Submission to:

Australian Government
NSW Government

Hunter LinkRail Proposal

Improving access & freight transport in the Hunter Region

Updated Edition: includes connection with proposed High Speed Rail Network

Submission prepared by:

Hunter Environment Lobby Inc.

This submission was prepared in June 2010,
and updated May 2013 as a community
initiative by:

Hunter Environment Lobby Inc.
PO Box 188
East Maitland 2323

Tel: 02 4936 6260

Membership enquiries welcome

Hunter LinkRail Proposal

Improving access & freight transport in the Hunter Region

1. Introduction

Hunter LinkRail is an innovative proposal to dramatically improve urban accessibility and freight transport within the NSW Hunter Region.

The proposal has been developed by the Hunter Environment Lobby, an established regionally-based community group concerned with sustainable economic development, biodiversity conservation, transport and ecological sustainability. The proposal forms part of a broader *Hunter Region Environmental Action Plan* that provides a practical and integrated framework for the Region's future.

A primary objective of the Hunter LinkRail concept is to transform the urban settlement pattern and transport system of the Hunter Region so as to generate a wide variety of economic, social and environmental benefits. Securing the corridor and constructing the proposed rail link would:

- significantly improve regional freight and passenger transport services, with greatly enhanced connectivity and flexibility
- allow nationally-significant rail freight corridors to bypass sectors adversely affected by flooding, sea level rise and conflicts with existing urban areas
- support urban development patterns with a low carbon footprint
- provide a feeder connection from major centres in the Hunter Region to the proposed East Coast High Speed Rail network.

The proposal has been presented to representatives of NSW and Commonwealth Governments as well as local government. It is submitted as a project of national significance and priority.

The following submission outlines the scope and benefits of the proposal.

2. About Hunter LinkRail

Hunter LinkRail involves the construction of an integrated passenger and freight rail corridor generally between Maitland, Kurri Kurri and the vicinity of Glendale/ Cockle Creek/ Fassifern (see the Concept Plan and Strategy Plans at the end of this submission). The proposal would provide:

- a new passenger rail link connecting emerging urban centres earmarked for significant future growth, namely Maitland, Kurri Kurri and Glendale.
- an alternative western route through the region for the strategic East-Coast Rail Freight Corridor, with a direct connection to the North West rail corridor.
- a regional connection to a future Newcastle High Speed Rail station at Cameron Park.

For much of its length, the Hunter LinkRail proposal is able to utilise existing disused rail corridors (see Constraints and Opportunities map).

3. Transport issues in the Hunter Region

The Lower Hunter Region is a nationally-significant transport hub. In terms of freight transport, it is a focus for the export of coal, wheat and other bulk products, and has a growing role as a general container seaport. Approximately 12.5 million tonnes per annum of general freight transits through the Region on the East Coast route, whilst an additional 5.7 million tonnes per annum moves between the Hunter and Sydney Regions. By 2031, these figures are expected to increase to 30 and 11.3 million tonnes per annum respectively (Hyder Consulting, 2008, *Lower Hunter Transport Needs Study Technical Paper 2: Freight Transport*).

As Australia's sixth largest urban region (with a population of approximately 540,000), the Lower Hunter is also a major generator of passenger movement within the region itself. The wider Hunter Region has a population of over 650,000 people, and generates a highly significant proportion of the wealth of Australia and NSW relative to its share of population.

The Hunter Region is expected to accommodate 160,000 new residents over the next 25 years, representing a 25% population increase (Department of Planning, 2008, *NSW State and Regional Population Projections, 2006-2*036, 2008 release).

Transport investment in the region is focused on the coal industry and on inter-regional freeway construction. There has been chronic under-investment for decades in urban public transport. No overall transport plan has been developed to serve the population growth that has occurred over the last 30 years, nor that which is expected during the next 25 years. The poor state of the region's public transport system is clearly evident when comparison is made with other Australian cities, or with comparable regions in other OECD economies.

Similarly, there has been chronic underinvestment in rail infrastructure for the transport of general freight. Whilst the volume of general freight movement on the East Coast and Sydney-Newcastle routes is expected to increase by over 100% over the next 20 years, there is currently no serious infrastructure planning to eliminate existing rail capacity constraints or for rail to capture a significant proportion of expected growth.

A consequence of the region's under-investment in urban public transport infrastructure has been a pattern of urban development that is excessively dependent on private vehicle transport. With much of the future population growth earmarked for areas that are remote from public transport links serving employment centres, tertiary education and other regional-level facilities, it is expected that automobile dependence will significantly worsen in the future. This trend will be amplified by the continuing diversification of the regional economy towards tertiary services. Together these factors have major implications for the region's long-term social, economic and environmental resilience and sustainability.

The *Lower Hunter Regional Strategy* (Department of Planning 2006) fails to consider sustainable transport alternatives as the foundation for the region's settlement pattern. The Strategy only considers the extension of the F3 Freeway to Branxton (Hunter Expressway), despite the fact that this proposal will itself further promote a less resilient automobile-dependent settlement pattern. The *Lower Hunter Transport Needs Study 2009* also failed to give any proper evaluation of passenger rail options.

There is already extensive long distance car commuting for work journeys in the Hunter Region. Distributed heavy or light rail services integrated with local bus, cycle, pedestrian and car parking networks provide the best long-term foundation for the region's urban settlement pattern.

4. National context

The proposal is of national infrastructure significance for the following reasons:

a. Economically vital coal exports are served by the railways of the Hunter Region. These are currently subject to capacity constraints.

b. The proposal improves efficiency of the East Coast Rail Freight Corridor by bypassing congested coal export lines.

c. It provides a long-term sustainable urban passenger transport framework for Australia's sixth largest urban area.

d. It provides a highly efficient feeder connection between the Hunter Region's major urban centres and the proposed East Coast High Speed Rail network.

e. Chronic under-investment in the Hunter Region's transport system needs to be corrected as it threatens the long-term performance, competitiveness and resilience of one of the nation's most economically productive regions.

5. Costs & benefits

The proposal would significantly enhance the connectivity of the region's existing passenger and freight rail network. It allows national rail freight corridors to bypass locations subject to unacceptable risk of flooding and sea level rise, as well as locations with severe urban conflicts due to noise, vibration and level crossings.

No consideration, assessment or cost-benefit analysis of the proposal or other rail-based options has been undertaken to date because of a bias by transport agencies towards the consideration of road infrastructure projects. For this reason, most transport infrastructure investment within the Hunter Region is currently being targeted to the Hunter Expressway project. However the cost of the Hunter LinkRail proposal would be in the order of $300 - $500 million, about a quarter of the cost of the Hunter Expressway.

The failure of existing regional-level planning to provide for effective investment in public transport infrastructure has significant long-term costs and risks. These mainly relate to a mismatch between the overall form and pattern of urban development, and the likely consequences of increasing fuel scarcity and prices over coming decades. By providing the foundation for alternative urban development models that are not dependent on high levels of personal car useage, the Hunter LinkRail proposal would substantially mitigate the inherent social and economic risks, whilst also contributing to significantly reduced urban transport emissions.

Future urban growth within the region can be efficiently planned for if it is underpinned by a long term rail transport strategy. The Hunter LinkRail concept can be implemented relatively cheaply in the medium term, whilst bringing significant long term benefits for the region's transport system and urban settlement pattern.

6. Consistency with strategic infrastructure priorities

The following table outlines how the proposal is consistent with Infrastructure Australia's strategic priorities, as outlined in its *Report to Council of Australian Governments*, December 2008 (page 8).

SP1 **Expand Australia's productive capacity**	The productivity of the Australian economy is increasingly reliant on services provided in urban areas. Enhancing transport connectivity within the region and to Sydney and internationally will increase productive capacity. It will potentially contribute to reducing congestion in Sydney.
SP2 **Increase Australia's productivity**	The proposal would significantly improve the effectiveness of nationally-significant rail freight corridors within the region
SP3 **Diversify Australia's economic capabilities**	Economic capability is increasingly dependent on accessibility, and the proposal contributes to this.
SP4 **Build on Australia's global competitive advantages**	The proposal would promote increased competitiveness in export markets due to more effective rail freight links. It would also promote urban settlement patterns that are internationally competitive due to lower carbon footprint, reduced traffic congestion, and avoidance of wasteful investment in unnecessary urban road infrastructure. This is a key issue in a knowledge-based economy.
SP5 **Develop our cities and/or regions**	The proposal would underpin a 'transit-oriented' urban settlement pattern that is resilient to likely future increases in the price and scarcity of fossil fuels.
SP 6 **Reduce green-house emissions**	By promoting a transit-oriented settlement pattern, the proposal will reduce emissions resulting from high levels of personal car use and automobile dependency.
SP7 **Improve social equity, and quality of life**	The proposal would greatly improve equitable access to tertiary education, health, cultural and other regional-level facilities. The Kurri Kurri-Cessnock area in particular currently enjoys poor access to such facilities.

7. Further assessment

A strategic economic, environmental and social assessment of the Hunter LinkRail proposal should be undertaken. This should take into account the implications of the proposal for future sustainable land use and settlement, including greenhouse emissions, resilience of settlement pattern to future economic shocks and equitable access to employment, education, health and other facilities.

It is also suggested that the assessment should take into account the role that Hunter LinkRail might play in supporting the future development of an East Coast high speed rail link (between Brisbane-Sydney-Melbourne), including any future international airport that might be located within the Hunter Region in conjunction with that rail link. A simple examination of likely route options for a high speed rail link suggests that the Hunter LinkRail would be well placed to serve as a feeder connection to major centres within the Hunter Region.

A further issue that needs to be taken into consideration is the urgent priority to secure corridors from inappropriate development. The proposed route between Glendale - Kurri Kurri - Maitland is likely to be subject to significant urban development within the coming decade. This has the potential to result in the irreversible loss of all practical route options for improved passenger and freight rail corridors across the Hunter Region, including the identified East Coast High Speed Rail corridor*. This issue is not currently being considered by State level agencies.

It is clear that Hunter LinkRail would prove extremely beneficial and sustainable when compared to proposals such as the extension of the F3 Freeway from Seahampton to Branxton. The latter proposal has been subject to enormous political pressure and has been fully funded, but will entrench for generations a settlement pattern that is completely unsuited to foreseeable economic conditions over coming decades.

* AECOM Australia Pty Ltd (2013). *High Speed Rail Study Phase 2 Report*, April 2013. Report prepared for Commonwealth Department of Infrastructure and Transport.

Further information

For further information contact the Hunter Environment Lobby:

Tel: 02 4936 6260

Post: PO Box 188
East Maitland 2323.

Supporting material

The following diagrams and maps are included with this submission:

- Concept Plan
- Constraints and Opportunities
- Strategy Plan - Passenger Transport
- Strategy Plan - Freight Transport
- Implementation Plan - Newcastle-Lake Macquarie Western Corridor Indicative Urban Structure.

Also included is a copy of the brochure *Introducing Hunter LinkRail*.

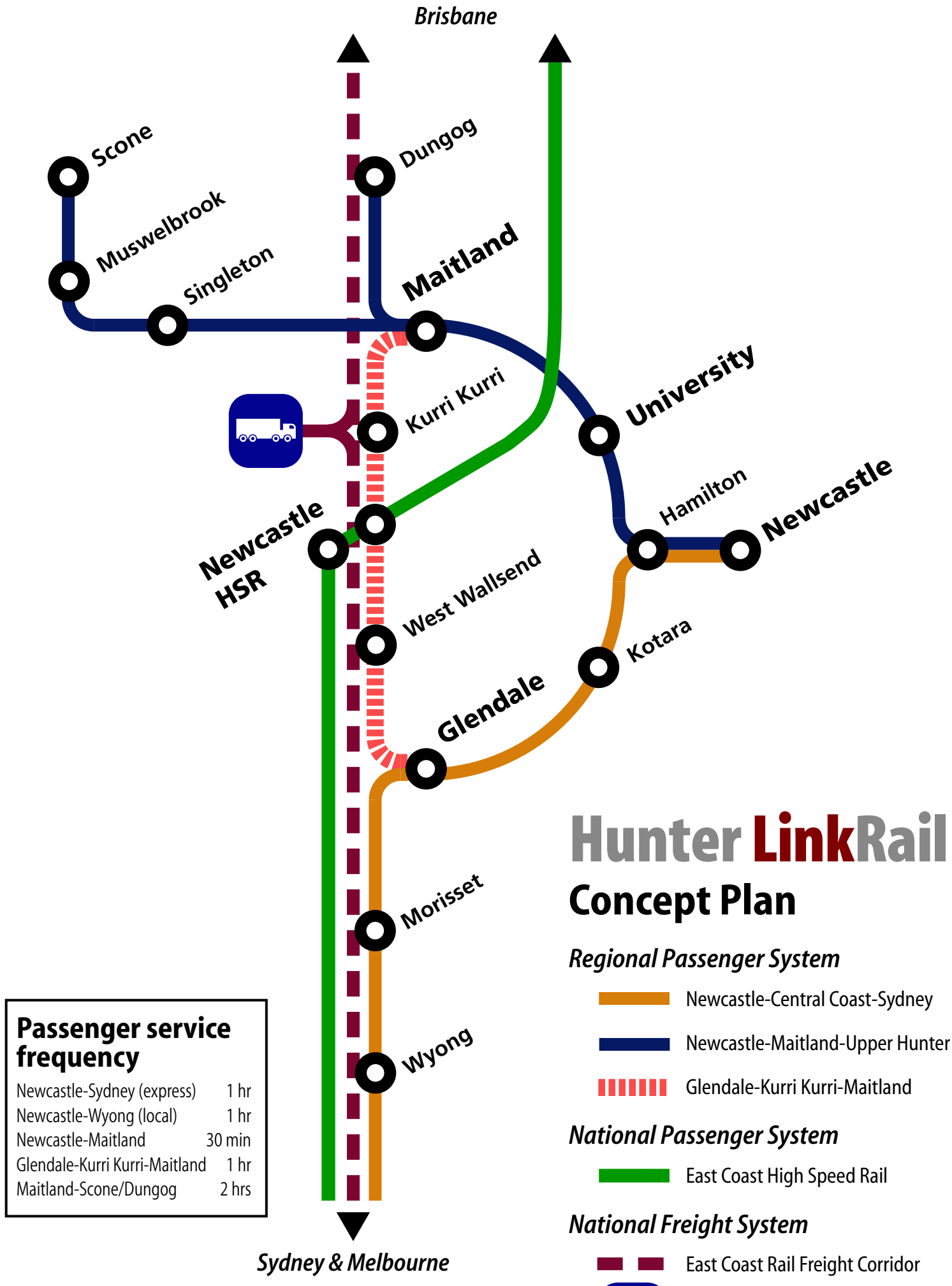
Government representations & submissions

• Infrastructure Australia	14 Oct 2008	
• NSW Minister for the Hunter	19 Sep 2008	
• NSW Minister for the Hunter	8 Feb 2010	
• Member for Charlton	30 Nov 2008	
• Member for Lake Macquarie	20 Apr 2009	
• NSW Dept of Planning	15 May 2009	
• NSW Dept of Transport	8 Oct 2010	High Speed Rail Proposal

Update May 2013

Subsequent to October 2010, submissions have been made to:

• NSW Dept of Planning	15 Feb 2011	Special Infrastructure Contribution
• NSW Dept of Transport	Dec 2011	2nd Stage East Coast High Speed Rail Corridor
• NSW Dept of Transport	8 Mar 2012	NSW Long Term Transport Master Plan
• NSW Dept of Transport	5 Oct 2012	NSW Long Term Transport Master Plan
• NSW Dept of Planning and Infrastructure	May 2013	Review of Lower Hunter Regional Strategy



Hunter LinkRail

Concept Plan

Regional Passenger System

- Newcastle-Central Coast-Sydney
- Newcastle-Maitland-Upper Hunter
- Glendale-Kurri Kurri-Maitland

National Passenger System

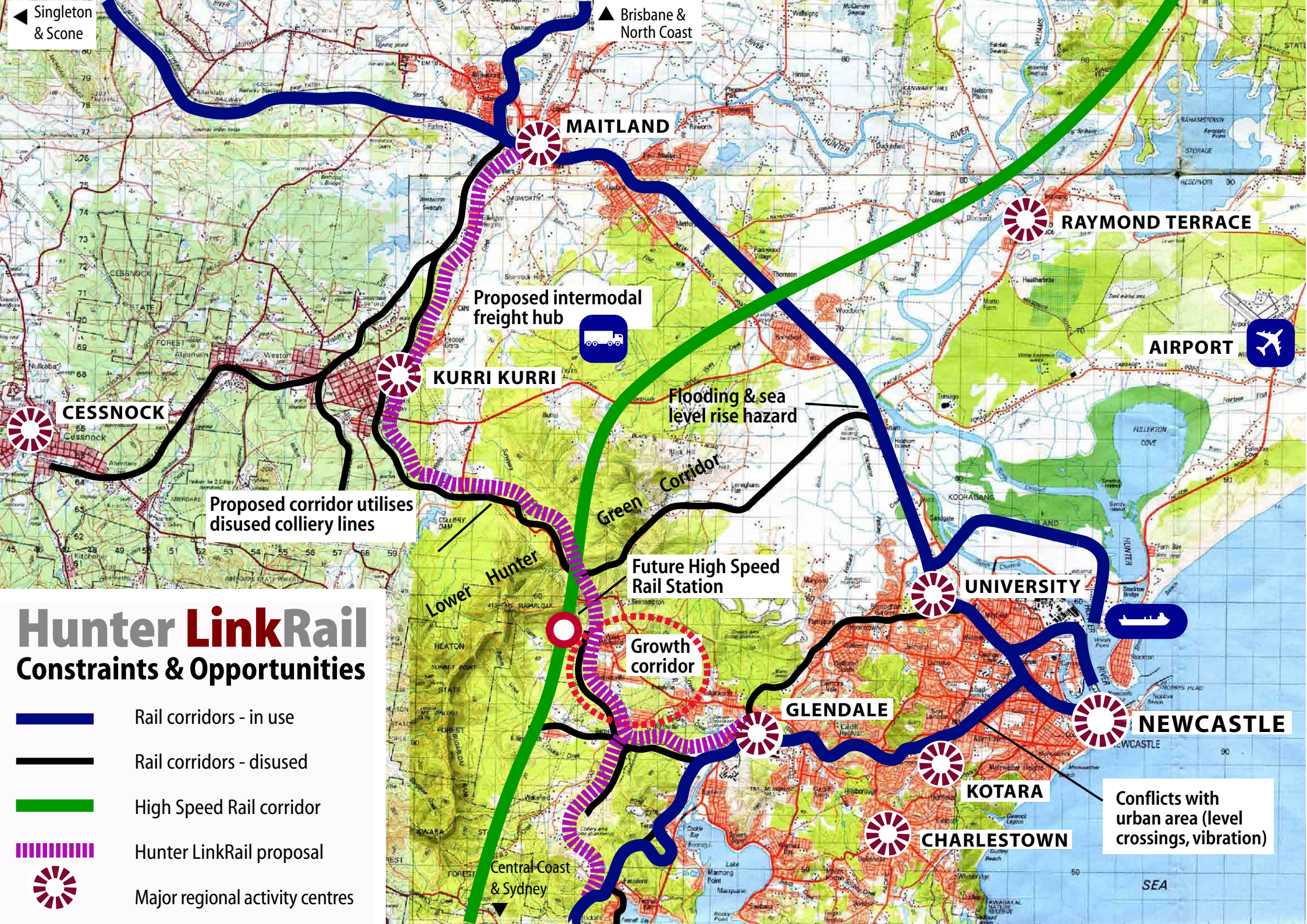
- East Coast High Speed Rail

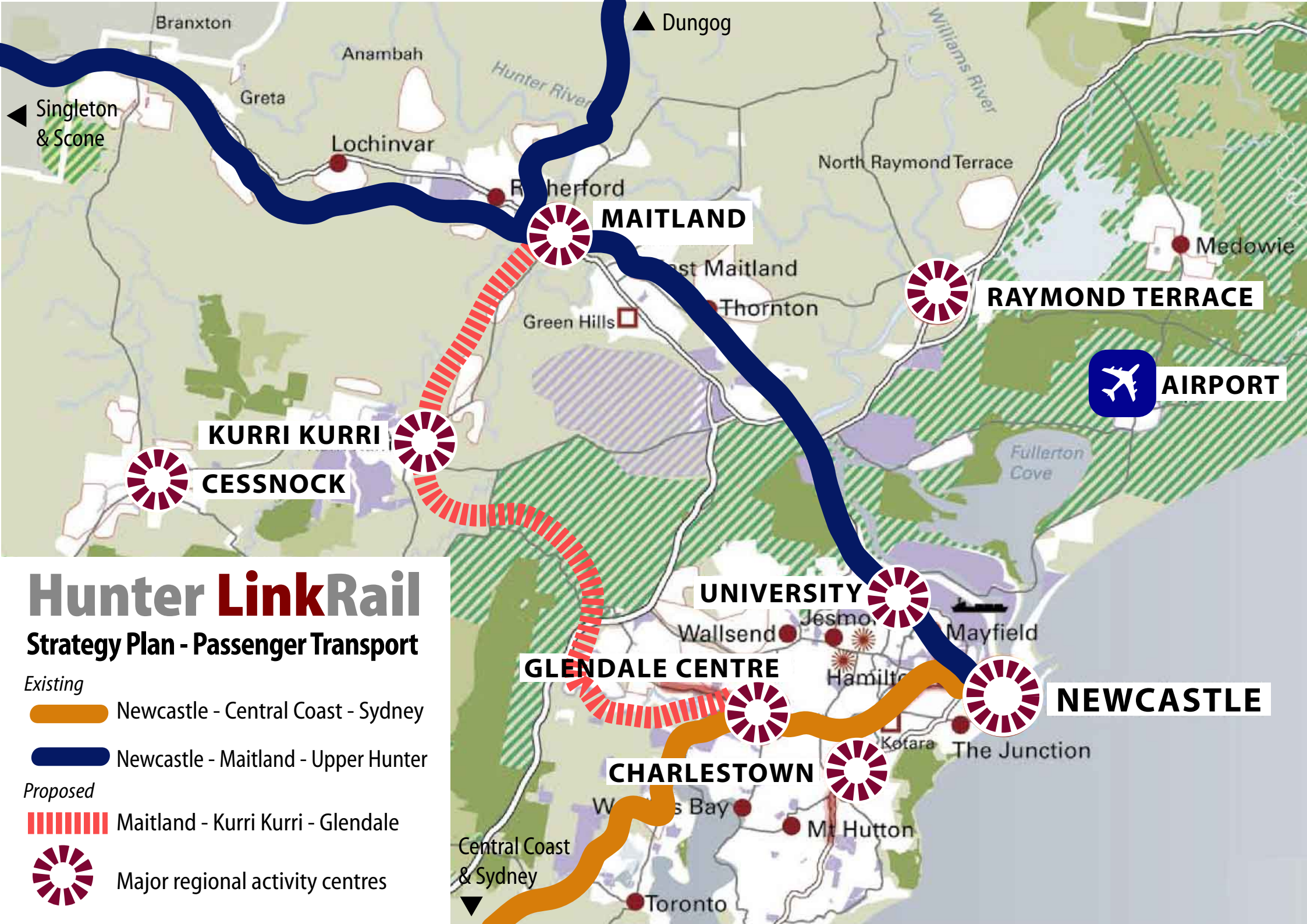
National Freight System

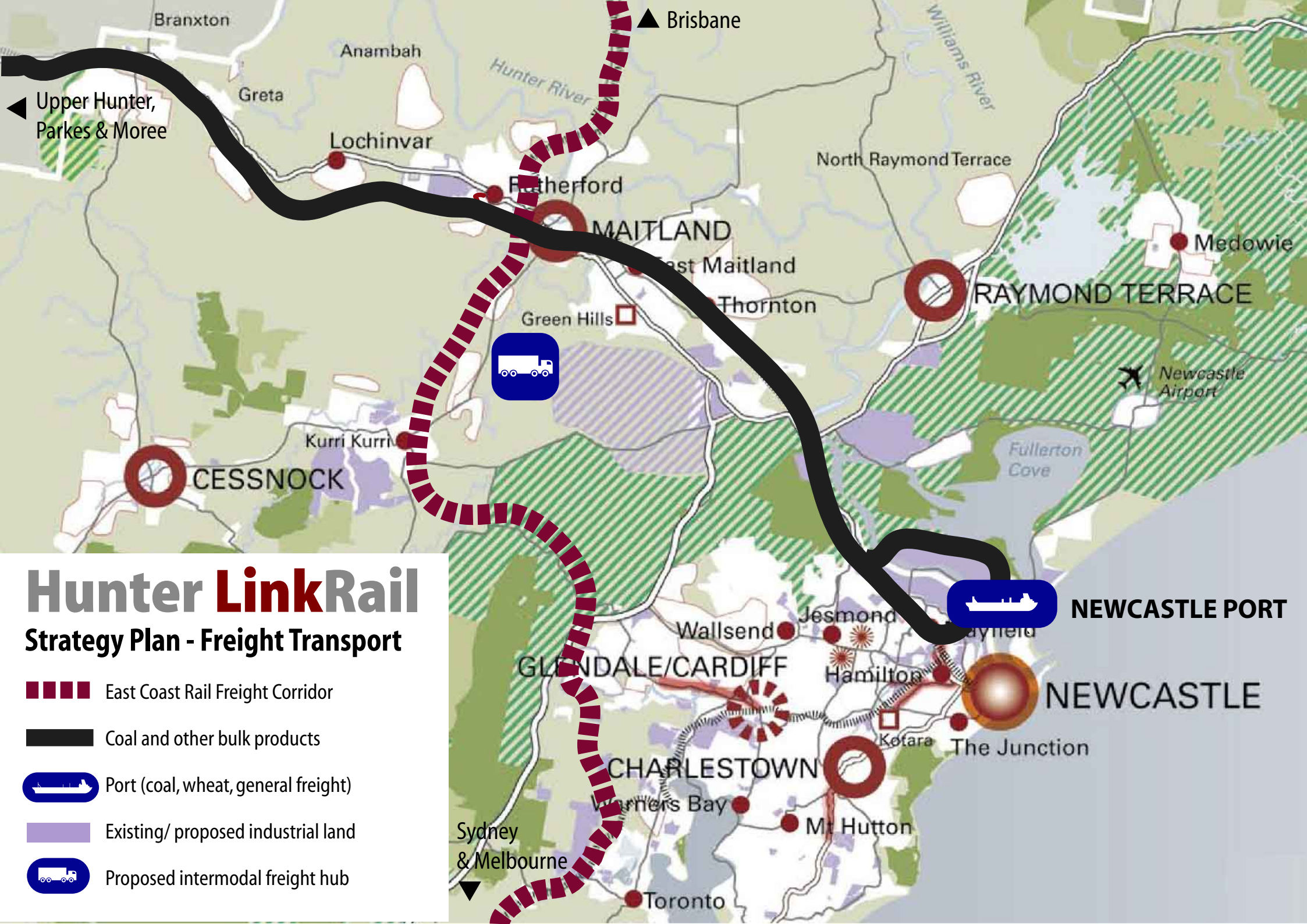
- East Coast Rail Freight Corridor
- Intermodal Freight Hub

Passenger service frequency

Newcastle-Sydney (express)	1 hr
Newcastle-Wyong (local)	1 hr
Newcastle-Maitland	30 min
Glendale-Kurri Kurri-Maitland	1 hr
Maitland-Scone/Dungog	2 hrs

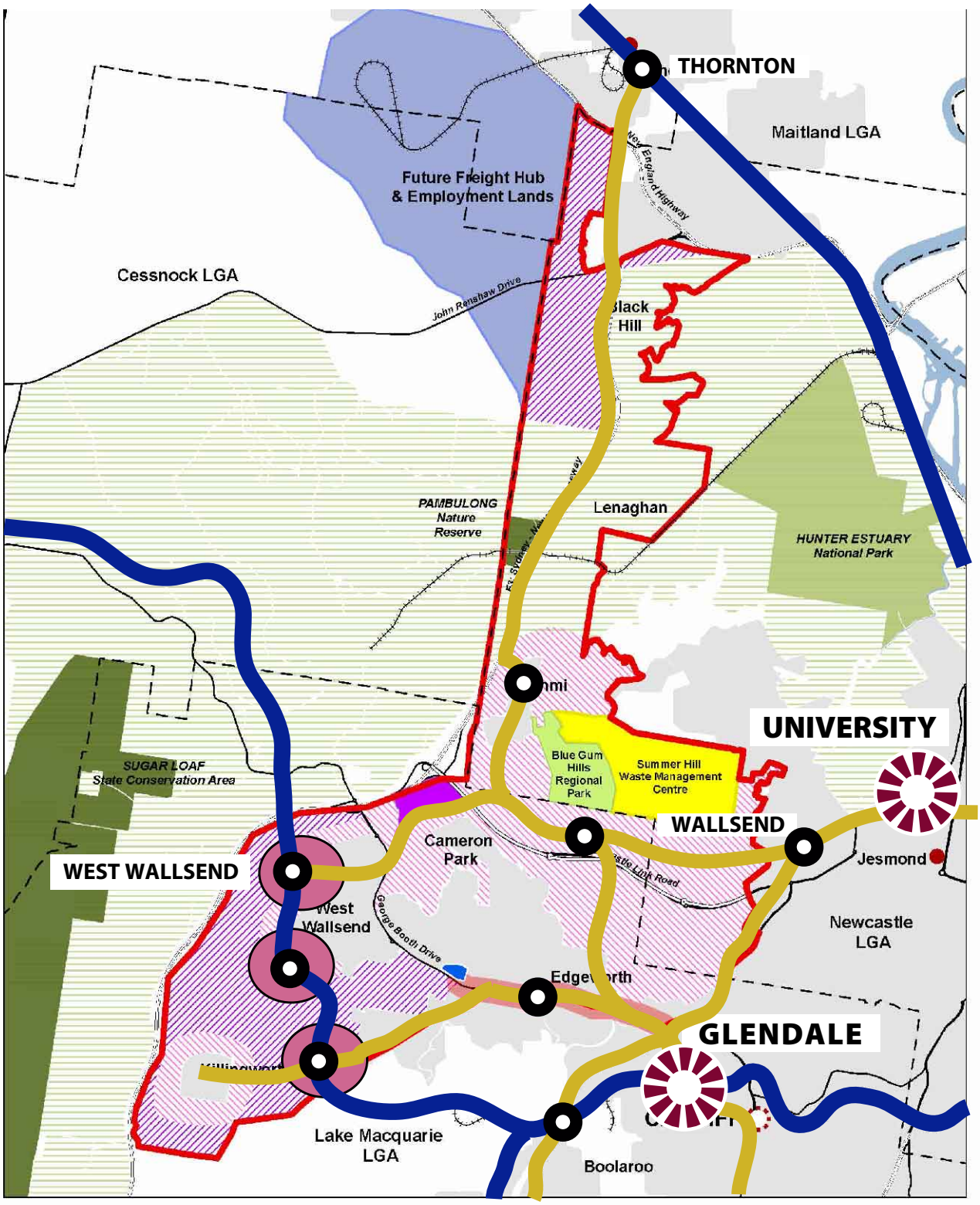

Singleton & Scone
Brisbane & North Coast
MAITLAND
RAYMOND TERRACE
Proposed intermodal freight hub
AIRPORT
KURRI KURRI
CESSNOCK
Flooding & sea level rise hazard
Green Corridor
Proposed corridor utilises disused colliery lines
Lower Hunter
Future High Speed Rail Station
UNIVERSITY
Growth corridor
GLENDALE
NEWCASTLE
KOTARA
Conflicts with urban area (level crossings, vibration)
CHARLESTOWN
Central Coast & Sydney
SEA
Hunter LinkRail
Constraints & Opportunities
Rail corridors - in use
Rail corridors - disused
High Speed Rail corridor
Hunter LinkRail proposal
Major regional activity centres


Branxton
Anambah
Greta
Singleton
& Scone
Lochinvar
Hunter River
Dungog
Williams River
North Raymond Terrace
MAITLAND
Green Hills
Thornton
Medowie
RAYMOND TERRACE
AIRPORT
KURRI KURRI
CESSNOCK
Fullerton
Cove
UNIVERSITY
Wallsend
Mayfield
GLENDALE CENTRE
NEWCASTLE
Kotara
The Junction
CHARLESTOWN
Mt Hutton
Central Coast
& Sydney
Toronto
Hunter LinkRail
Strategy Plan - Passenger Transport
Existing
Newcastle - Central Coast - Sydney
Newcastle - Maitland - Upper Hunter
Proposed
Maitland - Kurri Kurri - Glendale
Major regional activity centres


Hunter LinkRail
Strategy Plan - Freight Transport
East Coast Rail Freight Corridor
Coal and other bulk products
Port (coal, wheat, general freight)
Existing/ proposed industrial land
Proposed intermodal freight hub
Upper Hunter, Parkes & Moree
Brisbane
Sydney & Melbourne
Branxton
Anambah
Greta
Lochinvar
Hunter River
Williams River
Rutherford
MAITLAND
East Maitland
Thornton
Green Hills
North Raymond Terrace
Medowie
RAYMOND TERRACE
Newcastle Airport
Fullerton Cove
Kurri Kurri
CESSNOCK
NEWCASTLE PORT
Wallsend
Jesmond
GLENDALE/CARDIFF
Hamilton
NEWCASTLE
Kotara
The Junction
CHARLESTOWN
Warners Bay
Mt Hutton
Toronto

Hunter LinkRail Implementation Plan

Newcastle-Lake Macquarie Western Corridor Indicative Urban Structure



Legend

- Western Corridor Strategy Area
- Emerging Major Regional Centre
- Locality
- Renewal Corridor
- Local Government Area Boundary
- Freeway & Highways
- Main Road
- Railway Line
- Existing Urban
- Rivers/ Streams
- Rural Lands
- Summer Hill Waste Management Centre
- Watagan Stockton Green Corridor
- National Park
- State Conservation Area & Reserves
- Planned Open Space
- Employment Lands
- Employment Lands Investigation
- Future Freight Hub & Employment Lands
- Pambulong Commercial Retail Area
- Residential Investigation

NSW GOVERNMENT
Department of Planning

WESTERN CORRIDOR PLANNING STRATEGY

MAP 4 - INDICATIVE PREFERRED LAND USES

0 1 2 4
Kilometres

Date: 12th Dec 2009 Author: Regional Coordination

Regional passenger rail links

Regional bus links

Access & activity nodes

How can the corridor be reserved?

Amazingly, the corridor for Hunter LinkRail is almost entirely in existence! The corridor largely consists of disused colliery lines. In fact, a proposal to link up these lines was first considered by the NSW Government as early as the 1920s. Consequently, the proposal requires little in the way of land acquisition.

How will Hunter LinkRail operate?

Hunter LinkRail will be designed to operate as both a passenger and freight line. Special measures are necessary to avoid conflicts between passenger and freight traffic (e.g. signalling and passing facilities).

Hunter LinkRail can be operated using conventional rolling stock similar to that presently used between Newcastle, Maitland and the Upper Hunter.

Alternatively, the latest light rail technology could be used. One possibility is the 'dual-mode' concept successfully used in Karlsruhe and Saarbrucken, Germany. This allows light rail vehicles to share heavy rail track, whilst also accessing town centres and other locations normally inaccessible to heavy rail. This option is particularly well suited to the Hunter Region, and deserves very careful consideration.

Dual-mode trams can run on both streets and heavy rail lines

What about funding?

Because of its multiple objectives to improve freight transport, passenger transport, urban structure and social access, Hunter LinkRail is ideally suited to being funded under the new National Infrastructure Fund announced in the May 2008 Budget. Redevelopment of surplus rail yards at Broadmeadow is another funding source. Other possible sources include the NSW Government, superannuation and other investment funds.

Who will operate Hunter LinkRail?

Rail track infrastructure is likely to be operated by the Australian Rail Track Corporation as part of the national rail system.

The Hunter LinkRail proposal draws into focus the desirability of establishing a regional transport body to manage and operate all regional-level transport services in the Hunter Region. This model is successfully used in many other parts of the world, particularly in regions with a distinct identity and settlement pattern. It will help ensure that transport planning and decisions are more closely matched with local needs and aspirations.

Bringing Hunter LinkRail to fruition

Making Hunter LinkRail a reality will depend on the level of awareness and support, particularly by political representatives and senior planning and transport officials. Please pass this brochure on to your local councillors and members of Parliament (Commonwealth and State) and tell them about the benefits of Hunter LinkRail.

A community initiative by

Hunter Environment Lobby Inc.

Tel: 02 4936 6260

Introducing Hunter LinkRail

What is Hunter LinkRail?

Hunter LinkRail is an innovative proposal to dramatically improve access and transport in the Hunter Region.

The proposal will create better access to jobs and services in the Hunter, better connections to Sydney and the Central Coast, improved rail freight capacity, and less car dependence.

Hunter LinkRail is an integrated proposal that is three solutions in one:

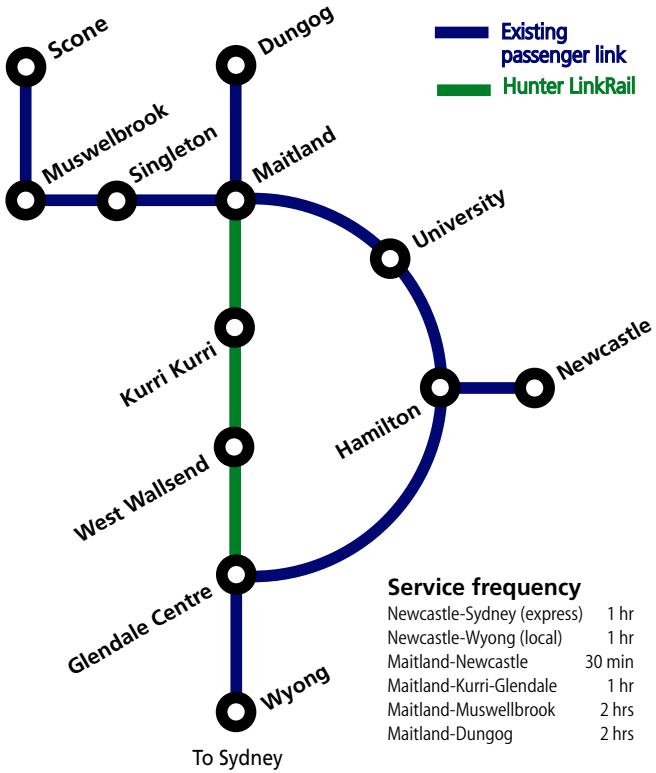
1. A missing link in the Hunter's regional passenger transport system
2. A component of the proposed East-Coast Rail Freight Corridor
3. A backbone to guide the location of new housing and employment in the Region.

Missing regional transport link

Hunter LinkRail is the missing link in the Hunter's regional passenger transport system. Presently, rail services radiate from the Newcastle City Centre. This no longer reflects travel patterns in the Region.

Hunter LinkRail provides a direct cross-connecting link from Maitland to Glendale Centre via Kurri Kurri. This will substantially increase the connectivity of existing rail services, and will improve access to a wide range of services and employment, particularly for areas that currently have poorly developed transport links.

Hunter LinkRail will also improve inter-regional access from the Upper Hunter to the Sydney and Central Coast Regions.

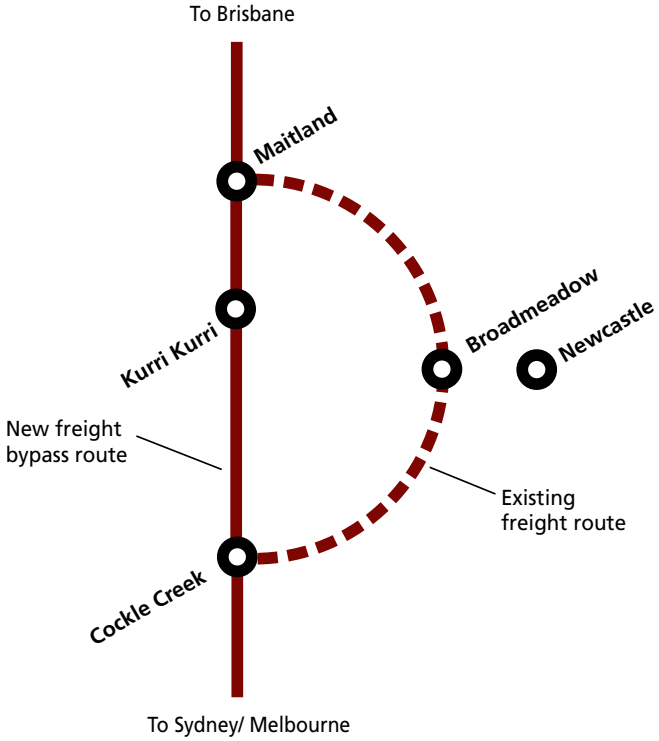


East-coast rail freight corridor

The East-Coast Rail Freight Corridor is a project of the Australian Government to provide efficient rail freight access along the eastern seaboard. At present, freight trains on this route are forced to pass through suburban Newcastle. This causes conflicts with residential areas, congestion at level crossings, and constrains the provision of passenger services. The existing route is also highly vulnerable to flooding.

Hunter LinkRail provides a Newcastle bypass for the east coast freight route. It provides a direct link from Maitland to Cockle Creek via Kurri Kurri.

A byproduct of the proposal is that it will enable surplus rail yards at Broadmeadow to be regenerated as a new residential community with good access to services.



Regional backbone

Much of the expected future housing development in the Region is currently planned to occur in locations that do not have good access to regional passenger transport links. These areas are likely to become highly car-dependent.

Hunter LinkRail provides a backbone to guide new housing and employment to locations with good access, thereby cushioning the Region from the effects of future rises in petrol prices.

Hunter LinkRail is the first step in creating a truly regional transport network that connects all of the Region's major activity centres, including Newcastle, Maitland, Glendale, Charlestown, Cessnock, University, Airport, John Hunter Hospital and many others. Future network additions, whether by rail or regional express bus, can also be considered.