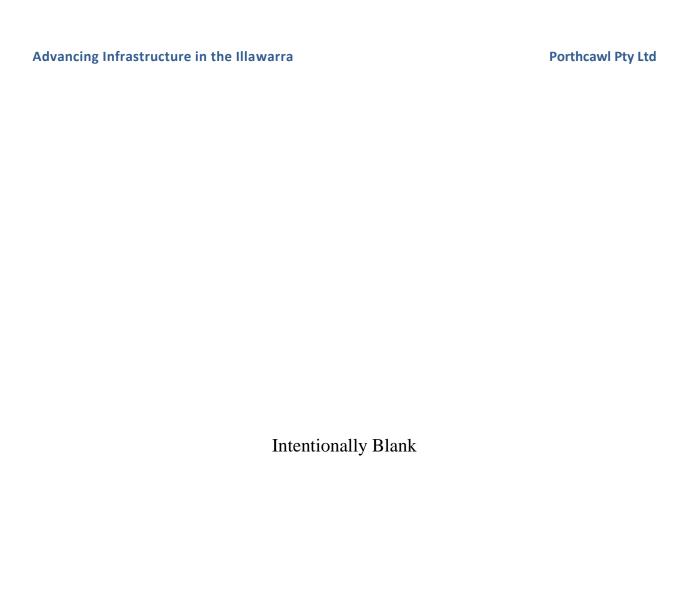
Advancing Infrastructure in the Illawarra

A regional response to the NSW Government's Rebuilding NSW Discussion Paper

Prepared for: Members of RDA Illawarra's Infrastructure Forum





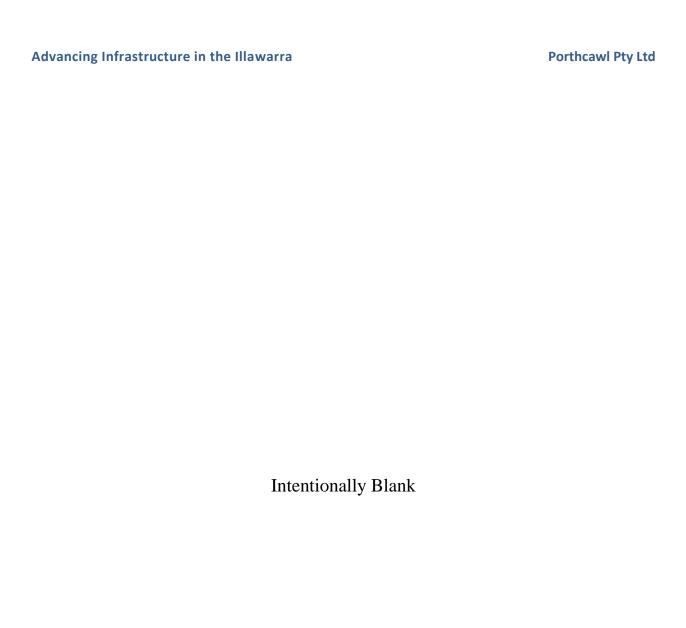
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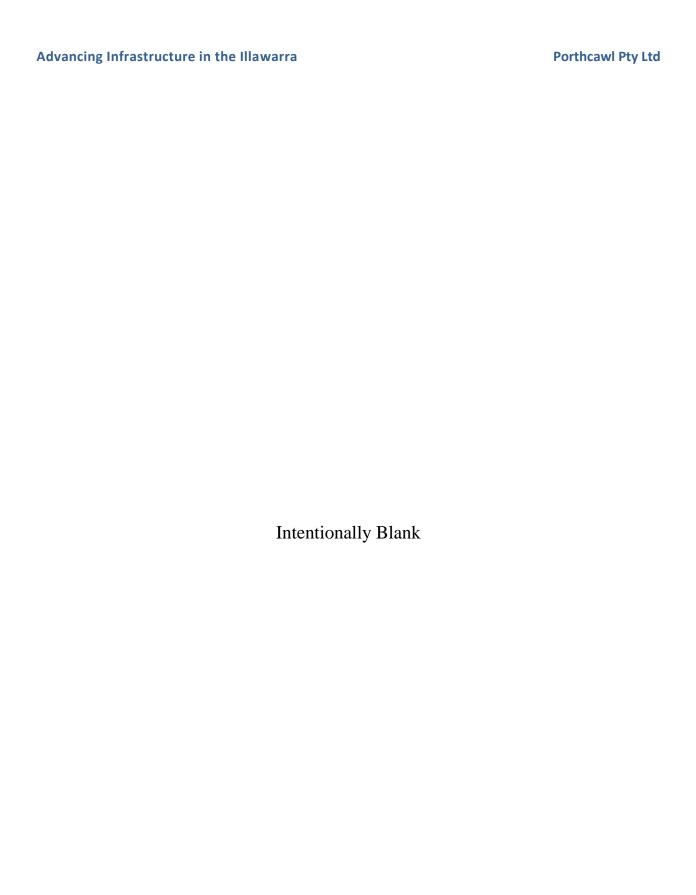
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Preface

This response to the NSW Government's Rebuilding NSW Discussion Paper identifies infrastructure priorities for the Illawarra Region covering the local government areas of Wollongong, Shellharbour, Kiama and the Shoalhaven. The priority projects have been collaboratively developed and are strongly supported by a regional consortium of peak organisations and local governments representing the economic and social wellbeing interests of the region as a whole. The members of the collaborative group represented by this joint submission are as follows:

Organisation	Representative	Role	Signature
RDA Illawarra	Eddy De Gabriele	Chair	
NSW Ports	Dom Figliomeni	Executive General Manager - Commercial	
Australian Industry Group	Leanne Grogan	Regional Manager	
Wollongong City Council	David Farmer	General Manager	
Shellharbour City Council	Carey McIntyre	A/g General Manager	
Kiama Municipal Council	Michael Forsyth	General Manager	
Destination Wollongong	Mark Sleigh	General Manager	
Illawarra Business Chamber	Debra Murphy	Chief Executive Officer	
Property Council of Australia Illawarra Chapter	Amanda Kunkler	Regional Director	



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Executive Summary

In June this year the NSW Government announced Rebuilding NSW, a plan to invest \$20 billion in infrastructure, through the funding vehicle Restart NSW.

Through its Rebuilding NSW Discussion Paper, published in August this year, the NSW Government has sought comments from community stakeholders about its proposed infrastructure program.

The Illawarra Region's submission

This submission is presented by a unique consortium of peak business, local government and community stakeholder groups in the Illawarra Region who have been working together for a number of years on progressing regional infrastructure priorities. The Rebuilding NSW process has provided the consortium with a vital opportunity to focus on three of the region's major transport infrastructure priorities.

The collaborative nature of this submission should be recognised as one of the strongest and clearest demonstrations of support from the region for some time. It reflects a united approach and confirms an agreed alignment on priority transport infrastructure projects for the Illawarra (Wollongong, Shellharbour, Kiama and Shoalhaven). The major priorities supported by this submission will provide the means to enhance economic development in the region and the State of NSW.

The consortium notes that Wollongong has been considered 'metropolitan', alongside Sydney and Newcastle. However, for the purposes of this process we would urge the NSW Government to ensure the benefit of investment in the Illawarra region as a whole is taken into account when determining the investment in transport infrastructure priorities.

This submission addresses **two** of the 12 questions that are posed by the Discussion Paper:

- e. Please provide examples of specific infrastructure projects in regional NSW that would contribute to the productive capacity of the economy.
- f. How can regional communities share in the benefits of Rebuilding NSW, including economic productivity and jobs creation? ¹

¹ NSW Government, Rebuilding NSW, Discussion Paper, August 2014

Three complementary transport infrastructure priorities

In response to these questions, we recommend **three** capacity building projects. Consistent with the emphasis given in the NSW Long Term Transport Master Plan to enhancing the performance of the whole system, addressing three serious transport pinch points, will in complementary ways, improve the capacity, efficiency and reliability of road and rail transport for both passengers and freight in the Illawarra and the Greater Sydney area, and therefore should be progressed as short-term priorities.

It is acknowledged that the NSW Government has already committed to elements of these three projects and in some cases work is underway. The Illawarra Consortium requests that these projects be expedited through opportunities available through this process.

Infrastructure project 1

Make the M1 Princes Motorway a continuous motorway between St Peters and Albion Park:

- a. Commence construction of the M1 (F6) from Waterfall to St Peters by 2020;
- b. Commence construction of the Albion Park Rail Bypass by 2017;
- c. Complete construction of ramps on M1 between Gwynneville and Albion Park.

The economic and social wellbeing benefits to NSW and the Illawarra

- ✓ Enable commuters, businesses, freight movers and visitors to travel between the Illawarra and Sydney more quickly, safely, and reliably
- ✓ Reduce the transport costs of NSW exports and imports
- ✓ Make it more attractive for businesses to invest in NSW and the Illawarra
- ✓ Make it easier for tourists to access the region.
- ✓ Reduce the pressure on Sydney's metropolitan transport network

Infrastructure project 2

Resolve the structural problems of the South Coast railway between Wollongong and Sydney:

- a. Commit \$100 million for completing the (mainline acceleration program) targeted works on speed restriction and pinch points by 2019;
- b. Commit \$1 billion as soon as possible to ensure capital works are completed by 2024 to reduce travel time to 60 minutes between Wollongong and Sydney.

The economic and social wellbeing benefits to NSW and the Illawarra

- ✓ Achieve 60 minute trip that is reliable, convenient and safe for commuters and visitors travelling between the Illawarra and Sydney
- ✓ Improve access to wider employment market
- ✓ Encourage population growth in Illawarra
- ✓ Increase public transport patronage and reduce the pressure on road networks
- ✓ Minimise railway breakdowns and maintenance costs

Infrastructure project 3

Complete the construction of the Maldon to Dombarton railway as a dedicated freight rail corridor by 2020:

- a. Commit \$200 million towards the construction, to be matched by at least \$500 million in private sector funding immediately;
- b. Expedite the Registration of Interest process and call for tenders from private sector investors immediately.

The economic and social wellbeing benefits to NSW and the Illawarra

- ✓ Enhance the capacity and efficiency of the state's freight transport network for bulk export and import commodities, and containers in the future
- ✓ Free up the Illawarra and South Coast railway for passenger services
- ✓ Consistent with the State Infrastructure Strategy, utilise existing assets to facilitate growth in valuable mining and agricultural exports through Port Kembla Port to enhance international trade
- ✓ Contribute to the economic prosperity of the Illawarra Region and NSW as a whole

Regional snapshot

The Illawarra, as defined by the four Local Government Areas (LGAs) of Wollongong, Shellharbour, Kiama and Shoalhaven, is NSW's third most populous area, being the home to about 384,100, and an expected population of about 459,100 people by 2034.² The region is also the State's third largest economy, contributing \$16.5 billion to the State's economy in 2012-13.³

The face of the Illawarra is changing. Our economy is diversifying with a broad range of service sectors, including high value professional service activities, education and training, transport and logistics, and information technology and e-commerce are gathering pace to complement our traditional reliance on manufacturing and mining.

The region's unique natural and built environments are powerful sources of attraction for businesses wanting to make long term investments in sustainable enterprises, and for an increasing number of visitors who want to enjoy the pleasures afforded by our beautiful beaches, rainforests and modern urban settings, and the rich cultural calendar.

Our connections with Sydney are intensifying

The Illawarra is becoming increasingly integrated with the Sydney CBD and the Greater Sydney area:

- We send freight to and receive it from the Greater Sydney area (and from mines and farms further afield in western NSW), and especially the dense urban and industrial areas of western and south western Sydney.
- An average of 42,300 passenger and freight vehicles per day travel between the Illawarra and the Sydney CBD and metropolitan area on the M1 Princes Motorway, the main road corridor between the Illawarra and Sydney. ⁴ This makes this corridor one of Australia's busiest inter-city road corridors. ⁵ In addition, another 3,000 people per day travel between the Illawarra and Sydney by rail.
- Among these travellers, about 20,850, or 15% of our workforce commute to Sydney and its southern and western suburbs to go to work, and 10,000 people living in Sydney make the trip from these areas to work in our region.⁶
- Sydney is an important market for our university and a diverse range of professional and technical service providers that are based in the Illawarra.

² NSW Government, Illawarra Regional Transport Plan, March 2014, pages 3-4

³ Illawarra Business Chamber, Linking the Illawarra, Improving the region's transport connectivity, August 2014, p iii

⁴ Roads and Maritime Services, Average Daily Traffic Volumes, V1.0, updated 25/3/2014, http://www.rms.nsw.gov.au/publicationsstatisticsforms/trafficvolumes/map/, accessed 5 September, 2014

⁵ BITRE, Australian transport statistics Yearbook 2009 http://www.bitre.gov.au/publications/2009/stats_001.aspx ⁶ Illawarra Business Chamber, Linking the Illawarra, Improving the region's transport connectivity, August 2014, page 8

- Sydney, and its domestic and international airports, are critical gateways enabling us to connect with our colleagues and clients in other states in Australia and overseas; and
- We are all part of families and friendship networks, and sporting and cultural interest networks that are spread across these places and need to keep in touch with each other regularly.

Transport connectivity needs to be improved

A critical factor in this 21st century picture of the Illawarra is the quality of the road and rail transport connections on which we rely every day.

According to the recent assessment of transport connectivity within the Illawarra and between the region and Sydney, the Illawarra has the lowest overall transport connectivity score by comparison with three other Australian regional cities and areas: Central Coast, NSW, Geelong, Victoria and Gold Coast Queensland. The 20,850 workers that rely on these road and rail corridors to travel to work, incur about \$450 million per year in time and out of pocket costs or about \$27,200 per person travelling by road and \$17,100 per person travelling by rail. These costs are estimated to increase to about \$690 million by 2031.

The F6 Freeway/ Mt Ousley Road (both recently renamed the M1 Princes Motorway) and the A1 (Princes Highway) at its northern extension beyond Waterfall is the primary entry and exit point for passenger traffic, and essentially the only entry and exit point for freight traffic moving between Wollongong and Sydney.⁷

In 2007 it was identified as Australia's busiest inter-urban road corridor, and at the time its most significant challenge was that it was highly congested.⁸ Today, traffic volumes are higher, congestion is worse and the journey time takes increasingly longer. And at the southern end near Wollongong, where freight vehicles account for about 15% of the traffic, and the road is steep and winding, the corridor is prone to traffic accidents and other incidents that can cause lengthy delays.

The only other alternative for travelling to Sydney is the less popular railway journey, which takes longer than the road trip, is typically crowded, and is also prone to breakdowns and sometimes in areas where there is no telecommunications connection making it impossible to inform friends, colleagues and clients, or an airline of the delay.

Most of the region's freight is transported by road,⁹ and mostly on the M1 Princes Motorway either between the Illawarra and Sydney or between the Illawarra and south western Sydney, via Picton Road, which is accessed from the M1 near Wollongong. Critically important bulk exports are moved on the

⁷ The Southern Freeway and Mount Ousley Road, commonly known as the F6, from Waterfall to Albion Park Rail will be formally renamed the M1 Princes Motorway; Roads and Maritime Services;

http://www.rms.nsw.gov.au/newsevents/news/2013/130809-next-round-of-alphanumeric-road-number.html. However, 'F6' is still the more commonly used name for the section of the motorway that stretches between Bulli Tops and Waterfall and Mt Ousley Road is still commonly used to describe the section that runs between Gwynneville and Bulli Tops.

⁸ Auslink, Sydney –Wollongong Corridor Strategy, 2007

⁹ Infrastructure NSW, State Infrastructure Strategy, 2012, page 72. Road accounts for 63% of the volume of freight movements in NSW.

slow, unreliable Illawarra and South Coast railway through Sydney's passenger network – and only during non-peak passenger timetable periods – to Port Kembla Port. The lack of a more direct rail linkage between mining and agricultural production areas in the southern and western NSW hinterland is depriving the state of potentially valuable revenues from bulk commodities that could be exported from Port Kembla Port.



1 Introduction

1.1 NSW Government Rebuilding NSW Program

In June this year the NSW Government announced Rebuilding NSW, a plan to invest \$20 billion in infrastructure, funded from the partial lease of NSW electricity networks and allocated to priority projects through the funding vehicle Restart NSW.

In its Rebuilding NSW Discussion Paper, published in August this year, the NSW Government has sought comments from community stakeholders about its proposed infrastructure program.

This submission is presented by a consortium of peak business, local government and community stakeholder groups in the Illawarra Region, and addresses **two** of the 12 questions that are posed by the discussion paper:

e. Please provide examples of specific infrastructure projects in regional NSW that would contribute to the productive capacity of the economy.

f. How can regional communities share in the benefits of Rebuilding NSW, including economic productivity and jobs creation? 10

1.2 A snapshot of the Illawarra

The Illawarra, as defined by the four Local Government Areas (LGAs) of Wollongong, Shellharbour, Kiama and Shoalhaven, is NSW's third most populous area, being the home to about 384,100, and an expected population of about 459,100 people by 2034.¹¹ The region is also the state's third largest economy, contributing \$16.5 billion to the state's economy in 2012-13.¹²

The face of the Illawarra is changing. Our economy is diversifying with a broad range of service sectors, including high value knowledge based professional service activities, gathering pace to complement our traditional reliance on manufacturing and mining.

The region's unique natural and built environments are powerful sources of attraction for businesses wanting to make long term investments in sustainable enterprises, and for an increasing number of visitors who want to enjoy the pleasures afforded by our beautiful beaches, rainforests and modern urban settings.

1.2.1 New foundations are being built

Change is also occurring on a number of fronts to secure the foundations of the future that we envision for the region. The following initiatives are among the many developments that are currently being progressed.

¹⁰ NSW Government, Rebuilding NSW, Discussion Paper, August 2014

¹¹ NSW Government, Illawarra Regional Transport Plan, March 2014, pages 3-4

¹² Illawarra Business Chamber, Linking the Illawarra, Improving the region's transport connectivity, August 2014, p iii

- Already the Port of Port Kembla is handling NSW's motor vehicle imports, and construction is
 progressing on the new \$700 million Outer Harbour to support growing trade opportunities,
 including a broadening range of bulk products including cement, soy bean, bauxite and iron ore,
 as well as containers which are expected to increase once capacity is reached at Port Botany.
- The West Dapto Urban Release Area is on track to provide residential land for 18,000 new homes to cater for an extra 47,600 people living in the region by 2031. To support this and other nearby urban land release projects at Tallawarra and Calderwood, water infrastructure to the value of \$70m will be installed by 2019 and \$84m worth of waste water infrastructure will be installed by 2015.
- Over \$720 million of construction is underway or has been completed in the last 12 months
 within the Wollongong City Centre. These include construction of a new GPT shopping complex
 (resulting in 800 full time equivalent jobs), the Crown St Mall Refurbishment, several mixed use
 developments, and commitment of new SES headquarters. Based on current construction, the
 Wollongong CBD population in the next 3 years is projected to double.



 The State Government is spending \$134 million to upgrade the Wollongong Hospital, and two new private hospitals that are being built in the region will support our growing population.
 One of these is a 156-bed facility in Wollongong. The second will be a 303-bed facility to be built in West Dapto.¹³

¹³ Illawarra Mercury, Wollongong: Work starts on new private hospital, 05 Apr, 2012 03:12 PM

- Construction is in progress on the first of three stages of development of the Shell Cove Boat Harbour, which will accommodate a 300-berth marina with adjoining land utilised as a retail and commercial centre, residential development, a technology park and boat servicing facilities. The boat harbour development will provide more than 150 full time positions during construction and more than 2,000 long term employment positions in the region.
- Roads and Maritime Services are progressing plans to complete three separate upgrades of the
 Princes Highway between Gerringong and Bomaderry just north of Nowra to support growing
 traffic volumes, improve road safety and efficiency, and social amenity for local communities. A
 \$329 million Gerringong upgrade is due to open to traffic by mid-2015 and the detailed design
 and build contract for the Foxground and Berry bypass is expected to be awarded in the next
 few months, and approval for preparatory work on stage three of the Princes Highway upgrade
 between Berry and Bomaderry has been granted.

1.2.2 Our economy is diversifying

The Illawarra regional economy spans a broad range of industries. While manufacturing, worth about \$2 billion in 2013, accounts for the largest share of output by value, and mining and construction each produced about \$1 billion, a number of other service sectors are among the ten biggest employers and economic generators in the region.

- The healthcare and social assistance sector employs the highest number of people and contributed about \$1.5 billion
- Education and training dominated by the University of Wollongong contributed just over \$1
 billion and accounted for the second highest number of jobs in the region
- Public administration and safety also contributed just over \$1 billion and is one of the largest employers in the region
- Retail trade, also employing a significant share of the regional workforce, accounted for the about \$750 million in 2013.



Also among this group of ten big generators of economic value are three sectors that while employing smaller numbers of people, nevertheless each contributed between \$600 million and \$1 billion in 2013:

- Transport postal and warehousing services
- Financial and insurance services
- Professional, scientific and technical services.¹⁴

Transport and logistics

Much of the growth in the transport and logistics sector has been generated by Port Kembla Port becoming the entry point for motor vehicle imports into NSW.

This has attracted a number of national and international logistics players to transfer their operations to the region, which in turn is expanding the region's role as an important transport and logistics hub, handling a growing share of consumer and industrial freight destined for metropolitan markets as well as exports that originate in the NSW hinterland. Over the last 10 years this sector has grown to include a range of services including motor vehicle pre delivery, short-term storage and distribution, and road and rail transportation of consumer and industrial goods between Port Kembla and Greater Sydney.

In addition to the expansion of Port Kembla Coal Terminal from 14 million tonnes per year to 18 million tonnes per year to support growing coal exports, other bulk commodity trades are adding to the Port's growing trade facilitation role. These include the construction of the new Quattro grain terminal which will handle about 600,000 tonnes of grain per year, 15 the US\$220 million soybean processing facility, 16 and Cement Australia's grinding mill facility at the new Outer Harbour.

Professional scientific and technical services

The valuable professional, scientific and technical services sector employs 4,900 people in 72 locations in Wollongong alone, and includes a diverse range of knowledge-based enterprises, many of which are young local companies that are leaders in niche markets nationally and internationally.

On the one hand they are involved in policy analysis and advice in areas such as land title systems, social change, transport economics, and environmental management. On the other, they manage multimillion dollar design and construction projects, or provide services in areas such as information

technology and e commerce, geospatial technologies, and innovative manufacturing and design.

Tourism and cultural services

Attracted to the region's natural and cultural assets, the Illawarra is a popular place for domestic and international visitors. As well as the natural beauty of the region, and the

Figure 1 Illawarra Visitor Numbers, 2012-2013

Total visitors (million)	9.2
Total nights (million)	12.6
- domestic nights	88.2%
- international nights	11.8%
Total expenditure (million)	\$2,069

¹⁴ All of the data in section 1.2.2 is sourced from: Illawarra Business Chamber, Linking the Illawarra, Improving the region's transport connectivity, August 2014, page 16

¹⁵ Mr Dom Figliomeni, Executive General Manager Commercial, NSW Ports, 16 September 2014

¹⁶ National Biodiesel Limited, http://www.natbiogroup.com/default.asp?id=142, accessed 16 September, 2014

growing reputation of its local foods and wines, the Illawarra is also developing a growing calendar of popular cultural festivals and sports events. In the year ending June 2013, the South Coast received 9.2 million visitors, with approximately 88% of these being domestic and 12% international visitors. Together these visitors spent just over \$2 billion.¹⁷



The University of Wollongong

Recognised nationally and internationally for its excellence in teaching and research, the University of Wollongong (UOW) has more than 31,000 students and almost 3,000 staff, and is one of the biggest economic forces in Wollongong and the surrounding region.

In 2012 UOW boasted 25% of NSW's IT graduates, and the second highest number of IT graduates in Australia.18 Among the student population that attend UOW, a portion come from Sydney and elsewhere in Australia, while 12,800 are international students.¹⁹

This service base enables the university to leverage off its national and international reputation as an innovation leader, to facilitate hot-house business start-ups and to operate highly successful research projects.

To facilitate the Illawarra Region's growth as a leader in innovation, UOW established a 33 hectare Innovation Campus (iC) in 2008, with seed funding from the New South Wales State Government and

¹⁷ Destination Wollongong, 2014. The South Coast includes Wollongong to Eden.

¹⁸ Wollongong City Council, Wollongong Economic Development Strategy 2013-23, page 12

¹⁹ University of Wollongong Statistics, 2013, http://www.uow.edu.au/about/statistics/index.html, accessed 9 September 2014

ongoing support at the Commonwealth, State and Local government levels. Having already attracted a range of research enterprises and other businesses, iC anticipates that about 5,000 people will be part of this community of business and research enterprises in 10-15 years.

1.3 Sydney and the Illawarra are becoming increasingly interrelated

The Illawarra is becoming increasingly integrated with Sydney CBD and the Greater Sydney area. Sydney is an important market for the University of Wollongong and a diverse range of professional and technical service providers that are based in the Illawarra.

Port Kembla Port handles significant volumes of the State's grain (2.6 million tonnes in 2012-13) and coal exports (13.4 million tonnes in 2012-13)²⁰ and is the gateway for all of the State's motor vehicle imports, and it has been designated as the State's future terminal for handling overflow container trade at Port Botany.

As is shown by Figure 2, these valuable export and import tasks as well as the movement of interregional freight mean that we send freight to and receive it from the Greater Sydney area (and from mines and farms further afield in western NSW), and especially the dense urban and industrial areas of western and south western Sydney.

An average of 42,300 passenger and freight vehicles per day travel between the Illawarra and the Sydney CBD and metropolitan area on the M1 Princes Motorway, the main road corridor between the Illawarra and Sydney.²¹ This makes the M1 Princes Motorway one of Australia's busiest inter-city road corridors.²² In addition, another 3,000 people per day travel between the Illawarra and Sydney by rail.

Among these travellers, about 20,850, or 15% of our workforce commute to Sydney and its southern and western suburbs to go to work, and 10,000 people living in Sydney make the trip from these areas to work in our region.²³ Sydney, and its domestic and international airports, are critical gateways enabling us to connect with our colleagues and clients in other states in Australia and overseas.

And, we are all part of families and friendship networks, and sporting and cultural interest networks that are spread across these places and need to keep in touch with each other regularly.

²⁰ Port Kembla Port Corporation Annual Report, 2012-13, page 3

²¹ Roads and Maritime Services, Average Daily Traffic Volumes, V1.0, updated 25/3/2014, http://www.rms.nsw.gov.au/publicationsstatisticsforms/trafficvolumes/map/, accessed 5 September, 2014

²² BITRE, Australian transport statistics Yearbook 2009 http://www.bitre.gov.au/publications/2009/stats_001.aspx ²³ Illawarra Business Chamber, Linking the Illawarra, Improving the region's transport connectivity, August 2014

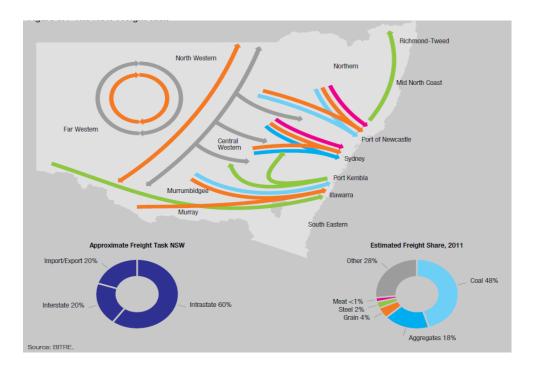


Figure 2 The NSW Freight Task

Source: Infrastructure NSW, State Infrastructure Strategy, 2012, page 72

1.3.1 Regional connectivity is essential to Illawarra and NSW as a whole

A critical factor in this 21st century picture of the Illawarra is the quality of the transport connections on which we rely every day. This point was made by the Linking the Illawarra report, published this year, when it said:

'Improved connectivity is a means to an end. As the structure of the Illawarra's economy changes over time to focus on the service sectors, these 'economic ends' will increase in value. Improved connectivity will contribute to maximising the net benefit of trips being undertaken for business (including high value activities requiring access to Sydney Airport), education and tourism purposes. As such, improving the transport connectivity of the Illawarra is central to supporting its future growth.'24

A similar theme reverberates through the State Infrastructure Strategy:

'The Illawarra and the Hunter Regions are increasingly becoming integrated with the economy of the Greater Sydney Region. Many residents commute by rail and many more make the journey by road to work in Sydney every day. As Newcastle and Wollongong grow in size and importance to the NSW economy, they need faster and more efficient links to Sydney'²⁵

²⁴ Illawarra Business Chamber, Linking the Illawarra, Improving the region's transport connectivity, August 2014

²⁵ Infrastructure NSW, State Infrastructure Strategy, 2012, page 69

One of the NSW Government's economic priorities is to raise the global profile of Sydney and NSW. ²⁶ Improved connectivity between the Illawarra and Sydney, and the rest of Australia and the world (through the Sydney Airport and the Port), will make the region and the State as a whole an even more attractive place in which to invest and do business. Improved road and rail connectivity will also make the Illawarra easier for tourists to access, and add to the valuable economic contribution that is already made by this sector.

Currently, we're approximately 90 minutes from the domestic and international airports by road and rail, and the M1 Princes Motorway extension as well as improvements to the South Coast railway would reduce that time.

By contrast with metropolitan commuters – for whom the average rail trip distance is 20 kilometres, the strongest determinants of demand for rail travel are service frequency and reliability. However, according to Infrastructure NSW, for commuters from the Illawarra, Central Coast and the Hunter, for whom the commuting distance is 80 kilometres or more, speed is a more important determinant of demand for rail services.

Based on international comparators, reducing the journey time from the current 90 minutes (for peak hour express services) to 60 minutes would be likely to stimulate considerable growth in demand from Illawarra and other regional commuters. The strategy would also expand the catchment area from which people could access jobs in Sydney, which would assist in reducing the unemployment rate in the Illawarra. And, in turn, improved commuter rail services would spread the State's growing population across a larger area, including to the Illawarra, where population growth is projected to grow at an annual rate of 0.85 by contrast with the 1.6% in Sydney to 2031. ²⁷ This will help drive growth in the region particularly West Dapto, Calderwood and Wollongong City Centre (where there will be substantial growth in the availability of housing).

²⁶ NSW Government, Trade & Development, NSW Economic Development Framework, http://www.business.nsw.gov.au/doing-business-in-nsw/nsw-business-environment/economic-dev-framework, accessed 16 September 2014

²⁷ Infrastructure NSW, State Infrastructure Strategy, 2012, page 113

2 Priority transport infrastructure and services

A survey conducted in 2012 by RDA Illawarra to assess the transport infrastructure priorities of residents in the Illawarra clearly showed that the highest priority (represented by 17.9% of respondents) was a faster rail link to Sydney, while the third highest (represented by 9.3% of respondents) was extending the M1 (F6) to Sydney.²⁸ These priorities are not surprising given that the 20,000 residents that commute to Sydney for work and to do business rely on one or other, or a combination of both, of these transport modes to reach their Sydney destinations. In doing so, they incur about \$450 million per year in time and out of pocket costs or about \$27,200 per person travelling by road and \$17,100 per person travelling by rail. These costs are estimated to increase to about \$690 million by 2031.

According to the recent assessment of transport connectivity within the Illawarra and between the region and Sydney, the Illawarra has the lowest overall transport connectivity score by comparison with three other Australian regional cities and areas: Central Coast, NSW, Geelong, Victoria and Gold Coast Queensland. Each of these comparator locations are a similar distance from a major metropolitan city, and have similar population numbers and socio demographic characteristics.

The Illawarra's score is 25-30% lower than the scores in the other Australian benchmark regions – and nearly 50% lower than the international comparator, Lille, France that was also included in the benchmark study. The key factors contributing to this performance is that the region has the lowest overall network coverage due to a poor freight rail connection, and comparatively poor road speed for both passenger and freight transport, and public transport (some bus services but mainly the South Coast railway).

As noted by the NSW Long Term Transport Master Plan, road congestion imposes costs on the NSW economy in the order of \$5.1 billion each year – or nearly \$1100 for every person living in Sydney, and unless the factors that contribute to this congestion are addressed these costs will grow - faster than the rate of economic growth - to \$8.8 billion by 2020.

However, as the Long Term Transport Master Plan points out, effective management of congestion is not just a matter of building additional road or rail capacity, or indeed upgrading a particular piece of road or railway in the hope that this will resolve a specific hotspot issue. Instead it requires building an integrated transport system which includes managing transport demand as well as supply by optimising public transport options as well as road networks that genuinely support economic growth and social amenity.²⁹

Consistent with this emphasis on enhancing the performance of the whole system, addressing three serious transport pinch points, will in complementary ways, improve the capacity, efficiency and reliability of road and rail transport for both passengers and freight in the Illawarra and the Greater Sydney area, and therefore should be progressed as a short-term priority.

²⁸ Transition Illawarra Initiative: Stage One, Final Report, Deloitte Access Economics for Regional Development Australia – Illawarra, 17 December 2013, Page 66/67

²⁹ NSW Long Term Transport Master Plan, 2013, page105

The infrastructure project priorities are:

Infrastructure project 1

Make the M1 Princes Motorway a continuous motorway between St Peters and Albion Park:

- a. Commence construction of the M1 (F6) from Waterfall to St Peters by 2020;
- b. Commence construction of the Albion Park Rail Bypass by 2017;
- c. Complete construction of ramps on M1 between Gwynneville and Albion Park.

The economic and social wellbeing benefits to NSW and the Illawarra

- ✓ Enable commuters, businesses, freight movers and visitors to travel between the Illawarra and Sydney more quickly, safely, and reliably
- ✓ Reduce the transport costs of NSW exports and imports
- ✓ Make it more attractive for businesses to invest in NSW and the Illawarra.
- ✓ Make it easier for tourists to access the region
- ✓ Reduce the pressure on Sydney's metropolitan transport network

Infrastructure project 2

Resolve the structural problems of the South Coast railway between Wollongong and Sydney:

- a. Commit \$100 million for completing the (mainline acceleration program) targeted works on speed restriction and pinch points by 2019;
- b. Commit \$1 billion as soon as possible to ensure capital works are completed by 2024 to reduce travel time to 60 minutes between Wollongong and Sydney.

The economic and social wellbeing benefits to NSW and the Illawarra

- ✓ Achieve a 60 minute trip that is reliable, convenient and safe for commuters and visitors travelling between the Illawarra and Sydney
- ✓ Improve access to wider employment market
- ✓ Encourage population growth in Illawarra
- ✓ Increase public transport patronage and reduce the pressure on road networks
- ✓ Minimise railway breakdowns and maintenance costs

Infrastructure project 3

Complete the construction of the Maldon to Dombarton railway as a dedicated freight rail corridor by 2020:

- a. Commit \$200 million towards the construction, to be matched by at least \$500 million in private sector funding immediately;
- b. Expedite the Registration of Interest process and call for tenders from private sector investors immediately.

The economic and social wellbeing benefits to NSW and the Illawarra

- ✓ Enhance the capacity and efficiency of the state's freight transport network for bulk export and import commodities, and containers in the future
- ✓ Free up the Illawarra and South Coast railway for passenger services
- ✓ Consistent with the State Infrastructure Strategy, utilise existing assets to facilitate growth in valuable mining and agricultural exports through Port Kembla Port to enhance international trade
- ✓ Contribute to the economic prosperity of the Illawarra Region and NSW as a whole

Each of these strategic priorities is described in more detail in the remainder of this report.

3 A continuous M1 Princes Motorway between St Peters and Albion Park

Infrastructure project 1

Make the M1 Princes Motorway a continuous motorway between St Peters and Albion Park:

- a. Commence construction of the M1 (F6) from Waterfall to St Peters by 2020;
- b. Commence construction of the Albion Park Rail Bypass by 2017;
- c. Complete construction of ramps on M1 between Gwynneville and Albion Park.

3.1 The current situation

The F6 Freeway/ Mt Ousley Road (both recently renamed the M1 Princes Motorway) and the A1 (Princes Highway) at its northern extension beyond Waterfall is the primary entry and exit point for traffic moving between Wollongong and Sydney. 30

In 2007, the AusLink Sydney-Wollongong Corridor Strategy identified congestion and safety as major concerns for this road.³¹ At the time, the section of the corridor between the Gwynneville Interchange and the top of Mt Ousley carried 36,500 vehicles per day, with a relatively high concentration of freight vehicles (15-16%) competing with passenger vehicles for space on the road. During the morning and afternoon peak periods, as well as during peak holiday periods in particular, this section of the motorway suffered from congestion, which was reflected in the volume/capacity ratio of 0.9 to 1.1, which indicates that it was approaching or already at capacity.

Today, the same stretch of road is considerably more congested, carrying about 42,300 vehicles per day travelling north and 42,000 vehicles per day travelling south during week days.³² In 2007 when the Sydney-Wollongong Corridor Strategy projected that total traffic volume would grow by 2% a year until 2025, with heavy vehicle traffic growing at a slightly faster pace of 2.7 per cent a year, it also forecast that the Motorway would be 20% over capacity by 2016.

At the northern end of the M1 Motorway (popularly known as the F6 and then the Princes Highway), between Waterfall and Sydney, traffic volumes become increasingly higher, with congestion particularly

³⁰ The Southern Freeway and Mount Ousley Road, commonly known as the F6, from Waterfall to Albion Park Rail is now formally named the M1 Princes Motorway; Roads and Maritime Services; http://www.rms.nsw.gov.au/newsevents/news/2013/130809-next-round-of-alphanumeric-road-number.html. However, 'F6' is still the more commonly used name for the section of the motorway that stretches between Bulli Tops and Waterfall, and Mt Ousley Road is still commonly used to describe the section that runs between Gwynneville and Bulli Tops.

³¹ Sinclair Merz Knight (SKM), Sydney-Wollongong Corridor Strategy, prepared for the Department of Infrastructure and Regional planning, June 2007

³² Roads and Maritime Services, Average Daily Traffic Volumes, V1.0, updated 25/3/2014, http://www.rms.nsw.gov.au/publicationsstatisticsforms/trafficvolumes/map/, accessed 5 September, 2014

severe between Heathcote and Jannali, and extending to Blakehurst, where north of Tom Ugly's Bridge, the M1 Motorway (the Princes Highway) carries an average of 43,600 vehicles travelling north and 42,600 vehicles travelling south per day. Nevertheless, this section travels through residential areas, shopping strips, school zones, many cross roads traffic lights, and has with multiple variations in speed limits from 50kph through to 100kph.

One of the implications of the growing congestion on the motorway is that it is taking progressively longer to make the journey to and from Sydney. In 2005 for example, the trip between Wollongong and Sydney took an estimated 70 minutes³³ (NRMA estimate); in 2012, it was likely to take approximately 85 minutes³⁴. Not surprisingly, it now takes 90 minutes to make the trip from Wollongong to Sydney's CBD.³⁵

With traffic volumes that exceed those on the F3 (about 39,000 vehicles per day) and that are not far behind the M4 (49,300 vehicles per day at Homebush), the M1 Princes Motorway and the F6 is Australia's busiest inter-city road corridor. Intensifying the congestion and the safety of the corridor is the relatively high proportion of freight traffic (16%) that it carries. Growing at a faster rate than general traffic (2.7% by comparison with 2%), heavy vehicles will continue to intensify congestion and lower the speed at which the trip between Wollongong the Sydney can be travelled. This is particularly the case on the Mt Ousley section of the corridor due to the ongoing growth of import and export freight moving

Figure 3 Traffic incident delay on M1

through Port Kembla Port.

Figure 3 Traffic incident delay on M1 Princes Motorway



Source, Illawarra Mercury, Truck Fire on Mount Ousley Road, May 12, 2014

As well as congestion, the Mt Ousley to Bulli Tops section of the motorway is very steep (with gradients of between 8-10 per cent), and this in combination with fog and wet weather, results in it having a higher than average crash rate.

According to AusRAP,³⁶ between 2005 and 2009, there were 236 crashes that led to serious injury and five that resulted in deaths on the 39 kilometre section of this major corridor between Waterfall and Wollongong. And, in 2007 for example, wet weather accidents were reported to represent over 66% of all crashes, about 8 times the rate expected for a road of this type.

³³ Illawarra Mercury, NRMA call to extend F6, ALEX ARNOLD, 05 Feb, 2008

³⁴Roads & Maritime Services, Trip Time Calculator, http://www.rta.nsw.gov.au/cgi-bin/index.cgi?fuseaction=fatiguecalc.handler&town1=Wollongong&town2=Sydney&SubmitButton.x=79&SubmitButton.y=8, accessed 31 May, 2012

 $^{^{35}}$ Illawarra Business Chamber and PWc, Linking The Illawarra, Improving the Region's Transport Connectivity, September 2014, page 4

³⁶ AusRAP, Australian Road Assessment Program, How Safe Are Our Roads? Rating Australia's National Network for Risk

Benchmarking the performance of Australia's roads in the Decade of Action, 2011, http://www.ausrap.org/ausrap/performance-tracking-report/pdfs/AusRAP-report-2011-How-Safe-Are-Our-Roads.pdf, accessed 18 May 2012

As well as being a serious safety concern, these crashes can slow traffic to a near stand-still for many hours. Aside from motor vehicle crashes, geological issues such as ground slippage can also shut down the only major link into and out of Wollongong and the South Coast for significant periods of time, with the only alternatives, the much slower Bulli Pass and the old Princes Highway for those who are lucky enough to be forewarned prior to actually entering the motorway. Otherwise, once on the motorway, there is sometimes no option but to wait for the incident to be cleared. The lost time in either taking a slower diversion (along either the Northern Distributor and Bulli Pass Road or the old Princes Highway to Helensburgh) or sitting in the traffic on the Motorway, represents increased travel and transport costs and lost economic opportunity for commuters and freight operators and their customers. Just as importantly, the unreliability of the road also acts as a disincentive for new businesses that need safe and efficient transport linkages to establish in the Illawarra.

To the south of Wollongong, the M1 Princes Motorway extends for 20 kilometres until it reconnects with the Princes Highway at Yallah. Based on 2012 data, the Princes Highway at Albion Park carries about 44,000 vehicles per day (in AADT terms), and is estimated to grow to 73,000 per day by 2030, a 60% growth on the volume for 2004.

Already, however, this section of the Princes Highway is under stress and operating beyond its capacity with a volume capacity ratio of 1.4 at Albion Park. According to Level of Service (LoS) standards³⁷, this important section of road is approaching LoS F, which is the lowest level of service. This is exacerbated at peak holiday times.

This stretch of the M1 Princes Motorway supports a combination of local and interregional transport, with a heavy proportion of freight traffic, including trucks moving to and from Port Kembla Port carrying some of the Port's export coal and all of the imported motor vehicles, as well as other commodities.

At the moment, the Port handles 280,000 import vehicles per year and is forecast to handle 460,000 vehicles per year by 2021.³⁸ And, although it would be hoped that most of the growing coal exports supported by the expansion of the coal terminal (see section 5.1.2) would be transported by rail, some of it would still be moved by road.

To support urban growth and local employment, the West Dapto Urban Release Area (WDURA) is being developed to provide about 17,000 new dwellings over a 40+ year period, which in turn will result in an additional population of 50,507 people in the region. As well as new dwellings, about 180 hectares of employment land will also be released. Through the Wollongong Local Environment Plan (West Dapto) 2010, Stages 1 and 2 of this long-term strategic plan for the Illawarra have already released land for the development of nearly 6,700 dwellings and 174 hectares of employment, which together will result in more than 20,500 additional people over the next 20 years.

As well as the West Dapto land release, two other nearby land releases will also contribute to growing traffic volumes on the Illawarra Region's road network. One of these land releases is Tallawarra which is just to the north east of the southern terminus of the F6 Southern Freeway where it merges with the

³⁷ LoS relates to operational conditions within a traffic stream, based on service measures such as speed and travel time, freedom to manoeuvre, traffic interruptions, comfort, and convenience (based on the Austroads LoS standard).

³⁸ NSW Freight and Ports Strategy, 2014

Princes Highway. The second urban land release is at Calderwood, which is to the west of the Princes Highway and south of the Illawarra Highway.

Together, these urban developments are likely to increase pressure on the region's road transport network, and in particular on the M1 Princes Motorway and the Princes Highway as the main north south corridor connecting these areas to Wollongong and Sydney. Growing traffic volumes on this section of the Motorway will also reduce the efficiency of passenger and freight transport for traffic coming from and going to Kiama and the Shoalhaven.

When combined with existing major road projects and future projects such as the Albion Park Rail Bypass, faster road links with Sydney will provide significant benefits through greater access to and from the Illawarra, Shoalhaven and South Coast regions.

3.2 The way forward

3.2.1 The M1 Princes Motorway - Waterfall to St Peters

Given the high traffic volumes and serious congestion that characterises this section of the M1 Princes Motorway (formerly the F6), it is not surprising that there have been many calls for it to be upgraded to a genuine motorway standard corridor from Waterfall to St Peters. For example, a submission made to Infrastructure Australia in October 2008, made the following comment:

'The F6 Freeway connects the Illawarra region with Sydney and currently stops south of Heathcote. Although there has been a proposal for a freeway into Sydney from the Illawarra since 1951, no government has committed to providing such a link.'³⁹

Similarly, a study published by the NRMA in the same year, suggested that this extension would deliver a net economic benefit of \$1.1 billion immediately to NSW and almost \$3 billion by 2031, 'with the Illawarra being a major beneficiary'. The study also claimed that the extended freeway would result in a range of cost savings for motorists and the general public. Vehicle operating costs, including petrol consumption costs would fall by \$559 million. Road travel times between Wollongong and Sydney would be reduced from 70 minutes to 55 minutes⁴⁰, with associated savings worth \$475 million being realised for motorists; and costs associated with road crashes would be reduced by \$22 million.⁴¹

As noted by the NSW Long Term Transport Master Plan, missing links in the motorway network cause traffic congestion, and need to be filled in order to 'make sure the city's growth areas and centres have good arterial road connections with each other and to the Sydney City Centre'. Among these missing links identified by the State Infrastructure Report and the NSW Long Term Transport Master Plan is the F6 (M1) which is unconnected from the motorway network from the south (see Figure 4).

³⁹ Scott Morrison MP, Federal Member for Cook, covering letter of submission made to Infrastructure Australia, 14 October, 2008

⁴⁰ Based on a travel time survey conducted by NRMA in 2005

⁴¹ NRMA, F6 Link - \$3 Billion In Benefits, 05 February 2008



Figure 4 Longer-Term Vision for the Sydney Strategic Road Network

Source: Infrastructure NSW, State Infrastructure Report, 2013, page 83

The Master Plan suggests that connecting the F6 (M1) to Sydney's motorway network - between St Peter's near Sydney Airport and Waterfall in Sydney's South is a major long term priority project. 42

We agree that it is a significant missing link in Sydney's motorway system but it also needs to be emphasised that the completion of this connection is essential not just for Sydney's southern metropolitan area but also for seamlessly and efficiently integrating the Illawarra Region with Sydney.

As was recently pointed out by a study of transport connectivity in the Illawarra, accessing passenger and freight transport services to and from Sydney costs the region an estimated \$450 million per year, and, unless addressed, will increase to \$690 million per year by 2031. As the third largest regional economy in NSW, the Illawarra produced \$16.5 billion of output in 2012-13, accounting for 3.5% of the NSW economy. It simply does not make sense to add to the costs of this regional economic output through inefficient transport infrastructure.

In March this year, Wollongong City Council supported a petition to ask the legislative Assembly to call on the NSW government on behalf of the residents of Southern Sydney, the Illawarra and the South Coast to allocate sufficient funds in the 2014-15 budget to bring planning of the M1 extension in Southern Sydney to 'shovel ready' stage within two years.⁴⁴

In June this year the State Government announced the inclusion in the 2014-15 budget of \$11 million for a feasibility study into the extension. While the corridor from Waterfall to St Peters that was set aside in

⁴² NSW Long Term Transport Master Plan, page 104

⁴³ Illawarra Business Chamber Linking the Illawarra, improving the region's transport connectivity, August, 2014, pages 10-11.

⁴⁴ Wollongong City Council Resolution extract from minutes, 24 March 2014

1951 is purported to be the most likely route, the feasibility study will also consider other route options including linking the motorway to the Sydney Orbital, or a route that would run through Menai and Alfords Point to the M5 motorway.

Recommendation

Irrespective of which route proves to have the most merit, it is critically important that the construction of a freeway standard corridor that significantly reduces the time it takes to travel between the Illawarra and Sydney is given high priority in the short term rather than its current longer-term status in the NSW Long Term Transport Master Plan.

We recommend commencing construction of the M1 (F6) from Waterfall to St Peters by 2020.

3.2.2 The M1 Princes Motorway just north of Wollongong

Roads and Maritime Services (RMS) is currently progressing three separate projects⁴⁵ to upgrade the steep, winding and highly congested stretch of the M1 Princes Motorway between the intersection with old Mt Ousley Road and Bulli Tops, all of which are urgently required to address the shortcomings of this critical gateway to Wollongong and the Illawarra Region. Given the current inadequate performance of this section of the M1 Princes Motorway, and the fact that it is expected to be 20% over capacity by 2016, its upgrade should be progressed as a short-term planning and investment priority. As the main connection between the Illawarra – as well as the South Coast – and Sydney, the M1 Princes Motorway needs to be upgraded so that it is a reliable, efficient and safe interregional corridor that can adequately support the current and future volumes of passenger and freight traffic that are expected to use it over the next 30+ years.

Safety upgrades at Picton Road intersection

The first of these which has been under construction since January this year is the upgrade of the intersection at Picton Road, which is the main road corridor for the movement of passengers and freight between the Illawarra and Sydney's south west and western industrial areas and areas of high consumer demand. The upgrade will improve the safety of the northbound left turn entry of vehicles onto the M1 Princes Motorway from Picton Road by replacing the current T intersection with an acceleration lane.

Interchange and third southbound lane

In a second project (to which \$500,000 has been allocated in the 2014/15 budget), RMS has started planning for the replacement of the intersection of (old) Mt Ousley Road⁴⁶ and the M1 Princes Motorway – at the base of Mt Ousley – with a grade separated interchange. This upgrade will enhance the safety and efficiency of northbound traffic entries onto the M1 Princes Motorway by removing the

⁴⁵ Roads and Maritime Services NSW, www.rms.nsw.gov.au/roadprojects/projects/south_eastern_region/mount_ousley_road/slow_vehicle.html), accessed 5 September 2014

⁴⁶ (old) Mt Ousley Road denotes the road that intersects with the M1 Princes Motorway, which at the intersection has historically been known as 'Mt Ousley Road' or the 'Southern Freeway' or the 'F6'.

need for vehicles to negotiate with, and cross, two lanes of southbound traffic travelling south on the M1 Princes Motorway.

One of the most frightening sections of the M1 Princes Motorway is just north of Mt Pleasant Road where the motorway, both steep and windy, narrows from three into two lanes, and passenger vehicles need to navigate their way around much slower moving trucks in order to merge into the right lane. If the project also takes up the opportunity that RMS is considering to add a third southbound lane to this 2.5 km stretch between Mt Pleasant Road to old Mt Ousley Road, then this will make a much welcomed improvement to the safety, capacity and efficiency of this final passage into Wollongong for both passenger vehicles and trucks.

Additional climbing lanes

The third RMS project (currently in the early stages of the concept design phase) is a plan to add two northbound and southbound climbing lanes at four locations on the M1 Princes Motorway between Picton Road and Bulli Tops.

- The northbound climbing lanes are planned at locations between Cataract Creek and Bellambi Creek.
- The southbound climbing lanes are planned at locations between Bulli Pass and Cataract Creek.

Jointly funded on a 50:50 basis by the Australian and NSW Governments, with the Australian Government committing up to \$42 million to the project over the five year Nation Building Program that commenced in July this year, this capital improvement will make a very substantial difference to the capacity, efficiency and safety of this section of the motorway.

Bulli Pass as a backup in emergencies

In its submission to the NSW Ports and Freight Strategy in 2013, the Illawarra Business Chamber pointed out the importance of reducing the risks of freight movements being thrown into disarray because of an accident on the M1 Princes Motorway by improving alternative routes, and in particular, by connecting Memorial Drive (previously known as the Northern Distributor) to the base of Bulli Pass.⁴⁷

RMS is currently assessing the merits of such a proposal. It is investigating the potential to upgrade Bulli Pass as an efficient and safe alternative to the M1 Princes Motorway when it is blocked or closed.

Currently, Bulli Pass carries 12,000 vehicles per day, with heavy vehicles accounting for about 5% of these movements. Nevertheless, it is also affected by the steep and geologically unstable Illawarra escarpment, and like the M1 Princes Motorway, has an 'adverse crash history'. With limited capacity and only one climbing lane each way north of a steep hairpin bend, it provides access for light vehicles and general access heavy vehicles but not for Higher Mass Limit (HML) vehicles; the only option for these vehicles entering or leaving the Illawarra is the M1 Princes Motorway (and Picton Road for access to the Hume Highway).

⁴⁷ Illawarra Business Chamber, submission to Transport for NSW Draft Port and Freight Strategy, March 2013

Although there are land corridors that could potentially support an expansion, the project is being treated as a longer-term option, with the planning set to be completed in 2016. 48

As with the three projects that RMS is progressing in relation to upgrading the M1 Princes Motorway, we also support the priority being given to investigating the merits of Bulli Pass as an alternative route in the case of the M1 Princes Motorway being temporarily blocked or closed.

3.2.3 Upgrade and Extend the M1 Princes Motorway south of Wollongong

To address residential and Port related demands, Wollongong City Council and Shellharbour City Council, in collaboration with Roads and Maritime Services, have already completed a strategic assessment of the impacts they are likely to have on State and Regional road networks in the Illawarra out to 2036. Traffic modelling identified deficiencies in the road networks, and determined where these could be accommodated within the existing network and where there is a need to upgrade the network, including by building new linkages.

Both the Long Term Transport Master Plan and the Illawarra Regional Transport Plan articulate the State Government's commitment to deliver these 'previously identified regional road upgrades to support planned growth around the new release areas of West Dapto, Calderwood and Tallawarra, including the widening of the F6 (M1) and sections of the Princes Highway (A1) and the Illawarra highways and a number of new ramps and interchanges on the F6 (M1)'. ⁴⁹

3.2.4 Build the Albion Park Rail Bypass

To relieve the pressure on the Princes Highway that will be created by these urban developments, as well as others in Shellharbour, and to improve freight transport efficiency, the Strategic Assessment completed by Wollongong and Shellharbour City Councils in collaboration with RMS suggests the need to extend the M1 beyond its present terminus at Yallah via a bypass to the west of Albion Park Rail, which would reconnect with the Princes Highway at the Oak Flats Interchange, which marks the northern end of the recently upgraded section of the Princes Highway between Oak Flats and Dunmore (see Figure 5 below).

⁴⁸ Roads and Maritime Services, http://www.rms.nsw.gov.au/roadprojects/projects/princes_hway/bulli_pass/index.html, accessed 5 September 2014.

⁴⁹ Illawarra Regional Transport Plan, 2014, page 17, and Transport for NSW, NSW Long Term Transport Master Plan, 2013, page 2

Prince Highway
Highway
Tongara Road
OAK BLATS
ALBION
PARK

Figure 5 Albion Park Rail Bypass/Interchange

While the already completed Oak Flats interchange has relieved pressure on this section of the Princes Highway, there is still a need to increase the capacity and efficiency of the section to the north between Yallah and Oak Flats.

The proposal to extend the M1 to the Oak Flats Interchange by building a new road that would bypass Yallah to the west of the Yallah industrial precinct and Albion Park Rail would reduce traffic movements through this urban environment and would negate the need for traffic to travel through the heavily congested existing at-grade junction of the Princes Highway and the Illawarra Highway. The cost of building this critical piece of infrastructure is an estimated \$331 million.

The New South Wales Government provided \$1 million this year to progress investigations and planning for alternative routes for the bypass, and is now progressing to the concept design phase of the project. This is a welcome first step in progressing the implementation of this project. However, given the already congested status of this critical road corridor, we believe that it should be completed over the next 5 to 8 years, with the interchange being built in the medium to longer term.

Recommendation

The construction of this Bypass would not only permit more efficient local and intra-regional transport for freight and passenger vehicles in the area, but would also support quicker and more efficient travel along the M1 Princes Motorway between the Illawarra and Sydney.

We recommend commencing construction of the Albion Park Rail Bypass by 2017.

⁵⁰ RMS, Albion Park Rail Bypass- Princes Highway Upgrade; http://www.rms.nsw.gov.au/projects/illawarra/albion-park-rail-bypass/index.html

3.2.5 Build ramps on the M1

In addition to constructing the Albion Park Rail Bypass, a number of upgrades to the M1 Princes Motorway south of Wollongong would help to better support heavy traffic volumes using the motorway.

One of these, a proposed flyover at Masters Road would ease congestion for traffic moving between the Port Kembla Port and adjacent industrial areas and the M1 Motorway. The existing grade separated junction at Masters Road caters for all movements except the northbound to eastbound movement. The proposed northbound offload ramp from the M1 onto Masters Road would address this gap in the transport system. The offload ramp would provide an additional link to the Wollongong CBD and in so doing alleviate pressure on the existing northbound Figtree off ramp and Crown Street as well as alleviating pressure on Five Islands Road and Springhill Road, both of which carry heavy freight traffic.

The estimated cost of building the Master Road flyover is \$40 million.

Four other interchange upgrades to the F6 Southern Freeway also included in this proposed package of road network projects aim to accommodate traffic flow growth generated by the new urban developments at Dapto. These include:

- constructing new northbound offload and southbound onload ramps at the Kanahooka Road interchange;
- constructing additional lanes on both the northbound onload ramp and the southbound offload ramp as well as intersection improvements to the Fowlers Road interchange;
- constructing new on and off ramps at the Emerson Road interchange; currently this road passes
 over the F6 Southern Freeway via a bridge without providing any connection; south facing
 ramps would improve connectivity between Dapto and the southern part of the Illawarra and
 beyond;
- constructing new northbound onload and southbound offload ramps at the Tallawarra interchange to provide direct connection between the Tallawarra Land Release and the F6 Southern Freeway, eliminating the need for long distance trips to congest the Princes Highway through Dapto or travel through local streets of Dapto and Koonawarra

The estimated cost of building ramps at these four interchanges is \$71 million.

A summary of the proposed timing and cost of each of the projects included in this program of upgrades to the M1 is shown below in Table 1.

Table 1 M1 upgrades: Wollongong to Albion Park

Project	Timing ⁵¹	Cost
Masters Road Flyover	2017	\$40m
Fowlers Rd on/off ramps	2017	\$13m
Emerson Rd on/off ramps	2017-2022	\$20m
Kanahooka Rd on/off ramps	2022- 2027	\$13m
Yallah Interchange	2022-2032	\$60m
Tallawarra on/off ramps	2022-2032	\$25m
Illawarra Highway upgrades	2036	\$40m

It is noted that progress is being made on the Fowlers Road bridge upgrade through the provision of \$600,000 in co-funding for planning and design of the upgrade. This funding is in addition to \$206 million being invested in improving and maintaining roads in the Illawarra region, including the continued upgrade to sections of the Princes Highway in the region. ⁵²

Recommendation

We recommend completing construction of ramps on M1 between Gwynneville and Albion Park.

The economic and social wellbeing benefits of extending and upgrading the M1 Princes Motorway to NSW and the Illawarra are:

- ✓ Enable commuters, businesses, freight movers and visitors to travel between the Illawarra and Sydney more quickly, safely, and reliably
- ✓ Reduce the transport costs of NSW exports and imports
- ✓ Make it more attractive for businesses to invest in NSW and the Illawarra.
- ✓ Make it easier for tourists to access the region
- ✓ Reduce the pressure on Sydney's metropolitan transport network

 $^{51\ \}mathrm{Timings}$ subject to completion of a comprehensive modelling process by RMS, WCC and SCC

⁵² Illawarra Regional Transport Plan, 2014, page 8

4 Provide a reliable, faster passenger rail service

Infrastructure project 2

Resolve the structural problems of the South Coast railway between Wollongong and Sydney:

- a. Commit \$100 million for completing the (mainline acceleration program) targeted works on speed restriction and pinch points by 2019;
- b. Commit \$1 billion as soon as possible to ensure capital works are completed by 2024 to reduce travel time to 60 minutes between Wollongong and Sydney.

4.1 The current situation

One of the factors that affect the overall liveability and economic competitiveness of the Illawarra, and that will play an increasingly critical role in enabling the Illawarra to fulfil its vision as an integrated part of the Greater Sydney economy, is the quality of the railway service that connects the Region with Sydney. However, there are a number of significant shortcomings with the Illawarra and South Coast railway infrastructure that need to be addressed if the railway is to adequately serve this role.



Figure 6 South Coast Rail Journeys: 2001-02 to 2013-14

Source: NSW Government Bureau of Transport Statistics, Electronic Publication No. E2014-02-Rail-Journeys

Although the number of people commuting from the Illawarra to Sydney is growing, most of these people are travelling by road rather than rail. This trend is also reflected in the growing traffic volumes carried by the M1 princes Motorway. In 2011 when about 19,000 people made the trip, 83% travelled by road. Today, the estimated number of Illawarra – Sydney commuters is 20,000.

But, the proportion of people making the trip by train has fallen slightly from 17% to 15%. As Figure 6 shows, patronage on the South Coast railway has stagnated or fallen from 3.4 million per year in 2001-02 to just over 3 million in the last financial year⁵³.

That the South Coast railway service is struggling to adequately support the growing demand for efficient and reliable commuter transport between the Illawarra and Sydney is borne out by the fact that for the last 10+ years a decreasing number of residents in the Illawarra Region are using rail to travel to and from Sydney.

In the context in which overall commuter numbers have steadily increased and the railway service has operated at or above capacity, the problem would seem to be that commuters have found rail an increasingly unattractive option. In 2004 for example, an assessment of public transport in NSW reported that in relation to the Illawarra line – which connects with the South Coast line at Waterfall, 'overcrowding is common and CityRail's target maximum load of 130% of seated capacity is often exceeded during the peak periods.⁵⁴

Even though travelling by rail ought to be more relaxing and ought to offer the opportunity to spend the time on the train fruitfully in either leisure or work activities, the falling rail patronage numbers suggest that the choice to do so is less attractive than driving to Sydney for most commuters.

4.1.1 It takes too long

One of the key shortcomings is the journey time, recently estimated to be 96 minutes from Wollongong Station to Sydney.⁵⁵ When the time required to access stations and wait for interconnecting services at Central are taken into account the overall journey time is an estimated 113 minutes. This is 23 minutes longer and makes the work day nearly an hour longer than the round trip by road.⁵⁶

A recent analysis of the Illawarra Region's transport connectivity concluded that 'despite having train stations in many key regional centres, the Illawarra region has relatively slow rail (and bus) services compared with benchmark regions. For example, a typical rail journey time of 90 minutes or more between Wollongong and Sydney is compared with around 70 minutes between Geelong and Melbourne over similar 'straight line' distances.' It went on to say that 'Relatively high public transport journey times, particularly for rail, impact negatively on the productivity of commuters who seek access to the employment centres in Sydney. ⁵⁷

That commuters are dissatisfied with the rail service is borne out by a faster rail link to Sydney ranking number one infrastructure improvement priority in a survey of Illawarra residents carried out by the

⁵³ NSW Government Bureau of Transport Statistics, Electronic Publication No. E2014-02-Rail-Journeys. The figures for 2013-14 are a projection based on figures provided for the first half of that year.

⁵⁴ Department of Infrastructure, Planning and Natural Resources, and the Roads and Traffic Authority, F6 Corridor Public Transport use Assessment Final Draft Report, September 2004, page 28

⁵⁵ It should be noted that the scheduled time for peak hour express services from Wollongong to Sydney is between 87 and 90 minutes.

⁵⁶ Illawarra Business Chamber Linking the Illawarra, Improving the Region's Transport Connectivity, August, 2014, page 4.

⁵⁷ Illawarra Business Chamber and PWc, Linking the Illawarra, Improving the Region's Transport Connectivity, August 2014, page 20.

RDA Illawarra in 2012⁵⁸. Train travel time to and from the Sydney Metropolitan Area is also acknowledged as one of the key transport challenges in the State Government's Illawarra Regional Transport Plan, published in March 2014.

While it is recognised that timetabling changes and new trains introduced over the last couple of years may have reduced travel time by five to six minutes on the peak hour express services, and increased the number of passenger seats and passenger comfort, this is unlikely to be enough of an improvement to persuade commuters to use rail instead of road.

For some commuters that do not want to drive all the way to Sydney, the peak hour express timetable means that they need to either take their local train to either Thirroul or Helensburgh in order to catch the train to Sydney, or make their way to one of these two express service stations. It would seem that the latter option is the preferred strategy for these commuters, with the consequence that the car parks at Thirroul and Helensburgh stations are overcrowded, causing problems for residents as well as commuters. ⁵⁹

Similarly, while an integrated bus service may go some way to supporting the rail services between Wollongong and Sydney, these are interim measures that aim to soften the impact of an inadequate railway rather than tackling the core factors impeding travel time.

4.1.2 Passenger and freight services compete for access

One 'elephant in the room' that is impeding the ability of the South Coast railway to operate effectively is its dual use for freight as well as passengers. Although passenger trains have priority on the line, the freight trains are prone to break down, causing delays for both the passenger and freight services. (In the case of the freight trains, a breakdown can result in valuable export freight missing a shipping schedule at Port Kembla Port.)

4.1.3 Poor redundancy and communication

A sometimes under-recognised issue is that the delays can sometimes occur between Helensburgh and Engadine in locations in which there is no road access and no phone or internet access. These circumstances exacerbate the impact of the delay by making it impossible to shift to either a bus or a taxi service, or to contact employers, clients or airlines to explain the delay or make alternative arrangements.

4.1.4 Structural problems with the network

Aside from the fact that the railway supports freight as well as passenger services, structural impediments also contribute to the relatively slow journey time.

Firstly the terrain through which the railway travels is beset by inherent difficulties. In 2001, when the then Coordinator General of Transport, Ron Christie reviewed Sydney's railway network, he highlighted

⁵⁸ RDA Illawarra Infrastructure Priorities Survey, 2012

⁵⁹ Illawarra Mercury, GLEN HUMPHRIES Thirroul parking chaos: train timetable effects not looked at, May 1, 2014

the fact that landslips and 'other geotechnical problems have long caused difficulties on the South Coast line, necessitating expensive remedial works on a number of occasions.' ⁶⁰

A submission made by the Railway Technical Society of Australasia (RTSA) to the NSW government⁶¹ some years later also argued that: 'The section between Waterfall and Thirroul presents challenges to both train operators and track maintainers, with a fatal train accident south of Waterfall subject to a Royal Commission for much of 2003.

Much of this section of track, including the Stanwell Park Viaduct, was rebuilt about 1920. The track passes through an area with geotechnical demands and the Waterfall - Thirroul section was identified in the 1998 report Action for Transport 2010 as to be replaced by 2010 with a long tunnel.'



Figure 7 Stanwell Park Viaduct, 1920 and Today

Source: Department of Environment and Heritage,

www.environment.nsw.gov.au

The RTSA submission also separately mentions that the Stanwell Park viaduct, which was damaged in 1985, and which necessitates speed restrictions at this point in the line, needed to be replaced by 2011. From the perspective of commuters and freight movers alike, this impediment results in average speeds of 50 km/hr on the South Coast line.

Secondly, originally built in the late 19th century, the railway infrastructure is very old and consequently the service is renowned for breakdowns - resulting from incidents caused by inclement weather or from train derailments - that either cause delays or force commuters to be transferred to bus services. In

⁶⁰ Christie, Ron, "Long-term strategic plan for rail: overview report: Greater Sydney metropolitan region, June 2001, accessed, 10 May, 2012

⁶¹ Railway Technical Society of Australasia, submission to Standing Committee on State Development of the Legislative Council Inquiry into Port Infrastructure in New South Wales, 2004 http://www.parliament.nsw.gov.au/Prod/parlment/committee.nsf/0/44695ed461b29c97ca256e4c000658ba/\$FILE/04_RailTechSoc.pdf

addition, 'trackwork' required to maintain this very old railway, also require bus alternatives that cause considerable inconvenience to passengers.

4.1.5 Accessing Sydney by rail is costly

Currently travelling by rail to Sydney to access jobs and business opportunities costs an Illawarra commuter an estimated \$17,100 per year. These costs are based on two factors: total time and out of pocket costs, with travel time representing 80% of the cost.⁶² Unless the journey time is significantly reduced and the reliability issues of the service addressed, these costs are conservatively estimated to increase by 25% by 2031.

4.2 The way forward

4.2.1 Achieve a 60 minute transit time

We support Infrastructure NSW's recommendations through the Mainline Acceleration Program to achieve a 60 minute transit time for railway trips between Wollongong and Sydney. In late 2012, the then CEO of Infrastructure NSW, Paul Broad said:

'In our view, the new NSW Trains should have a one hour journey time from Wollongong to Sydney as one of their core operational objectives. While the Illawarra escarpment prevents true high speed operation, we believe operational changes, including tighter timetabling, will deliver time savings but without major expenditure. Once these gains have been achieved, other higher cost improvements could be considered to increase speeds. These measures could include signalling upgrades, new track work and rolling stock. The emphasis in the early stages would be on operational changes, including tighter timetabling and fewer intermediate stops, to deliver faster journeys. Faster trains to the Illawarra would support population growth in the region as part of strengthening the region's economy.'63

The 60-minute target was also strongly endorsed by the Honourable Mr Mike Baird in his role as State Treasurer when he said:

'I think getting that commute to an hour is ambitious but an incredibly worthwhile pursuit. If you go to big cities around the world, the hour mark is where the commuting stops. If you can get a commute down to an hour there is a huge economic impact.'64

The Illawarra Transport Plan is less specific than the strategies recommended by Infrastructure NSW in its aspirations for the railway, suggesting that the short term plans are to introduce modern signalling technology to deliver greater travel reliability and 'reduced travel time' between Wollongong and Sydney.⁶⁵

For as long as there are delays in seeking a genuine solution to the infrastructure challenges that prevent a 60 minute journey from being achieved, the more pressures will be placed on the M1 Princes

⁶² Illawarra Business Chamber and PWc, Linking The Illawarra, Improving the Region's Transport Connectivity, September 2014, page 10

⁶³ Illawarra Mercury, Road and Rail improvements recommended for the Illawarra, 3 October, 2012

⁶⁴ Illawarra Mercury, Glen Humphries, Baird backs quicker commute to Sydney, 5 October, 2012

⁶⁵ NSW Government, Illawarra Regional Transport Plan, March 2014, page 16

Motorway - which is also struggling to meet traffic demand - as the only alternative transport corridor between the Illawarra and Sydney.

We understand that improvements to the railway that serves the Illawarra region need to be balanced against the needs of the State as a whole. However, as the State's third largest economy, it is critical to progress targeted investment in capital works that will achieve the 60-minute target in the short-term rather than in the longer term.

We appreciate the merits of pursuing incremental operational improvements as a first option for reducing transit time. However, if these operational strategies cannot achieve the 60-minute target that is widely accepted as a reasonable inter-city journey time, then it is imperative that plans are progressed in the short term to remove freight from the line and resolve the structural problems of the railway - such as the Stanwell Park viaduct and other geotechnical issues in the area - in order to increase the reliable life of the railway corridor, and reduce passenger transit times to a more acceptable level.

4.2.2 Make the railway a dedicated passenger service

One of the tasks included in the NSW Freight and Ports Strategy is to 'separate passenger and freight movements with network enhancements and rail alignments', because, the Strategy argues, separating passenger and freight movements will enable each to operate efficiently and to be enhanced appropriately to meet growing public transport demand.⁶⁶

We support this State Government transport network policy, and recommend that it be implemented in relation to the South Coast line as a short-term priority in the current Transport Master Plan and the Illawarra Transport Plan.

4.2.3 Enable reliable phone and internet communication along the rail corridor

Keeping in mind that there are some sections of the railway from where it would be impossible to transfer passengers to a bus service in the case of a breakdown, another enhancement would be to ensure the availability of an effective telecommunication connection along the entire length of the railway. As well as enabling passengers to inform clients, colleagues and airlines of their delay, it would also enable passengers to use electronic equipment for leisure and work purposes during all of the trip.

Recommendation

We believe that achieving a reliable, convenient 60-minute trip for residents and visitors travelling between Wollongong and Sydney should be promoted to short-term priority status in the Long Term Transport Master Plan and the Illawarra Regional Transport Plan.

We recommend that the structural problems of the South Coast railway between Wollongong and Sydney be resolved by:

a. Committing \$100 million for completing the (mainline acceleration program) targeted works on speed restriction and pinch points by 2019;

⁶⁶ NSW Freight and Ports Strategy, 2012, page 108

b. Committing \$1 billion as soon as possible to ensure capital works are completed by 2024 to reduce travel time to 60 minutes between Wollongong and Sydney.

The economic and social wellbeing benefits to NSW and the Illawarra

- ✓ Achieve a 60 minute trip that is reliable, convenient and safe for commuters and visitors travelling between the Illawarra and Sydney
- ✓ Improve access to wider employment market
- ✓ Encourage population growth in Illawarra
- ✓ Increase public transport patronage and reduce the pressure on road network
- ✓ Minimise railway breakdowns and maintenance costs

5 Construct the Maldon to Dombarton Railway

Infrastructure project 3

Complete the construction of the Maldon to Dombarton railway as a dedicated freight rail corridor by 2020:

- a. Commit \$200 million towards the construction, to be matched by at least \$500 million in private sector funding immediately;
- b. Expedite the Registration of Interest process and call for tenders from private sector investors immediately.

5.1 The current situation

5.1.1 Capacity constraints on South Coast Railway

The feasibility study, completed in September 2011, into the construction of the missing link in the Maldon to Dombarton railway found that the railway would support the movement of mainly bulk freight between inland NSW and the Port of Port Kembla, while also freeing up needed capacity along the existing Illawarra and South Coast lines for additional passenger services. Submissions to this study pointed to the inefficiencies of the Illawarra and South Coast railway for transportation of coal, caused by delays created by passenger trains, which have priority on the line. As well as coal, the shared passenger/freight South Coast line is also carrying other commodities, primarily steel and grain.

Figure 8 Passenger, coal and container trains on the Illawarra Line at Tempe



Source: Transport for NSW, NSW Freight and Ports Strategy, 2013, page 78

The inadequacies of the line in supporting the State's current and future freight tasks are also clearly acknowledged in the NSW Freight and Ports Strategy (2013):

'There are significant capacity constraints for both the Main South and Illawarra line options. The Illawarra line has a high level of utilisation, particularly on the double track section from Hurstville to

Waterfall and paths for freight services are limited largely due to two steep sections, which significantly slow laden freight trains'.⁶⁷

The only other railway that connects Port Kembla and the Illawarra with the western hinterland from where export commodities need to be transported is the Moss Vale—Unanderra railway. Some time ago, Manildra built a siding so that they could get rail paths to transport grain needed at their Bomaderry plant. However, it is inadequate as an alternative for a range of reasons, including the fact that movement of freight on the line takes 75 minutes longer than on the South Coast line. Nevertheless, Quattro will also use this railway to transport around 600,000 tonnes of grain to the new terminal that it is building at Port Kembla. These grain exports will place more demand on an already stretched rail path availability (shared with passenger services at Unanderra), resulting in significant queuing of up to 11 hours.⁶⁸

Apart from this railway, according to the NSW Freight and Ports Strategy, the only other possible option, the Southern Sydney Freight line would not be able to handle the bulk commodities that move on the South Coast line.

Already, large freight volumes move to and from Port Kembla - 9 million tonnes per year from the Central West region and another 9 million tonnes per year to the Sydney region. Because containers take up all of the capacity of the Southern Sydney Freight line, this line is not an option for these freight movements.⁶⁹ Instead, the Strategy envisages that 'new freight opportunities such as the proposed Maldon-Dombarton freight rail line', will be needed as one of the dedicated freight corridors to support growth in freight movements in the region.

5.1.2 Future bulk export commodities will demand additional rail capacity

Exporting 14.4 million tonnes of coal and coke in 2014, facilities at the Port Kembla Coal Terminal is investing \$300 million to take capacity to around 18 million tonnes per year. ⁷⁰ It is also proposing to increase capacity from 18 million tonnes to 22.5 million tonnes per year to support coal demand from a range of prospective projects including Hume Coal's POSCO project, which if it proceeds in 2019-2020, will add 2.5 million tonnes per year.

The rail capacity required to transport coal exports alone is forecast to increase to about 36.7 million tonnes per year by 2031, with the Maldon-Dombarton railway best suited to service about 12 million tonnes of this output, principally from the southern (such as Tahmoor and Appin) and western (Lithgow) coalfields.

In addition, other bulk resource prospects including iron-ore, bauxite and a range of other mining products would be well served by the railway, which would have greater hauling capacity and efficiency than the existing Moss Vale-Unanderra connection with Port Kembla. Also, although the Moss Vale-Unanderra line would be less expensive to upgrade, it would impose higher operating costs than the Maldon-Dombarton line.

⁶⁷ Transport for NSW, NSW Freight and Ports Strategy, 2013, page 193

⁶⁸ Mr Dom Figliomeni, Executive General Manager Commercial, NSW Ports, 16 September 2014

⁶⁹ NSW Freight and Ports Strategy, 2013, page 193

⁷⁰ Mr Dom Figliomeni, Executive General Manager Commercial, NSW Ports, 16 September 2014

The iron ore prospects are all currently the subject of feasibility assessments. Quite clearly, although it may be feasible to move some of iron-ore export volumes by road in the short-term, their longer-term viability depends not just on the new capacity that will be created at the Outer Harbour, but critically, on the availability of an adequate railway connection.

Australian Bauxite is expected to begin exporting about 2.5 million tonnes per year of bauxite in 2018/19, with this product being moved by rail, via the Moss Vale line.⁷¹

5.2 The way forward

Ports and related rail and road infrastructure are fundamentally important facilitators of economic activity and growth. As well as contributing to the Illawarra regional economy, all of these bulk trades will add valuable export revenue to the NSW economy. A missing piece in the freight network jigsaw that is needed to support the efficient movement of these bulk commodities from mines and farms located in Western NSW to Port Kembla is an efficient rail linkage. The Maldon-Dombarton railway would provide this critical linkage, but in its absence the new trades will need to be transported on the highly congested south coast railway or where feasible, on the key road freight corridors of the Illawarra and the Sydney metropolitan area, which are also struggling. However, if these options are not feasible, the Port Kembla Port, and therefore the State as a whole, will miss out on export opportunities and the economic benefits that accompany them.

5.2.1 Treat Port Botany and Port Kembla as one integrated system

The NSW Freight and Ports Strategy points out that as the State's cargo transport task grows, the capacity of the existing railway network to support this growth is a critical priority. Two key themes emerge in this future picture.

One of these themes is to treat Port Kembla and Port Botany and their port related road and rail networks as part of a single integrated freight transport system (see Figure 9 below), and to optimise the use of the whole of the network through the centralised coordination of cargo transport in and around both ports as a means of effectively supporting the expected growth in the cargo task and to ensure that the existing network is used most efficiently and effectively.⁷²

We believe that treating the port related transport and logistics task associated with the movement of export and import cargoes moving through Port Botany and Port Kembla as part of a single system is an effective way of maximising the efficiency of whole transport network.

5.2.2 Maldon Dombarton railway to be one of State's dedicated freight corridors

The second key theme is to ensure that the freight transport system is supported by clearly defined freight corridors that are dedicated to just servicing freight. Hence, the Strategy argues that it will be better to separate freight from passenger tasks so that both can effectively support growth in demand.

⁷¹ Notes provided by Mr Dom Figliomeni, CEO, Port Kembla Port Corporation, 16 May, 2012, updated 3 September, 2014

⁷² Transport for NSW, NSW Freight and Ports Strategy, 2013, page 86

According to these principles, and as the Strategy makes clear, the South Coast line is not suitable to play an effective role in this integrated freight network because it handles – and struggles to handle – both freight and passenger services.

Inset STOCKINGAL PARKES RAILWAY SYDNEY MALDON NIN SOUTHERN RAILWAY MBARTON See Inset

Figure 9 Maldon Dombarton and Related Railways

Source: Hyder, Acil Tasman, Maldon Dombarton Rail Link Feasibility Study, Final Report, prepared for Department of Infrastructure and Transport, September, 2011

Mine Sites

Iron

Coal

Gold/Copper

Proposed Maldon to Dombarton Alignment

Existing Railway Line

LEGEND Main Roads

Motorway

Primary road

Arterial road

5.2.3 Port Kembla to handle Port Botany container trade overflows

Apart from supporting these valuable bulk trades, the Maldon-Dombarton railway also offers the opportunity for Port Botany's overflow container trade to be moved through Port Kembla once capacity is reached at Port Botany. In anticipation of this, the NSW Government has invested \$700 million into progressing the development of a new Outer Harbour at Port Kembla.

Although Port Botany has the capacity to handle up to about 6 million TEU per year, which according to current forecasts will be reached between 2020 and 2030, there are a number of issues which will need to be addressed to support expansion of container handling capacity.⁷³ Apart from access to Port land, one of the critical factors is the significant, and very complex to resolve, road and rail access constraints in Sydney, which even with planned upgrades of the M4 and M5, will require significant investment in intermodal as well as road and rail infrastructure.

The Port Kembla Outer Harbour development has permission to handle 1.2 m TEU per year but the March 2011 Concept Approval for this growth in Port Kembla's container trade limits the volume that is moved by road to 10% or 120,000 TEU's per year. The rest must be moved by rail. The Port is well located to serve the expected growth in the State's import and export containers, 50% of which are expected to concentrate in Sydney's south west metropolitan area. In addition, reduction in BlueScope's output could potentially make available land and wharf space that could be used to develop container handling facilities. However, the completion of the Maldon-Dombarton railway is essential if the Port is to fulfil this role.



5.2.4 Ensure the project is shovel-ready for imminent PPP process

Following the completion of the Feasibility Study, which concluded that 'a new rail line would support the rapidly expanding resources sector in New South Wales by giving the mining sector more direct access to Port Kembla', the then Prime Minister Julia Gillard committed \$25.5 million to 'advance the project' through detailed design work and finalisation of a realistic construction timetable and cost

⁷³ NSW Freight and Ports Strategy, 2013, page 27, 30

estimate in readiness for consideration for the project to be included in the Australian Government's next *Nation Building Program*. ⁷⁴

More recently, the NSW Government has collaborated with the Australian Government to complete important pre-construction work on the railway. Managed by Transport for NSW the work has included engineering, operational and environmental investigations and cost planning, as part of its plans to investigate viable freight corridors that will enhance the freight network and separate freight from passenger transport.⁷⁵

This project will facilitate growth in valuable mining exports, which will contribute to the future economic prosperity of the Illawarra Region and NSW as a whole. It is also important in contributing to the effectiveness and efficiency of the transport system of the Illawarra and the Greater Sydney area by adding a much needed freight linkage to the system and in turn by taking pressure off the South coast passenger service. In addition, the removal of the freight task from the South Coast line may also reduce maintenance costs of the rail infrastructure, make it easier to address unstable geological issues that limit speeds on the railway, and remove the gradient requirements needed for heavier coal trains.⁷⁶

Recommendation

We strongly support the fact that the Maldon-Dombarton railway is currently being explored as one of the options for dedicated freight corridors as part of the NSW Freight and Ports Strategy.

It is pleasing that the NSW Government is calling for Registrations of Interest from private parties to participate in a public private partnership to build and operate the missing link in the railway line.⁷⁷ It is critical that this pre-construction task be completed so that the project is 'shovel-ready' to enable its construction within the next five years.

We recommend that the construction of the Maldon to Dombarton railway as a dedicated freight rail corridor be completed by 2020, by the State Government and to:

- a. Commit \$200 million towards the construction, to be matched by at least \$500 million in private sector funding immediately;
- b. Expedite the Registration of Interest process and call for tenders from private sector investors immediately.

⁷⁴ Maldon to Dombarton Rail Link on Track for the Illawarra; Media Release, AA186/2011, 18 October 2011, http://www.minister.infrastructure.gov.au/aa/releases/2011/October/AA186_2011.aspx

⁷⁵ NSW Freight and Ports Strategy, 2013, page 27

⁷⁶ Illawarra Business Chamber, Submission to NSW Draft Ports and Freight Strategy, March 2013

⁷⁷ The Honourable John Ajaka, Minister for the Illawarra announced that this at the Illawarra Business Chamber Executive Lunch, Wollongong, 22 August 2014.

The economic and social wellbeing benefits to NSW and the Illawarra

- ✓ Enhance the capacity and efficiency of the state's freight transport network for bulk export and import commodities, and containers in the future
- ✓ Free up the Illawarra and South Coast railway for passenger services
- ✓ Consistent with the State Infrastructure Strategy, utilise existing assets to facilitate growth in valuable mining and agricultural exports through Port Kembla Port to enhance international trade
- ✓ Contribute to the economic prosperity of the Illawarra Region and NSW as a whole.

6 Conclusion

Home to about 384,100, and an expected population of about 459,100 people by 2034,⁷⁸ the Illawarra is the State's third largest economy, contributing \$16.5 billion to the State's economy in 2012-13.⁷⁹

The region is undergoing significant, exciting change. Our economy is diversifying with a broad range of service sectors, including high value professional service activities, education and training, transport and logistics, and information technology and e commerce gathering pace to complement our traditional reliance on manufacturing and mining.

The region's unique natural and built environments are powerful sources of attraction for businesses wanting to make long term investments in sustainable enterprises, and for an increasing number of visitors who want to enjoy the pleasures afforded by our beautiful beaches, rainforests and modern urban settings, and the rich cultural calendar.

6.1 Three critical transport problems

This report has provided a brief assessment of a number of interrelated transport shortcomings that if addressed will be powerful facilitators of economic growth not just for the Illawarra but importantly for NSW as a whole.

- The M1 Princes Motorway and the Princes Highway to its north and south form the main road
 corridor that connects the Illawarra with Sydney and the Greater Sydney area. One of the
 busiest inter-city corridors in the country, this road is highly congested, and prone to blockages
 and temporary closure, resulting in slow and unreliable transportation for commuters,
 businesses and freight movers.
- Unfortunately, the South Coast railway presents a similar story of long transit times and
 unreliability, and therefore does not compete well as a public transport alternative to driving to
 Sydney. The infrastructure is more than 100 years old, and with steep gradients and a viaduct
 that requires trains to travel in some sections at 50 kilometres per hour, the railway is prone to
 breakdowns.
- As a shared passenger and freight line, the South Coast railway also struggles to provide coal
 exporters from western and south western NSW with an efficient and reliable connection to
 Port Kembla Port. Squeezed for capacity and rail paths, and taking second priority to passenger
 services, freight trains suffer from costly delays.

6.2 Three projects will deliver complementary benefits

All of the State Government's strategic plans for passenger and freight transport recognise well that timely, efficient and reliable transport connections are critical to the economic and social wellbeing of the Illawarra in its own right and as an intimately connected part of the State as a whole.

⁷⁸ NSW Government, Illawarra Regional Transport Plan, March 2014, pages 3-4

⁷⁹ Illawarra Business Chamber, Linking the Illawarra, Improving the region's transport connectivity, August 2014, p iii

Implementing the proposed extensions and upgrades to the M1 Princes Highway will increase its capacity to handle the growing number of passenger and freight vehicles that are likely to want to use it to travel between the Illawarra and Sydney.

Similarly upgrading the South Coast railway and enabling it to achieve a 60 minute transit time between Wollongong and Sydney will improve the capacity, efficiency and reliability of the railway as a public transport option. In so doing, it will better share the inter-city transport load with the M1 Princes Motorway, thus also enhancing its capacity over the long-term.

The third project that is being recommended, completing the construction of the Maldon Dombarton railway as one of the State's dedicated freight corridors, will provide a much-needed and more efficient and reliable alternative for coal and grain exports - and prospective future bulk exports - to get to Port Kembla Port.

The Maldon Dombarton railway would also in the future reduce pressure on Sydney's road and rail networks that support the Port Botany container task by enabling containers to be imported through Port Kembla and then railed to high consumer demand areas of south and south western Sydney.

However, as a bonus, the Maldon Dombarton railway would also reduce or possibly altogether remove freight from the Illawarra and South Coast railway, thus enhancing the potential for the line to be upgraded for faster, more reliable passenger services.

In conclusion, implementing all three of the recommended projects will in complementary ways, improve the capacity, efficiency and reliability of road and rail transport for both passengers and freight in the Illawarra and the Greater Sydney area, and therefore should be progressed as short-term priorities. This essential infrastructure will strengthen the Illawarra economy, having significant flow on benefits to the South Coast, Greater Sydney and the NSW State as a whole.



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