Submission No 33

INLAND RAIL PROJECT AND REGIONAL NSW

Organisation: Port of Newcastle

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SUPPORTING SUPPLY CHAIN INNOVATION AND COMPETITION TO MAXIMISE REGIONAL OPPORTUNITIES FROM INLAND RAIL

A SUBMISSION TO THE NEW SOUTH WALES LEGISLATIVE ASSEMBLY COMMITTEE ON INVESTMENT, INDUSTRY AND REGIONAL DEVELOPMENT

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OVERVIEW

The Inland Rail project represents an important opportunity to deliver lower freight logistics supply chain costs, with benefits to producers and consumers throughout New South Wales (NSW) and Australia.

With New South Wales' freight task expected to continue to grow, these productivity benefits can also be expected to grow.

Port of Newcastle is uniquely connected to Inland Rail at Narrabri and Narromine via the Australian Rail Track Corporation's Hunter Valley Rail Network. This creates the opportunity for regional importers and exporters to take advantage of the connection to the Port of Newcastle to expand trade opportunities.

Currently, central west NSW generates more than $2.2 billion in agricultural products.[1] In 2018/19, agriculture exports from just the Parkes Shire Council area amounted to over $114 million.[2]

The benefits from Inland Rail will be enhanced through the complementary investment in the proposed container terminal at Newcastle. Inland Rail:

- is expected to free up capacity on the northern rail line between Sydney and Newcastle, creating increased opportunity to use that capacity for alternative freight transport options; and
- provides the infrastructure to support competitiveness between NSW ports and the port of Brisbane, particularly for exporters in northern NSW.

A container terminal at Newcastle in combination with Inland Rail provides the opportunity for some northern NSW containers to transit through a NSW port compared to the Port of Brisbane.

Indeed, we estimate that for an export container from Narrabri haulage costs would be around 15 per cent cheaper via rail to Newcastle as compared to the next alternative being Brisbane. Port of Newcastle is 400km from Narrabri, 200km closer than the Port of Brisbane. This difference in distance translates to savings of around $50 per TEU. Although haulage costs only make up around 15 to 20 per cent of total landside container costs, they are the best opportunity to increase competitiveness as port costs are similar across all three ports. Overall, we estimate that for an export container from Narrabri, landside container costs would be around 1.5 per cent cheaper via rail to Newcastle compared to Brisbane. Assuming similar cost savings can be achieved throughout the supply chain, this represents benefits to Northern and Central West NSW[3] of approximately $2.4 million each year.

To achieve these benefits in NSW regional communities, there is merit in ensuring that the proposed intermodal terminals at Narromine and Narrabri are prioritised as part of the Inland Rail project.

Further, consideration should be given to upgrading the Maryvale to Gulgong route to remove existing tonnes per axle, speed, length, and capacity restrictions on the existing Dubbo and Gulgong via Merrygong route. This will further improve the efficiency of the supply chain routes into Newcastle, thereby delivering additional supply chain benefits to regional NSW.

[1] NSW Government, Regional Growth NSW, *Parkes Special Activation Precinct,* https://www.rgdc.nsw.gov.au/precincts/parkes, accessed 1 February 2021.

[2] Parkes Shire Council, *Parkes Shire Exports,* https://economy.id.com.au/parkes/exports-by-industry, accessed 16 December 2020.

[3] Northern and Central West NSW is defined as the Far West and Orana, the New England and North West and the Central West SA4s.

NEWCASTLE – A GATEWAY TO NEW SOUTH WALES AND THE WORLD

Port of Newcastle plays a critical role in the New South Wales economy, supporting numerous industries involved in the importation and exportation of bulk commodities, ranging from coal, wheat, grains, fertiliser, and mineral concentrates.[4]

Economic activity at the Port of Newcastle generates: [5]

- 7,800 direct and indirect jobs across New South Wales;
- $629 million of direct and indirect household income; and
- contributes approximately $1.2 billion to the New South Wales gross state product.

The Port also plays an important role in the future of New South Wales, as both freight movements and population increase, and NSW works to repair its' economy following the COVID-19 pandemic.

The strategic location, channel capacity, and land development opportunities at the Port of Newcastle adjacent to the central population growth areas, and the strategically important northern regional areas of NSW provide significant opportunities for growth and are a strategic advantage for New South Wales' importers and exporters.

The landside linkages between shippers and the Port are also important for continuing to improve the efficiency of supply chains and NSW's productivity into the future.

Newcastle is a significant driver of economic growth in regional NSW

Port of Newcastle has close ties with regional NSW, including as Australia's largest coal export port.

The port provides a global gateway for regional NSW and is already a significant driver of regional economic growth, especially in the Lower Hunter.

Overall port activity generates about 5,700 jobs across the Lower Hunter, $475 million worth of household income and gross regional product worth almost $1 billion.[6] The total value of exports through the Port of Newcastle exceeded $19.7 billion in 2019.

Port of Newcastle will become increasingly important as Australia's freight task grows

Australian freight is predicted to double over the next 40 years and beyond[7] and the Port of Newcastle is well-placed to support this growth in freight, especially with a planned investment into a container terminal and supporting freight infrastructure. All of this is achieved with minimal impact on road congestion in Greater Sydney and relatively little investment in supporting rail infrastructure.

As Port of Newcastle becomes increasingly important to support Australia's freight task, the port must be accessible. Inland rail is an important infrastructure project to ensure the competitiveness of freight transport between regional New South Wales and the Port of Newcastle.

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[4] Port of Newcastle, *Port of Newcastle port master plan 2040*, p 3.

[5] *Port of Newcastle, See: https://www.portofnewcastle.com.au/news/report-shows-port-of-newcastle-an-economic-powerhouse-for-nsw-and-australia/#:~:text=Port%20of%20Newcastle%20is%20a,successfully%20compete%20in%20international%20markets., accessed 7 December 2020.*

[6] *Ibid.*

[7] Port of Newcastle, *Port of Newcastle port master plan 2040,* p 8.

INLAND RAIL PROVIDES THE INFRASTRUCTURE NEEDED TO SUPPORT NEW SOUTH WALES' COMPETITIVENESS

Inland Rail supports New South Wales by lowering supply chain costs and improving efficiency and reliability.

Inland Rail lowers logistic supply chain costs

Lowering logistic supply chain costs to improve Australia's competitiveness in export markets is important, especially as Australia looks to increase trade following the COVID-19 pandemic. Inland Rail is a key investment to increase the efficiency and reliability of supply chains.

Inland Rail will increase access to different ports and modes of transport across the east coast of Australia, leading to increasingly market-led supply chain decisions with increased competition. As Australia's freight task grows, the efficiency and reliability of freight movements around Australia is key to staying competitive in global markets.

Rail is one of the most efficient and productive modes of transport for bulk freight moving from regional areas to ports and urban destinations.[8] The high volume of bulk commodities means it is suited to rail freight. However, the current rail network is constrained and must improve to prepare for future increases in both freight movements and population.

As rail is a more efficient mode of transport for freight, it is expected that for many types of freight switching to transport via Inland Rail will likely result in cost savings.

A study by the Commonwealth Scientific and Industrial Research Organisation (CSIRO) suggests horticulture products and post-processed food currently transported via road, have average potential cost savings of $76 per tonne by shifting to Inland Rail.[9]

The existing coastal railway between Melbourne and Brisbane is constrained by passing through Sydney. The Sydney rail network has many restrictions and, in some areas, the current rail line shares track with passenger rail. Passenger services are given priority within the Sydney network and a curfew is in place at commuter peaks in southern and northern metropolitan areas.[10] As urban populations are predicted to increase, especially in Sydney, pressure on all parts of the urban transport system will also increase, including the passenger rail system. This, combined with Australia's increasing freight task, demonstrates a clear opportunity for infrastructure investments that improve the efficiency of supply chains in NSW and Australia.

CSIRO also found that horticultural products currently transported by rail on the coastal line could reduce costs by switching to Inland Rail, with an average cost saving of $31 per tonne.[11]

[8] ARTC, *Attachment A: ARTC 2015 Inland Rail programme business case*, Group report, 2015, p 9.

[9] Commonwealth Scientific and Industrial Research Organisation, A, Higgins, S, McFallan, C, Bruce, A, Bondarenco and A, McKeown, *Inland Rail supply chain mapping: Parkes to Narromine pilot*, March 2019, p ii.

[10] Australian Rail Track Corporation, *Attachment A: ARTC 2015 Inland Rail programme business case*, Group report, 2015, p 61.

[11] Commonwealth Scientific and Industrial Research Organisation, A, Higgins, S, McFallan, C, Bruce, A, Bondarenco and A, McKeown, *Inland Rail supply chain mapping: Parkes to Narromine pilot*, March 2019, p ii.

Reduced reliance on road transport for freight

The Inland Rail project decreases the current over-reliance on road transport to meet the future east coast freight task.[12] Replacing road with rail to transport freight has several advantages.

Road congestion will decrease as the trucks carrying freight are taken off the roads, replaced by rail. Congestion on some key highways in NSW will decrease, such as the Hume and Newell highways.[13] CSIRO estimated that there could be a reduction of up to 63,000 heavy vehicle trips per year along some sections of the Newell Highway.[14] Relieving pressure on Australia's highways is important as the population increases, and therefore passenger use rises also.

Reducing reliance on road for freight transport also increases safety. Heavy vehicles are much more likely to be involved in a serious crash.[15] Estimates suggest that the addition of Inland Rail will mean up to 15 serious crashes will be prevented every year.[16]

Compared to road transport, rail is four times more fuel efficient when moving freight and generates less pollution, with Inland Rail projected to cut carbon emissions by 750,000 tonnes per year from 2050.[17]

These advantages of moving freight by rail will result in cost savings and increase the efficiency of supply chains, thereby increasing Australia's competitiveness in the global market, as well as improving domestic freight movements and outcomes.

Increased freight transport opportunities for regional NSW

The Inland Rail project facilitates the connection of regional communities to global export markets with a more competitive form of transport. Some of these areas are currently only able to transport freight via road.

The existing rail route is coastal and excludes some of Australia's most productive agricultural regions.[18] The Inland Rail project includes 600km of new track to be built, connecting regional towns and areas, in new rail corridors.[19]

Inland Rail connects regional areas in NSW to the major cities on Australia's east coast, as well as wider domestic and global markets, providing more opportunities for regional producers to access global markets. Regional exporters and importers will be able to transport freight and access domestic and global markets more easily. This increased access will facilitate increased competition between exporters and importers, thereby increasing efficiency of supply chains.

Inland Rail is also a catalyst for complementary private sector investments, promoting economic growth and opportunities across regional NSW and Australia.[20]

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[12] ARTC, *Attachment A: ARTC 2015 Inland Rail programme business case*, Group report, 2015, p 69.

[13] Australian Rail Track Corporation, *The case for Inland Rail: summary of the 2015 business case*, 21 September 2015, p 3.

[14] Commonwealth Scientific and Industrial Research Organisation, A, Higgins, S, McFallan, C, Bruce, A, Bondarenco and A, McKeown, *Inland Rail supply chain mapping: Parkes to Narromine pilot*, March 2019, p iii.

[15] Bureau of Infrastructure, Transport and Regional Economics, *Heavy truck safety: crash analysis and trends*, Information sheet, 2 August 2016, p 1.

[16] Inland Rail website, https://inlandrail.artc.com.au/what-is-inland-rail/benefits/, accessed 8 December 2020.

[17] Ibid.

[18] Australian Rail Track Corporation, *The case for Inland Rail: summary of the 2015 business case*, 21 September 2015, p 5.

[19] Inland Rail website, https://inlandrail.artc.com.au/where-we-go/, accessed 9 December 2020.

[20] Australian Rail Track Corporation, *The case for Inland Rail: summary of the 2015 business case*, 21 September 2015, p 3.

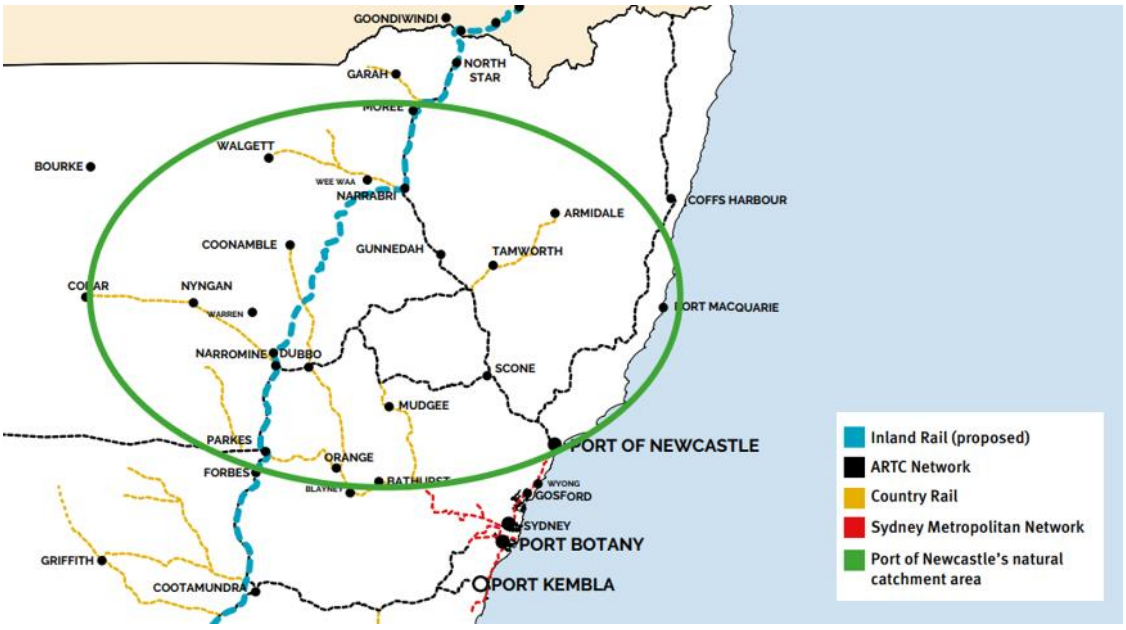
FREIGHT RAIL TO NEWCASTLE PROVIDES OPPORTUNITIES FOR INNOVATION AND COMPETITION

Port of Newcastle is a key export terminal for coal, agricultural and other regional freight, so the connection between the Port of Newcastle and Inland Rail will provide increased opportunity and choice for regional producers in NSW. Inland Rail will extend the Port's catchment even further than the already extensive Hunter Valley and Country Rail networks.[21]

Port of Newcastle will be directly connected to Inland Rail via the Australian Rail Track Corporation (ARTC) Hunter Valley Rail Network at Narromine and Narrabri - figure 1.

Newcastle is already connected to the Inland Rail project with existing freight rail networks that provide sufficient capacity to support the extra freight anticipated from the Inland Rail project. This creates an opportunity for NSW to take advantage of this connection to the Port of Newcastle to retain and expand trade via Inland Rail. This trade might otherwise be lost interstate once the project is completed.[22]

Figure 1: Current rail network, the Inland Rail network and the Port of Newcastle



Source: Port of Newcastle, *Submission RE: the draft future transport 2056 strategy*, December 2017, p 5. *See https://www.future.transport.nsw.gov.au/sites/default/files/proposals/Port-of-Newcastle-Submission-Future-Transport-Strategy-Submitted-2017-12-01.pdf*

The Port Botany and Port Kembla connection to Inland Rail via the existing Blue Mountains route from Parkes requires additional investment within the Sydney Rail network. In addition, the existing Port of Newcastle connection has an advantage in gradient, which allows for higher capacity and wagons for a

[21] Port of Newcastle, *Port of Newcastle port master plan 2040*, p 69. See https://www.portofnewcastle.com.au/wp-content/uploads/2019/10/Port-Master-Plan-2040-for-web.pdf.

[22] Port of Newcastle, *Submission re: the draft future transport 2056 strategy*, December 2017, p 7.

single train.[23] This takes advantage of increasing economies of scale to decrease overall costs and increase supply chain efficiency.

Inland Rail will broaden contestable areas with Port Botany and Port of Brisbane, as well as providing Port of Newcastle with greater connectivity to intermodal hubs being developed or planned at Parkes, Narromine, Narrabri and Moree.[24]

Opportunities for increased rail capacity between Newcastle and Sydney

Inland Rail will increase capacity on the coastal rail route between Newcastle and Sydney by diverting rail movements.

The current rail network requires trains not destined to either Newcastle or Sydney to travel through those cities, along the coast. This adds to congestion on tracks in and between Sydney and Newcastle. As both Australia's population and freight task increase in the future, the pressure on the rail network between Newcastle and Sydney will increase. Planning ahead to avoid overwhelming the rail system is crucial.

Once Inland Rail is completed, Melbourne and Adelaide freight train services previously travelling through Newcastle and Sydney will shift to Inland Rail.

Analysis of current freight train timetables suggests that Inland rail will increase the capacity of the Newcastle to Hornsby line, freeing around 12 1500m paths a week, creating an opportunity for an estimated 110,000 TEU per year of additional freight movements between Sydney and Newcastle.[25]

The Inland Rail project also has the potential to host passenger train services between Brisbane and Melbourne. There is currently no direct train between Melbourne and Brisbane. Like freight, passengers travel through Sydney and Newcastle, along the coast, when travelling between Brisbane and Melbourne by rail. These passenger train services could potentially switch to Inland Rail once completed, reducing passenger use of the rail between Sydney and Newcastle, therefore increasing potential for additional freight or passenger movements from and to Newcastle.

It follows that Inland Rail creates the opportunity to make use of increasing spare capacity on the northern coastal rail line.

Port of Newcastle proposed container terminal

Port of Newcastle's proposed Multi-purpose Deepwater Terminal (MDT) at Mayfield is an important investment that will support Australia's growing freight task.

The MDT will increase the container port capacity in NSW, supporting the predicted growth in the NSW population to more than 11 million by 2056, and the doubling of freight volumes in the Greater Sydney area, and 25 per cent increase of freight volumes in regional NSW.[26]

Inland Rail is a complementary investment to the MDT. These projects support each other and together can maximise the benefits to NSW, by providing potentially lower cost import and export supply chains, particularly for regional areas. This can be achieved through:

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[23] Port of Newcastle, Carmody, C, *Submission: Management of the Inland Rail project by the Australian Rail Track Corporation and the Commonwealth Government*, Letter, 2 December 2019, p 6.

[24] Port of Newcastle, Carmody, C, *Submission: Management of the Inland Rail project by the Australian Rail Track Corporation and the Commonwealth Government*, Letter, 2 December 2019, p 5.

[25] Analysis of Transport for NSW freight train paths. See: Transport for NSW, *Rail Freight Access,* https://www.transport.nsw.gov.au/data-and-research/freight-data/freight-performance-dashboard/rail-freight-access, accessed 16 December 2020.

[26] Port of Newcastle, *Port of Newcastle port master plan 2040*, p 27.

- providing regional importers and exporters with access to the increased economies of scale from accessing larger container ships and longer freight trains, which can be more readily accommodated at Newcastle; and
- providing readily accessible container port facilities closer to key population growth and regional areas of NSW.

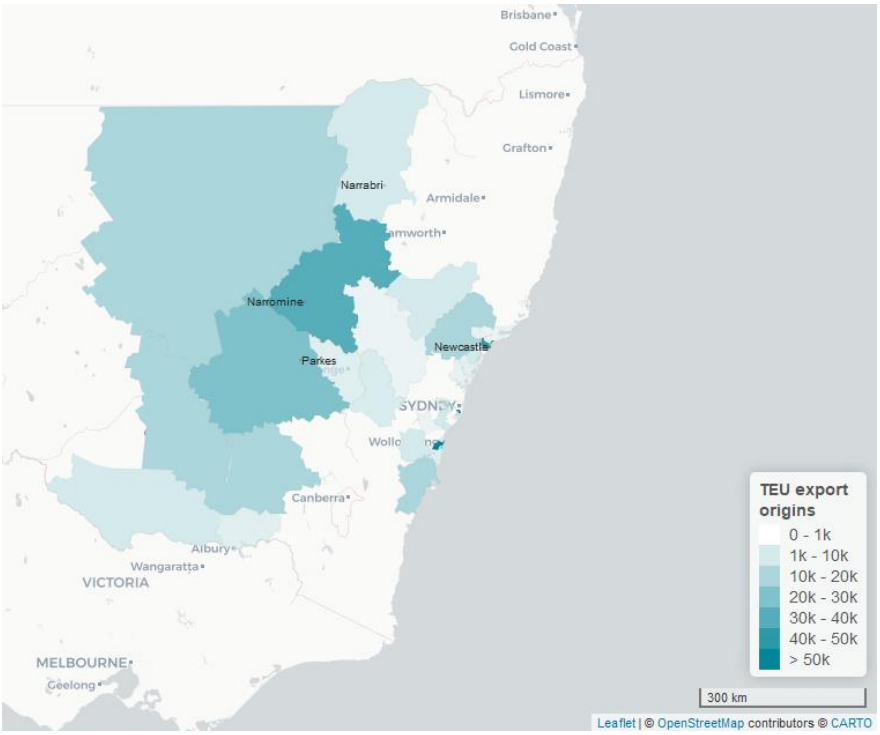
These investments in combination have the potential to significantly contribute to the economic growth of regional communities in NSW, and creates the opportunity for containerised trade currently moving across the border into and out of Queensland via road, to transit through a port within NSW.

Inland Rail connects all ports on Australia's east coast to each other and to regional areas. This means exporters and importers in Australia will have greater choice in ports, facilitating greater competition and increased returns to producers as a result.[27]

Currently all cargo in NSW goes through Sydney's metropolitan transport network. The proposed container terminal at Port of Newcastle, in conjunction with the Inland Rail project, increases the opportunities for the use of rail for import containers, without impacting on rail constraints or road congestion.

This also improves road safety, reduces transport emissions, and lowers road congestion for all road users. In addition, the resultant improvements in the efficiency of cargo transport would lower container haulage costs benefiting both regional importers and exporters.

Figure 2: Estimated containerised exports by SA3 region in NSW in 2021



Source: Analysis of Transport for New South Wales containerised export data. See: Transport for NSW, Freight Forecast from the Strategic Freight Model, February 2020.

[27] ARTC, *Attachment A: ARTC 2015 Inland Rail programme business case*, Group report, 2015, p 127.

Figure 2 above shows the estimated containerised exports by statistical area level 3 (SA3) region in NSW during 2021. Parkes, Narromine, and Narrabri are all towns along the Inland Rail route. The Inland Rail project will pass through the area of regional NSW with the highest level of TEU export origins. The actual route can be seen in Figure 1. The connection between Narromine and Narrabri is the longest stretch of new track in the project.

In 2021, containerised exports originated principally from central regional NSW. The area surrounding the town of Narromine is predicted to have between 30,000 to 40,000 TEU exports – the highest of any SA3 in NSW.

A further 20,000 to 30,000 TEU of exports is predicted to originate from the area including Parkes - the second highest number in regional NSW. The area including Narrabri will be the origin of only 1,000 to 10,000 TEU exports, however, the town is located strategically, north of Narromine.

For some of these regional locations, road is currently the only competitive mode of transport for freight to ports. Inland Rail has the potential to connect these regional commodity centres to the Port of Newcastle with competitive transportation, providing a gateway to global markets.

OPPORTUNITY TO LOWER COSTS FOR CONTAINER SUPPLY CHAIN LOGISTICS

To maximise the benefits of Inland Rail for regional communities in New South Wales, it is important that the project contributes to a lowering of supply chain costs.

This can be best achieved by creating opportunities for regional producers and importers to choose the most cost-effective mode of container transport to and from competing container ports.

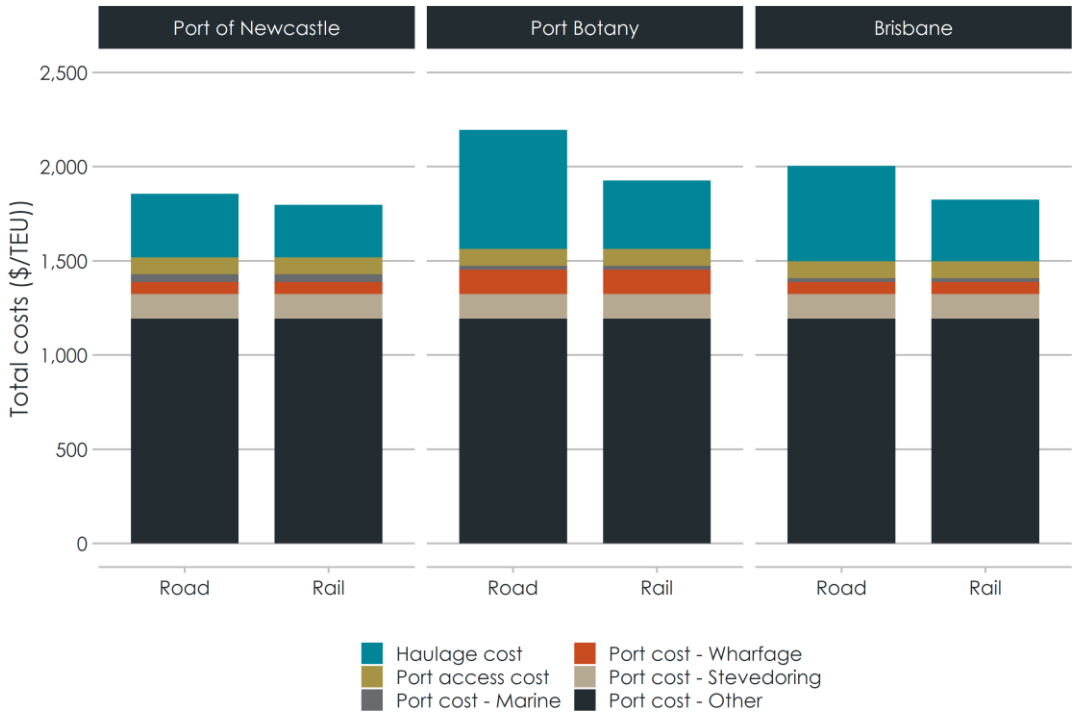
Currently exporters located in and around northern NSW transport their containerised exports via either road to Port Botany or the Port of Brisbane. Inland Rail combined with a container terminal at Port of Newcastle provides another competitive alternative for regional NSW.

To illustrate this point, we have estimated the total landside costs associated with transporting a container from the planned intermodal terminal at Parkes to Botany, Newcastle and Brisbane - Figure 3.

The estimated cost per container includes:

- rail and road haulage based on the distance travelled, labour rates, fuel and other associated costs;
- loading and unloading of the container at the intermodal terminal and port; and
- estimated stevedoring and wharfage costs.

Figure 3: Comparison of cost of transporting container from Narrabri to Ports on Australia's East Coast



Source: HoustonKemp analysis.

The results demonstrate that the cheapest option for a producer looking to export a container from Parkes would be through the container terminal at Newcastle.

Absent the MDT, the next cheapest alternative would be the Port of Brisbane, followed by Port Botany.

We estimate that transporting a container through the Port of Newcastle by rail would save a producer approximately $28 per TEU relative to the Port of Brisbane. Assuming similar cost savings for all exporters in Northern and Central West NSW[28] this could amount to over $2.4 million in cost savings each year.

The cost savings are even larger comparatively to Port Botany. We estimate that a producer would save approximately $129 per TEU transporting a container through the Port of Newcastle by rail relative to Port Botany, amounting to over $6.9 million in cost savings each year for exporters in Northern and Central West NSW. These benefits would be received directly by regional communities in New South Wales but would not be achieved without the MDT.

The estimated difference in haulage cost between the three ports demonstrates the potential competitive advantage of the Port of Newcastle given its strategic location. It highlights the importance of Inland Rail in combination with the MDT to deliver benefits to regional NSW.

Development of infrastructure surrounding key terminals

The Inland Rail project will lead to the development of several key intermodal terminals in regional NSW. These terminals will be hubs for freight, playing a crucial role in transferring freight from road to rail.[29] The development of these terminals is expected to generate investment in the surrounding infrastructure and intermodal structures, as regional exporters and importers must be able to access the railway and transport freight to and from the terminal via road. These investments will improve the connection to not only the Inland Rail project, but also to the existing railway system.

Narromine and Narrabri are both already connected to the Port of Newcastle with the existing railway system. However, Inland Rail has identified these towns as terminals for the project, making the road connection to these towns crucial for regional businesses transporting freight via the Inland Rail.

Given our analysis of supply chain costs, Port of Newcastle believes that these intermodal terminals should be prioritised as part of the Inland Rail project, to maximise the benefits that will be received by regional NSW, through improving access to a competitive port in Newcastle.

[28] Northern and Central West NSW is defined as the Far West and Orana, the New England and North West and the Central West SA4s.

[29] Inland Rail, https://www.inlandrail.gov.au/regional-development/intermodal-terminals, accessed 15 December 2020.

BENEFITS OF INLAND RAIL CAN BE ENHANCED THROUGH COMPLEMENTARY INVESTMENTS

As highlighted throughout this submission, complementary port expansions and landside connections are important to realise the full benefits of Inland Rail, particularly for regional NSW. These investments are crucial to enhancing supply chain logistics and improving overall efficiency and competitiveness for NSW.

While the existing connection between the Port of Newcastle and the Inland Rail project will deliver benefits to NSW, enhancing this connection will further increase efficiency and lower costs of supply chains. The capacity of railways, including length, speed, and weight restrictions, should all be considered to maximise the benefits of the Inland Rail project.

Improving connection to the Central West region with the Maryvale to Gulgong track project

Port of Newcastle is already directly connected to Inland Rail with existing infrastructure. However, the current connection between the Port of Newcastle and the Central West region has opportunities to improve, making the connection between the Inland Rail project and the Port of Newcastle more efficient and competitive.

The current route is from Parkes to Newcastle, with the Dubbo to Gulgong route via Merrygoen.

While the railway between Gulgong and the Port of Newcastle was designed specifically for the coal industry, with a rating of 30 tonnes per axle load (TAL), the railway between Dubbo and Gulgong via Merrygong, the connection to Inland rail, has significant limitations. Ageing infrastructure, a weaving route with difficult terrain and passing loops mean that there are length, speed, and weight restrictions. Unrestricted container trains require a minimum of 25 tonnes per axle load, however this section of rail is limited to 21 tonnes per axle load.[30]

Current maintenance plans by the Australian Rail Track Corporation for the Dubbo to Gulgong route will update ageing infrastructure to improve speed outcomes and somewhat increase length capabilities. However, these plans will not make any improvements to TAL capabilities and some speed, length and capacity restrictions will remain.

Completing the Maryvale to Gulgong section of track will avoid these restrictions. This investment would increase the capabilities and improve the efficiency of the connection between the Port of Newcastle and Inland Rail, maximising the benefits of the Inland Rail project.

[30] Port of Newcastle, Carmody, C, *Submission: Management of the Inland Rail project by the Australian Rail Track Corporation and the Commonwealth Government*, Letter, 2 December 2019, p 6.