Namoi Region
Road Network Strategy

Version 11 – February 2018
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<td>Fixing Country Roads (NSW)</td>
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<td>Fixing Country Truck Washes</td>
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<tr>
<td>NSW Prescriptive and Performance Based Standards (PBS) Heavy Vehicle Combinations</td>
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In 2015, Namoi Unlimited undertook a study with the Regional Australia Institute (RAI) called ‘Shaping the Future of the Namoi’. The RAI estimated that the economy of the Namoi could expand by an additional $900 million by 2030, on top of the roughly $2 billion in potential economic growth the region is already likely to experience by this time.

Six Future Factors or levers were identified to grow the economy of the Local Government Areas who are members of Namoi Unlimited. These levers suggested the group; embrace innovation in agricultural production, understand national and global commodity markets, seek investment on the right terms and leverage a regional brand to attract people to live and invest in the Namoi region.

Critical to growth and developing opportunities for investment in the economy and agricultural production, is the network of, and access for freight and commodities to roads, rail and air transport.

The catalyst for collaborating on the network of roads was a partnership opportunity with NSW Roads and Maritime Services (RMS) to conduct a pilot program to develop an understanding of how critical the roads network is to economic development with the understanding that:

- Fixing one issue on a regional road in one Local Government Area will not improve freight capacity, capability and ultimately productivity on a network.
- Fixing all of the identified inhibitors on an identified freight route on the network will have greater impact on service, efficiency and operation for business, industry and community.
- Efficiencies in works and funding can be identified by approaching issues as a region.

This approach was used to address critical access and safety issues on the Pacific Highway (A1), demonstrating that with a key route approach to fast-track funding and priorities, the political will and evidence - this can be achieved.

The focus of this strategy is in three parts:

- Part 1 – the Executive Summary outlines the rationale for this approach, the challenges and the industry sectors who are reliant on a well performing roads network.
- Part 2 – identifies the pinch points on the region’s roads network based on HML access, freight movements and safety.
- Part 3 – outlines the future focus of the Councils and Government, the advocacy and documentation required for funding applications.

The pinch points are classified under four identified routes crossing the Namoi region. These four routes are identified feeders and drivers of industry and commodities across NSW and Australia. These routes are: the Oxley Highway (B56), the Kamilaroi Highway (B51), New England Highway (A15) and Fossickers Way (B95).

Post endorsement of this strategy, detailed engineering solutions, business cases and extensive solutions-based consultation will be undertaken to prepare the requirements for infrastructure funding set by all levels of government.

The Board of Namoi Unlimited will commence its advocacy role around the strategic vision for HML access, industry development and safety.

Namoi Unlimited acknowledges that this is a pilot program and the effort to collaborate across traditional Local Government boundaries and cross government is bold and ambitious.

Cr Andrew Hope  
Chair, Namoi Unlimited  
Mayor Liverpool Plains Shire Council
Introduction

Namoi Unlimited is a Joint Organisation of Councils in the New England North West region of NSW. As a group of seven Local Government Areas¹ in NSW, members collaborate to develop regional opportunities to challenges that inhibit the growth of the economies in the Namoi region.

A goal of the member Councils is to achieve HML access across the region.

In order to facilitate action toward this goal, the member Councils of Namoi Unlimited partnered with RMS to articulate the network pinch points that inhibit growth. The pinch points on the roads network are summarised in Part 2: Pinch Points and classified by their access to major State transport routes.

The priorities are classified under four of the substantial arterial routes crossing the Namoi region: These four routes are important feeders and drivers of commodities and services across NSW and Australia. The routes are: the Oxley Highway (B56), the Kamilaroi Highway (B51), New England Highway (A15) and Fossickers Way (B95).

It is important to recognise that not all the region’s freight networks are not encompassed in these four key routes or isolated within the boundaries of the seven member Councils.

The Newell Highway (A39) is as an equally significant freight route for the region. Priorities on the Newell Highway are not articulated in this document as Namoi Unlimited believes this role rests with the Newell Highway Taskforce and is articulated in the Newell Highway Corridor Strategy².

NSW Government Regional Plan

The importance of freight and connectivity across the region as a driver for the economic, environmental and social outcomes is described in the New England North West Regional Plan 2036³.

Action 14.4 in the New England North West Regional Plan 2036 is to prioritise projects that address impediments to the regional freight network and work with stakeholders to upgrade transport network capability as demand changes.⁴

The New England North West Regional Plan 2036 plan acknowledges the connection between local, regional and state roads and seeks the support of the Local Government sector to identify initiatives to build a network for business, industry and community to operate.

The New England North West Regional Plan 2036 acknowledges that the maintenance of these transport and freight networks is imperative to driving commodities to processors and markets for grain, livestock, cotton, wool, coal and timber as well as facilitating tourism and people to schools, hospitals and for amenity.

Why a Network Strategy?

The intent of the Namoi Road Network Strategy is to identify needs or missing links within the road network.

The links encompass State and Local roads, the pinch points within the Strategy are identified as roads that:

a) are vital economic enabling connections between local, regional and state roads;

¹ Members of Namoi Unlimited at the time of completing this document were: Gunnedah Shire Council, Gwydir Shire Council, Liverpool Plains Shire Council, Narrabri Shire Council, Tamworth Regional Council, Uralla Shire Council and Walcha Council
b) contribute to a transport and logistics network that supports efficiencies for business, industry and communities;

c) are accessible to an appropriate type of vehicle; and

d) are managed in a way that contributes to (a), (b) and (c).

This Strategy also demonstrates the value of collaborating across Local Government boundaries with the NSW Government on the road systems, to address the challenges and opportunities on the network and to create a seamless and safe journey for road users.

A significant volume of freight moves by road. Industry is supported by connected freight corridors providing the east-west and north-south links across the region as well as to the rest of New South Wales and across the border into Queensland. This is expected to increase into the future.

Transport infrastructure needs to be continually maintained and upgraded; as new vehicles come onto the road network, and as new industries emerge. This pilot Strategy is a mechanism to maintain a focus and create a direction around advocacy on the needs for the road network and industry. Namoi Unlimited will be an advocate for the network and member Councils to seek funding for upgrades.

This strategy also provides support and justification on how various links fit into the overall road network by nominating the dependency of industry on a productive and efficient roads network or the future impact of known development. This approach is consistent with the NSW Long-Term Transport Master Plan, the NSW Freight and Ports Strategy and the New England North West Regional Plan 2036 released by the NSW Department of Planning.

**Vision of the Strategy**

In collaboration with the NSW Government, Namoi Unlimited will create a vision for the road and freight network across the region, to ensure roads are enabling the movement of commodities and goods safely and efficiently, to capitalise on economic and social opportunities, and available funding.

**Objectives of the Strategy**

The objectives for the Namoi Roads Network Strategy are:

A. To develop an integrated strategy in partnership with the State government recognising vehicles use a combination of state, regional and local road networks connecting them from their place of origin to their destination.

B. To identify pinch points across the network, recognising that a pinch point is a deficiency on a local, regional or state government road, it is substandard because access, detours or HML is denied and if a pinch point exists the trip becomes less efficient and potentially unsafe. This also applies where freight and community amenity need to coexist safely. Deficiencies on the network for the community, for business and industry are costly.

C. To focus on strategic links and functions rather than on local roads issues

D. To conduct a pilot program that seeks to develop a seamless and well maintained system for road users

**Namoi Unlimited**

Namoi Unlimited is one of the collaborations of Councils operating in NSW.

In 2017 legislation recognising the value of collaboration and strategic planning in Local Government was recognised by the NSW Government in amendments to the Local Government Act.
The vision of Namoi Unlimited is to collaborate to create:
A productive, smart and liveable Namoi Region that is recognised for its strong leadership, innovation and excellence in regional collaboration.

Namoi Regional Profile

<table>
<thead>
<tr>
<th>LGA</th>
<th>GDP ($million)</th>
<th>People</th>
<th>Male</th>
<th>Female</th>
<th>Median Age</th>
<th>Families</th>
<th>All Private Dwellings</th>
<th>Av. Household</th>
<th>Median Weekly Household Income</th>
<th>Median Monthly Mortgage</th>
<th>Median Weekly Rent</th>
<th>Av. Motor Vehicles per Dwelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gwydir LGA</td>
<td>744</td>
<td>5,258</td>
<td>50.6%</td>
<td>49.4%</td>
<td>48</td>
<td>1,367</td>
<td>2,589</td>
<td>2.3</td>
<td>$910</td>
<td>$981</td>
<td>$120</td>
<td>2</td>
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<tr>
<td>Gunnedah LGA</td>
<td>231</td>
<td>12,215</td>
<td>50%</td>
<td>50%</td>
<td>40</td>
<td>3,191</td>
<td>5,490</td>
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<td>$1,253</td>
<td>$1,473</td>
<td>$240</td>
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<tr>
<td>Liverpool Plains LGA</td>
<td>419</td>
<td>7,687</td>
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<td>49.6%</td>
<td>45</td>
<td>1,991</td>
<td>3,703</td>
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<td>Narrabri LGA</td>
<td>875</td>
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<td>50.1%</td>
<td>40</td>
<td>3,281</td>
<td>5,970</td>
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<td>$1,242</td>
<td>$1,395</td>
<td>$200</td>
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<tr>
<td>Tamworth Regional LGA</td>
<td>2,780</td>
<td>59,663</td>
<td>48.7%</td>
<td>51.3%</td>
<td>40</td>
<td>15,373</td>
<td>26,041</td>
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<td>Uralla LGA</td>
<td>214</td>
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<td>2,734</td>
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<td>$1,058</td>
<td>$1,346</td>
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<td>Walcha LGA</td>
<td>149</td>
<td>3,092</td>
<td>50.2%</td>
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<td>48</td>
<td>823</td>
<td>1,593</td>
<td>2.3</td>
<td>$1,054</td>
<td>$1,083</td>
<td>$148</td>
<td>2.1</td>
</tr>
</tbody>
</table>

Industry relies on the Road Network across the Namoi

Namoi Unlimited has utilised content from the New England North West Regional Plan 2036\(^\text{5}\) to articulate the vision for enabling industry and economic in the region.

Utilising content from an established and adopted NSW Government publication supports the directions in this document.

The Namoi Region is part of the New England North West region and includes some of Australia’s most productive agricultural land in NSW.

It is a network of vibrant cities and centres across diverse landscapes.

These assets will be the foundation of a prosperous future.

The strong economic base is expected to underpin new and emerging industries to create one of the most dynamic regional economies in NSW. The focus of the future for the economy is to leverage the distinctive regional identity of agriculture; to promote intensive agriculture, horticulture, green industries, renewable energy generation and tourism. The natural environment, cultural features and events will continue to attract tourists and offer diversity within an economically sustainable region.

Agricultural production accounts for 17.5% of the State’s gross agricultural value, the second highest regional contribution in NSW.

The strength of the sector will rely on favourable climate and soils, access to national and international markets, strong broad acre cropping and grazing sectors and emerging intensive agriculture and food.

The region’s cities and centres are rich in heritage, history and character. As the principal places for jobs, commerce, health, education and industrial activity, will be a focus for economic activity.

**Agribusiness and Food Processing sectors**

Intensive agriculture and food processing are the fastest growing agriculture-related sectors. A more diverse agricultural sector will offset the challenges of agricultural restructuring in the region.

Large livestock and food processing facilities, such as abattoirs and milling operations, can leverage changing global population and food consumption trends.

Potential expansion of these sectors is demonstrated by the already growing poultry sector around Tamworth, Gunnedah and Liverpool Plains.

A strategic approach to intensive agriculture and food processing will avoid land use compatibility issues and protect the long-term viability of their operations, while also facilitating opportunities for expansion across different rural sectors and communities.

Agribusiness plays a vital role in supporting agricultural production, and includes professional agricultural services, storage and warehousing, machinery and equipment, transport and logistics, and food, beverage and other product outlets. These uses should be permitted in a range of locations and existing agribusiness sites protected from the encroachment of inappropriate land uses that might limit their operations.

Appropriate co-location of related industries will maximise infrastructure, decrease supply chain costs, increase economies of scale and attract investment. Industries that co-locate also have the potential to use the by-products and waste materials of other industries to create new products and services.

**Direction 1 in the New England North West Regional Plan 2036: Expand agribusiness and food processing sectors**

Actions include:

1.1 Prepare a Regional Intensive Agribusiness Strategy to foster ongoing investment and to specify guidelines for intensive agriculture, food processing and mapping for suitable future precincts for these uses.

1.2 Promote the expansion of agribusiness and associated value-adding activities through local plans.
1.3 Protect intensive agriculture clusters in local plans to avoid land use conflicts, particularly with residential and rural residential expansion.

1.4 Encourage commercial, tourist and recreation activities that complement and promote a stronger agricultural sector, and build the sector’s adaptability.

Agricultural Productivity

The New England North West is home to some of Australia’s largest, most efficient and productive farmers and graziers.

The New England North West is uniquely positioned to foster stronger relationships with the adjoining Darling Downs in Queensland and develop new supply chains to export produce to Asian markets via the Brisbane West Wellcamp Airport, while also maximising export opportunities associated with Tamworth Regional Airport, the Inland Rail and the Port of Newcastle.

This expertise is a competitive advantage that must be harnessed for the region to remain one of the State’s food and fibre heartlands.

Fostering innovation and competitiveness will be essential to securing sustained growth in the agricultural sector over the next 20 years. Agricultural research and development, the presence of institutions like the University of Sydney at Narrabri, numerous CRCs, the University of New England, and SMART Farm Innovation Centre in Armidale, will continue to nurture agricultural innovation.

The region’s institutions lead the way in research and development into farm efficiency and technologies that can sustain productivity, foster environmental sustainability, open market opportunities and maintain a competitive edge.

Reliable telecommunications will also be critical to enabling farming innovations.

The New England North West can maximise opportunities associated with growing global connectivity and international trade agreements.

By harnessing new markets presented through these processes, the entire supply chain can benefit, including transport infrastructure and facilities such as silos, abattoirs and saleyards, supporting secondary processing facilities, and transport and logistics industries.

**Direction 2 in the New England North West Regional Plan 2036:**

Actions include:

2.1 Develop industry-specific action plans to grow cotton, broadacre grains and grazing sectors and address sector-specific considerations through local plans.

2.2 Facilitate research and development institutions through local plans and identify opportunities to grow and promote innovation in the agricultural sector.

2.3 Promote investment in the agricultural supply chain through local plans by protecting these assets from land use conflict and the encroachment of incompatible land uses.

Partners to the Strategy

This Strategy has been developed with a genuine intent to collaborate across traditional Local Government boundaries and with the NSW Government.

As momentum around the pilot evolved, consultation with other NSW Government agencies and the transport industry occurred.
The partners to the Strategy are:

- Namoi Unlimited a Joint Organisations of Councils in NSW
- Gunnedah Shire Council
- Gwydir Shire Council
- Liverpool Plains Shire Council
- Narrabri Shire Council
- Tamworth Regional Council
- Uralla Shire Council
- Walcha Council
- NSW Roads and Maritime Services

The initial work to inform this Strategy was undertaken by the SMEC Consultancy Group and is available in the *Regional Freight Connectivity and Productivity Analysis – Final Report (March 2016)*.

Namoi Unlimited also sought assistance from the NSW Department of Planning and Environment to utilise information from the recently released *New England North West Regional Plan 2036*. The intent of this relationship is to align the region’s planning strategy to the work undertaken in this document to demonstrate the alignment of the NSW Government and the region’s initiatives.

RMS representatives provided the opportunity for Namoi Unlimited to engage more broadly with Transport for NSW Freight Branch. Freight Branch is the strategic link between transport policy and application by Local Government.

Consultation undertaken with industry was undertaken to discuss the identified pinch points with regional industry operatives who make up the *Tamworth Freight and Supply Chain Cluster*. Consultation was undertaken with Carey’s Transport, Hopkins Transport, McCullock Bulk Haulage and Stockmaster/Cavanagh, and anecdotally industry supported the approach of the network strategy, expressed to the Namoi that works included as pinch points were priorities that would enable industry.
As a Strategic Project of Namoi Unlimited the Board requested Road and Transport representatives of member Councils to meet and identify the inhibitors to HML access on roads within their Local Government Area regardless of ownership.

Local Government is an experienced road manager. Six of the seven member Councils of Namoi Unlimited have regional maintenance contracts with the RMS. These contracts have an estimated value of $25 million to Local Government.

Members were also asked to identify any roads outside their Local Government Area (that in their experience) were critical to industry growth and freight in and out of the region.

In addition to identifying inhibitors to growth the working group also recognised the need to identify safety issues on the network. Figures released up to January 2018 show regional roads account for the highest fatal and serious injury crashes across NSW. NSW Government sources say that two thirds or 253 of the 384 lives lost on NSW roads in 2016 were on country roads.

The development and maintenance of roads is critical for industry and community amenity.

**How were Pinch Points identified?**

The Board of Namoi Unlimited set a goal for the Roads and Transport Working Group to identify pinch points and inhibitors to growth across the seven Local Government Areas.

The involvement of road asset managers and engineers in this project with the RMS was essential in this pilot project. Member Councils met and provided a list of pinch points that they believe are inhibiting growth in their own Local Government Area.

Pinch points were then aligned to accessing a State corridor.

Government provided input on roads that were impacting the NSW Road Toll and safety.

The RMS and Transport for NSW provided a contribution to the regional freight network and identified constraints on the network.

The result is a listing of pinch points linked to four arterial freight routes with the:

- Identification of pinch points
- Linkages to State owned assets
- A summary of solutions and estimates
- Identification if the pinch point is related to HML access
- Noting of current and future industry activity
- Potential funding sources are identified

This recognises that any prioritisation of works on the network needs to have regard for:

- Fixing one issue on a regional road in one Local Government Area will not improve freight capacity, capability and ultimately productivity on a network.
- Fixing all of the identified inhibitors on an identified freight route on the network will have greater impact on service, efficiency and operation for business, industry and community.
- Efficiencies in works and funding can be identified by approaching issues as a region.

The approach specified in Part 3 of this document provides the future direction for this pilot which includes the development of business cases for funding, political will and advocacy. Part of the rationale for this pilot is to contribute to work being conducted into how road funding is allocated and prioritised.

In Part 3 there is a listing of all of the current programs available to Local Government for the development and maintenance of roads.

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The table of pinch points is extensive and it is the intent of this Strategy to create a process and role for the Joint Organisation to continually renew the list of pinch points. This needs to be an ongoing function of the Roads and Transport Working Group of Namoi Unlimited.

The process to identify the pinch points is described below:

- **Local road priorities identified by representatives from member Councils**
- **Definition of a regional priority agreed**
- **Identification of regional priorities**
- **Consultation to verify priorities**
- **Alignment of regional priorities with industry uses on the network**
- **Alignment of regional priorities to State road networks**
- **Namoi Roads Network Strategy documented**
- **Identified routes move to Solutions Phase**
- **Development of Business Cases, engineering design, consultation and funding**

**Pinch Points identified**

According to the pilot objectives, the following table of pinch points are aligned to four strategic road routes in NSW, they are identified deficiencies with a particular focus on strategic links and functions rather than on local roads issues.
### New England Highway (A15)

**Description:** The New England Highway is an 878-kilometre highway in Australia running from Hexham at Newcastle, New South Wales at its southern end to Yarraman near Toowoomba, Queensland at its northern end. At its southern end it connects to the Pacific Highway and at its northern end it connects to the D'Aguilar Highway. It traverses the Hunter Valley, New England, Southern and Darling Downs regions.

<table>
<thead>
<tr>
<th>Identified Works</th>
<th>Description</th>
<th>Significance to the Network Strategy</th>
<th>Inhibitor</th>
<th>Current Enabler for Industry</th>
<th>Future Enabler for Industry</th>
<th>Data Source</th>
<th>Solution</th>
<th>Estimated Cost</th>
<th>Identified Funding Source</th>
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<tbody>
<tr>
<td>A15 New England Highway (Tamworth Regional Council)</td>
<td>Jack Smyth Drive to Calala Lane</td>
<td>Section of the New England Highway into Tamworth from the south</td>
<td>Heavy congestion, particularly during events Amenity, being a high profile entrance to the regional capital</td>
<td>General freight</td>
<td>Traffic counts</td>
<td>Two lanes increased to four</td>
<td>$5.65 million</td>
<td>RMS</td>
<td></td>
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<tr>
<td>RR7718 Port Stephens Cutting (Tamworth Regional Council)</td>
<td>Link between the New England Highway and – Thunderbolts Way via Dungowan</td>
<td>Regional link to the East Coast Alternate route to Newcastle and Sydney Alternate route to the Oxley Highway and 42kms of winding road</td>
<td></td>
<td>Livestock Tourism Timber</td>
<td>Traffic counts</td>
<td>Improvement of the existing road by widening and realignment to improve sight lines and safety</td>
<td>$20 million</td>
<td>Regional Growth Fund</td>
<td></td>
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<td>MR73 Shanahans Bridge (Uralla Shire Council)</td>
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<td>MR73 Regional Bridge Tolleys Gully Bridge (Uralla Shire Council)</td>
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<td>MR73 Alma Park Bridge (Uralla Shire Council)</td>
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<td>MR73 Basin Creek Bridge (Uralla Shire Council)</td>
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<tr>
<td>MR73 Laura Creek Bridge (Uralla Shire Council)</td>
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<tr>
<td>Lone Pine Bridge (Uralla Shire Council)</td>
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</tbody>
</table>

**Note:** The table above highlights some identified works along the New England Highway, detailing their description, significance, inhibiting factors, current and future enablers, and their corresponding solutions and costs. The identified funding sources are also provided for each project.
Kamilaroi Highway (B51)

Description: The Kamilaroi Highway is a 605-kilometre state highway located in the north-western region of New South Wales, Australia. The highway's north western terminus is at a junction with the Mitchell Highway at Bourke. Its south eastern terminus is a junction with the New England Highway north of Willow Tree.

<table>
<thead>
<tr>
<th>Identified Works</th>
<th>Description</th>
<th>Significance to the Network Strategy</th>
<th>Inhibitor</th>
<th>Current Enabler for Industry</th>
<th>Future Enabler for Industry</th>
<th>Data Source</th>
<th>Solution</th>
<th>Estimated Cost</th>
<th>Identified Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR37 Clifton Road (Gunnedah Shire Council)</td>
<td>Link between the Kamilaroi (B51) and the Oxley (B56) Carroll to Breeza missing link</td>
<td>Cotton from the west to ginning operations in Gunnedah Shire and Narrabri Shire</td>
<td>HML Unsealed section of road. Poor pavements.</td>
<td>Grain</td>
<td>Traffic counts Local Land Services (DPI)</td>
<td>Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)</td>
<td>Reconstruction of 13km of road and bitumen sealing</td>
<td>$6.14million</td>
<td>Fixing Country Roads</td>
</tr>
<tr>
<td>SR55 Williwarina Road &amp; SR177 Mystery Road (Liverpool Plains Shire Council)</td>
<td>Liverpool Plains link to Kamilaroi Highway at Breeza</td>
<td>Cotton from the Liverpool Plains (south) to ginning operations in Gunnedah Shire Council on Clifton Road</td>
<td>Passive Rail Crossings and Unsealed Pavement</td>
<td>Grain</td>
<td>Traffic counts Local Land Services (DPI)</td>
<td>Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)</td>
<td>Upgrade Rail Crossings and Seal 18km of unsealed road</td>
<td>$7million</td>
<td></td>
</tr>
<tr>
<td>SR73 Wandobah Road (Liverpool Plains Shire Council)</td>
<td>Liverpool Plains link to Kamilaroi Highway at Curlewis</td>
<td>Agricultural Products from the Liverpool Plains (south) to Gunnedah &amp; Narrabri</td>
<td>Unsealed Pavement</td>
<td>Grain</td>
<td>Traffic counts Local Land Services (DPI)</td>
<td>Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)</td>
<td>Reconstruction of 15km of road and bitumen sealing</td>
<td>$8million</td>
<td></td>
</tr>
<tr>
<td>RR126 Wallabadah Road Henry Street Bridge Whittaker St Bridge Henry St Rail Crossing (Liverpool Plains Shire Council)</td>
<td>Link between New England Highway and Kamilaroi Highway</td>
<td>Servicing for forestry, agricultural and mining industries</td>
<td>The route is not identified for HML by Council Narrow Bridges Rail Crossing</td>
<td>Grain</td>
<td>Traffic counts Local Land Services (DPI)</td>
<td>Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)</td>
<td>Replacement of concrete bridges, upgrade of Rail Crossing (overpass)</td>
<td>$50million</td>
<td></td>
</tr>
<tr>
<td>SR28 Trucking Yards Lane (Narrabri Shire Council)</td>
<td>Wee Waa internal link on the Kamilaroi Highway</td>
<td>Identified link to avoid disruption to community amenity Anticipated increase in container freight</td>
<td>Narrow pavement does not allow for truck turning movements Rail realignment Poor condition Safety High voltage power relocation</td>
<td>Grain</td>
<td>Traffic counts Local Land Services (DPI)</td>
<td>Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)</td>
<td>Realignment of the road and railway line</td>
<td>$3million</td>
<td>Regional Growth Funds</td>
</tr>
<tr>
<td>Route</td>
<td>Description</td>
<td>Problem</td>
<td>Recommendations</td>
<td>Cost</td>
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<tr>
<td>MR130 Werris Creek Road (Tamworth Regional Council)</td>
<td>Link between Oxley Highway and Kamilaroi Highway Primary link between Tamworth and Quirindi</td>
<td>Identified safety concern Link to the Newell Highway and to western regions Community route for commerce and employment between Tamworth Regional Council and Liverpool Plains Shire Council Access for B-doubles and B-triples onto the Kamilaroi Highway</td>
<td>Narrow pavement Safety Poor road condition Heavy vehicle access</td>
<td>$7 million</td>
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<tr>
<td>RR130 Werris Creek Road Rail Crossing south of Werris Creek (Liverpool Plains Shire Council)</td>
<td>Link between New England Highway and Kamilaroi Highway</td>
<td>Identified safety concern – Emergency Services queuing for trains hauling &amp; shunting Community route for commerce &amp; employment between TRC &amp; LPSC. Serving for forestry, agricultural and mining industries</td>
<td>At grade rail crossing - Part of Rail Shunting Yard at Werris Creek. Route is not identified for HML by Council</td>
<td>$40 million</td>
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<tr>
<td>RR7785 Bloomfield Street (Gunnedah Shire Council)</td>
<td>Alternate heavy vehicle route access level is currently HML B-doubles primarily due to poor pavement condition</td>
<td>Key freight route Community route for commence and employment between Tamworth Regional Council and Liverpool Plains Shire Council</td>
<td>No B-triple access between Tamworth Regional Council and Gunnedah Shire Council. Requirement for additional overtaking lanes East/West of Gunnedah. Weak pavements unable to service heavy traffic loadings</td>
<td>$4 million</td>
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<tr>
<td>SR30 Culgoora Road (Narrabri Shire Council)</td>
<td>Link between the Kamilaroi Highway (B76) and the Newell Highway (A39) through Wee Waa to Narrabri.</td>
<td>Key freight route Community route for commence and employment between Tamworth Regional Council and</td>
<td>Unsealed road Agri-business Grain Livestock Cotton</td>
<td>$5.6 million</td>
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<tr>
<td>Road Name</td>
<td>Description</td>
<td>Authority</td>
<td>Problems</td>
<td>Work Details</td>
<td>Cost</td>
<td>Funding Source</td>
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<tr>
<td>SR43 Bulunbulun Road (Gunnedah Shire Council)</td>
<td>Link between Werris Creek Road to Breeza (SH29) to Currabubula (MR130) through to the Kamilaroi Highway (B51)</td>
<td>Liverpool Plains Shire Council</td>
<td>Freight and commerce route between Tamworth and Breeza, Unsealed road, Weak pavements</td>
<td>Grain, Livestock, Cotton, Shenhua Watermark Coal operation</td>
<td>$6.15 million</td>
<td>Fixing Country Roads</td>
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<tr>
<td>RR579 Gap Rd (Liverpool Plains Shire Council)</td>
<td>Link to Mid Western Region (Dubbo &amp; Orange) Werris Creek Road from Tamworth onto Kamilaroi Highway (B51)</td>
<td>Liverpool Plains Shire Council</td>
<td>Key Agricultural freight &amp; commerce route between Tamworth and the Liverpool Plains, Underpass under rail track at Werris Creek – frequent flooding, Causeways, Poor alignment</td>
<td>Mining, Tourism, General Freight, Agri-business, Grain, Livestock, Cotton, Shenhua Watermark Coal operation</td>
<td>$10 million</td>
<td>Regional Growth Funds</td>
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<tr>
<td>SR9 Spring Creek Bridge Bald Hill Road (Narrabri Shire Council)</td>
<td>Link between the Kamilaroi Highway (B51) to the Newell Highway (A39) for Narrabri to Edgeroi and Bellata</td>
<td>Narrabri Shire Council</td>
<td>Key freight and commodity route, Safety, Access, Flood event</td>
<td>Grain, Livestock, Cotton</td>
<td>Replacement of the single lane bridge and address safety concerns</td>
<td>$600,000</td>
<td>Timber Bridge Replacement Program</td>
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<tr>
<td>MR329 Cypress Way (Narrabri Shire Council)</td>
<td>Link between the Kamilaroi Highway (B51) to the Newell Highway (A39) for Pilliga and Gwabegar</td>
<td>Narrabri Shire Council</td>
<td>Key freight and commodity route, Link north to south to Warrumbungle Shire Council and beyond, Unsealed road</td>
<td>Grain, Livestock, Cotton, Timber</td>
<td>Reconstruction of 24km road and bitumen sealing</td>
<td>$14.2 million</td>
<td>Fixing Country Roads</td>
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<tr>
<td>RR7716 Come by Chance Road (Narrabri Shire Council)</td>
<td>Link between the Kamilaroi Highway (B51) to the Castlereagh (B55) for Narrabri to Walgett</td>
<td>Narrabri Shire Council</td>
<td>Link north south and onto Coonamble Shire and beyond, Unsealed Road</td>
<td>Grain, Livestock, Cotton</td>
<td>Rehabilitation and widening</td>
<td>$400,000</td>
<td>Fixing Country Roads</td>
<td></td>
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</tr>
<tr>
<td>Project Description</td>
<td>Details</td>
<td>Key Freight Route</td>
<td>Community Amenities</td>
<td>Safety</td>
<td>Competing Priorities for Road Use</td>
<td>Land Acquisition Required</td>
<td>Grain</td>
<td>Livestock</td>
<td>Cotton</td>
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<tr>
<td>SR36 Old Newell Hwy to Old Turrawan Rd Railway crossing (Narrabri Shire Council)</td>
<td>Link between the Kamilaroi Highway (B51) to the Newell Highway (A39) for Narrabri</td>
<td>Key freight route</td>
<td>Community amenity</td>
<td>Intersection to the Kamilaroi</td>
<td></td>
<td></td>
<td>Grain</td>
<td>Livestock</td>
<td>Cotton</td>
</tr>
</tbody>
</table>
## Oxley Highway (B56)

### Description:
The Oxley Highway starts from the Mitchell Highway at Nevertire before journeying to the Castlereagh Highway at Gilgandra, from where it is duplexed with the Newell Highway to Coonabarabran, thence to the New England Highway at Tamworth, with which it is duplexed to Bendemeer, the Thunderbolts Way at Walcha, and the Pacific Highway near Port Macquarie.

### Identified Works

<table>
<thead>
<tr>
<th>Description</th>
<th>Significance to the Network</th>
<th>Inhibitor</th>
<th>Current Enabler for Industry</th>
<th>Data Source</th>
<th>Solution</th>
<th>Estimated Cost</th>
<th>Identified Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Southern Tamworth Bypass (Tamworth Regional Council)</strong></td>
<td>New England Highway South to Oxley Highway west via Werris Creek Road</td>
<td>Connection to the airport, future industrial estate, and future intermodal freight terminal. Direct link between New England Highway south, Werris Creek Road and Oxley Highway west.</td>
<td>Current freight route from the south of Tamworth (to Glen Artney, Airport, Freight Intermodal and Taminda) is through congested city traffic including several school zones</td>
<td>Poultry Livestock Agri-business General freight Manufacturing Equine Forestry</td>
<td>Forestry operations east of Nundle Possible future air freight Future intermodal freight terminal</td>
<td>Traffic counts Local Land Services (DPI) Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)</td>
<td>Construction of a 5-leg roundabout on the Oxley Highway at Country Road. Re-alignment and upgrade of the Airport access road (new Winton Road). Upgrade of Country Road, Heiligmans Lane, and Burgmanns Lane. New bridge over Timbumburi Creek. Overpass over Warral Road, railway line and Werris Creek Road. Roundabout at Burgmanns Lane/New England Highway intersection.</td>
</tr>
<tr>
<td><strong>Chimney Swamp Bridge (Walcha Shire Council)</strong></td>
<td>Narrow bridge on a poor alignment. The works involves the installation of a compliant two lane bridge on an appropriate alignment, works to be undertaken by RMS who can provide estimates.</td>
<td>Key freight link east to west</td>
<td>Narrow bridge on a poor alignment Safety</td>
<td>Livestock Agri-business General freight Tourism Commerce</td>
<td></td>
<td>Traffic counts Local Land Services (DPI) NSW Visitor Numbers (Destination NSW) Australian Bureau of Statistics (ABS) Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)</td>
<td>Two lane bridge and alignment works</td>
</tr>
<tr>
<td><strong>Surveyors Creek Bridge (Walcha Shire Council)</strong></td>
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<tr>
<td>RR7709 Grain Valley Road (Gunnedah Shire Council)</td>
<td>Access through Mullaley (B56) HW11, Boggabri (B51) WH29 onto Kamilaroi Highway (SH29)</td>
<td>Wellington to Boggabri link and beyond Connector to the Golden Highway and Black Stump Way Detour route for Newell Hwy during incident, floods and fires</td>
<td>Unsealed road Causeways in flooding events</td>
<td>Poultry Livestock Grain Cotton</td>
<td>Traffic counts Australian Bureau of Statistics (ABS)</td>
<td>Reconstruction of road and bitumen sealing Causeways</td>
<td>$8.2million</td>
</tr>
<tr>
<td>Second over rail bridge at Gunnedah on Oxley Hwy connecting to Kamilaroi Hwy and Bloomfield St</td>
<td>Community passage and heavy vehicle route access level is currently HML B-doubles primarily due to poor pavement condition</td>
<td>Key freight route Community route for commence and employment</td>
<td>Pinch point for HPV freight access Safety concerns at level crossing.</td>
<td>Mining Tourism General Freight Agri-business Grain Livestock Cotton</td>
<td>Traffic counts Local Land Services (DPI) NSW Visitor Numbers (Destination NSW) Australian Bureau of Statistics (ABS) Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)</td>
<td>Construction of a second over rail bridge at Gunnedah</td>
<td>$61million</td>
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</tbody>
</table>
Fossickers Way (B95)

**Description:** The Fossickers Way is a series of country roads located in the Northern Tablelands region of New South Wales, Australia that, when joined together, come to form a 379-kilometre scenic and tourist drive. The road's southern terminus is located in Nundle with its northwest terminus in Warialda; thereafter the road joins the Gwydir Highway and heads east to Inverell before reaching its eastern terminus in Glen Innes. The majority of the Fossickers Way is designated as B95.

<table>
<thead>
<tr>
<th>Identified Works</th>
<th>Description</th>
<th>Significance to the Network Strategy</th>
<th>Inhibitor</th>
<th>Current Enabler for Industry</th>
<th>Data Source</th>
<th>Solution</th>
<th>Estimated Cost</th>
<th>Identified Funding Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>MR357 Rangari Road (Gunnedah Shire Council)</td>
<td>Unsealed route linking the Fossickers Way to the Kamilaroi Highway and crossing three Local Government Areas</td>
<td>Freight access route for mining and agriculture in the area</td>
<td>Unsealed road and poor pavement condition. Freight access level</td>
<td>Traffic counts</td>
<td>Australian Bureau of Statistics (ABS)</td>
<td>Reconstruction of road and bitumen sealing</td>
<td>$8.75 million</td>
<td></td>
</tr>
<tr>
<td>MR357 Rangari Road (Tamworth Regional Council)</td>
<td>Access for producers to processors and to main markets from Manilla (B95) to Boggabri (B51) linking to the Kamilaroi Highway (B51). Direct access from the east to mining operations.</td>
<td>Efficient access for service vehicles and employees from Tamworth and Manilla to the mines. Agreement between three Councils on the significance of the route.</td>
<td>Poultry, Livestock, Mining, Agriculture</td>
<td></td>
<td>Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES)</td>
<td></td>
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</tr>
<tr>
<td>MR63 Manilla Low Level Bridge (Tamworth Regional Council)</td>
<td>Low level bridge over the Namoi River in Manilla and associated roadworks to link the river crossing back to MR63</td>
<td>Key freight route and identified future priority</td>
<td></td>
<td>Expansion of the poultry industry</td>
<td>Traffic counts</td>
<td>Construction of a Low Level Heavy Vehicle Crossing over the Namoi River in Manilla and approach roads</td>
<td>$7.7 million</td>
<td></td>
</tr>
<tr>
<td>Bridge over the Gwydir River and Bridge over Halls Creek at Bingara (Gwydir Shire Council)</td>
<td>230m bridge across Gwydir River, 60m bridge across Halls Creek. These bridges restrict HML traffic and are an impediment to RAV/HPV approval between Tamworth and Walialda</td>
<td>Key bridges</td>
<td></td>
<td></td>
<td>Traffic counts</td>
<td>Alignment correction of MR63, two new lower level/shorter span bridges</td>
<td>$30 million</td>
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</tr>
<tr>
<td>Bundarra to Bingara Road (Uralla Shire Council)</td>
<td>Link between Thunderbolts Way through Uralla, Armidale to Bingara and 8.4km to Gwydir Shire Council boundary</td>
<td>Gravel road requiring upgrade to sealed road. Gravel, narrow road impacted by weather thus not</td>
<td>Livestock</td>
<td>Traffic counts</td>
<td>Local Land Services (DPI)</td>
<td></td>
<td>$2.73 million</td>
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</tr>
<tr>
<td>Project Description</td>
<td>Key Roadway Details</td>
<td>Safety &amp; Commerce Impact</td>
<td>Relevant Agencies (ABARES)</td>
<td>Total Cost</td>
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<tr>
<td>Halls Creek Bridge, approximately 23km south Bingara (Gwydir Shire Council)</td>
<td>Link between the Fossickers Way (B95) to Warialla through to Tamworth to the New England Highway. Currently has inadequate width and extremely poor horizontal alignment. Currently posted at 80km/h and is a recognised safety risk.</td>
<td>Narrow bridge, Livestock, General freight</td>
<td>Traffic counts Local Land Services (DPI), Australian Bureau of Statistics (ABS), Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), NSW Visitor Numbers (Destination NSW)</td>
<td>$6million</td>
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<tr>
<td>MR63 Upper Manilla Bridge Upgrade (Tamworth Regional Council)</td>
<td>110m long bridge over the Manilla River on MR63 between Manilla and Barraba. Key bridge on freight route</td>
<td>HML, Narrow bridge, 21 tonne axle limit, Safety and commerce, Livestock, Poultry, General freight, Tourism, Agriculture</td>
<td>Traffic counts Local Land Services (DPI), Australian Bureau of Statistics (ABS), Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), NSW Visitor Numbers (Destination NSW)</td>
<td>$7.4million</td>
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<tr>
<td>MR63 Barraba Bridge Upgrade (Tamworth Regional Council)</td>
<td>65m long bridge over the Manilla River on the northern edge of Barraba township. Key bridge on freight route</td>
<td>HML, Narrow bridge, Load limit, Safety and commerce, Livestock, General freight, Agriculture, Tourism</td>
<td>Traffic counts Local Land Services (DPI), Australian Bureau of Statistics (ABS), Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), NSW Visitor Numbers (Destination NSW)</td>
<td>$3.53million</td>
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<tr>
<td>Thunderbolts Way, Pavement linking Walcha, Uralla north to Inverell, south to Gloucester, at Uralla access to the New England Highway</td>
<td>Pavement linking Walcha, Uralla north to Inverell, south to Gloucester, at Uralla access to the New England Highway. Safety - deteriorated road pavements, Passing lanes, Travel time, operator maintenance costs</td>
<td>Safety, Key freight route across three local government, Access for higher productivity vehicles in the future, Livestock, General freight, Agriculture, Tourism</td>
<td>Traffic counts Local Land Services (DPI), Australian Bureau of Statistics (ABS), Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES), NSW Visitor Numbers (Destination NSW)</td>
<td>$23.72million</td>
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<tr>
<td>Economics and Sciences (ABARES) NSW Visitor Numbers (Destination NSW)</td>
<td>replacement, realignment, duplication and approach works</td>
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Identifiers of Pinch Points on the Road Network

The performance of the regional road network is captured by various measures but predominately by:

- Safety of the road network: acknowledging that the region and the NSW Government want to reduce fatal and serious injury crashes by identifying nodes and links on the network that are high risk; and
- Freight accessibility - these are roads with the capacity to take high productivity vehicles to access origin and destination points to create efficiencies for network users.

NSW Premier’s Priorities

The NSW Government priorities for responding to challenges are outlined. Implementing actions will improve road safety, traffic efficiency and reliability, offer whole-of-life economic benefits and increase productivity for the Namoi Region.

The document also acknowledges existing Government endorsed documents and plans that prioritise the movement of freight and safety. The NSW Premier’s stated priorities are:

- grow the economy, accelerating major project assessments and delivering strong budgets
- build infrastructure and deliver better services, improving road travel, reliability and on time public transport running
- create safer communities, reducing road fatalities by at least 30% by 2021 based on 2010 levels.

Australian Government National Land Transport Network

The National Land Transport Network is a defined national network of important road and rail infrastructure links and their intermodal connections. The Network is determined by the Minister under the National Land Transport Act 2014.


Namoi Unlimited Identifiers and Suggested Prioritisation Themes

Namoi Unlimited recognises that prioritisation cannot simply be based on the development of a Business Case. The following themes are further evidence of this.

Capacity, Adaptability and Flexibility

Any strategy needs to be adaptable and flexible in order to respond to economic growth, emerging new industries and markets within the region. This means priorities might change, depending on where and when the transport network will need to be changed or improved to meet the demand created by new, emerging or growth industries to access markets.

Historically governments have tried to develop the capacity of road networks to cater for existing development. As governments continue to market and seek investment to grow NSW regions, adaptability and flexibility needs to be considered as part of transport planning and planning in general.

In a previous road project conducted around the Rangari Road development, previous prioritisation was set upon the production of a Business Case. The Business Case failed to attract the required economic attractor of greater than 1, thus the investment and drive for this project failed. As a consequence this approach needs to be more flexible to recognise there are a number of equal

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priorities that need assessment on a route based approach. It also recognised that one focus for Namoi Unlimited can not drive improvements in the network.

Some of the challenges are evident; others are expected to emerge as the result of future changes in land use, industry and demographics, hence the reference to the New England North West Regional Plan and its priorities.

Namoi Unlimited needs to develop its capacity to propose infrastructure projects and maintain ‘shovel ready’ developments.

**Industry Growth**

The expected growth in agriculture and mining and resource development is identified as growing freight task in regional NSW. The table highlights expected development that will impact the road network. This should be used as a prioritisation mechanism for the Councils and governments.

**Road Safety**

Figures released up to January 2018 show regional roads account for the highest fatal and serious injury crashes across NSW. NSW Government sources say that two thirds or 253 of the 384 lives lost on NSW roads in 2016 were on country roads. More detailed analysis from the RMS of the 2016 statistics shows that 41% of fatal crashes on regional roads involved local drivers, with a further 29% comprising of other regional residents. In summary, in 2016 the fatality rate per head of population for residents in regional NSW was almost five times that for metropolitan residents.

This has implications for the Namoi area given the distance covered by the regional road network, the current state of roads, the mix of vehicles required for the movement of goods around the region, local traffic and tourism.

Issues with the existing road network include bridge capacity limits, narrow bridges and culverts, seal widths, the ability of vehicles to safely pass or overtake, and road pavement which can contribute to poor safety outcomes on the network.

**Existing Evidence**

This document has been prepared by Namoi Unlimited, the report references the identified need, intent and program of works to be undertaken. This Strategy acknowledges the outcomes of a previous Freight Connectivity and Productivity Analysis conducted by Namoi Unlimited itself.

In the development of this document it has been evident that a number of studies have been undertaken in the past to identified issues, challenges and opportunities to enhance the road network.

A significant impediment identified in this project is the ability of region to identify one road over another that the significance of works needed across the network to enable growth and create jobs has to be demonstrated.

Challenges on the network recorded in previous plans are consistent. These are the main issues that need to be overcome to maintain or improve transport productivity and safety for commerce and the community.

A study conducted in 2015, the Agricultural Expansion Analysis: New England North West NSW Final Report prepared by the NSW Department of Planning verifies the priorities identified in this report and provides a link to out of region priorities that need to be addressed.

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HML Access and Vehicle Type

The work undertaken by Namoi Unlimited was to focus the region’s Local Government Areas to address the increasing challenge associated with larger high productivity vehicles on the roads network.

An objective of this Strategy is to prioritise investment that enables HML access.

The use of various vehicles across the NSW freight network is guided through various mechanisms. Guidance is provided by Transport for NSW policy, and implemented via a permit system operated by RMS as the Road Manager.

Local Government plays a vital role in consenting to restricted access vehicles on their local government road network. A right of access can be provided on roads identified under a Notice under the Heavy Vehicle National Law.

Currently, access is not availed to road trains travelling on the NSW road network east of the Newell Highway, unless the vehicles are compliant modern road trains.
Broader access exists for freight movement on the NSW road network if it is carried by B-doubles or Performance Based Standards (PBS) 2B combinations.

The PBS2B vehicles can comprise 2A Truck and Dog combinations and 2B combinations up to 30m in length. These performance based vehicles are seen to deliver improved productivity for freight movements (of the order of 30%) without the additional infrastructure costs often associated with upgrading the road network for B-triples or larger road trains.

Due to the greater number of other vehicles on the network east of the Newell, PBS vehicles are seen as more appropriate vehicles for the road network, interaction with other smaller vehicles is considered safer, and the wear and tear on the road system is minimised.

The COAG and national reforms currently being developed for road freight and implemented through TIC are based on PBS 2B combinations. Further information is available on the National Heavy Vehicle Regulator website.

Pavement Condition

Roads deteriorate over time due to wear from traffic and environmental effects. Rough roads have higher travel costs and vehicle maintenance costs, particularly for trucks. Pavement conditions are also relevant with regards to opening up of new parts of the network to higher productivity vehicles.

In the event of Councils or the NSW Government designating new links or roads for larger vehicles (be that due to new upgrades and or classification changes, maintenance costs associated with increased wear and tear) should form part of the overall economic analysis. This will ensure appropriate maintenance regimes can be costed for and accommodated in the future.

Intersections

Access on and off the NSW State Road Network has been raised as a concern by the freight industry. Restrictions existing on and off road systems are making it difficult for larger restricted access vehicles to navigate across a connected road network.

Restrictions can exist by both physical constraints (e.g. intersections not being designed to enable larger vehicles to track around safely) or restrictions existing on one system that are permitted on an adjacent system (e.g. B-doubles permitted on State road but not on local connecting roads thus affected first and last mile transport of goods).

In the considering the overall network objective to permitting larger vehicles across an integrated system, consideration has to be made to both the nodes on the network at which vehicles enter and leave a road, as well as the entire journey along which vehicles need to pick up and deliver freight.

Isolation and Distance

In her iconic patriotic poem “My Country” Dorothea Mackellar\textsuperscript{11} wrote, in part, about the vast size of the Australian continent and its extremely varied terrain. Its references to soils which range from dry hard rocky material to soft and fertile black soils is particularly relevant also for the Namoi road network. It typifies the difficulties and conditions for providing transport options in the Namoi region.

Isolation, distance and the spread of population provides challenges in providing access to employment, with people commuting up to 100kms to work daily. The provision of essential services such as health care, education, social services and, most importantly, access to goods and services is an everyday experience for populations across the region.

The isolation and distance for industry and business has as an additional cost to doing business in regional NSW.

The \textit{NSW Premier's Priorities}\textsuperscript{12} encourage approaches to make business in NSW easier by:

\textsuperscript{11} \url{http://www.dorotheamackellar.com.au/archive/mycountry.htm}
\textsuperscript{12} \url{https://www.nsw.gov.au/improving-nsw/premiers-priorities/}
focusing on reducing or removing barriers, costs and complexity and make regulatory obligations easier to understand and implement; and
enabling business confidence in NSW to attract and grow businesses, creating jobs and prosperity to improve living standards.

Cross Border movement

There are significant movements of freight from the Namoi region crossing the Queensland, Victorian and New South Wales borders, to the ports of Newcastle, Sydney and Brisbane and to distribution centres throughout NSW and interstate.

Compared to the restrictions on road system across the Namoi region, access for larger performance based vehicles is less restricted in Queensland. Currently in Queensland, PBS level 1 network has access on all roads, including local government roads. PBS level 2A network (the B-double (23m) network and PBS 2B vehicles) are permitted on the 25m B-double road network.

This inconsistency across borders and access for performance based vehicles provides added complexity on the network.

Expanding the heavy vehicle network

Heavy vehicles are the primary mode of transport for livestock, commodities, grain and general freight within and across the region.

Enhancing the security, structural capacity and geometry of the heavy vehicle network will ensure commodities of trade can be moved efficiently, it would be more responsive to market demand and provide access in abnormal weather events and address network structural deficiencies.

The network needs to have the capacity and capability to enable industry to undertake business at any time. For example; ‘Just in Time Contracts’ for grain growers, providing produce to customers; for feedlots requiring animals to be finished with specialist grain and feed, animals taken to market or to an abattoir; live animals sold on farm or being delivered to market on the sale day. These are some of the time and market demands on the regional road network. Transport and vehicles systems are critical for producers to achieve price premiums and maintain order commitments and relationships.

General freight inputs such as; feed, fertiliser, chemicals, machinery and parts rely on the transport network for continuity of supply.

Freight consistency and access is reliant on the road network for efficiency and to reduce overhead cost of freight. Factors that can enhance network security and efficiency include:

- A program of works to eliminate pinch points, such as timber bridges and substandard road intersections.
- Ongoing and consistent maintenance to prevent the decline of road capability.
- Increasing structural capacity and capability on the network, such a program to increase pavement strength and bridge capability to meet HML requirements.
- Improving the networks geometric capacity (where financially viable) to allow for High Productivity Vehicles, such as Road Trains and A-B Triples.
- Providing ‘all-weather access’ on unsealed roads ensuring heavy vehicles can access properties when markets demand.
- Improving road access security (where financially viable) by sealed roads that are intolerant to flood events, ensuring that the network will continue to operate when waters rise and recede.
- Addressing and meeting future anticipated and unanticipated market demand.
- Addressing security, pavement strength and geometry that will allow flexibility for future transport types.

Weather

There are a number of impacts from weather on the roads and transport network.
With road types across the region varying from unformed and unsealed roads to State and Federal highways, the impact of rainfall can differ for residents and businesses.

Industries utilising unsealed roads can be affected by rainfall over 10mm between 19 and 27 days per year. The timing of rainfall can impact business continuity for those that require road access for their day to day activities.

Floods can cause the closure of highways impacting local communities financially and socially. It can restrict children’s access to schools and industries to grind to a halt. Improving the flood resistance of strategic routes can help ensure lesser impacts from flooding.

There are examples of highways providing access through floods via an entire network structure such as the West Wyalong to Forbes link constructed in 2016.

<table>
<thead>
<tr>
<th>Local Government Area in the Namoi</th>
<th>&gt; 1mm (mean days)</th>
<th>&gt; 10mm (mean days)</th>
<th>&gt; 25mm (mean days)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gunnedah (1948-2017)</td>
<td>60.7</td>
<td>20.7</td>
<td>6.1</td>
</tr>
<tr>
<td>Liverpool Plains - Murrurundi Gap (2003-2017)</td>
<td>75.2</td>
<td>24.5</td>
<td>6.3</td>
</tr>
<tr>
<td>Narrabri (2001-2017)</td>
<td>53.0</td>
<td>19.5</td>
<td>5.7</td>
</tr>
<tr>
<td>Tamworth (1993-2017)</td>
<td>61.0</td>
<td>21.8</td>
<td>5.8</td>
</tr>
<tr>
<td>Uralla (1901-2017)</td>
<td>78.3</td>
<td>27.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Gwydir - Warialda (1878-2017)</td>
<td>59.6</td>
<td>22.2</td>
<td>7.0</td>
</tr>
<tr>
<td>Walcha - Woolbrook (1958-2017)</td>
<td>85.4</td>
<td>26.9</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Figure describes average days of rainfall across the Namoi Region (Source: BoM)

Intermodals and Network Integration

Integration is one of primary advocacy roles of Namoi Unlimited. The group has a non-competitive approach to roads and strategic infrastructure planning.

There are capacity restraints and “pinch points” on some of the main freight routes. Pinch point’s impact on operational efficiencies across the whole supply chain and add to storage, handling and transport costs significantly for intermodal sites.

There are several capacity constraints and inefficiencies around the rail freight network and port infrastructure mainly at Port Botany and to a lesser extent at Newcastle.

There are several existing intermodal facilities across the Namoi region including three at Narrabri. These intermodal facilities support the containerisation of cotton, cereals, pulses and oilseeds for domestic and international markets from the region and interstate. Integration with intermodal sites is a key justification and need to enable regional growth, improving productivity and freight efficiency.

There are plans to build an intermodal freight hub at Narrabri in conjunction with the Melbourne/Brisbane Inland Rail project which would open up access to ports in these cities and beyond.

Tamworth Regional Council has an intermodal proposal to support the development of its air freight capability to an international level.
The work done in this Strategy generally aligns with previously undertaken studies such as the Newell Highway Corridor Strategy\textsuperscript{13}, Oxley Highway Corridor Strategy\textsuperscript{14} and NSW Freight and Ports Strategy\textsuperscript{15}, all of which consider improved access to rail, ports, roads and air freight, reducing freight costs, extending markets (existing and new) and distribution opportunities.

**External Developments impacting Prioritisation**

**ARTC – Australian Rail Track Corporation**

The Australian Rail Track Corporation (ARTC) manages and maintains 8,500km of the Australian rail network across five States. ARTC says their role is vital for the transport supply chain and the economic development of Australia.

ARTC projects that will impact the regions capacity to transport goods and services are:

**Inland Rail**

Inland Rail is a once-in-a-generation project connecting regional Australia to global markets; it will complete the ‘spine’ of the national freight network between Melbourne and Brisbane via regional Victoria, New South Wales and Queensland.

This transformational rail project will bring lower costs and greater efficiencies to freight customers and will ultimately deliver more produce and goods to consumers along the eastern seaboard, create long-term jobs, boost regional economies, and help businesses grow.

**Hunter Valley Strategy**

On 5 September 2004, ARTC commenced a 60-year lease of the interstate and Hunter Valley rail lines in New South Wales. In early 2005, ARTC began to release annual Hunter Valley infrastructure enhancement strategies setting out how ARTC planned to ensure that rail corridor capacity in the Hunter Valley would stay ahead of coal demand.

ARTC has released the consultation draft of the 2017 Hunter Valley Corridor Capacity Strategy. The HVCCS sets out a number of volume scenarios for the Hunter Valley coal task and track investment options to ensure capacity remains ahead of contracted demand. Note that the timing of the Strategy release has been modified from this year to better align with other coal chain processes.

**Singleton Bypass\textsuperscript{16}**

The New England Highway forms part of the National Land Transport Network and is a major freight and commuter route between Newcastle and the Upper Hunter.

The highway passes through Singleton and forms the main road access through the town and to the CBD.

A New England Highway bypass of Singleton would address current congestion and future traffic demands. Over 25,000 vehicles use the highway through Singleton each day with around 3750 of these being heavy vehicles. Traffic volumes are predicted to increase over the next 25 years.

The NSW Government has announced $92 million towards the upgrade under Rebuilding NSW, with $3 million allocated in 2017-18 to progress planning.

**Buckett’s Way**

The Buckett’s Way is a 151-kilometre rural road linking Gloucester to Taree and Raymond Terrace NSW. Buckett’s Way links to the Pacific Highway Raymond Terrace and Taree. Buckett’s Way is also an important link to Fossickers Way and to Topdale Road through to the New England Highway.


The challenge for Namoi Unlimited and the RMS is to broaden the scope of identifying regionally significant routes into other regions of Councils.

**Non-infrastructure Impediments**

**Heavy Vehicle National Law issued by National Heavy Vehicle Regulator**

The Heavy Vehicle National Law (HVNL)\(^{17}\) which took effect on 10 February 2014 provides for all Heavy Vehicle Access Permits to be issued by the National Heavy Vehicle Regulator (NHVR).

Prior to issuing a permit the NHVR must obtain the consent of each relevant road manager. The HVNL imposes a time limit of 28 days on road managers in deciding whether or not to give consent to access and to determine under what (if any) conditions access will be granted. The time limit can be extended by up to six months if a route assessment is required or if the road manager is required to consult with a third party or determines that it is necessary to consult with a Local Government Authority.

A road manager may charge the applicant a fee for conducting a route assessment. The access request need not be considered by the road manager until the applicant has paid the route assessment fee.

**Permits for travel in NSW and permits for interstate travel**

The RMS has been delegated authority by the NHVR to directly issue Class 1 and Class 3 Heavy Vehicle Permits for journeys within NSW travelling on State roads.

Local Government Authorities and other road managers in NSW have been delegated to issue Class 1 and Class 3 permits for travel on the roads they manage.

The Intelligence Access Program (IAP)\(^{18}\) is a compliance and asset sustainability management tool to provide restricted access and over dimension vehicles with improved access to the NSW road network. In return, their compliance with approved access conditions is monitored using satellite-based tracking technology. This provides the RMS and the community with greater assurances that the right heavy vehicles are operating on the right roads. The IAP is mandatory for access and provides enhanced route access in NSW for:

- Higher Mass Limits vehicles including quad axle group combinations and modern road trains operating east of the Newell Highway;
- B-Triples and AB-Triples operating under the Road Train Modernisation Program;
- Modular B-Triples operating east of the Newell Highway;
- Vehicles operating under Performance Based Standards Access Level 2B or above; and
- High risk mobile cranes.

Registered operators seeking to operate the above vehicles in NSW must enrol in the IAP with the RMS and where applicable apply for the appropriate access permit from the National Heavy Vehicle Regulator (NHVR) to travel in NSW.

**First Mile and Last Mile Access**

“The first and last mile concept dictates that the same level of HPV access extends from origin to destination, and recognises that local roads are ultimately connected to State controlled arterial roads and national highways.” Australasian Transport Research Forum Proceedings 16 – 18 November 2016, Melbourne, Australia http://www.atrf.info Regional first and last mile pilot project Steve Manders, Craig Gorlick and Scott Britton


Peak Period Network Utilisation

The increasing utilisation of on-farm storage for cereal crops has the effect of reducing peak harvest time road use.

Cotton producers' harvest time has decreased as cotton harvesting technologies have undergone rapid improvement, deliveries of round bales to ginning facilities throughout the Namoi peaks in March and April each year.
PART 3: FUTURE FOCUS FOR THE NAMOI ROADS NETWORK STRATEGY
Strategic connections enable freight and heavy vehicles access to industry, mining and agricultural hubs across NSW. Roads provide strategic north-south and east-west transport spines upon which regional and local roads connect, enabling the movement of people, commodities and freight across the region. The Namoi region encompasses parts of the following state roads:

- Gwydir Highway (B76)
- Fossickers Way (B95)
- Kamilaroi Highway (B51)
- New England Highway (A15)
- Newell Highway (A39)
- Oxley Highway (B56)

This Strategy aims to identify inhibitors for access for industries identified for growth. The future directions for industry growth and how this work can be used to respond to expected growth is described in this, Part 3 of the Namoi Roads Network Strategy.

Strong Infrastructure and Transport Networks for a connected future

The New England North West Regional Plan 2036, GOAL 3 is strong infrastructure and transport networks for a connected future.

Specifically in the New England North West Regional Plan 2036, Direction 14 is to enhance transport and infrastructure networks. Actions associated with this Direction include:

- Protect freight and utility infrastructure and corridors through local plans and strategies to protect network opportunities and distribution from incompatible land uses or land fragmentation.
- Minimise the impact of development on the regional and State road network and rail corridors by identifying buffer and mitigation measures.
- Support councils to investigate opportunities to provide greater access for high productivity vehicles.
- Prioritise projects that address impediments to the regional freight network and work with stakeholders to upgrade transport network capacity as demand changes.

NSW’s freight volumes are projected to double by 2030 and triple by 2050. Transport for NSW’s Future Transport Strategy will include comprehensive engagement with the community and industry across NSW to understand and address local needs.

Freight and logistics industries will be a focus for investment to grow social and economic ties across communities and borders. Investment, integration and alignment of road, rail, port, utility and airport infrastructure will foster emerging industries.

The coordination and provision of cost effective utility and local infrastructure will support the quality and diversity of lifestyles on offer in the region and enable the timely and affordable release of land for development. Protecting transport assets and expanding export-related and value-adding industries will encourage investment, attract industry and provide certainty to industries.

A large share of this growth is expected in the New England North West region. The region needs to enhance the quality, capacity and efficiency of freight, transport and infrastructure networks to move more freight and to better connect local producers and suppliers.

The Hunter Valley rail network transports coal from the Gunnedah Basin and agricultural produce to the Port of Newcastle. Coal from the region is transported predominately on the rail freight network. Industry is investing in improving tracks and the network to increase the capacity of rail in the region.

19 New England North West Regional Plan 2036, Department of Planning and Environment
The NSW Government will continue to work towards implementing the second freight route across the rail line at Gunnedah as part of the Bridges for the Bush Program.\(^{21}\)

Corridor strategies for roads identify connectivity improvements to consistently manage and plan the State road network. The Newell Highway Corridor Strategy (2015)\(^{22}\) outlines the investment priorities to develop, manage and maintain the Newell Highway. Corridor strategies for the New England, Oxley, Kamilaroi and Gwydir highways are under development. The strategies will respond to current and future challenges and issues, and set short-medium and long-term priorities and actions.

Planning for development along existing and proposed transport corridors will protect productivity and safety. The location of existing and proposed utility or other infrastructure is required to maintain and upgrade the transport network and its capacity as demand changes. The Newell Highway is the eastern limit for road trains; however, concessional access extends to Gunnedah and Inverell.

**Linking Funding, Industry, Locations and Freight**

The NSW Government is investing an additional $1.3 billion in regional infrastructure to support growing regional centres, activate local economies and improve services in communities, through the new Regional Growth Fund\(^{23}\).

The NSW Government’s Regional Development Framework\(^{24}\) provides an overall vision for the Regional Growth Fund. The framework establishes a plan for regional development over the next 30 years that ensures every community across the state benefits from NSW’s economic success.

Of the $6 billion regional infrastructure program under Rebuilding NSW, a significant proportion is being spent on infrastructure to support essential government services, including:

- $2 billion for the Regional Road Freight Corridor Program;
- $1 billion for a Regional Growth Roads Program;
- $500 million for the Fixing Country Roads Program;
- $300m for regional tourism and environment;
- $400 million for Fixing Country Rail;
- $200 million to accelerate the Bridges for the Bush program

Part of the imperative to developing this Strategy was to articulate the industry reliance on the road and freight networks and infrastructure and identify areas or nodes where investment was needed.

Developing applications under the Regional Growth Funds requires a Business Case to be prepared. This strategy aligns the priorities or missing links on the road network to the needs of industry providing a basis for applications for funding to be substantiated through enabling business development.

This Strategy recognises that a continued understanding of the agricultural inputs and outputs throughout the supply chain enables the group to understand the impacts on freight networks and also a method to anticipate growth and change in the sector.

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Agricultural Production

In 2015–16, the gross value of agricultural production in the New England and North West region was $2.8 billion, which was 21 per cent of the total gross value of agricultural production in New South Wales ($13.1 billion). Growth in the sector is expected to continue.

Timber

In 2010–11, the most recent year for which regional data are available, the total plantation area in the New England and North West region was approximately 30,600 hectares, comprised of approximately 17,000 hectares of hardwood plantations, 13,400 hectares of softwood plantations and 200 hectares of other plantations. The main hardwood species planted is shining gum (Eucalyptus nitens) and the main softwood species planted is radiata pine (Pinus radiata).

In 2011, there were approximately 4.0 million hectares of native forests in the New England and North West region, comprised mainly of Eucalypt medium woodland (1.1 million hectares), Eucalypt medium open (942,000 hectares), Callitris (540,900 hectares) and Rainforest (106,100 hectares) forest types. Approximately 2.4 million hectares of the native forests are privately owned, 809,800 hectares are in nature conservation reserves and 392,600 hectares are multiple-use.

public forest available for timber production. Major timber processing industries are located at Urbenville, Walcha, Liverpool Plains, Tamworth Regional Council and Glen Innes.

**Poultry**

Tamworth is a major poultry processing region. Plants have developed close to markets and labour sources, this keeps distribution and transport costs down and ensures labour and other services are available.

Chicken grow-out farms, where chickens grow from day-olds until they are ready for processing, are generally within 100km of the processing plant. Growers look for: a nearby feed mill, guaranteed water supply, guaranteed electric power, access for heavy transport for feed and live poultry, available labour supply and available services such as tradesmen, servicemen and veterinarians.

**Grains for Feed**

Tamworth Regional Council area is one of the largest net importers of grain to supply food processing and feed lotting industries and Gunnedah Shire Council has several flour mills and feed mills. The following estimates of regional freight flows (2005-06 data) for processing and feed lotting are (RDANI 2012):

- Cattle feedlot usage is estimated to be in the order of 0.5 million tonnes p.a. in the slopes zone
- Oilseed processing around 0.3 million tonnes in Narrabri and Moree LGAs
- Cereal grain processing (flour mills, stockfeed mills) of 0.48 million tonnes in Gunnedah and Tamworth Regional.

**Tourism**

Travel to New England North West Year ended (YE) June 2017 notes that the New England North West received over 1.5 million domestic overnight visitors - up by 13.2%* on YE Jun 16. Visitors spent nearly 4.2 million nights in the region - up by 11.6% on YE Jun 16. Domestic overnight visitors spent $532 million in the region – up by 11.6% on YE Jun 16. On average, they spent $127 per night - unchanged on YE Jun 16.

Regional NSW (54.3%) was the largest source of visitors to the region, followed by Queensland (19.7%) and Sydney (16.1%).

Compared to YE Jun 16, the regional NSW source market grew by 21.6%* and Sydney increased by 17.1%. Over the same period, Queensland declined by 6.0% while Victoria grew by 9.7% and the ACT declined by 24.2%.

In the region, business tourism or domestic daytrip visitors is a significant contributor to the regional economy.

The region also has a significant year-round events industry that attracts regional and inter-state travellers to the region. The roads network is an important feeder for tourism within the Namoi and beyond.

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Freight Networks that support Agriculture

FIGURE: Agricultural Freight Network across the New England North West region
SOURCE: New England North West Region Plan 2036
In 2014, coal extraction in the region and accounted for 4% of mining industry value added in NSW. Despite producing only around 8 Mt of coal each year, the Gunnedah coal fields in the Gunnedah Basin has the third largest reserves, behind the Hunter and Western coalfields, with estimated recoverable coal reserves of 2 055 Mt.

Around one quarter of approved projects or projects under construction in 2012 was from the Gunnedah, Liverpool Plains and Narrabri Local Government Areas. In addition, around one quarter of potential new projects were located in the Gunnedah Basin. Hence, coal may play a more important role in the regional economy in the future.


Freight

Strategically located between Sydney and Brisbane, with strong transport links into Newcastle and South East Queensland, the New England North West region is well positioned to access domestic and international markets.

Stronger links and relationships across communities and borders will provide access to services and markets in the Hunter and South East Queensland. The freight network’s efficiency influences the productivity of agriculture, manufacturing and natural resource sectors.

Inter-regional Freight Connections

Councils in the Namoi are in discussions with State, National and International providers to improve rail networks across the region and access to ports of significance.

Rail is also an important piece of the passenger transport providing an alternative by road and air into Newcastle and Sydney.

The connections of roads to rail hubs or intermodal terminals in Tamworth and Narrabri and the development of the Inland Rail project will be important to accessing new markets inter-state and beyond.

Namoi Unlimited supports the development of international air freight capability at the Tamworth Regional Airport.

The figure left from the New England North West Regional Plan describes the links between the strategic corridors, the New England North West region and beyond.

Namoi Unlimited believes a stronger emphasis should be on the western corridor link from Narrabri and have considered it as a Key Strategic Regional Corridor. Also noted is since this image was developed direct flights between Narrabri and Sydney and Brisbane have been secured by the Narrabri Shire Council, with a link to the Inverell Shire by air.

BITRE STATISTICAL ALERT – Road Freight Movement Survey, 2014 release of ABS Survey of Road Freight Movements, 29 October 2015 notes the top 11 Statistical Areas (ABS Statistical Area Level 4 or SA4) that accounted for more than one third of the total road freight task.

Expand emerging industries through freight and logistics connectivity

The region is uniquely positioned to leverage opportunities associated with growing global and domestic markets. Port Botany at Sydney, Port Waratah at Newcastle, the Port of Brisbane, Brisbane International Airport and Brisbane West Wellcamp Airport at Toowoomba are global gateways for industries and businesses.

The plan suggests that the region needs to work to integrate cross-border transport planning between NSW and Queensland. Enhanced cross-border connectivity between NSW and Queensland will accommodate the forecast growth of freight movements into the Darling Downs, Toowoomba and Port of Brisbane.

The proposed Melbourne to Brisbane Inland Rail has the potential to reshape freight movements. The 2010 Melbourne-Brisbane Inland Rail Alignment Study, prepared by the
Australian Rail Track Corporation (ARTC), identified the preferred corridor for inland rail, passing through Narrabri. The fine-scale alignment of the corridor is yet to be settled, and planning, engineering design and assessment will be finalised by the Australian Government and ARTC.

More than 13.6 million tonnes of freight moves through the New England North West area every year, mainly by road, with rail used to transport coal and grains to the Port of Newcastle and Port Botany.

Agriculture and coal makes up much of the outbound freight task with movements to Brisbane, Newcastle and Sydney. The movement of agricultural commodities including: bulk grain, cotton, wool, horticulture products and fresh produce is forecast to grow and could require new intermodal terminals and supporting rail infrastructure. Narrabri and Tamworth support existing and proposed intermodal terminals and will continue to be significant areas for outbound containerised freight.

Any new freight and logistics hubs and intermodal terminals must be close to freight network corridors and infrastructure. These assets should also be protected from urban encroachment and incompatible land uses to protect freight and cargo handling capacity. Narrabri Shire Council is developing a transport and manufacturing hub masterplan that will take advantage of existing intermodal facilities and investment in rail and natural gas infrastructure.

Post Endorsement of this Strategy

Deliberately this strategy outlines the regionally significant projects for enabling regional growth and development. This document is to be used to shift resourcing and focus to developing solutions with the RMS, negotiating with funding providers and harnessing regional resources to complete these necessary works.

Advocacy

The Board of Namoi Unlimited endorsed this Strategy at a meeting in February 2018. Once endorsed, the Roads and Network Managers across the seven member Councils in the organisation will commence work on developing the solutions and business cases for funding.
Namoi Unlimited will undertake the following roles:

- Maintain a monitoring and coordination, assisting the member Councils to develop funding applications and rationale for the approach.
- Conduct an advocacy role seeking support for a regional approach to road investment from all levels of Government.
- Maintain relationships between Government agencies.

**Next Steps**

The solutions business case to be developed around the priority routes and works will be based on the *Australian Transport Assessment and Planning Guidelines*[^31].

The *Australian Transport Assessment and Planning Guidelines* was developed in collaboration with the state and territory governments and outline best practice for delivering effective, cost efficient and robust transport decision-making across the country.

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This Framework is an activity and decision-support system, with a logical, multi-step approach aimed at achieving the high-level goals and transport system objectives of a jurisdiction. Examples of this approach are being developed and will be available with this Guideline at [https://atap.gov.au/framework/index.aspx](https://atap.gov.au/framework/index.aspx).

**The Business Case[^32]**

The Business Case should be in an accessible format and contain all of the information that the decision-maker requires for a fully informed decision. This should include all supporting material outlining the assumptions and assessment techniques used in the assessment process.

The Business Case is the centrepiece for a proposed initiative. It should clearly state and demonstrate the merit and justification for the initiative, and ensure all required evidence is properly documented.

The Business Case should be developed in stages as progress is made through the planning and assessment Framework. The Business Case at each stage should be referred to by a different name to distinguish the different stages. The naming proposed in the ATAP Guidelines is: Business Case: Strategic, Rapid; and Full/Final.

Section 4 of the Framework describes the components of a Business Case:

- Clearly describe the preferred solution
- Document the problem assessment that justified proceeding to the consideration of solution options
- Document the full list of possible options that were generated and assessed
- Demonstrate through detailed appraisal data the justification for supporting the preferred option/solution
- Provide sufficient documentation so that the reader can fully understand the logic and sound evidence that supports the decision, including all relevant information, expressed in monetised and non-monetised terms (as relevant), as well as quantitative and qualitative terms.

The key principles of the Business Case are:

- Be well presented, well written and easily understood
- Use appropriate use of visual aids – maps, photographs, summary charts, graphs, tables – to assist the reader
- Be transparent in the way it presents data and information in order for a reviewer or assessor to properly understand and judge the standard and reliability of the assessments included
- Meet all the requirements for a Business Case at the relevant stage of development
- Include all information needed to:
  - Support the decision-maker, and
  - Secure necessary approvals from relevant government agencies
- Be a stand-alone self-contained document
- Be designed so that supporting detailed data and information that address specific issues (e.g. Environmental Impact Statement, detailed CBA, etc.) are provided in technical appendices or documents
- Have coverage and level of detail that matches the complexity and approval requirements for the particular proposal. Hence coverage and level of detail will vary between proposals

The Business Case should include:

- An Executive Summary
- Clear description of the initiative
- The strategic context
- Description of the problem to be addressed
- A description of the 'problem identification, assessment and priority' process, and the evidence based results
- Description and quantification (if possible) of the relationships between the problem and other parts of the transport system. This could include inter-relationships between problems, or with other initiatives
- Discussion of the contribution that solving the problem will make to achieving the jurisdiction's agreed transport system objectives and targets
- The basis and results of the Strategic Merit Test (SMT) and the resulting degree of strategic alignment
- A description of the 'options generation and assessment' process, and the evidence-based results that led to declaring the preferred option/solution
- The cost-benefit analysis (CBA) (detailed, or rapid if detailed appraisal has not yet commenced) results and methodology, including separation of benefits and costs
- Adjusted CBA details and results - if this approach was used by the proponent
An Appraisal Summary Table (AST) summarising monetised and non-monetised benefits and costs side-by-side
- Stakeholder views and details of the process used to gather those views
- Social impacts, gainers and losers
- Risk assessments
- A Benefits Management Plan
- A Benefits Register assessment of readiness of the proposed initiative
- Timing, costs, staging
- Relevant reports associated with benefit management and realisation.

Additional items that should be included in a Final Business Case include:

- A financial analysis (clearly distinguishing it from the CBA) where relevant
- A review of funding and financing options (e.g. role of user pays, public private partnerships)
- A distributional and equity analysis
- Budgetary impacts (e.g. the cost of the initiative as reflected in the budget of the relevant government agency)
- A suitable environmental assessment and, in cases required under legislation, an Environmental Impact Statement (if required and if available)
- Land use planning implications
- Legal issues
- An initiative implementation plan (e.g. contracting arrangements and risk management).

**Partners for the Future**

Transport for NSW, RMS and Freight Branch are important partners in the development of this strategy and providing support for the implementation approach.

The regional leaders of NSW Government Departments through the Regional Leadership Executive (RLE) have been asked to assist Namoi Unlimited to identify pockets of existing data that would support industry’s and the community’s use of the road network.

The Government departments in the region will be asked to provide access to data identified in this document to build the business case for industry.

Industry leverage and support around these priorities will be confirmed.
Identified Funding Sources

As part of developing the network Strategy for the region, consideration has been given to how funding may be provided to these projects. Traditional sources of funding for roads need to be explored, any submission to the Regional Growth Funds is intended to support the notion that by investing in infrastructure – the economy of the region will grow.

**Investment Road and Rail (AUS)**

The Investment Road and Rail Programme is an Australian Government initiative which targets land transport projects that will deliver the highest benefits to the nation. When completed, these projects are intended to significantly improve the efficiency and safety of land transport infrastructure across Australia.

**Roads to Recovery (AUS)**

The objective of the Australian Government’s Roads to Recovery Programme is to contribute to the infrastructure investment programme by supporting maintenance of Australia's local road infrastructure assets. Direct funding to local councils distributed according to population and road length with funding allocation fixed for the life of the programme.

**Black Spot (AUS)**

The Black Spot Programme is part of the Australian Government’s commitment to reduce crashes on Australian roads by funding measures such as traffic signals and roundabouts at dangerous locations. The Australian Government has committed $500 million to the Programme from 2014-15 to 2018-19, which includes an additional $200 million over two years from 2015-16 to improve road safety across the nation. At least 50 per cent of funding provided over the next two years will be dedicated to fixing roads in regional Australia.

**Heavy Vehicle Safety and Productivity (AUS)**

The objectives of the Australian Government’s HVSP Programme are to increase the productivity and safety of heavy vehicles by enhancing the capacity of existing roads and improving connections to freight networks. The Australian Government contributes a maximum of 50 per cent of the total project cost. Payments to all successful projects will be made through National Partnership Agreements to

**Transport Development and Innovation Projects (AUS)**

The Australian Government’s Transport Development and Innovation Projects are those that involve planning, research, investigations, studies, etc. relating to the present or future development or usage of the National Land Transport or the development of related technology or practices. Corridor studies to support the development of long-term investment strategies for the National Network may be eligible for funding.

**Bridges Renewal (AUS)**

The objectives of this federal programme are to upgrade and repair bridges to enhance access for local communities and facilitate higher productivity vehicle access. The Australian Government has committed $300 million to the Programme from 2015-16 to 2018-19. In the 2016-17 Federal Budget this was extended by $60 million per year from 2019-20. The Australian Government contributes a maximum of 50 per cent of the total project cost. Payments to all successful projects will be made through National Partnership Agreements to state/territory governments.

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13 SMEC 2016, Regional Freight Connectivity and productivity Analysis Final Report for the Namoi Councils Joint Organisation
**National Highway Upgrade (AUS)**

This federal programme provides jurisdictions with funding towards priority improvements to Australia's key national highway networks through works such as shoulder and centreline widening, ripple strips and wire rope barriers, overtaking lanes, turning lanes and pavement improvements. In New South Wales, Australian Government allocation is $61.35 million over the next five years with projects funded on an 80:20 basis, with the New South Wales Government contributing $15.35 million. The proposed project is on the Newell Highway between Mungle Back Creek and Boggabilla and includes construction of heavy duty pavement with a wide centreline to support the freight task.

**National Stronger Regions Fund (AUS)**

This federal programme commenced in 2015 and provides funding of $1 billion over 5 years to fund priority infrastructure in regional and disadvantaged communities. Local governments and incorporated not-for-profit organisations are eligible to apply for grants between $20,000 and $10 million. The project must deliver an economic benefit to the region beyond the period of construction and funding must be matched in cash on at least a dollar for dollar basis.

**Community Development Grants (AUS)**

The Australian Government established the Community Development Grants Programme to support needed infrastructure that promotes stable, secure and viable local and regional economies. Until 30 June 2017, more than $300 million is available under the Programme for single or multiple year projects. Funding for projects ranges from $2,000 to $13 million.

**Financial Assistance Grant to Local Government (AUS)**

This federal programme consists of a general-purpose component which is distributed between the states and territories according to population (i.e. on a per capita basis), and an identified local road component which is distributed between the states and territories according to fixed historical shares. Both components of the grant are united in the hands of local government, allowing councils to spend the grants according to local priorities.

**Fixing Country Roads (NSW)**

The Fixing Country Roads program aims to provide targeted funding to local councils for road projects that will eliminate connectivity constraints on local roads in NSW. The program is helping fund vital road and bridge upgrades to better connect local and regional roads to state highways and key freight hubs.

**Safer Roads (NSW)**

Includes the NSW State Black Spot Program, is a targeted infrastructure treatment program. The program aims to reduce the number of casualty crashes and reduce the severity of injuries when a crash does occur. Councils can seek funding for treatment of black spots and other targeted treatments from either the Australian Government’s Black Spot Programme or the Safer Roads Program. RMS especially encourage councils to submit nominations that target pedestrian and motorcycle crashes, crashes on rural curves in high speed zones (>80km/h) and crashes on roads subject to driver fatigue.

**Bridges for the Bush (NSW)**

The program focuses on upgrading or replacing key bridges in regional NSW at 17 locations, including five high priority Higher Mass Limit (HML) deficient bridges to improve freight productivity in NSW. Within the study area, Gunnedah Bridge and Tulladunna Bridge (both HML bridges) have been included in this program.
Traditional funding sources have been identified in the table in Section 8. Sources of identified funding expected to support these traditional funding programs have been nominated where a gap has been identified.

**Fixing Country Truck Washes**

Fixing Country Truck Washes contributes to the cost of constructing or upgrading truck wash facilities to help remove bottlenecks that constrain logistic businesses and protect NSW against the spread of weeds and disease. The program is co-funded by both NSW Government and Australian Government.

**Regional Growth Funds (NSW)**

The Regional Growth Fund will invest in projects that facilitate regional development through six funds. These funds aim to enable essential infrastructure, support arts and culture, enhance and build sporting infrastructure, improve regional voice and data connectivity, invest in our mining-impacted communities, spur job creation and deliver local infrastructure.

**TCorp (NSW)**

TCorp is the financial markets partner of New South Wales public sector agencies to deliver debt financing and investment outcomes for clients using financial markets expertise and significant economies of scale.
References & Acknowledgements

All documents and references to Roads and Traffic Authority (RTA) have been replaced with Roads and Maritime Services (RMS).


Australasian Transport Research Forum Proceedings 16 – 18 November 2016, Melbourne, Australia [http://www.atrf.info] Regional first and last mile pilot project Steve Manders, Craig Gorlick and Scott Britton


NSW Government Future Transport 2056 [https://future.transport.nsw.gov.au/]


Regional Freight Connectivity and Productivity Analysis Final Report for the Namoi Councils Joint Organisation, March 2016, SMEC

The contribution of mining to the New South Wales economy, The NSW Minerals Taskforce, 16 September 2014 THE CENTRE FOR INTERNATIONAL ECONOMICS

## VEHICLE CLASSIFICATION SYSTEM

### CLASS 1: LIGHT VEHICLES

- **SHORT**
  - Car, Van, Wagon, 4WD, Utility, Bicycle, Motorcycle

### CLASS 2: TRAILER, CARAVAN, BOAT

- **SHORT - TOWING**

### HEAVY VEHICLES

- **CLASS 3:**
  - **TWO AXLE TRUCK OR BUS**
    - *2 axles*

- **CLASS 4:**
  - **THREE AXLE TRUCK OR BUS**
    - *3 axles, 2 axle groups*

- **CLASS 5:**
  - **FOUR (OR FIVE) AXLE TRUCK**
    - *4 (5) axles, 2 axle groups*

- **CLASS 6:**
  - **THREE AXLE ARTICULATED**
    - *3 axles, 3 axle groups*

- **CLASS 7:**
  - **FOUR AXLE ARTICULATED**
    - *4 axles, 3 or 4 axle groups*

- **CLASS 8:**
  - **FIVE AXLE ARTICULATED**
    - *5 axles, 3+ axle groups*

- **CLASS 9:**
  - **SIX AXLE ARTICULATED**
    - *6 axles, 3+ axle groups or 7+ axles, 3 axle groups*

### LONG VEHICLES AND ROAD TRAINS

- **CLASS 10:**
  - **B DOUBLE or HEAVY TRUCK and TRAILER**
    - *7+ axles, 4 axle groups*

- **CLASS 11:**
  - **DOUBLE ROAD TRAIN**
    - *7+ axles, 5 or 6 axle groups*

- **CLASS 12:**
  - **TRIPLE ROAD TRAIN**
    - *7+ axles, 7+ axle groups*
NSW Prescriptive and Performance Based Standards (PBS)
Heavy Vehicle Combinations

In NSW heavy vehicles are categorised as ‘general access’ and ‘restricted access’ vehicles, dependent on the vehicle mass, dimensions and configuration or a combination of all three. General access vehicles have unrestricted access to the NSW road system. General access vehicles are those that do not exceed all of the following:

<table>
<thead>
<tr>
<th>Width</th>
<th>Length</th>
<th>Height</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.5 metres</td>
<td>12.5 metres (Rigid Truck), 19 metres (Articulated Combination)</td>
<td>4.3 metres</td>
<td>GML value shown in chart below</td>
</tr>
</tbody>
</table>

**PRESCRIPTIVE COMBINATIONS**

- **2 Axle Rigid Truck**:
  - Maximum overall length: 12.5 metres
  - GML: 15.0t

- **3 Axle Rigid Truck**:
  - Maximum overall length: 12.5 metres
  - GML: 22.0t

- **4 Axle Rigid Truck**:
  - Maximum overall length: 12.5 metres
  - GML: 27.0t

- **6 Axle Truck and Dog Combination**:
  - Maximum overall length: 19.0 metres
  - GML: 45.0t

- **7 Axle Truck and Dog Combination**:
  - Maximum overall length: 19.0 metres
  - GML: 50.0t

- **Truck and Pig Combination**:
  - Maximum overall length: 19.0 metres
  - GML: 37.0t

- **Semi-Trailer**:
  - Maximum overall length: 19.0 metres
  - GML: 42.0t

- **Truck and Low Loader Combination**:
  - Maximum overall length: 19.0 metres
  - GML: 50.0t

- **19 metre B Double Combination (General Access Vehicle)**:
  - Maximum overall length: 19.0 metres
  - GML: 51.0t

*Special Permit required for masses over 42.0t.*

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www.rms.nsw.gov.au | 13 22 13

May 2013
RMS. 13.259
NSW Prescriptive and Performance Based Standards (PBS) heavy vehicle combinations
PERFORMANCE BASED STANDARDS APPROVED COMBINATIONS

(Mass limits for PBS vehicles are subject to final PBS vehicle approval)

PBS Truck and Three Axle Dog Trailer Combination (Tri Dog)****
≤ 20.0 metres at Level 1 Access

- GML*: 48.0t
- HML*: 53.0t

PBS Truck and Four Axle Dog Trailer Combination (Quad Dog)****
≤ 20.0 metres at Level 1 Access

- GML*: 62.0t
- HML*: 67.0t

PBS Quad Axle Semi-Trailer Combination
≤ 20.0 metres at Level 1 Access

- GML*: 63.0t
- HML*: 68.0t

PBS Truck and Five Axle Dog Trailer Combination (Quad Dog)****
≤ 30.0 metres at Level 2 Access

- GML*: 55.0t
- HML*: 60.0t

PBS B-Double Combination
≤ 30.0 metres at Level 2 Access

- GML*: 62.0t
- HML*: 67.0t

PBS A-Double Combination
≤ 30.0 metres at Level 2 Access

- GML*: 76.0t
- HML*: 81.0t

PBS Super B-Double Combination (Quad Tri)****
≤ 30.0 metres at Level 2 Access

- GML*: 65.0t
- HML*: 70.0t

PBS Super B-Double Combination (Quad Quad)****
≤ 30.0 metres at Level 2 Access

- GML*: 63.0t
- HML*: 77.0t

Internal dimensions vary between PBS and prescriptive B-Double.

* Under Gazette Notices published in NSW, vehicles with a GVM of 15 tonnes or more meeting Front Under-run Protection Systems, cabin strength and engine emissions standards (ADR80/01) can operate at 6.5 tonnes on the steer axle. The extra 500kg permitted on the steer axle increases the total gross mass of the combination by 500kg.

** Vehicles accredited under the NHVAS Mass Management Accreditation Scheme are permitted 1 tonne above the total combination mass for a vehicle or vehicle combination with an allowable gross mass not exceeding 55 tonnes and 2 tonnes above the total combination mass for a vehicle or vehicle combination with an allowable gross mass exceeding 55 tonnes.

*** Requirements for HML operation: enrolment into the Intelligent Access Program (IAP), accreditation under the NHVAS Mass Management Accreditation Scheme and certified Road Friendly Suspension fitted on all axle and axle groups except the steer axle on the prime mover.

**** A PBS Permit is required for operation on NSW Roads.

GML General Mass Limits.
CML Concessional Mass Limits.
HML Higher Mass Limits.

*Mass limits refer to the Total Combination Mass (TCM) of a heavy vehicle combination.

NSW Prescriptive and Performance Based Standards (PBS) heavy vehicle combinations