessed: 23/11/23
Consequences			
Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C1 – Catastrophic	Approximately 18 seriously injured and 2 killed in road accidents from Timbumburi, Bendeemer to Watsons creek. Date accessed: 23/11/22
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C4 – Moderate	2 hour closures that prohibited heavy vehicles from passing. Alternative routes exist with an unspecified amount of added time to journey. Date accessed: 30/11/23

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Containing Tanana	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
C D C C	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C5 – Minor	Singular cultural asset (Goonoo Goonoo Station) that has been restored in recent years. Date accessed: 29/11/23
	Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C4 – Moderate	Oxley Highway NE Highway
	Economic value to the economy	Regional Plans <u>NSW Regional Economic</u> <u>Development Strategies</u> <u>TraNSIT Web (csiro.au)</u> <u>Value of Agricultural</u> <u>Commodities Produced, Australia</u>	C1 – Catastrophic	\$3.5 billion freight task value in Tamworth (road only). Date accessed: 23/11/23

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C1 - Catastrophic	Mt Baldwin Comms Tower (Moderate) Niangala Public School rated at catastrophic consequence. Date accessed: 23/11/23

Risk Matrix, Tolerance and Response Output



Transport for NSW

High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Tamworth East Kingswood Mount Falcon Estate	Burgmans LaneKingswood EstateCalalaCalala LaneNorth TamworthRural PropertiesJewry Street (west of PeelRiver)Kable Avenue/Peel StreetKia-Ora LaneOxley ValePeel StreetRoberts RoadTamworth EastNew England HighwayScotts RoadKingswood EstateLynchwood Scout CampWhitehouse LaneMount Falcon EstateFarrer Agricultural High SchoolFarres Memorial AgriculturalHigh SchoolCalrossy and William CowperNemingha Public School	N/A	 Bald Hill Communications Tower Kable Avenue/Pee Street Natural Gas Pump Station Peel Street Flagstaff Communications Repeater Botanic Gardens Endeavour Park Lynchwood Scout Camp 	ing

Transport for NSW Likelihood A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Tamworth City Customer Journey. **TERM Rating Source Documents** [likelihood] Analysis (Descriptor) Qualitative L2 – Very Likely **Council Assessment** Climate change in my region Expectation AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data Quantitative L2 – Very Likely Historic incidents of fire by LGA Frequency 13 Natural Disaster Declarations between 2018 and NSW Natural disaster 2023. declarations TfNSW Spatial Data Tool Date accessed: 23/11/23

	Transport for NSW			
	Consequences			
	Consequence	Source Documents	[consequence]	Analysis
Customer Journey Risk Assessment -	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C1 - Catastrophic	Approximately 54 seriously injured and 3 killed in road accidents in the town of Tamworth (2018 - 2022). Date accessed: 23/11/22
Risk Assessment – [regi	Everyday Service Delivery High Risk Communities	Traffic (TFNSW) Volumes Report Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C1 – Catastrophic	Extended road closures in Tamworth result in community isolation with no alternative routes for heavy vehicles specified. Date accessed: 30/11/23
[region] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C5 – Minor	A few gardens and parks however no significant concerns.
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory	C6 – Insignificant	No environmental assets identified along journey.

ransport or NSW			
Consequence	Source Documents	[consequence]	Analysis
	Maritime heritage database		
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Upper Moore Creek Road has investment from Tamworth Council for upgrades. Date accessed: 23/11/22
	Management Plans		
Economic value to the economy	<u>Regional Plans</u> <u>NSW Regional Economic</u> <u>Development Strategies</u>	C1 – Catastrophic	\$3.5 billion freight task value in Tamworth (road only)
	TraNSIT Web (csiro.au) Value of Agricultural Commodities Produced, Australia		Date accessed: 23/11/22
	<u>Strategic Freight Forecasts -</u> <u>commodity forecast map</u> Strategic Freight Forecasts -		
	<u>commodity origin map</u> <u>Strategic Freight Forecasts –</u> <u>commodity destination map</u>		
Technology and	NSW Population Projections	C5 – Minor	Bald Hill Comms Tower.
public utility including electricity, water	Transport for NSW Projects and initiatives map		Date accessed: 23/11/22
supply and production/treat	School Infrastructure Projects Health Infrastructure Projects		
ment,	TfNSW Spatial Data Tool		

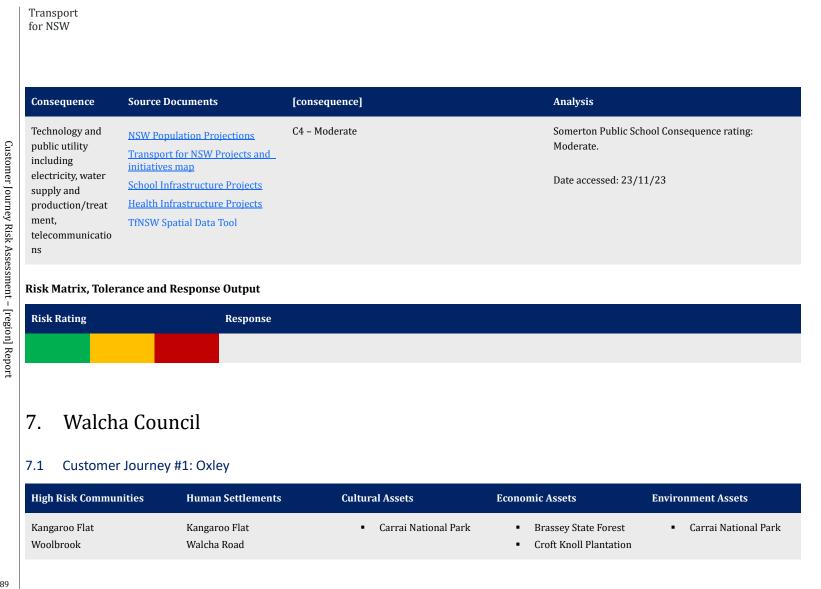
Transport for NSW					
Consequence	Source Documents	[cons	equence]	Analysis	
telecommunicatio ns					
Risk Matrix, Tole	erance and Response Outpu	ıt			
Risk Rating	Respo	onse			
6.4 Custome High Risk Comm	er Journey #4: Oxley unities Human Settle	ments	Cultural Assets	Economic Assets	Environment Assets
N/A	Somerton Publ Somerton Villa		N/A	N/A	N/A
TERM Rating	an differ in type and intensity. I Source Documents		ent, fire and flood risk is mos ihood]	likely to interrupt the Oxley Cust Analysis	omer Journey.
(Descriptor) Qualitative Expectation	<u>Climate change in my regior</u> <u>AdaptNSW</u> <u>NSW and ACT Regional Clim</u> <u>Model (NARCliM) data</u>		.ikely	higher me	ssified as likely as there is a chance of an temperatures and a higher frequency of ver 35 degrees.

Transport for NSW			
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L2 – Very Likely	13 Natural Disaster Declarations between 2018 and 2023. Date accessed: 23/11/23
Consequences			
Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 5 seriously injured along Oxley Highway, Somerton (2018 - 2022). Date accessed: 23/11/22
Everyday Service	Traffic (TENSW) Volumes Report	C6 – Insignificant	No prior road closures recorded due to natural

Consequences

Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 5 seriously injured along Oxley Highway, Somerton (2018 - 2022).
			Date accessed: 23/11/22
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports	C6 – Insignificant	No prior road closures recorded due to natural hazards. Data accessed: 30/11/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C5 - Minor	Oxley Highway
Economic value to the economy	Regional Plans NSW Regional Economic_ Development Strategies TraNSIT Web (csiro.au) Value of Agricultural_ commodities Produced, Australia Strategic Freight Forecasts commodity forecast map Strategic Freight Forecasts commodity origin map Strategic Freight Forecasts commodity destination map	C1 – Catastrophic	\$3.5 billion freight task value in Tamworth (road only). Date accessed: 23/11/23



Transport for NSW

High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
	Woolbrook Yarrowitch Yarrowitch Public School	 Werrikimbe National Park Yarrowitch River Hut and Stock Yards Youdales Mill Hut Birds Nest Hut & Stock Yards Deep Gully Hut Green Gully Hut and Stock Yards Walcha Road Railway Station & Yard Group Mooraback Hut 	 Enfield State Forest Wild Dog Fence (Western side of Oxley Wild Rivers NP) Walcha Landfill/Transfer Station Walcha Water Treatment Plant Woolbrook Landfill/Transfer Station Youdales Hut & Stock Yards Mary's View 	 Werrikimbe National Park Mummel Gulf National Park Enfield State Forest Cottan Bimbang NP

Likelihood

A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Oxley Customer Journey.

TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L2 – Very Likely	Council Assessment. *Note: this might be an over-estimated risk based on climate change projections Little change in rainfall, 0 to 0.5 change in number of days a year FFDI > 50 (high fire danger days), little to

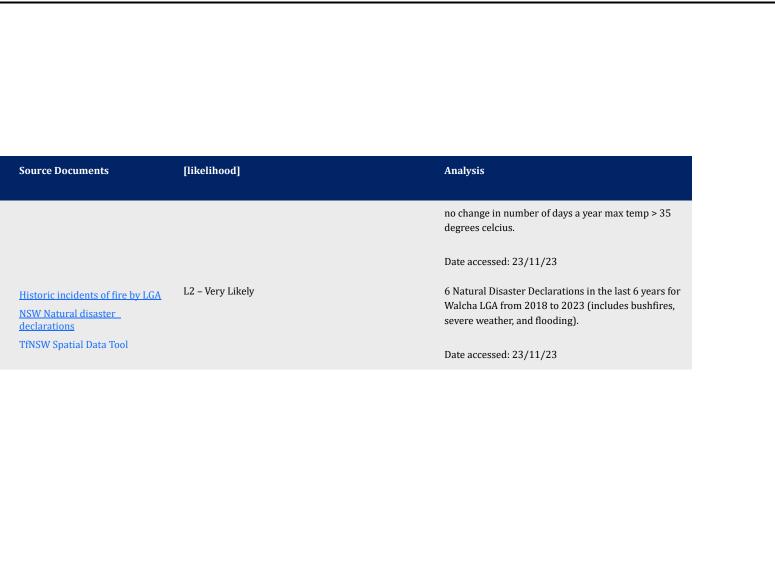
Transport for NSW

TERM Rating

(Descriptor)

Quantitative

Frequency



Consequences				
Consequence	Source Documents	[consequence]	Analysis	
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C1 – Catastrophic	Approximately 5 killed and 7 seriously injured from Woolbrook along Oxley Hwy through Yarrowitch (2018 - 2022).	
			Date Accessed: 23/11/23	
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction	C3 – Major	Road closures due to bushfires with alternative routes adding 2-3 hours of travel time. Historically road closure has lasted 19 days.	
	Reports TfNSW Spatial Data Tool		Date accessed: 30/11/23	
Environment is natural considerations, environmental vulnerability, or	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C2 – Severe	Multiple environmental assets host to various endangered species. Some of these are susceptible to frequent, high intensity fires but with management plans in place (Werrikimbe).	
sensitivities			Date accessed: 30/11/23	
Cultural assets include Aboriginal, non-indigenous	NSW Bushfire Risk Management Plans	C2 – Severe	Many cultural assets within region, some without proper planning or management (Carrai NP).	
historical, and other cultural assets	NPWS Plans of Management Aboriginal heritage information management system State heritage inventory		Date accessed: 30/11/23	

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
0		Maritime heritage database		
ustomer Journey	Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C5 – Minor	Oxley Highway: https://www.transport.nsw.gov.au/sites/default/files /media/documents/2017/oxley-highway-draft- corridor-strategy.pdf
Risk Asses				No evidence of plans or investment into Kangaroo Flat Road, coachwood road, etc.
Customer Journey Risk Assessment – [region] Report	Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$600 million as per TraNSIT data.
	Technology and public utility including electricity, water supply and	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects	C3 – Major	Yarrowitch Public School: Major Walcha Water Treatment Plant: Moderate.

	Transport for NSW				
	Consequence	Source Documents	[consequence]	Analysis	
Customer Iournev Risk Assessment – [region] Report	production/treat ment, telecommunicatio ns	<u>Health Infrastructure Projects</u> TfNSW Spatial Data Tool			
ournev	Risk Matrix, Toler	ance and Response Output			
Risk As	Risk Rating	Response			
sessmei					
ıt – [reg	7.2 Customer				
		Journey #2: Thunderbolts			
ion] Re	High Risk Commur		Cultural Assets	Economic Assets	Environment Assets

	unities Human Settlements	Cultural Assets	Economic Assets Environment Assets
		 Left Hand Hut Middle Yards Hut Sunnyside Woolshed Tin Hut 	
likelihood			
	can differ in type and intensity. In this a	assessment, fire and flood risk is most likely to	o interrupt the Thunderbolts Way Customer Journey.
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L3 – Likely	*Note: this might be an over-estimated risk based or climate change projections Little change in rainfall, 0 to 0.5 change in number o
			days a year FFDI > 50 (high fire danger days), little t no change in number of days a year max temp > 35 degrees Celsius.
			Date accessed: 23/11/23
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u>	L2 – Very Likely	6 Natural Disaster Declarations in the last 6 years fo Walcha LGA from 2018 to 2023 (includes bushfires, severe weather, and flooding).

Transport for NSW

Consequences

Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C1 – Catastrophic	Approximately 2 killed and 15 seriously injured between 2018 and 2022. Note: this route encapsulate a North to South tragectory between Walcha and south on Thunderbolts Way and Niangala Road. Date Accessed: 23/11/23
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C3 – Major	Road closures due to bushfires with alternative routes adding 2-3 hours of travel time. Historically road closure has lasted 19 days. Date accessed: 30/11/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C3 – Major	Many environmental assets host to various endangered flora/fauna, some with a diverse range of ecosystems. Specific fire management strategies in place.
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management	C1 – Catastrophic	Date accessed: 30/11/23 Extensive cultural assets within region, some damaged by natural weathering and human impacts (stone artifacts). Date accessed: 30/11/23

Consequence	Source Documents	[consequence]	Analysis
	<u>State heritage inventory</u> <u>Maritime heritage database</u>		
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C5 – Minor	Oxley Highway: https://www.transport.nsw.gov.au/sites/default/file /media/documents/2017/oxley-highway-draft- corridor-strategy.pdf No evidence of plans or investment in other regional/local roads. Date accessed: 8/01/24
Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$600 million as per TraNSIT data.
Technology and public utility	NSW Population Projections	C3 – Major	Nowendoc Public School RFS rating: Major.

Transport for NSW				
Consequence	Source Documents	[consequence]	Analysis	
including electricity, water supply and production/treat ment, telecommunicatio ns Risk Matrix, Tolen Risk Rating	<u>Transport for NSW Projects and initiatives map</u> <u>School Infrastructure Projects</u> <u>Health Infrastructure Projects</u> TfNSW Spatial Data Tool			
Risk Matrix, Toler	rance and Response Output			
	Response			
8. Glenn	Innes Council			
8.1 Customer	r Journey #1: Gwydir nities Human Settlement	s Cultural Assets	Economic Assets	Environment Assets

ingii kisk communities	Human Settlements	Guitaran Assets	Leonomic Assees	Life in online it insides
N/A	Glen Innes Corrections Centre Isolated Dwellings Wellingrove Isolated Rural Properties	 Washpool National Park Gibraltar Range Gilbratar House 	 Mount Mitchell Frog Hollow Repeater Beardy Waters Woodland 	 Washpool National Park Gibraltar Range

Transport for NSW				
High Risk Commu	inities Human Settlement	s Cultural Assets	Economic Assets	Environment Assets
	Matheson		 Boundary Falls Campground Mulligans Campground Raspberry Lookout 	d
Likelihood A Natural Disaster o	an differ in type and intensity. In this	assessment, fire and flood risk is mos	st likely to interrupt the Gwydir Customer	ourney.
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis	
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L4 – Unlikely	mountain regions around Glenn Inne Cold nights are pr England North We by 2030. The grea eastern mountain which is projected fewer nights per y considerable impa	e to days above 35°C in the of the New England North West, ess. No major changes in the FFDI. ojected to decrease across the New set by an average of 9 days per year test decreases are seen in the ous region around Glenn Innes, to experience an additional 10-2C ear. Changes in cold nights can hav test on native ecosystems and reliant on cold winters.
Quantitative Frequency	Historic incidents of fire by LGA	L2 – Very Likely	for Glenn Innes LO	/11/23 er Declarations in the last 6 years GA from 2018 to 2023 (includes weather, storms and flooding).

Transport for NSW			
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Lourney Bick Accessment - Frecion Benort	<u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool		Date accessed: 22/11/23
2			

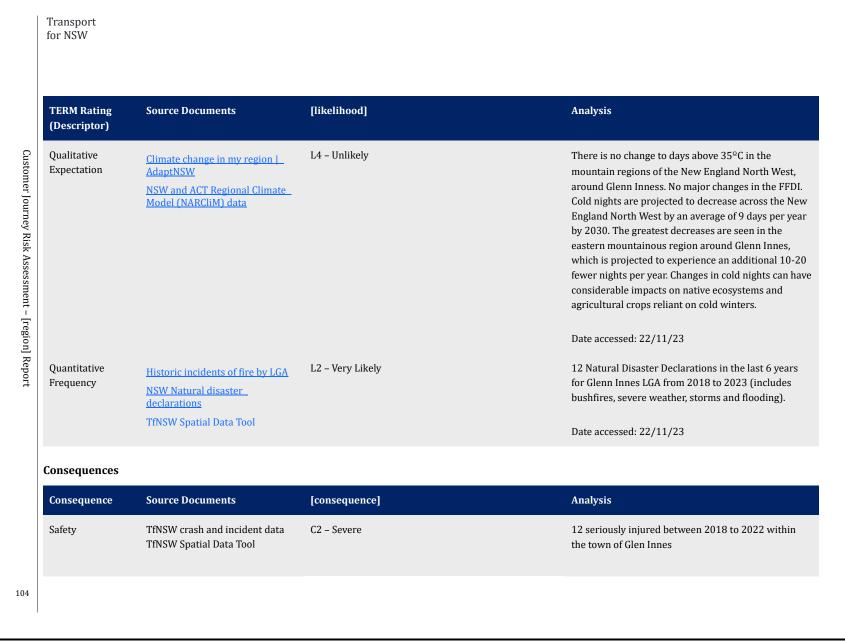
Transport for NSW

Consequences

Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	 10 - 11 seriously injured between 2018 to 2022, and 2 fatalities over the same time period. Note: These fatalities and casualties cover the Gwydir Highway (Moogem to Glen Innes) and Strathbogie Road. This does not include fatalities or injuries within the town of Glen Innes. Date accessed: 22/11/23
Everyday Service Delivery High Risk Communities	Traffic (TFNSW) Volumes Report Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C2 – Severe	Previous fire incidents resulted in total road closure for 5 days with alternative routes unsuitable for heavy vehicles. Date accessed: 22/11/23
Environment is natural considerations, environmental vulnerability, or sensitivities	C2 – Severe	Frequent fires occur in national parks and can sustain rapidly moving, high intensity fires. Date accessed: 22/11/23	
Cultural assets include Aboriginal, non-indigenous historical, and	<u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C3 – Major	Natural parks are also cultural assets that would be partially destroyed in bushfires. Date accessed: 22/11/23

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
other cultural assets	Aboriginal heritage information management system State heritage inventory Maritime heritage database		
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C5 – Minor	Gwydir Highway owned by TfNSW. Investing to improve flood immunity. Cannot locate plans. Investment in place to upgrade. No data on Strathbogie Road. Date accessed: 22/11/23
Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$700 mil - Freight value in glen innes by road.Beef is primary freight. Date accessed: 22/11/23
Technology and public utility including	NSW Population Projections	C3 – Major	Frogs Hollow Repeater major consequence as per BFRMP.
	for NSW Consequence other cultural assets Financial Economic value to the economy Technology and public utility	for NSWConsequenceSource Documentsother cultural assetsAboriginal heritage information management system State heritage inventory Maritime heritage databaseFinancialTransport for NSW Corridor Plans Local Government Asset Management PlansEconomic value to the economyRegional Plans NSW Regional Economic Development Strategies TraNSIT Web (csiro.au) Value of Agricultural Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination mapTechnology and public utilityNSW Population Projections	for NSW Consequence Source Documents [consequence] other cultural assets Aboriginal heritage information. management system State heritage inventory Maritime heritage database

	Source Documents	[consequence]	Analysis	
electricity, water supply and production/treat ment, telecommunicatio ns isk Matrix. Toler	Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	_	Date accessed: 22	/11/23
Risk Rating	Response	:		
.2 Customer High Risk Commu	Journey #2: Glen Innes nities Human Settlemer	nts Cultural Assets	Economic Assets	Environment Assets
	Glen Innes	N/A	 Glen Innes Substation 	N/A



for NSW			
Consequence	Source Documents	[consequence]	Analysis
			Date accessed: 22/11/23
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C4 – Moderate	Gwydir Highway has been closed in previous back burning events. Alternative routes prioritised for local residents, none specified for heavy vehicles Date accessed: 22/11/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	t C6 – Insignificant	No environmental assets identified along journey.
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database		No cultural assets identified along journey.
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C5 – Minor	TfNSW own Gwydir Highway, New England Highwa Plans along highway. No plans for Church Street. Date accessed: 22/11/23

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Customer Journey Risk Assessment – [reg	Economic value to the economy	Regional Plans NSW Regional Economic Development Strategies TraNSIT Web (csiro.au) Value of Agricultural Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$700 mil - Freight value in glen innes by road.Beef is primary freight.
[region] Report	Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C4 – Moderate	Glen Innes Water Treatment Plant at moderate consequence as per BFRMP. Date accessed: 22/11/23

Risk Matrix, Tolerance and Response Output



Transport for NSW Customer Journey #3: New England 8.3 **High Risk Communities** Human Settlements **Cultural Assets Economic Assets Environment Assets** N/A Bullock Mountain Homestead N/A Stone Henge N/A **Isolated Rural Properties** Dundee RFS station and Rural Properties Deepwater township Likelihood A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the New England Customer Journey. **TERM Rating Source Documents** [likelihood] Analysis (Descriptor) Qualitative L5 - Very Unlikely Council Assessment. Climate change in my region Expectation AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data Quantitative L2 – Very Likely 12 Natural Disaster Declarations in the last 6 years Historic incidents of fire by LGA Frequency for Glenn Innes LGA from 2018 to 2023 (includes NSW Natural disaster bushfires, severe weather, storms and flooding). declarations TfNSW Spatial Data Tool Date accessed: 22/11/23

	Transport for NSW			
	Consequences			
	Consequence	Source Documents	[consequence]	Analysis
Customer lourn	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	1 killed and 10 seriously injured over 2018 - 2022 on the New England Hwy Date accessed: 22/11/23
Customer Journev Risk Assessment – [region] Report	Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C6 – Insignificant	Flooding on New England Hwy resulted in total road closure for < 1 day. Heavy vehicle travel was still permitted. Date accessed: 23/11/23
egion] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C6 – Insignificant	TfNSW own New England Highway. Plans along highway. Date accessed: 22/11/23
Economic value to the economy	Regional Plans NSW Regional Economic Development Strategies TraNSIT Web (csiro.au) Value of Agricultural Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$700 mil - Freight value in glen innes by road.Beef is primary freight.
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant	No public utility or technology assets identified as at risk as per Consolidated Council Data for NENW.

Risk Rating	Resp	onse		
3.4 Custome	er Journey #4: Emmavill	e		
High Risk Comm	unities Human Settle	ments Cultural Assets	Economic Assets	Environment Assets
Emmaville Towns	hip Isolated Rural Rummery's Hi Kangawalla Emmaville Lan Mount Mitche	ll nd Fill	N/A	N/A
L ikelihood A Natural Disaster (can differ in type and intensity.	In this assessment, fire and flood risk is 1	nost likely to interrupt the Emmaville (Customer Journey.
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis	
Qualitative Expectation	<u>Climate change in my regio</u> <u>AdaptNSW</u>	L3 – Likely	Council Ass	essment.

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	Transport for NSW			
	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Journey Risk Assessment – Tregion] Report	Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L2 – Very Likely	12 Natural Disaster Declarations in the last 6 years for Glenn Innes LGA from 2018 to 2023 (includes bushfires, severe weather, storms and flooding). Date accessed: 22/11/23
Dialy Ace	Consequences			
beemar	Consequence	Source Documents	[consequence]	Analysis
t [rogion] D	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	2 seriously injured over 2018 - 2022. Date accessed: 22/11/23
	Everyday Service	Traffic (TFNSW) Volumes Report	C(Insissificant	
		Tranic [TFNSw] volumes Report	C6 – Insignificant	Past fires did not result in total road closures.
	Delivery High Risk Communities	Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C6 – Insignificant	Past fires did not result in total road closures. Date accessed: 23/11/23

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Customer Journey Risk Assessment - [region] Report	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management . Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.
ssessment – [regi	Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C2 – Severe	Emmaville road is regional road. New England Road Network Strategy exists. Unsure if investment in place.
2 x1 D2x22++	Economic value to the economy	Regional Plans NSW Regional Economic Development Strategies TraNSIT Web (csiro.au) Value of Agricultural commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$700 mil - Freight value in Glen Innes by road. Beef is primary freight.

Transport for NSW				
Consequence	Source Documents	[consequence]	Analysis	
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant		lity or technology assets identified as at onsolidated Council Data for NENW.
Risk Matrix, Toler	ance and Response Output			
Risk Rating	Response			
8.5 Customer	Journey #5: Old Grafton Ro	ad		
High Risk Commu	nities Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Wytaliba	Isolated Rural Proper Wytaliba	ies N/A	N/A	N/A
Likelihood A Natural Disaster ca	n differ in type and intensity. In this a	ssessment, fire and flood risk is m	nost likely to interrupt the Old Grafton F	Road Customer Journey.

TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L2 – Very Likely	Council Assessment.
Quantitative Frequency	Historic incidents of fire by LGA <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L2 – Very Likely	12 Natural Disaster Declarations in the last 6 years for Glenn Innes LGA from 2018 to 2023 (includes bushfires, severe weather, storms and flooding).
			Date accessed: 22/11/23

Transport for NSW			
Consequences			
Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	1 seriously injured between 2018 – 2022. Date accessed: 22/11/23
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C5 – Minor	Bushfire incident resulted in total road closure for 1 day. Alternative routes available. Date accessed: 23/11/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C1 – Catastrophic	Frequent fires occur in national parks and can sustain rapidly moving, high intensity fires. Date accessed: 23/11/23
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	No risk rating	No data available on Old Grafton Road.
Economic value to the economy	Regional PlansNSW Regional Economic_ Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural_ Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$700 mil - Freight value in Glen Innes by road. Beef is primary freight.
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant	No public utility or technology assets identified as at risk as per Consolidated Council Data for NENW.

Risk Rating	Response	9		
8.6 Custom	er Journey #6: Red Range			
High Risk Comm	unities Human Settlemen	nts Cultural Assets	Economic Assets	Environment Assets
N/A	Isolated Rural Prop	perties N/A	N/A	N/A
Likelihood			ly to interrupt the Red Range Customer	
Likelihood			ly to interrupt the Red Range Customer Analysis	
Likelihood A Natural Disaster TERM Rating	can differ in type and intensity. In th	nis assessment, flood risk is most like [likelihood] L3 – Likely		Journey.
Likelihood A Natural Disaster TERM Rating (Descriptor) Qualitative	can differ in type and intensity. In th Source Documents <u>Climate change in my region _</u> <u>AdaptNSW</u> NSW and ACT Regional Climate	nis assessment, flood risk is most like [likelihood] L3 – Likely	Analysis Council Asse 12 Natural D for Glenn Inr	Journey.

	Transport for NSW			
	Consequences			
	Consequence	Source Documents	[consequence]	Analysis
Customer lou	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	2 killed and 8 seriously injured over 2018 – 2022. Date accessed: 22/11/23
Customer Journev Risk Assessment – [region] Report	Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C2 – Severe	Previous incidents resulted in extended total road closure with limited alternative routes available. Date accessed: 30/11/23
- [region] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C4 – Moderate	No identified road plans for this section of the New England Highway.
Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$700 mil - Freight value in Glen Innes by road. Beef is primary freight.
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant	No public utility or technology assets identified as at risk as per Consolidated Council Data for NENW.

Transport for NSW

Risk Matrix, Tolerance and Response Output

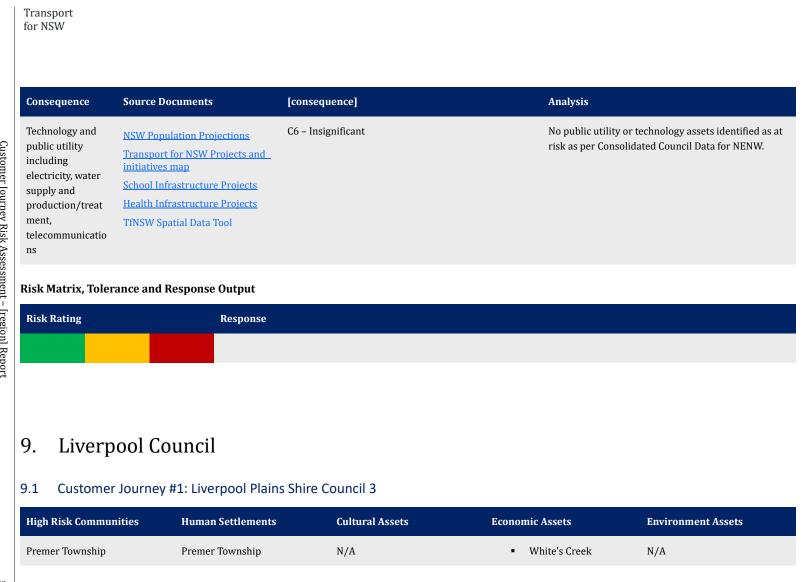
Risk Rating	Response			
8.7 Customer Journey	y #7: Blue Hills			
High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Glen Innes	Glen Innes	N/A	 Glen Innes 	N/A
			Landfill/Community Recycling	

Likelihood

TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L5 – Very Unlikely	Council Assessment.
Quantitative Frequency	Historic incidents of fire by LGA NSW Natural disaster declarations	L2 – Very Likely	12 Natural Disaster Declarations in the last 6 years for Glenn Innes LGA from 2018 to 2023 (includes bushfires, severe weather, storms and flooding).

Transport for NSW			
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
	TfNSW Spatial Data Tool		Date accessed: 22/11/23
Consequences			
Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C1 – Catastrophic	4 killed and 9 seriously injured between 2018 and 2022.
			Date accessed: 29/11/23
Everyday Service Delivery	Traffic (TFNSW) Volumes Report Road classifications	C2 – Severe	Previous incidents resulted in extended total road closure with limited alternative routes available.
High Risk Communities	High Risk TfNSW Network Restriction Communities Reports TfNSW Spatial Data Tool		Date accessed: 30/11/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Cultural assets include Aboriginal non-indigenous historical, and other cultural assets Financial Economic value to the economy	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C4 – Moderate	Gwydir Highway and New England Highway owned by TfNSW. No plans identified along this section of customer journeys.
Economic value to the economy	 Regional Plans NSW Regional Economic_ Development Strategies TraNSIT Web (csiro.au) Value of Agricultural_ Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map 	C5 – Minor	This customer journey is reference to a singular road on outskirts of Glen Innes. There is no corridor within this journey, therefore, reasonable assumption that little to no freight travels through this road.



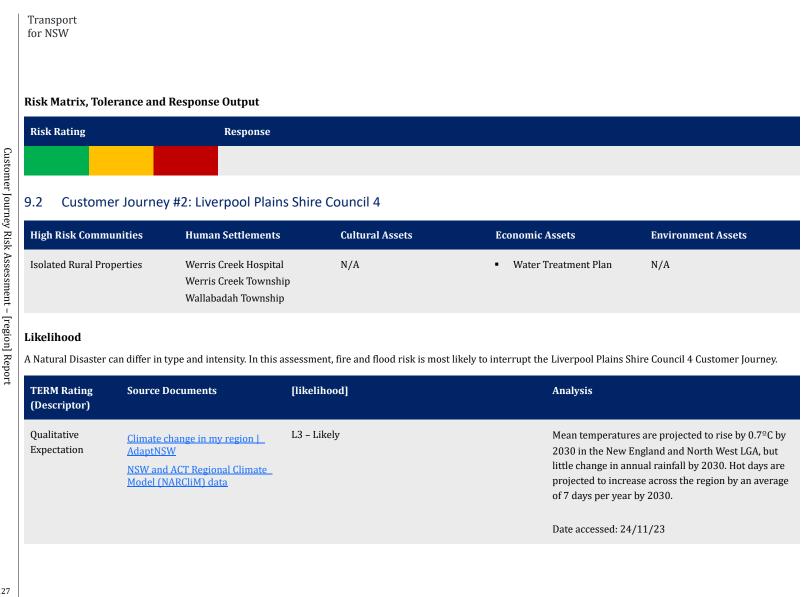
	Transport for NSW				
	High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
ב	Walhallow Settlement Spring Ridge Township Colly Blue Township Caroona Township Premer Township Spring Ridge Township	Pine Ridge Township Colly Blue Township Caroona Township Spring Ridge Township Walhallow Settlement		 Isolated Rural Properties Mt Tamarang Radio Site 	
·	Likelihood				

A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Liverpool Plains Shire Council 3 Customer Journey.

TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L3 – Likely	Mean temperatures are projected to rise by 0.7° C by 2030 in the New England and North West LGA, but little change in annual rainfall by 2030. Hot days are projected to increase across the region by an average of 7 days per year by 2030.
			Date accessed: 24/11/23
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u>	L3 – Likely	6 Natural Disaster Declarations in the last 6 years for Liverpool Plains LGA from 2018 to 2023 (includes bushfires and flooding).
	TfNSW Spatial Data Tool		Date accessed: 24/11/23

	Transport for NSW			
	Consequences			
	Consequence	Source Documents	[consequence]	Analysis
Customer Jou	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	1 killed 5 seriously injured between 2018 and 2022. Date accessed: 23/11/23
Customer Journey Risk Assessment – [region] Report	Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C5 – Severe	Total road closure for 1 day with alternative routes available. Date accessed: 30/11/23
- [region] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management . Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial Economic value to the economy	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Asset Management Plan for roads within Liverpool Plains Shire Council. Investment into Coonabarabran Road.
Economic value to the economy	Regional PlansNSW Regional Economic. Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural. Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$0.9 billion freight value outbound from Liverpool. Date accessed 28/11/23
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C3 – Major	Mt Tamarang Communications Site: Moderate. Premer Township - cannot access bore (water supply) in case of flood.



Transport for NSW			
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Quantitative Frequency Consequences Safety Everyday Service	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L3 – Likely	6 Natural Disaster Declarations in the last 6 years for Liverpool Plains LGA from 2018 to 2023 (includes bushfires and flooding). Date accessed: 24/11/23
Consequences			
Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	6 seriously injured between 2018 and 2022.
			Date accessed: 23/11/23
	<u>Traffic (TFNSW) Volumes Report</u>	C6 – Insignificant	No prior road closures recorded due to hazards.
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C6 – Insignificant	-

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Customer Journey Risk Assessment – [region] Report	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.
	Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Asset Management Plan for roads within Liverpool Plains Shire Council.
onl Renort	Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$0.9 billion freight value outbound from Liverpool. Date accessed: 28/11/2023

Transport for NSW				
Consequence	Source Documents	[consequence]	Analysis	
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C3 – Major	Werris Creek F cut off	lospital: Major. Water Treatment Plant
Risk Rating	Response			
9.3 Customer High Risk Commu	r Journey #3: Liverpool Pla nities Human Settlemen		Economic Assets	Environment Assets
Whodathoughtit Lo Boolah Gap		N/A	 Whodathoughtit Lookout Quirindi Water Sup 	N/A

Isolated Rural Properties

Transport for NSW Likelihood A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Liverpool Plains Shire Council 5 Customer Journey. Customer Journey Risk Assessment - [region] Report **TERM Rating Source Documents** [likelihood] Analysis (Descriptor) Qualitative L3 – Likely Mean temperatures are projected to rise by 0.7°C by Climate change in my region | Expectation AdaptNSW 2030 in the New England and North West LGA, but little change in annual rainfall by 2030. Hot days are NSW and ACT Regional Climate Model (NARCliM) data projected to increase across the region by an average of 7 days per year by 2030. Date accessed: 24/11/23 Quantitative L3 – Likely 6 Natural Disaster Declarations in the last 6 years for Historic incidents of fire by LGA Frequency Liverpool Plains LGA from 2018 to 2023 (includes NSW Natural disaster bushfires and flooding). declarations TfNSW Spatial Data Tool Date accessed: 24/11/23

Consequences

Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	1 seriously injured between 2018 and 2022.
			Date accessed: 23/11/23

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Everyday Service Delivery High Risk Communities	Traffic (TFNSW) Volumes Report Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C6 – Insignificant	No prior road closures recorded due to hazards. Date accessed: 30/11/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management . Plans NPWS Plans of Management Aboriginal heritage information . management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Asset Management Plan for roads within Liverpool Plains Shire Council.

Customer Journey Risk Assessment – [region] Report

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Economic value to the economy	Regional Plans NSW Regional Economic_ Development Strategies TraNSIT Web (csiro.au) Value of Agricultural_ commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity origin map	C1 – Catastrophic	\$0.9 billion freight value outbound from Liverpool. Date accessed: 28/11/2023
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C1 – Catastrophic	Quirindi Hospital and Water Supply.

Risk Matrix, Tolerance and Response Output



Transport for NSW

9.4 Customer Journey #4: Liverpool Plains Shire Council 6

High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Willow Tree Township Isolated Rural Properties	Isolated Rural Properties Willow Tree Township	N/A	Mt Helens Radio Site	N/A

Likelihood

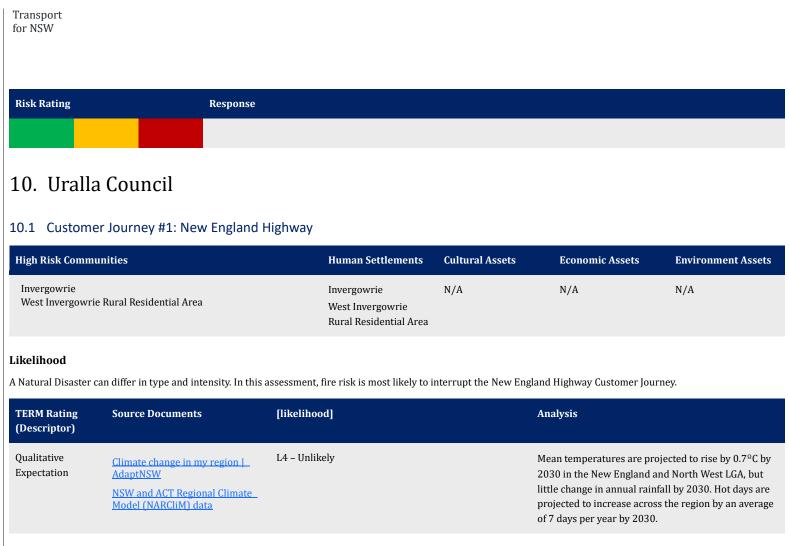
A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Liverpool Plains Shire Council 6 Customer Journey.

TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L3 – Likely	Mean temperatures are projected to rise by 0.7° C by 2030 in the New England and North West LGA, but little change in annual rainfall by 2030. Hot days are projected to increase across the region by an average of 7 days per year by 2030.
			Date accessed: 24/11/23
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u>	L3 – Likely	6 Natural Disaster Declarations in the last 6 years for Liverpool Plains LGA from 2018 to 2023 (includes bushfires and flooding).
	TfNSW Spatial Data Tool		Date accessed: 24/11/23
Consequences			

Customer Journey Risk Assessment – [region] Report

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	3 seriously injured between 2018 and 2022. Date accessed: 24/11/23
Everyday Service Delivery High Risk	<u>Traffic (TFNSW) Volumes Report</u> Road classifications	C6 – Insignificant	Partial road closures recorded with temporary changes in traffic conditions.
Communities			Date accessed: 30/11/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information . management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.
Financial	Transport for NSW Corridor Plans	C3 – Major	Asset Management Plan for roads within Liverpoo Plains Shire Council.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
	Local Government Asset Management Plans		
Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$0.9 billion freight value outbound from Liverpool. Date accessed: 28/11/2023
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C3 – Major	Mt Helen Communications Site: Major.
Risk Matrix, Toler	ance and Response Output		



	Transport for NSW			
	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Journey Risk Assessment -	Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L4 – Unlikely	3 Natural Disaster Declarations in the last 6 years from 2018 to 2023 (includes bushfires and flooding). Date accessed: 28/11/23
7 Risk As	Consequences			
Si l				
essm	Consequence	Source Documents	[consequence]	Analysis
essment – [region] Report	Consequence Safety	Source Documents TfNSW crash and incident data TfNSW Spatial Data Tool	[consequence] C2 – Severe	Analysis1 killed (Bundarra Rd) and 4 seriously injured between 2018 and 2022.Date accessed: 28/11/23

C6 – Insignificant

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Environment is

considerations,

environmental

vulnerability, or sensitivities

natural

TfNSW Spatial Data Tool

Plans

NSW Bushfire Risk Management

NPWS Plans of Management

No environmental assets identified along journey.

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Customer Journev Risk Assessment – [region] Report	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.
ssessment – fregi	Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Asset Management Plan for Uralla Shire Council. Bundarra Road has investment.
on] Report	Economic value to the economy	Regional Plans NSW Regional Economic Development Strategies TraNSIT Web (csiro.au) Value of Agricultural Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$0.2 billion freight value outbound from Uralla. Date accessed 28/11/2023

for NSW				
Consequence	Source Documents	[consequence]	Analysis	
Risk Rating	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool Ance and Response Output Response Journey #2: Thunderbolts	C6 - Insignificant	No Technology and along journey.	public utility assets identified
High Risk Commur	ities Human Settlement	s Cultural Assets	Economic Assets	Environment Assets
Bundarra	Bundarra Balala Kingstown Bundarra Central Sci	N/A	 Bundarra Landfill/Transfer Station Stoney Batter National Park 	 Indwarra National Parl Serpentine Ridge National Park
Likelihood				

Transport for NSW

A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Thunderbolts Way Customer Journey.

TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L4 – Unlikely	Mean temperatures are projected to rise by 0.7°C by 2030 in the New England and North West LGA, but little change in annual rainfall by 2030. Hot days are projected to increase across the region by an average of 7 days per year by 2030.
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u>	L4 – Unlikely	3 Natural Disaster Declarations in the last 6 years from 2018 to 2023 (includes bushfires and flooding).
	TfNSW Spatial Data Tool		Date accessed: 28/11/23

Consequences

Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C1 – Catastrophic	2 killed and 8 seriously injured between 2018 and 2022.
			Date accessed: 28/11/23
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports	C3 – Major	Two-day closures with alternative routes available.

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Customer Journey Risk Assessment – [region] Report

Source Documents	[consequence]	Analysis
TfNSW Spatial Data Tool		
TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C4 – Moderate	Some vulnerable flora/ fauna. Not very high risk of bushfires so, no intensive fire management is allocated. Date accessed: 30/11/23
NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C5 – Minor	Potential of some cultural assets within National Parks. No study done to determine assets are of cultural heritage. Date accessed: 30/11/23
Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Asset Management Plan for Uralla Shire Council. Bundarra Road has investment.
<u>Regional Plans</u> <u>NSW Regional Economic</u> <u>Development Strategies</u> <u>TraNSIT Web (csiro.au)</u>	C1 – Catastrophic	\$0.2 billion freight value outbound from Uralla. Date accessed: 28/11/2023
	TfNSW Spatial Data ToolTfNSW Spatial Data ToolNSW Bushfire Risk Management.PlansNPWS Plans of ManagementPlansNPWS Plans of ManagementAboriginal heritage informationState heritage inventoryMaritime heritage databaseCransport for NSW CorridorPlansLocal Government AssetManagement PlansNSW Regional Economic.Development Strategies	TINSW Spatial Data ToolC4 - ModerateTINSW Spatial Data ToolC4 - ModerateNSW Bushfire Risk Management. PlansC5 - MinorNSW Bushfire Risk Management. PlansC5 - MinorNSW Splans of ManagementC5 - MinorNPWS Plans of ManagementC5 - MinorNews Plans of ManagementC5 - MinorState heritage information. management systemC3 - MajorState heritage databaseC3 - MajorIncal Government Asset Management PlansC1 - CatastrophicNSW Regional Economic. Development StrategiesC1 - Catastrophic

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Customer Journey Risk Assessment – [region] Report	Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	Value of Agricultural Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant	No Technology and public utility assets identified along journey.

Risk Matrix, Tolerance and Response Output



	Transport for NSW				
	High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Customer Iourney	West Uralla Rural Residential Area Uralla Rocky River	West Uralla Rural Residential Area Uralla Kentucky Rocky River	• Uralla	 Mount Mutton Water Reservoir CSIRO Research Station Uralla Landfill/Transfer Station 	N/A

Likelihood

A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Uralla Customer Journey.

TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L4 – Unlikely	Mean temperatures are projected to rise by 0.7°C by 2030 in the New England and North West LGA, but little change in annual rainfall by 2030. Hot days are projected to increase across the region by an average of 7 days per year by 2030.
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L4 – Unlikely	3 Natural Disaster Declarations in the last 6 years from 2018 to 2023 (includes bushfires and flooding). Date accessed: 28/11/23

Customer Journey Risk Assessment – [region] Report

Transport for NSW			
Consequences			
Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	1 killed and 9 seriously injured between 2018 and 2022.
			Date accessed: 28/11/23
Everyday Service Delivery High Pisk	<u>Traffic (TFNSW) Volumes Report</u> Road classifications	C5 – Minor	Total road closures for 1-2 days with alternative routes available.
Communities Reports	TfNSW Network Restriction Reports TfNSW Spatial Data Tool		Date accessed: 30/11/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
Cultural assets include Aboriginal,	NSW Bushfire Risk Management Plans	C6 – Insignificant	No cultural assets identified.
non-indigenous NP historical, and other cultural ma assets Sta	NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database		Date accessed: 8/01/24

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans	C3 - Major	Asset Management Plan for Uralla Shire Council. Bundarra Road has investment.
	Local Government Asset Management Plans		
Economic value to	Regional Plans	C1 – Catastrophic	\$0.2 billion freight value outbound from Uralla.
the economy	<u>NSW Regional Economic</u> <u>Development Strategies</u>		
	<u>TraNSIT Web (csiro.au)</u>		
	<u>Value of Agricultural</u> <u>Commodities Produced, Australia</u>		
	<u>Strategic Freight Forecasts -</u> commodity forecast map		
	<u>Strategic Freight Forecasts –</u> commodity origin map		
	<u>Strategic Freight Forecasts –</u> <u>commodity destination map</u>		
Technology and	NSW Population Projections	C4 – Moderate	Mount Mutton Water Reservoir: Moderate.
public utility including	<u>Transport for NSW Projects and initiatives map</u>		
electricity, water	School Infrastructure Projects		
supply and production/treat	Health Infrastructure Projects		
ment, telecommunicatio	TfNSW Spatial Data Tool		
ns			

	Transport for NSW								
	Risk Matrix, Tolerance and Response Output								
-	Risk Rating	Response							
Custome									
er Journe	11. Tente	erfield Council							
ey Risk /		Journey #1: Tenterfield 1							
Assessm	High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets				
Customer Journey Risk Assessment – [region] Report	Isolated Dwellings Jennings Legume Liston Urbanville Township	Jennings Isolated Dwellings Legume Liston Urbanville Township Isolated Rural Dwellings	 Robertsons Cabin Merrigall Stock Yards World War II Tank Traps 	 Boonoo Boonoo Depot Robinsons Cabin Bald Rock 	 Boonoo Boonoo National Park 				
	Likelihood A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Tenterfield 1 Customer Journey.								
	TERM Rating Source (Descriptor)	e Documents [lik	xelihood]	Analysis					
	QualitativeClimatExpectationAdapt	<u>t change in my region p</u>	– Likely		are projected to rise by 0.7°C by gland and North West LGA, but				
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	Transport for NSW			
	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Journey Risk Assessment		<u>NSW and ACT Regional Climate</u> <u>Model (NARCliM) data</u>		little change in annual rainfall by 2030. Hot days (over 35 degrees) are projected to increase across the region by an average of 1-5 days per year by 2030. Minimal, if any, change in likelihood to fire danger days.
Risk A:				Date accessed: 28/11/23
1	Quantitative Frequency	Historic incidents of fire by LGA <u>NSW Natural disaster</u> <u>declarations</u>	L2 – Very Likely	10 Natural Disaster Declarations in the last 6 years for Tenterfield LGA from 2018 to 2023 (includes bushfires and flooding).
egion]		TfNSW Spatial Data Tool		Date accessed: 28/11/23
[region] Report	Consequences			

Consequences

Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C4 – Moderate	0 killed or seriously injured between 2018 and 2022.
			Date accessed: 28/11/23
Everyday Service Delivery	<u>Traffic (TFNSW) Volumes Report</u> Road classifications	C2 – Severe	Substantial road closures > 10 days but alternative routes available.
High Risk Communities	TfNSW Network Restriction Reports		Date accessed: 5/12/23

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Transport for NSW							
Consequence	Source Documents	[consequence]	Analysis				
	TfNSW Spatial Data Tool						
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management .</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C4 – Moderate	Several flora/fauna species under ROTAP as endangered or vulnerable that cannot withstand fires. Several areas that are very vulnerable to fires as most of the region is forest land. Plans to establish fire management plan (2002).				
			Date accessed: 30/11/23				
Cultural assets include Aboriginal, non-indigenous historical, and	NSW Bushfire Risk Management Plans NPWS Plans of Management	C3 – Major	Multiple cultural assets. May be more as some assets have not been identified due to lack of documentation or research (Boonoo Boonoo NP).				
other cultural assets	Aboriginal heritage information management system State heritage inventory Maritime heritage database		Date accessed: 30/11/23				
Financial	Transport for NSW Corridor Plans Local Government Asset	C2 – Severe	Minimal evidence of investment in place for all major roads within journey.				
	Management Plans		Date accessed: 5/12/23				
Economic value to the economy	<u>Regional Plans</u> <u>NSW Regional Economic</u> <u>Development Strategies</u> <u>TraNSIT Web (csiro.au)</u>	C1 – Catastrophic	\$0.6 billion freight value outbound from Tenterfield. Date accessed: 28/11/23				

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Customer Journey Risk Assessment	Technology and	Value of Agricultural_ Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map NSW Population Projections	C5 - Minor	No critical technology and / or public utility assets /
sment – [region] Report	public utility including electricity, water supply and production/treat ment, telecommunicatio ns	<u>Transport for NSW Projections</u> <u>Transport for NSW Projects and</u> <u>initiatives map</u> <u>School Infrastructure Projects</u> <u>Health Infrastructure Projects</u> TfNSW Spatial Data Tool		infrastructure identified along the journey.

Risk Matrix, Tolerance and Response Output



	Transport for NSW											
	High Risk Comm	unities	Human Settlemen	ts	Cultura	al Assets		Econor	nic Assets	Enviro	onment Assets	
Customer Journey Risk	Jubullum Aborigir Isolated Dwelling: Isolated Rural Dw Frasers Cutting	s	Isolated Dwellings Tabullum Township Isolated Rural Dwel Tabulum Jubullum Aborigina Frasers Cutting	lings		Sandy Flat Sandy Flat	Forest		Girard Repeater Emu Creek Eco Retreat Lanaki Camping Area Lanikai Camping Area		Washpool Park	National
isk Assessment	Likelihood A Natural Disaster	can differ in ty	ype and intensity. In thi	s assessment, f	Park • Emu Creek Eco Retreat Park • Girard State Forest • Lanaki Camping Area Sandy Flat • Lanikai Camping Area • Sandy Flat • Four Bulls Hut ht, fire and flood risk is most likely to interrupt the Tenterfield 2 Customer Journey.							
1	TERM Rating (Descriptor)	Source D	ocuments	[likelihoo	d]				Analysis			
[region] Report	Qualitative Expectation	<u>Climate cl</u> <u>AdaptNSV</u>	<u>hange in my region </u> <u>N</u>	L3 – Likely					2030 in the New Eng	gland and	d Northwest LG	A, but

TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L3 – Likely	Mean temperatures are projected to rise by 0.7°C by 2030 in the New England and Northwest LGA, but little change in annual rainfall by 2030. Hot days (over 35 degrees) are projected to increase across the region by an average of 1-5 days per year by 2030. Minimal, if any, change in likelihood to fire danger days.
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u>	L2 – Very Likely	Date accessed: 28/11/23 10 Natural Disaster Declarations in the last 6 years for Tenterfield LGA from 2018 to 2023 (includes bushfires and flooding).

Transport for NSW			
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
	TfNSW Spatial Data Tool		Date accessed: 28/11/23
Consequences			
Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	1 killed and 3 seriously injured between 2018 and 2022. Date accessed: 29/11/23
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C1 – Catastrophic	Extended road closures due to flood with limited alternative routes available. Date accessed: 5/12/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C1 – Catastrophic	Many endangered species including a few at possible risk of extinction and several thought to be extinct species. Several areas listed as prone to rapid high fires in bushfire seasons. Data accessed: 30/11/23
Cultural assets include Aboriginal,	<u>NSW Bushfire Risk Management</u> <u>Plans</u>	C4 – Moderate	Several cultural assets along road.

Customer Journey Risk Assessment – [region] Report

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
non-indigenous historical, and other cultural assets	NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database		Date accessed: 1/12/23.
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C2 – Severe	Minimal evidence of investment in place for all majo roads within journey.
Economic value to the economy	Regional PlansNSW Regional Economic. Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$0.6 billion freight value outbound from Tenterfield.
Technology and public utility including	NSW Population Projections Transport for NSW Projects and initiatives map	C5 – Minor	No critical technology and / or public utility assets , infrastructure identified along the journey.

Transport for NSW				
Consequence	Source Documents	[consequence]	Analysis	
electricity, water supply and production/treat ment, telecommunicatio ns	<u>School Infrastructure Projects</u> <u>Health Infrastructure Projects</u> TfNSW Spatial Data Tool			
Risk Matrix, Toler Risk Rating	ance and Response Output Respons	e		
11.3 Cus High Risk Commu	tomer Journey #3: Tente nities Human Settlemo		Economic Assets	Environment Assets
Sandy Flat Isolated rural Prope Torrington Village Emmaville Townshi Isolated rural Prope Isolated Dwellings Torrington Village	Torrington Villag p Emmaville Towns	e Bolivia Shearing S hip Railway Bridge Red Rock Mine	N/A hed	N/A

Likelihood

Transport for NSW

A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Tenterfield 3 Customer Journey.

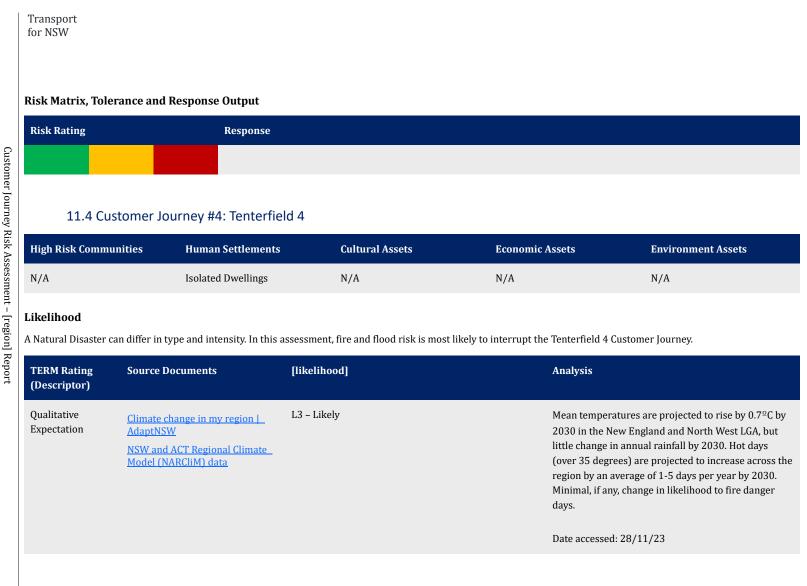
Cite	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Iournev Risk Assessment	Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCIIM) data	L3 – Likely	Mean temperatures are projected to rise by 0.7°C by 2030 in the New England and North West LGA, but little change in annual rainfall by 2030. Hot days (over 35 degrees) are projected to increase across the region by an average of 1-5 days per year by 2030. Minimal, if any, change in likelihood to fire danger days. Date accessed: 28/11/23
r - [region] Renort	Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L2 – Very Likely	10 Natural Disaster Declarations in the last 6 years for Tenterfield LGA from 2018 to 2023 (includes bushfires and flooding). Date Accessed: 28/11/23

Customer Journey 7 Risk Assessment – [region] Report

Transpor for NSW				
Consequer	nces			
Consequ	ience	Source Documents	[consequence]	Analysis
Safety		TfNSW crash and incident data TfNSW Spatial Data Tool	C2 – Severe	1 killed and 7 seriously injured between 2018 and 2022.
				Date accessed: 29/11/23
Everyday Delivery		<u>Traffic (TFNSW) Volumes Report</u> Road classifications	C6 – Insignificant	No total road closure with duration > 1 day recorded.
Everyday Delivery High Risk Commun Environn natural considera		TfNSW Network Restriction Reports TfNSW Spatial Data Tool		Date accessed: 5/12/23
Environn natural considera environn vulnerab sensitivit	ations, nental pility, or	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
Cultural a include A	assets Aboriginal,	<u>NSW Bushfire Risk Management</u> Plans	C4 – Moderate	Some cultural assets in need of repairs.
non-indig historical other cul assets	genous Il, and	NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database		Date accessed: 1/12/23

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C2 – Severe	Minimal evidence of investment in place for all major roads within journey. Date accessed: 5/12/23
Economic value to the economy	Regional Plans NSW Regional Economic Development Strategies TraNSIT Web (csiro.au)	C1 – Catastrophic	\$0.6 billion freight value outbound from Tenterfield. Date accessed: 28/12/23
	Value of Agricultural_ Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map		
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C5 – Minor	No critical technology and / or public utility assets / infrastructure identified along the journey.

Customer Journey Risk Assessment – [region] Report



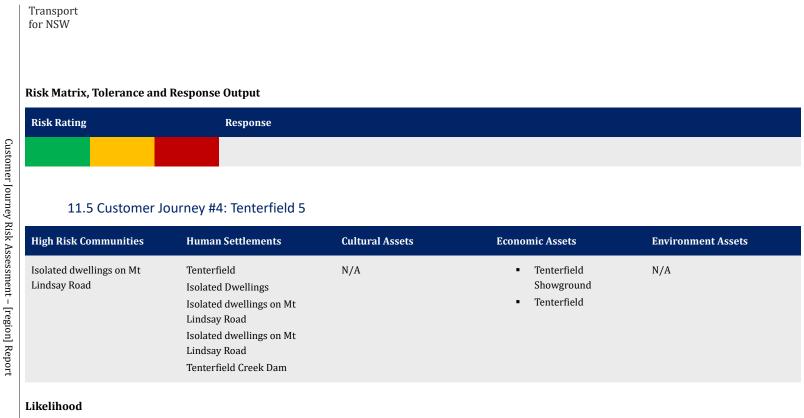
Transport for NSW			
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L2 – Very Likely	10 Natural Disaster Declarations in the last 6 years for Tenterfield LGA from 2018 to 2023 (includes bushfires and flooding). Date accessed: 28/11/23

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	Transport for NSW			
	Consequences			
	Consequence	Source Documents	[consequence]	Analysis
Customer Journ	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C6 – Insignificant	0 killed and 0 seriously injured between 2018 and 2022. Date accessed: 29/11/23
Customer Journey Risk Assessment – [region] Report	Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C6 – Insignificant	No total road closure with duration > 1 day recorded. Date accessed: 5/12/23
egion] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

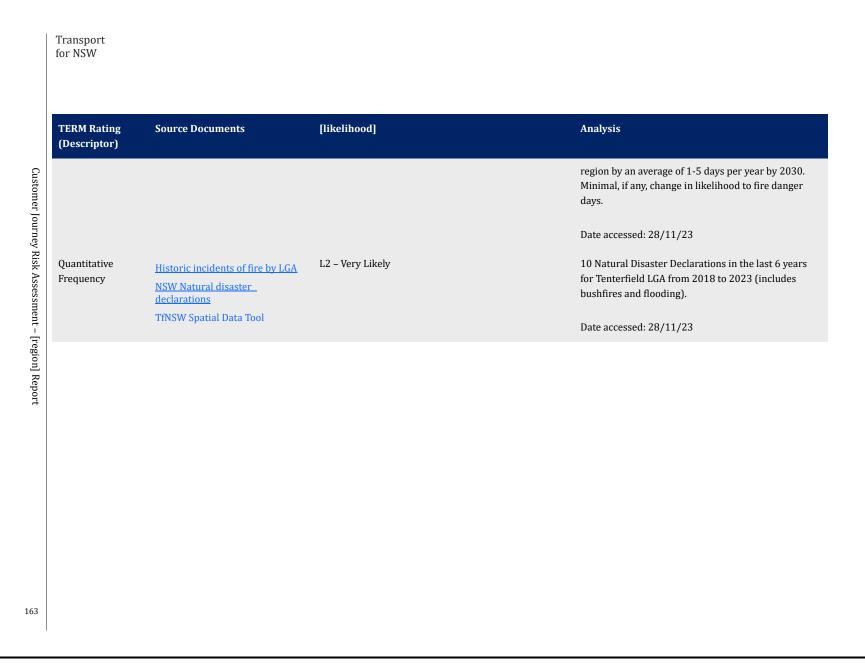
Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C2 – Severe	Minimal evidence of investment in place for all major roads within journey.
Economic value to the economy	Regional PlansNSW Regional Economic_ Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural_ Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$0.6 billion freight value outbound from Tenterfield.
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C5 – Minor	No critical technology and / or public utility assets / infrastructure identified along the journey.

Customer Journey Risk Assessment – [region] Report



A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Tenterfield 5 Customer Journey.

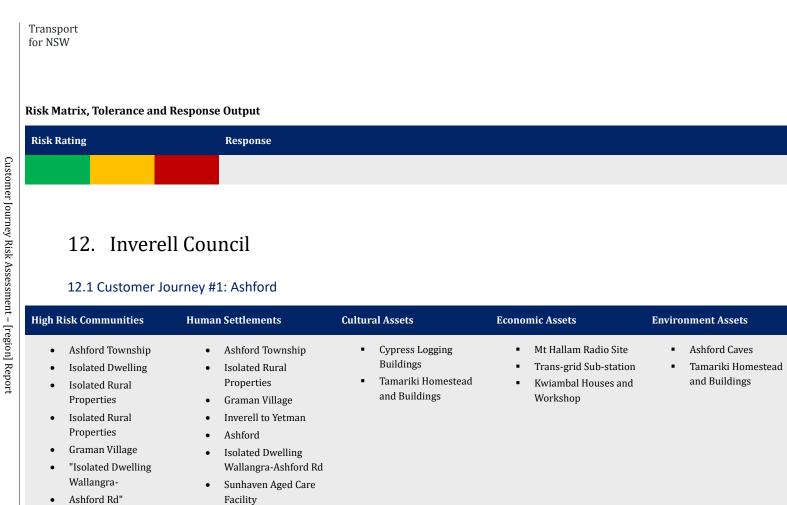
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L3 – Likely	Mean temperatures are projected to rise by 0.7°C by 2030 in the New England and North West LGA, but little change in annual rainfall by 2030. Hot days (over 35 degrees) are projected to increase across the



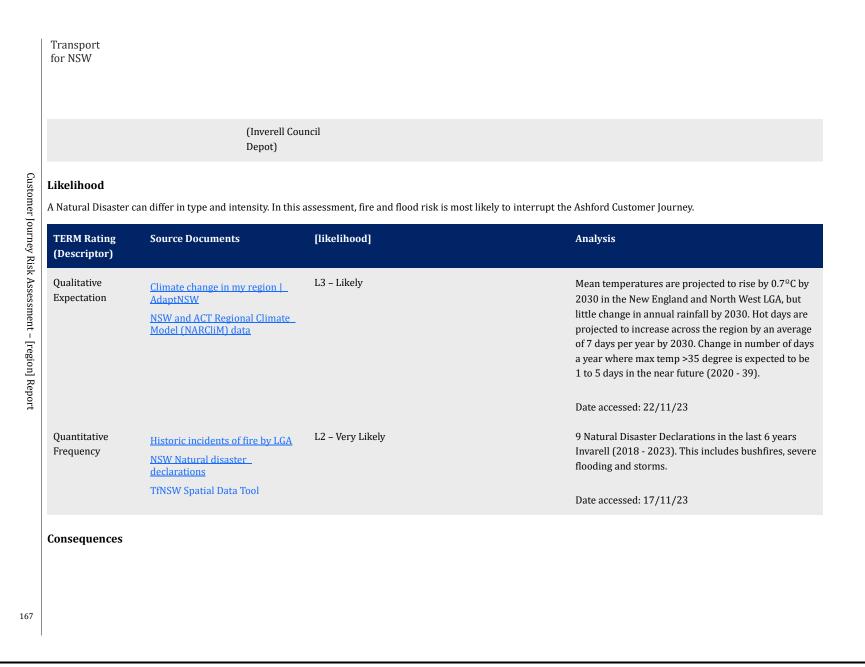
Transport for NSW			
Consequences			
Consequence Safety	Source Documents TfNSW crash and incident data TfNSW Spatial Data Tool	[consequence] C2 – Severe	Analysis1 killed and 2 seriously injured between 2018 and 2022.Date accessed: 29/11/23
Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C2 – Severe	Substantial road closures > 10 days but alternative routes available. Date accessed: 5/12/23
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C2 – Severe	Minimal evidence of investment in place for all major roads within journey.
Economic value to the economy	Regional PlansNSW Regional Economic_ Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural_ Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$0.6 billion freight value outbound from Tenterfield.
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C2 – Severe	If Dam were to fail, inundation of several residential properties would occur.

Customer Journey Risk Assessment – [region] Report

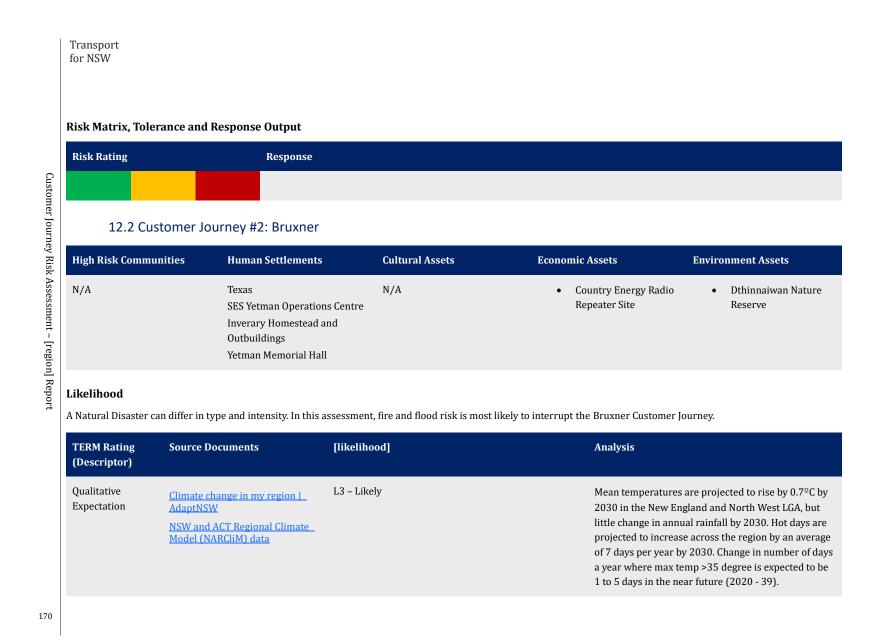


- Ashford Central School
 - SES Ashford ٠ **Operations Centre**



	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Custome	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 5 seriously injured (2018 - 2022). Date accessed: 23/11/23
fustomer Iournev Rick Assessment -	Everyday Service Delivery High Risk Communities	Traffic (TFNSW) Volumes Report Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C4 – Moderate	Road closures lasting 2 days have been recorded with alternative routes available. Date accessed: 5/12/23
ent _ [region] Deport	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C3 – Major	No fire management plans in place. Several species of endangered to vulnerable flora and fauna present and registered as ROTAP. Date accessed: 30/11/23
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C4 – Moderate	Several cultural assets identified in fire management plans. Date accessed: 30/11/23

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Warialda, Yetman, Graman, Bruxner Highway included in the NEJO road network strategy. Not all roads owned by TfNSW. Date accessed: 28/11/23
Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$1.9 billion freight value outbound from Inverell. Date accessed: 28/11/23
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C3 - Major	Transgrid Sub-station, major consequence.



Transport for NSW

TERM Rating

(Descriptor)

Quantitative

Consequences

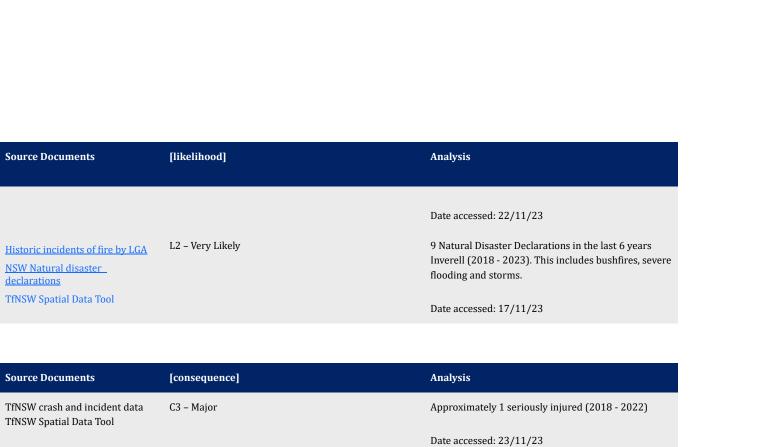
Frequency

Source Documents

NSW Natural disaster

TfNSW Spatial Data Tool

declarations



Customer Journey Risk Assessment – [region] Report

Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 1 seriously injured (2018 - 2022)
			Date accessed: 23/11/23
Everyday Service Delivery	<u>Traffic (TFNSW) Volumes Report</u> Road classifications	C4 – Moderate	Road closures lasting 2 days have been recorded with alternative routes available.
High Risk Communities	TfNSW Network Restriction Reports TfNSW Spatial Data Tool		Date accessed: 5/12/23
Environment is natural considerations,	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management .</u> <u>Plans</u>	C5 – Minor	Several species of endangered to vulnerable flora and fauna present.

Consequence	Source Documents	[consequence]	Analysis
environmental vulnerability, or sensitivities	NPWS Plans of Management		Date accessed: 30/11/23
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management_ Plans NPWS Plans of Management Aboriginal heritage information_ management system State heritage inventory Maritime heritage database	C5 – Minor	Some cultural assets within Dthinnawan Reserve. Date accessed: 30/11/23
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Bruxner Highway owned by TfNSW, Holdfast Road managed by council. Investment in place for the roads.
Economic value to the economy	Regional Plans NSW Regional Economic . Development Strategies TraNSIT Web (csiro.au) Value of Agricultural _ Commodities Produced, Australia Strategic Freight Forecasts commodity forecast map Strategic Freight Forecasts commodity origin map	C1 – Catastrophic	\$1.9 billion freight value outbound from Inverell.



12.3 Customer Journey #3: Gwydir

High Risk Communities	Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Delungra Township	Delungra Township	N/A	N/A	N/A
Likelihood				

Transport for NSW

A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the Gwydir Customer Journey.

() 	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Journey Risk Assessment	Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L3 – Likely	Mean temperatures are projected to rise by 0.7° C by 2030 in the New England and North West LGA, but little change in annual rainfall by 2030. Hot days are projected to increase across the region by an average of 7 days per year by 2030. Change in number of days a year where max temp >35 degree is expected to be 1 to 5 days in the near future (2020 - 39).
nent _ [region] Renort	Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u>	L2 – Very Likely	Date accessed: 22/11/23 9 Natural Disaster Declarations in the last 6 years Inverell (2018 - 2023). This includes bushfires, severe flooding and storms.
nt		TfNSW Spatial Data Tool		Date accessed: 17/11/23

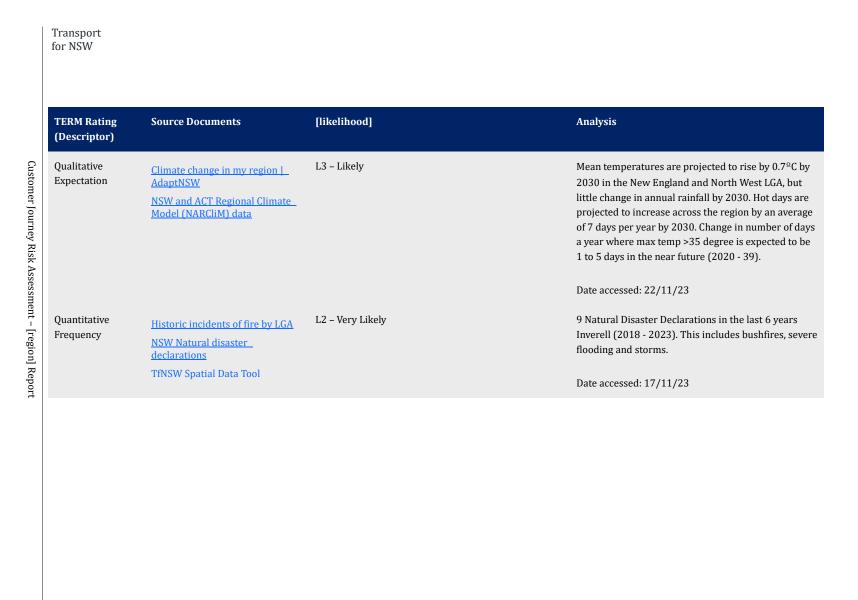
Customer Journey Risk Assessment – [region] Report

	Transport for NSW			
	Consequences			
	Consequence	Source Documents	[consequence]	Analysis
Custome	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 5 seriously injured (2018 - 2022)
rloui				Date accessed: 23/11/23
mev Risk As	Everyday Service Delivery High Risk	Traffic (TFNSW) Volumes Report Road classifications	C5 – Minor	Road impacted by floods for 2 days. Unclear if total or partial closure.
ssessment -	Communities	TfNSW Network Restriction Reports TfNSW Spatial Data Tool		Date accessed: 5/12/23
Customer Iournev Risk Assessment – [region] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Fransport For NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans	C3 – Major	Gwydir Highway owned by TfNSW, Other Delungra roads owned by Council.
	Local Government Asset Management Plans		
Economic value to	Regional Plans	C1 – Catastrophic	\$1.9 billion freight value outbound from Inverell.
the economy	<u>NSW Regional Economic</u> <u>Development Strategies</u>		
	<u>TraNSIT Web (csiro.au)</u>		
	<u>Value of Agricultural</u> <u>Commodities Produced, Australia</u>		
	<u>Strategic Freight Forecasts -</u> <u>commodity forecast map</u>		
	<u>Strategic Freight Forecasts – </u>		
	<u>Strategic Freight Forecasts – </u> <u>commodity destination map</u>		
Fechnology and	NSW Population Projections	C6 – Insignificant	No identified high-risk assets in Delungra.
public utility including	<u>Transport for NSW Projects and</u> initiatives map		
electricity, water	<u>Initiatives map</u> School Infrastructure Projects		
supply and production/treat	Health Infrastructure Projects		
ment, celecommunicatio ns	TfNSW Spatial Data Tool		

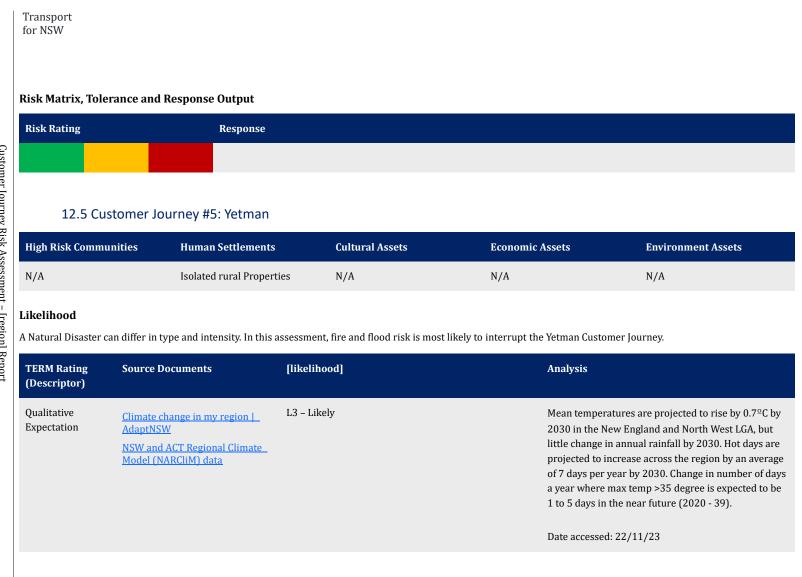
Risk Matrix, Tolerance and	Response Output			
Risk Rating	Response	scho		
High Risk Communities	ourney #4: Inverell Gilgai Tir Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Gilgai Village Isolated Dwellings Tingha Village	Bundarra Township Elsmore Isolated Rural Properties Isolated Dwelling Stannifer Village Tingha Village Gilgai School Inverell Town ship Inverell Shire Council Emergency Operations Centre SES Local Headquarters Inverell RFS and other small	Tingha Cementery	 Mt Topper Plantation Trans-grid Sub-station (Essential Energy) Tingha Communications Tower Tingha Landfill Copeton Waters Holiday Park 	 Burral Yurrul Nation Park Goonoowigall State Conservation Area

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Transport for NSW			
Consequences			
Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C1 – Catastrophic	Approximately 4 killed and 9 seriously injured (2018 – 2022).
			Date accessed: 23/11/23
Everyday Service Delivery	Traffic (TFNSW) Volumes Report	C3 – Major	Road closure incidents due to hazard events.
High Risk Communities	Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool		Date accessed: 5/12/23
Environment is natural considerations,	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> Plans	C4 – Moderate	Some endangered species of flora and fauna. Fire management plans in place in most areas.
environmental vulnerability, or sensitivities	<u>Plans</u> <u>NPWS Plans of Management</u>		Date accessed: 30/11/23
Cultural assets include Aboriginal,	<u>NSW Bushfire Risk Management</u> Plans	C5 – Minor	Some cultural assets identified as susceptible to fires.
non-indigenous historical, and	<u>NPWS Plans of Management</u>		Date accessed: 30/11/23
other cultural assets	Aboriginal heritage information		
	<u>State heritage inventory</u> <u>Maritime heritage database</u>		

Transport for NSW			
6	C	faurosand	
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans	C3 – Major	Yetman Road and Thunderbolts Way owned by Council.
	Local Government Asset Management Plans		
Economic value to	Regional Plans	C1 – Catastrophic	\$1.9 billion freight value outbound from Inverell.
the economy	<u>NSW Regional Economic</u> <u>Development Strategies</u>		
	<u>TraNSIT Web (csiro.au)</u>		
	<u>Value of Agricultural</u> <u>Commodities Produced, Australia</u>		
	<u>Strategic Freight Forecasts -</u> commodity forecast map		
	<u>Strategic Freight Forecasts –</u> commodity origin map		
	<u>Strategic Freight Forecasts – .</u> <u>commodity destination map</u>		
Technology and	NSW Population Projections	C4 – Moderate	Tingha Communications Tower, Moderate
public utility including	<u>Transport for NSW Projects and</u> <u>initiatives map</u>		Tingha Public School, Moderate.
electricity, water supply and	School Infrastructure Projects		
production/treat	Health Infrastructure Projects		
ment, telecommunicatio	TfNSW Spatial Data Tool		
ns			



Transport for NSW			
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L2 – Very Likely	9 Natural Disaster Declarations in the last 6 years Inverell (2018 - 2023). This includes bushfires, severe flooding and storms. Date accessed: 17/11/23

	Transport for NSW			
	Consequences			
Customer Io	Consequence Safety	Source Documents TfNSW crash and incident data TfNSW Spatial Data Tool	[consequence] C4 – Moderate	Analysis Approximately 2 minor injured (2018 - 2022). Date accessed: 23/11/23
Customer Journev Risk Assessment – [region] Report	Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C4 – Moderate	Road closures lasting 2 days have been recorded with alternative routes available. Date accessed: 5/12/23
- [region] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C6 – Insignificant	No environmental assets identified along journey.
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C6 – Insignificant	No cultural assets identified along journey.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C3 – Major	Analysis Bruxner Highway owned by TfNSW, Holdfast Road is managed by council. Investment in place for the roads.
Economic value to the economy	Regional PlansNSW Regional Economic_ Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural_ Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$1.9 billion freight value outbound from Inverell.
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C6 – Insignificant	No identified high-risk assets in Delungra.

Transport

for NSW				
Risk Matrix, Tolerance and H Risk Rating	Response Output Response			
	• Council urney #1: North to South Human Settlements	Cultural Assets	Economic Assets	Environment Assets
Warialda VillageToolimbah Repeater	 Warialda Village Isolated Rural Properties Upper Bingara Coolati Village Toolimbah Repeater Warialda High School Naroo Nursing Home Warialda Hospital Warialda Pre School 	N/A	Warialda Rail StationToolimbah Repeater	 Warialda State Conservation Area Gwydir River National Park Bingara State Conservation Area Gunyerwarildi National Park Serpentine Ridge National Park Taringa Nature Reserve

Likelihood

A Natural Disaster can differ in type and intensity. In this assessment, fire and flood risk is most likely to interrupt the North to South Customer Journey.

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Customer Journey Risk Assessment - [region] Report

	Transport for NSW			
	TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Customer Journey Risk Assessment – [region] Report	Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L3 – Likely	Hot days are projected to increase across the region by an average of 10-20 days per year, with an average increase in annual temperatures and a slight increase in the Forest Fire Danger Index (FFDI). Little change in annual rainfall expected.
	Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L3 – Likely	Date accessed: 4/12/23 6 Natural Disaster Declarations in the last 6 years (2018 - 2023). This includes bushfires, severe flooding and storms. Date accessed: 4/12/23
Report	Consequences			

Consequences

Consequence	Source Documents	[consequence]	Analysis
Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 8 seriously injured and 2 killed (2018 – 2022).
			Date accessed: 4/12/23
Everyday Service Delivery	Traffic (TFNSW) Volumes Report	C6 – Insignificant	No extended road closures recorded.
High Risk Communities	Road classifications		Date accessed: 6/12/23

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
	TfNSW Network Restriction Reports TfNSW Spatial Data Tool		
Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C4 – Moderate	Some endangered/ threatened ecological species with risks of frequent fires. Date accessed: 5/12/23
Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C5 – Minor	A few cultural assets in national parks (Gunyerwaraldi). Date accessed: 5/12/23
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C2 – Severe	Gwydir Council Transport Asset Management Plan No clear evidence of investment. Date accessed: 6/12/23
Economic value to the economy	<u>Regional Plans</u> <u>NSW Regional Economic</u> <u>Development Strategies</u>	C1 – Catastrophic	\$0.9 billion freight value outbound from Gwydir. Date accessed: 6/12/23

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Customer Journey Risk Assessment –		TraNSIT Web (csiro.au) Value of Agricultural Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map		
sment – [region] Report	Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C2 – Severe	Warialda High School, Naroo Nursing Home, Warialda Hospital, severe. Date accessed: 6/12/23

Risk Matrix, Tolerance and Response Output



High Risk Comm	unities Human Settlements	Cultural Assets	Economic Assets	Environment Assets
N/A	Isolated Rural Propertie	rs N/A	N/A	Bullala National ParlWarialda National Parl
Likelihood				
A Natural Disaster o	can differ in type and intensity. In this ass	sessment, fire and flood risk is most	likely to interrupt the East to West (Customer Journey.
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis	
Qualitative Expectation	Climate change in my region _ AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L3 – Likely	by an average increase in ar	projected to increase across the region e of 10-20 days per year, with an avera nual temperatures and a slight increa Fire Danger Index (FFDI). Little chang nfall expected.
			Date accessed	l: 4/12/23
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u>	L3 – Likely		aster Declarations in the last 6 years). This includes bushfires, severe storms.
	TfNSW Spatial Data Tool		Date accessed	d: 4/11/23

	Transport for NSW			
	Consequence	Source Documents	[consequence]	Analysis
Custor	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 3 seriously injured (2018 - 2022).
tome				Date accessed: 4/12/23
r Journey I	Everyday Service Delivery	<u>Traffic (TFNSW) Volumes Report</u> Road classifications	C2 – Severe	Extended road closures recorded with alternative routes available.
Customer Journey Risk Assessment – [region] Report	High Risk Communities	TfNSW Network Restriction Reports TfNSW Spatial Data Tool		Date accessed: 6/12/23
1ent – [regio	Environment is natural considerations,	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management .</u> Plans	C4 – Moderate	Some endangered/ threatened ecological species with risks of frequent fires.
n] Report	environmental vulnerability, or sensitivities	NPWS Plans of Management		Date accessed: 5/12/23
	Cultural assets include Aboriginal, non-indigenous	<u>NSW Bushfire Risk Management</u> <u>Plans</u> NPWS Plans of Management	C5 – Minor	A few cultural assets and potential unidentified ones (scarred trees, grinding grooves, etc exist).
	historical, and other cultural assets	Aboriginal heritage information management system State heritage inventory Maritime heritage database		Date Accessed: 5/12/23
	Financial	Transport for NSW Corridor Plans	C5 – Minor	Gwydir Highway owned by TfNSW.

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
	Local Government Asset Management Plans		
Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$0.9 billion freight value outbound from Gwydir. Date accessed: 6/12/23
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C2 – Severe	Warialda High School, Naroo Nursing Home, Warialda Hospital – very high fire risk.
Risk Matrix, Toler	ance and Response Output		

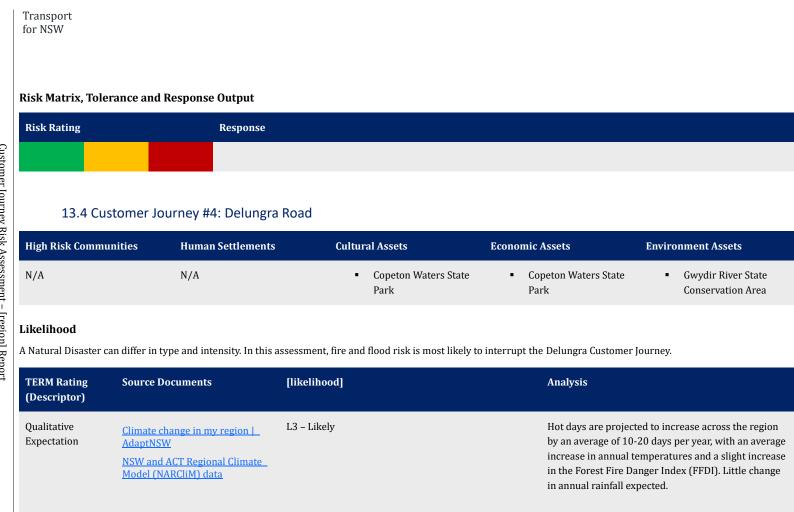


	Transport for NSW					
	Risk Rating	Response	9			
Cust						
omer Jou	13.3 Cu	istomer Journey #3: North	Star Road	i		
rney Ri	High Risk Comm	unities Human Settleme	nts	Cultural Assets	Economic Assets	Environment Assets
Customer Journey Risk Assessment – [region] Report		Isolated Rural Pro North Star Village	perties	N/A	N/A	 Gunyerwarildi National Park Planchonella Nature Reserve
region] Report	Likelihood A Natural Disaster	can differ in type and intensity. In th			likely to interrupt the North Star	r Road Customer Journey.
	TERM Rating (Descriptor)	Source Documents	[likeli	hood]	Analysis	
	Qualitative Expectation	Climate change in my region AdaptNSW NSW and ACT Regional Climate Model (NARCliM) data	L3 – Li	kely	by an aver increase i in the For	are projected to increase across the region rage of 10-20 days per year, with an average n annual temperatures and a slight increase est Fire Danger Index (FFDI). Little change rainfall expected.
					Date acce	ssed: 4/12/23
92						

Transport for NSW			
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L3 – Likely	6 Natural Disaster Declarations in the last 6 years (2018 - 2023). This includes bushfires, severe flooding and storms. Date accessed: 4/11/23

	Transport for NSW			
	Consequences			
Customer Ic	Consequence Safety	Source Documents TfNSW crash and incident data TfNSW Spatial Data Tool	[consequence] C2 – Severe	Analysis 1 killed and 1 seriously injured (2018 - 2022). Date accessed: 6/12/23
Customer Journev Risk Assessment – [region] Report	Everyday Service Delivery High Risk Communities	<u>Traffic (TFNSW) Volumes Report</u> Road classifications TfNSW Network Restriction Reports TfNSW Spatial Data Tool	C6 – Insignificant	No extended road closures recorded. Date accessed: 6/12/23
– [region] Report	Environment is natural considerations, environmental vulnerability, or sensitivities	TfNSW Spatial Data Tool <u>NSW Bushfire Risk Management</u> <u>Plans</u> <u>NPWS Plans of Management</u>	C4 – Moderate	Some endangered/ threatened ecological species with risks of frequent fires. Date accessed: 5/12/23
	Cultural assets include Aboriginal, non-indigenous historical, and other cultural assets	NSW Bushfire Risk Management Plans NPWS Plans of Management Aboriginal heritage information management system State heritage inventory Maritime heritage database	C5 – Minor	A few cultural assets in national parks (Gunyerwaraldi). Date accessed: 5/12/23

Transport for NSW				
Consequence	Source Documents	[consequence]	Analysis	
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C2 – Severe	Gwydir Council Transport Asset Management Plan No clear evidence of investment. Date accessed: 6/12/23	
Economic value to the economy	Regional PlansNSW Regional Economic Development StrategiesTraNSIT Web (csiro.au)Value of Agricultural Commodities Produced, AustraliaStrategic Freight Forecasts - commodity forecast mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity origin mapStrategic Freight Forecasts - commodity destination map	C1 – Catastrophic	\$0.9 billion freight value outbound from Gwydir. Date accessed: 6/12/23	
Technology and public utility including electricity, water supply and production/treat ment, telecommunicatio ns	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C5 – Minor	North Star Public School identified in the area. Not identified as at risk of natural disaster. Date accessed: 6/12/23	



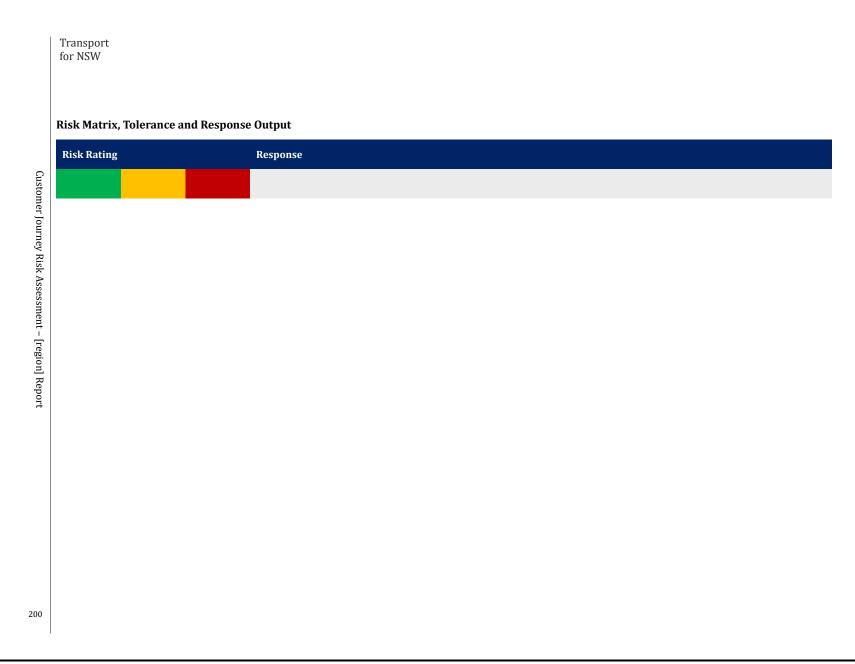
Date accessed: 4/12/23

Customer Journey Risk Assessment - [region] Report

Transport for NSW			
TERM Rating (Descriptor)	Source Documents	[likelihood]	Analysis
Quantitative Frequency	<u>Historic incidents of fire by LGA</u> <u>NSW Natural disaster</u> <u>declarations</u> TfNSW Spatial Data Tool	L3 – Likely	6 Natural Disaster Declarations in the last 6 years (2018 - 2023). This includes bushfires, severe flooding and storms. Date accessed: 4/11/23
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	Transport for NSW			
	Consequences			
	Consequence	Source Documents	[consequence]	Analysis
Custom	Safety	TfNSW crash and incident data TfNSW Spatial Data Tool	C3 – Major	Approximately 1 seriously injured (2018 - 2022).
er lou				Date accessed: 6/12/23
ırnev Ris	Everyday Service Delivery	Traffic (TFNSW) Volumes Report	C6 – Insignificant	No extended road closures recorded.
k Ass	High Risk Communities	Road classifications TfNSW Network Restriction		Date accessed: 6/12/23
iessm		Reports		
ent -		TfNSW Spatial Data Tool		
Customer Journev Risk Assessment – [region] Report	Environment is natural considerations,	TfNSW Spatial Data Tool NSW Bushfire Risk Management	C4 – Moderate	Some endangered/ threatened ecological species with risks of frequent fires.
Repor	environmental	<u>Plans</u> NPWS Plans of Management		Date accessed: 8/12/23
-	vulnerability, or sensitivities	<u>M wo Hails of Management</u>		
	Cultural assets include Aboriginal,	<u>NSW Bushfire Risk Management</u> Plans	C5 – Minor	A few cultural assets in national parks.
	non-indigenous	<u>NPWS Plans of Management</u>		Date accessed: 8/12/23
	historical, and other cultural	Aboriginal heritage information		
	assets	State heritage inventory		
		Maritime heritage database		

Transport for NSW			
Consequence	Source Documents	[consequence]	Analysis
Financial	Transport for NSW Corridor Plans Local Government Asset Management Plans	C2 – Severe	Gwydir Council Transport Asset Management Plan No clear evidence of investment. Date accessed: 6/12/23
Economic value to the economy	Regional Plans	C1 – Catastrophic	\$0.9 billion freight value outbound from Gwydir.
	NSW Regional Economic Development Strategies TraNSIT Web (csiro.au) Value of Agricultural Commodities Produced, Australia Strategic Freight Forecasts - commodity forecast map Strategic Freight Forecasts - commodity origin map Strategic Freight Forecasts - commodity destination map		Date accessed: 6/12/23
Fechnology and public utility ncluding electricity, water supply and production/treat nent, relecommunicatio	NSW Population Projections Transport for NSW Projects and initiatives map School Infrastructure Projects Health Infrastructure Projects TfNSW Spatial Data Tool	C5 – Minor	Delungra and Bingara Public Schools. Not identified as at risk of natural disaster.



Transport for NSW

