

# Federal Budget Submission



City of  
Newcastle

## Active Transport Infrastructure Improvements

### Federal Government Topics:

#### Infrastructure, Transport, Cities and Regional Development

- Cities
- Infrastructure
- Local government and territories
- Regional development
- Road and rail transport

### Project Description:

Support provision of active transport facilities and active transport network to support Newcastle as a liveable city. The aim of the network is to make walking and cycling for short trips – less than two kilometres for walking and 10 kilometres for cycling – viable alternatives to private car travel. The convenience of the connected network will encourage active transport for everyday trips, delivering health benefits through increased physical activity. At present, the overwhelming majority of trips in Newcastle are made by private vehicles, yet the average trip distances, for vehicle driver and vehicle passenger, are seven kilometres and five kilometres respectively<sup>1</sup>. More than 80% of trips in the Newcastle local government area are less than 10km and approximately 40% less than 2 kilometres. Newcastle's gentle topography and pleasant climate mean that with the right infrastructure, many of these trips could readily be substituted by walking and cycling.

### Benefits to be realised:

- Implementation of a safe, connected active transport network throughout Newcastle, that links key attractors and nodes, will make active transport a convenient, if not preferred choice for short trips, thereby realising significant health benefits and ameliorating the economic costs of physical inactivity.
- Reduce congestion and improve amenity on local roads, particularly those in Newcastle CBD

<sup>1</sup>Household Travel Survey data for Newcastle LGA, 2017/18 wave, <https://www.transport.nsw.gov.au/data-and-research/passenger-travel/surveys/household-travel-survey-hts/household-travel-survey--laccessed 29 August 2019>.

# Federal Budget Submission



City of  
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## Alignment to Strategic Plans:

### Hunter Regional Plan 2036

- Direction 17 – Create healthy built environments through good design
- Direction 18 – Enhance access to recreational facilities and connect open space
- Direction 26 – Deliver infrastructure to support growth and communities

### Greater Newcastle Metropolitan Plan 2036

- Strategy 1 – Reinforce the revitalisation of Newcastle city centre and expand transformation along the waterside
- Strategy 20 – Integrate land use and transport planning

### Greater Newcastle Future Transport Plan 2018

- Customer Outcomes 4 – Supporting centres with appropriate transport services and infrastructure
- Customer Outcomes 5 – Changes in land use, population and demand, including seasonal changes, are served by the transport system
- Customer Outcomes 6 – Economic development is enabled by regional transport services and infrastructure
- Customer Outcomes 9 – Accessibility to employment and services such as health, education, retail and cultural activities within Regional Cities and Centres
- Customer Outcomes 10 – Customers enjoy improved connectivity, integrated services and better use of capacity

**ASK: The City of Newcastle requests the State and Federal Government increase funding to the Walking and Cycling grant program to ensure the provision of active transport networks in cities. CN has identified projects and is seeking additional funding. A partnership approach between all levels of Government will deliver the best outcome for the community.**

# Federal Budget Submission



City of  
Newcastle

## Affordable Housing Initiatives

### Federal Government Topics:

#### Social Services

- Family and Children Support Services
- Social housing and homelessness

### Project Description:

Newcastle could establish a stand-alone social and affordable housing scheme to deliver close to 25,000 affordable homes and enable those on low to moderate incomes to rent at an affordable rate and save for a home or purchase one at below the market rate. Between 2011 and 2017 rents in Newcastle increased by almost 25 per cent while household incomes have increased by only 16 per cent. Strong demand for affordable housing in Newcastle is set to continue.

### Benefits to be realised:

- Access to secure, appropriate and affordable housing is not only a basic requirement for all people, it is an essential component of an inclusive, dynamic and sustainable city.

### Alignment to Strategic Plans:

#### Hunter Regional Plan 2036

- Direction 22 – Promote housing diversity

#### Greater Newcastle Metropolitan Plan 2036

- Strategy 16 – Prioritise the delivery of infill housing opportunities within existing urban areas
- Strategy 17 – Unlock housing supply through infrastructure coordination and delivery
- Strategy 19 – Prepare local strategies to deliver housing

#### Newcastle Affordable Living Plan 2018

### Next step

The City of Newcastle is currently implementing a range of programs identified in our Affordable Living Plan 2018.

**ASK:** The City of Newcastle asks the Federal Government to develop and fund a range of affordable housing schemes such as bond aggregation and rent-to-buy schemes. Furthermore, CN requests both the State and Federal Government develop legislation requiring a minimum of 10% affordable housing to be provided in appropriate scaled residential and mixed use development.

# Federal Budget Submission



City of  
Newcastle

## Ferry Terminal at Wickham

### Federal Government Topics:

#### Infrastructure, Transport, Cities and Regional Development

- Cities
- Infrastructure
- Local government and territories
- Regional development
- Maritime

### Project Description:

The Greater Newcastle Future Transport Plan identified options to extend the Newcastle Ferry Network by providing ferry services between Stockton and Queens Wharf to Wickham. This will facilitate interchange with heavy rail services. There could also be consideration of an on demand, special events ferry service between a new ferry wharf at Wickham and the Newcastle Cruise Terminal in Carrington.

### Benefits to be realised:

- The new ferry terminal will facilitate interchange with other transport services, particularly at the emerging multi-modal Newcastle interchange.
- Creating new ferry connections will improve the sustainability of our transport system by attracting more customers to use public transport.

### Alignment to Strategic Plans:

#### Greater Newcastle Future Transport Plan

- Customer Outcomes 3 – The appropriate movement and place balance is established enabling people and goods to move efficiently through the network whilst ensuring local access and vibrant places
- Customer Outcomes 4 – Supporting centres with appropriate transport services and infrastructure
- Customer Outcomes 5 – Changes in land use, population and demand, including seasonal changes, are served by the transport system
- Customer Outcomes 6 – Economic development is enabled by regional transport services and infrastructure
- Customer Outcomes 9 – Accessibility to employment and services such as health, education, retail and cultural activities within Regional Cities and Centres
- Customer Outcomes 10 – Customers enjoy improved connectivity, integrated services and better use of capacity

# Federal Budget Submission



City of  
Newcastle

## Hunter Regional Plan 2036

- Direction 1 – Grow Greater Newcastle as Australia's next metropolitan city
- Direction 9 – Grow tourism in the region
- Direction 18 – Enhance access to recreational facilities and connect open spaces
- Direction 20 – Revitalise existing communities
- Direction 26 – Deliver infrastructure to support growth and communities

## Greater Newcastle Metropolitan Plan 2036

- Strategy 1 – Reinforce the revitalisation of Newcastle city centre and expand transformation along the waterside
- Strategy 11 – Create more great public spaces where people come together
- Strategy 20 – Integrate land use and transport planning

**ASK:** The City of Newcastle requests that the Federal and State Government prioritise funding for the development of an implementation-ready Business Case for the new Ferry Terminal at Wickham. A partnership approach between all levels of Government will deliver the best outcomes for the community.

# Federal Budget Submission



City of  
Newcastle

## Flood Mitigation at Wallsend

### Federal Government Topics:

#### Environment and Energy

- Environment Policy and Programs

#### Infrastructure, Transport, Cities and Regional Development

- Cities
- Infrastructure
- Local government and territories

### Benefits to be realised:

- Reducing the risk to public and private property from frequent flooding and inundation
- Reducing the risk to public health from frequent flooding and inundation, including pedestrian and vehicular traffic, and
- Protecting downstream environments.

### Project Description:

Support infrastructure improvements for Wallsend floodplains. Wallsend is heavily impacted by flash flooding and high velocity flows, and events larger than the 10 per cent AEP currently exceed the channel capacity and flood the CBD. The 10-year Wallsend Floodplain Risk Management Plan Implementation Study was adopted by City of Newcastle in 2015 to reduce flood impacts to the CBD and risk to life. It includes the reconstruction of Tyrrell, Nelson and Boscawen Street bridges to raise levels of the underside of bridges, and to provide twin 14m spans. The project also includes the widening of the Cowper Street channel and construction of an additional culvert to the east, and the proposed widening of Hunter Water's existing concrete channel from 12m to 21m, from Cowper Street to downstream of the Boscawen Street Bridge.

# Federal Budget Submission



City of  
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## Alignment to Strategic Plans:

### Hunter Regional Plan 2036

- Direction 16 – Increase resilience to hazards and climate change
- Direction 17 – Create healthy built environments through good design
- Direction 18 – Enhance access to recreational facilities and connect open spaces

### Greater Newcastle Metropolitan Plan 2036

- Strategy 14 – Improve Resilience to Natural Hazards

<b>Estimated total project cost</b>	\$40 million
<b>City of Newcastle commitment</b>	\$20 million
<b>Government commitment/request</b>	\$20 million

**ASK:** The City of Newcastle asks the NSW State Government to prioritise flood mitigation investment in Wallsend. The City of Newcastle requests that the Federal Government provide the state government with the resources and framework required to effectively deliver for their local communities.

# Federal Budget Submission



City of  
Newcastle

## Hunter Sports and Entertainment Precinct

### Federal Government Topics:

#### Health, Aged Care and Sport

- Sport
- Youth

#### Infrastructure, Transport, Cities and Regional Development

- Cities
- Infrastructure
- Local government and territories
- Regional development

### Project Description:

To ensure Australia maintains a competitive edge in the national and international sporting and event market there is a need to be able to cater for large and diverse crowds, provide an improved game day experience and provide a range of venues to attract international events that provide significant economic benefit to the Australian economy.

The Broadmeadow Sports and Entertainment Precinct proposes an integrated development that combines contemporary residential and community spaces with cafes, restaurants, commercial uses and first-class sports and entertainment facilities which would create a new destination point for the city, complementing the revitalised CBD. A draft concept plan has been developed and included significant community consultation. This project is to support the development of an implementation-ready business case.

### Benefits to be realised:

- Provision of a world-class first choice sporting, leisure and entertainment destination that is accessible, sustainable and commercially viable
- Provision of elite training and game day facilities
- Enabling the provision of high-density housing and the creation of a new destination precinct in Newcastle



# Federal Budget Submission



City of  
Newcastle

## Alignment to Strategic Plans:

### Sport 2030

- Priority 4 – Strengthen the Australian Sport Industry

### Hunter Regional Plan

- Direction 18 – Enhance access to recreational facilities and connect open spaces
- Direction 20 – Revitalise existing communities
- Direction 26 – Deliver infrastructure to support growth and communities

### Greater Newcastle Metropolitan Plan 2036

- Strategy 11 – Create more great places where people come together
- Strategy 17 – Unlock housing supply through infrastructure coordination and delivery
- Strategy 20 – Integrate land use and transport planning

### Draft Hunter Sport and Active Recreation Plan

- Strategy 4.1 – Establish a Regional Sporting Hubs at the Hunter Sports and Entertainment Precinct at Broadmeadow and explore locations for sub-hubs

**ASK: The City of Newcastle requests that the Federal and State Government prioritise funding for the development of an implementation-ready Business Case for the Hunter Sports and Entertainment Precinct. A partnership approach between all levels of Government will deliver the best outcomes for the community.**

# Federal Budget Submission



City of  
Newcastle

## Lower Hunter Freight Corridor

### Federal Government Topics:

#### Infrastructure, Transport, Cities and Regional Development

- Cities
- Infrastructure
- Local government and territories
- Regional development
- Road and rail transport

### Project Description:

Greater Newcastle is the only place in regional NSW where the national road and rail trade routes intersect with an international trade port and airport. There are opportunities to better connect these trade movements through improvements to the rail corridor. The existing Main North railway line services coal freight movements to the Port of Newcastle, interstate freight movements from Sydney and Melbourne to Brisbane, as well as intrastate freight and passenger trains. Specifically, all rail freight needs to cross the Hunter River or travel through the metro core to reach the trade gateways of Newcastle Port and Newcastle Airport. Line congestion, and the priority given to passenger trains on shared parts of the rail network, reduce the efficiency and cost effectiveness of freight movement in the region. This results in more trucks on the road, which increases congestion, vehicle emissions and reduces amenity. The Lower Hunter Freight Corridor would separate most of the freight and passenger rail services on the congested area between Fassifern and Hexham. The project is for Transport for NSW to expedite the development of a feasibility study for the Lower Hunter Freight Corridor.

### Benefits to be realised:

- Growth in both passenger and freight train services, as well as enhance urban amenity and liveability in the Greater Newcastle region.
- Improve access to the trade gateways of Newcastle Port and Newcastle Airport. This would reinforce the region as the global gateway and service centre for North-Western NSW.

### Alignment to Strategic Plans:

#### NSW Economic Blueprint 2040

- Recommendation 4.2 – Improve freight networks from regional New South Wales to global gateways to increase exports

#### Hunter Regional Plan 2036

- Direction 4 – Enhance interregional linkages to support economic growth
- Direction 26 – Deliver infrastructure to support growth and communities

#### Greater Newcastle Metropolitan Plan 2036

- Strategy 23 – Protect major freight corridors

**ASK: The City of Newcastle ask that the Federal and State Governments provide expedited funding to Transport for NSW to complete a detailed Feasibility Study for the Lower Hunter Freight Corridor.**

# Federal Budget Submission



City of  
Newcastle

## Newcastle Airport Expansion

### Federal Government Topics:

#### Infrastructure, Transport, Cities and Regional Development

- Aviation
- Cities
- Infrastructure
- Local government and territories
- Regional development
- Road and rail transport

### Project Description:

Newcastle Airport is a global transport gateway that is significant to unlocking the potential of the Hunter region's tourism industry and providing an opportunity for the Hunter and regional NSW to export services and skilled labour to other parts of Australia and internationally. Newcastle Airport requires a runway upgrade and terminal expansion to accommodate long range aircraft (Code E). The required upgrade work includes both airfield and substantial terminal upgrades. The Williamstown site is also home to Astra Aerolab, a new innovation hub for aviation, defence and aerospace-related manufacturing, and the RAAF Base Williamstown, Australia's primary Defence Fighter Base and home to the country's new fleet of F35 Joint Strike Fighters. In partnership with these two organisations, the infrastructure upgrade would enable Newcastle Airport to become a globally significant precinct for aerospace innovation and connect the Hunter region to global markets.

### Benefits to be realised:

- An upgraded runway and terminal expansion is estimated to provide an economic uplift of +4,410 full-time jobs and +\$12.7 billion over the next 20 years to the regional economy of northern NSW.
- The Astra Aerolab precinct will become a globally significant space for innovation in aviation, defence and aerospace-related manufacturing, maintenance, research and education. The precinct will ultimately deliver 5,500 new jobs and global connectivity for the region.

For further information see:

- Appendix 1: Complementary Freight and Supply Chain opportunities in the Port of Newcastle and Newcastle Airport
- Appendix 2: Airport Runway Upgrade Economic Impact Statement
- Appendix 3: Newcastle Airport Terminal Upgrade Stage 1 Business Case

# Federal Budget Submission



City of  
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## Alignment to Strategic Plans:

### NSW Economic Blueprint 2040

- Recommendation 4.2 – Improve freight networks from regional New South Wales to global gateways to increase exports.
- Recommendation 7.6. Commit to sustainably resourcing implementation of the 2017 Defence Industry Strategy and the Defence Industry Sector Investment Attraction Plan.
- Develop targeted advocacy strategies for NSW to offer the necessary capabilities required for upcoming short-term and long-term major defence procurements.

### Hunter Regional Plan 2036

- Direction 4 – Enhance interregional linkages to support economic growth
- Direction 26 – Deliver infrastructure to support growth and communities

### Greater Newcastle Metropolitan Plan 2036

- Strategy 23 – Protect major freight corridors

<b>Estimated total project cost</b>	\$254 million
<b>City of Newcastle commitment</b>	\$50m plus \$50m from Port Stephens Council
<b>Federal Government commitment/request</b>	\$150 million for runway upgrades
<b>NSW State Government commitment/request</b>	\$4 million for drainage projects

**ASK:** The City of Newcastle requests that the Federal and State Government collectively provide \$154 million to provide runway and terminal upgrades. A partnership approach between all levels of Government and Newcastle Airport will deliver the best outcomes for the community.



# Complementary Freight and Supply Chain opportunities in the Port of Newcastle and Newcastle Airport

**CENTRE FOR SUPPLY CHAIN  
AND LOGISTICS**

**PREPARED FOR NEWCASTLE AIRPORT PTY LTD AND  
PORT OF NEWCASTLE  
V3 MAY 2019**

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## About the Centre for Supply Chain and Logistics

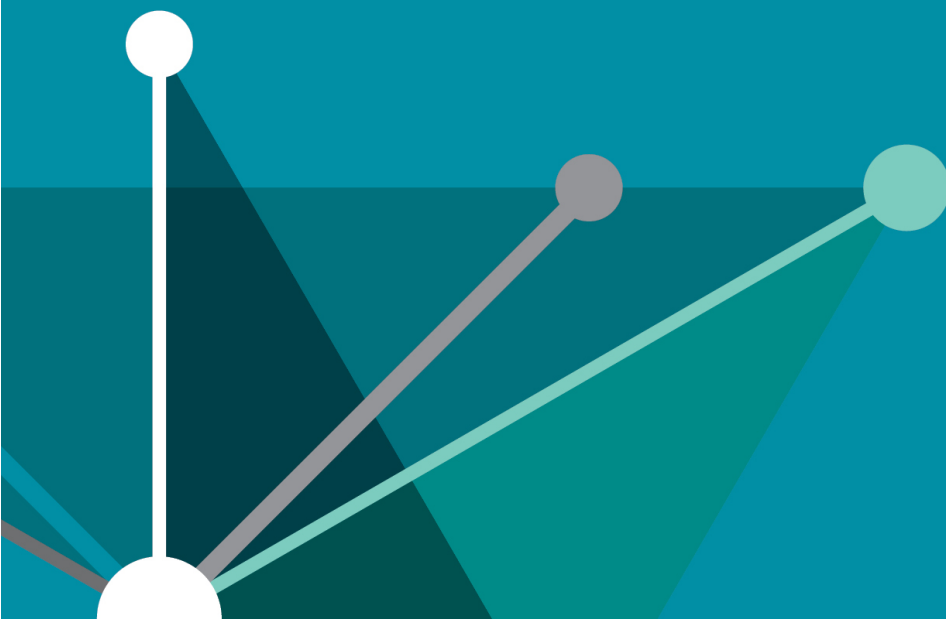
The Centre for Supply Chain and Logistics at Deakin University is Australia's leading research centre focusing on freight logistics and value-added supply chains. We aim to optimise public and private sector decision-making to achieve a better and more sustainable future.

CSCL's activities are built on three pillars: innovative and rigorous applied research; industry engagement throughout Australia, Asia and the Pacific region; and capability building through the provision of practical education programs, including Doctoral and other postgraduate programs.

All CSCL's activities are underpinned by the diverse and extensive expertise of its people and partners, including extensive operational, strategic and academic experience.

## The Research Team

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## Acronyms

3PL	3 <sup>rd</sup> party logistics (outsourced)
CTO	Container terminal operator
FCL	Full container load
IMEX	Import-Export
IoT	Internet of things
LCL	Less than a container load
LSP	Logistics service provider
PPE	Personal protective equipment
PUD	Pickup and delivery
ULCV	Ultra large container vessel

# Executive Summary

The Port of Newcastle and the Newcastle Airport are seeking to play their role in creating a new era in Newcastle's history as a smart, connected location for international trade, based on –

- Providing choice for people and goods movement
- Attracting supply chain services and the “smarts” behind it
- Active partnering of transport modes to deliver seamless flow of people and goods
- Improving amenity and community relationships in relation to goods movement.

Newcastle Airport and the Port of Newcastle have co-sponsored an analysis to determine their roles and opportunities in creating complementary trade capability for export, import and domestic distribution businesses in the Hunter and further afield. This analysis is in the context of their wish to work as twin gateways for international trade across their hinterlands.

Studies undertaken in recent years have identified the potential locations that would be freight-favoured to the Port of Newcastle, however the question to be addressed is how both trade gateways will facilitate trade and what value-added logistics facilities and services and transport connectivity requirements will be required to fulfil a comprehensive, complementary international trade and business role. The research question in the study is how, through working in cooperation, both ports might create more than the sum of the parts in facilitating trade and growing the regional economy; and what complementary trades can both gateways service to grow the regional economy?

The research has examined models both internationally and in Australia where air and sea ports have developed a regional logistics capability, creating location endowments and economies of agglomeration for regional economies. The concept of complementary supply chains is based on -

- Moving beyond the time and cost coefficient as being the only determinants of which international gateways will be used
- Building capacities and offering companies a suite of supply chain services additional to international port access
- Enabling multimodal choices to be made to best suit the needs of shippers
- Focusing efforts on complementing the existing trades in the region.

The logistics of air and sea freight appear to have little in common – one focused on high value, time-sensitive goods as a subset of passenger services (air) and one focused on value and volume freight (sea). What the research has shown is that, despite the differences in freight volume and configuration, both modes form part of the logistics capability needed for international trade. The research has identified potential for the ports to work collaboratively to service a dozen international trades with upgraded infrastructure to enable more international flights at the Newcastle Airport and through the addition of a dedicated container terminal at the Port of Newcastle.

While the fundamental necessity of terminal and network infrastructure is required, there is also the need to build an ecosystem of services, technology, skills and trader support that will fulfil sufficient conditions for international trade. There are extant models that provide examples for both ports. Trade in a 21<sup>st</sup> Century global context is about achieving scope, scale and a trade-oriented environment that embraces all technology solutions that support goods and people flow.

Another key feature of the global trade ecosystem models examined in the research is the **strong support and partnering of the state and local governments**, dedicating resources from their industry and planning programs and contributing funds and advocacy for the infrastructure (transport, communications, regulation) required to facilitate the international trade role.

The research finds that this **enhancement of a 'global trade ecosystem' is required** in the Hunter Region. This will create jobs and develop a new and competitive regional capability to underpin diversification of the region's economy. This new 'global trade ecosystem' is not just about infrastructure and land development. It also requires trade facilitation; lowering logistics costs for international trade performance; employment creation; capability and capacity development; smart cities enactment involving digitisation of logistics processes; agglomeration economies; attraction of talent into the region; creating a positive business environment; promotion of the region and optimisation of the existing and future transport networks.

The logistics of trade diversification requires connectivity for product flow; supply chain expertise; land supply for agglomeration economies; scalable logistics facilities; services for leading industry requirements for import/export and domestic distribution; and a globally oriented business mindset.

The research indicates that regional businesses could capture higher value if the mooted investment in these gateways proceeds, and the additional value is far greater than that which would be received by any single business or sector. The spillover benefits would include new incentives for research and development, attracting technical expertise into the region, increasing employment, enabling the region to build the capability to compete in global markets, achieving greater circularity in the economy.

Given these developments, **for Newcastle Airport** new trade opportunities could include e-commerce exports, biomedical devices, industrial supplies and safety equipment, defence manufacturing and technology, defence logistics, meat, aquaculture, advanced manufacturing equipment and prototypes, wine, live animals – breeder stock, processed foods, artisanal dairy products, and cut flowers.

**For the Port of Newcastle**, new and extended trade opportunities could include machinery and project cargoes for the energy and resources sectors, cotton, oilseeds, hay, processed foods, meat, manufactures and fabricated metals, ammonia for hydrogen fuel cell production, defence materials import and defence manufactures exports, mining supplies and equipment import, silica sands, fuels, grains and consumer retail goods.

**Complementary trades** to consider include Defence logistics, Defence manufactures and parts, fly-cruise passengers, industrial supplies and safety equipment, manufactured parts and products, meat and processed foods.

The following graphic describes the Air and Sea trades that present complementary opportunities and the air or sea-favoured trades with potential.

TRADE	AIR	SEA	AIR & SEA
Aluminium		Medium	
Ammonia		High	
Aquaculture	Medium	Modest	
Automotive and ro-ro		High	
Biomedical devices	Medium		
Cement		High	
Cotton		High	
Cut flowers	Medium		
Dairy	Modest	Modest	Modest
Defence logistics	High	High	High
Defence manufacturing and technology	High	High	High
eCommerce	Modest	Modest	Modest
Fly-cruise passengers	High	High	High
Fuels		High	
Grains		High	
Industrial hemp	Modest	Medium	Medium
Industrial supplies and safety equipment	High	High	High
Live animals – breeder stock	Medium	Medium	Medium
Manufacturing parts	High	High	High
Meat	High	High	High
Native foods	Modest		
Oilseeds		High	
Prefabricated buildings		Medium	
Processed foods	High	High	High
Project Cargo		High	
Protected cropping	High		
Silica sands		High	
Steel		Modest	
Timber		Medium	
Vaccines and pharmaceuticals	Medium		
Wine	High	Medium	Medium
Zinc and copper concentrates		Medium	

Key:  modest potential  medium potential  high potential

Interactions between the two ports can enhance trade offerings and potentially create savings through shared marketing work, training in safety and security compliance, systems for monitoring freight, data sourcing and sharing, and vehicle booking systems for terminal access. Understanding the product and people flows for specific supply chains can enable both organisations to reach a fuller picture of how they might tailor a package of offerings.

Three forms of collaboration that can be enacted between the air and sea ports in Newcastle are **(i) strategic synergy, (ii) tactical coordination and (iii) business synergy**. The element of strategic synergy is based on collaborative mechanisms, which include collaborative planning and management mechanisms in areas such as communication technology, distribution systems, and risk control and prevention schemes. Tactical coordination refers to work in areas such as the management of internal logistics network subsystems, collaboration involving bonded logistics subsystems, and the synchronisation of international and domestic logistics subsystems. Examples of useful business synergy coordination actions include the coordination of transport and warehousing, together with their related financial services.

**Actions to employ these synergies** and enhance the role of the Newcastle twin gateways in creating an international trade ecosystem are –

1. Formation of an **international trade coordination alliance**, in order to develop international logistics capability, including –
  - Development and marketing of international trader logistics parks
  - Trade facilitation – international trade finance, brokerage, forwarding, logistics service providers; international business hosting and support services; business travel and freight packages
  - Optimisation of transport networks – determining optimal off or on-port logistics operations; working with State and Commonwealth infrastructure agencies on connectivity to national transport networks; pathways for export cargoes; colocation of logistics/intermodal operations; cooperative arrangements with paired landside hubs
  - University and TAFE international trade and logistics programs
  - Support of regional development and business facilitation services such as location advice, market intelligence, investment climate information, fact-finding missions, legal and tax advice, talent, business and partner networks, being undertaken in the region.
2. **Partnership between the NSW Government**, regional organisations, local councils and the port entities, to invest in gateway connectivity, catalyst and special activation precincts.
3. Continuing **advocacy for the identified transport infrastructure** to enhance freight connectivity to the global gateways, including –
  - Stage 2 of the Northern Sydney Freight Rail program
  - Lower Hunter Freight Rail Corridor from Fassifern to Hexham
  - Investigation of a more direct rail route from Parkes to Newcastle
  - M1 Motorway extension to Raymond Terrace (budget allocation announced in Federal 2019 Budget)
  - Cabbage Tree Road Williamstown to M1 upgrades
  - New England Highway upgrade
  - Completion of the Golden Highway upgrades.
4. Adoption of a **supply chain framework** for developing a shared approach to promotion to key import-export trades in the region. Prepare joint offerings identifying the shared value proposition for a manufacturer/producer (incorporating global sourcing and business travel options).
5. For Newcastle Airport, determination of the **air cargo model** to be adopted when additional international flights are operational. While underbelly freight is dominant, the service model could also incorporate dedicated freighter operations to service specific trades (e.g. equine industry, vehicles).
6. For both ports, determination of the **range of on-port logistics services** required for the terminal models adopted, in order to meet supply chain efficiency and community amenity goals, as well as create revenues.
7. Joint **preparation for high levels of operational automation and use of digital tools** to facilitate supply chains, such as port community systems, including the establishment of systems interoperability protocols and global data standardisation across transaction systems.

8. Scheduling of **discussions with the air and shipping lines** and international logistics service providers (e.g. TOLL Group; Kerry Logistics) to identify commodities and geographies that could represent new or expanded trades to utilise international port calls and seek to balance IMEX volumes.
9. **Integration of critical path plans** for both international terminals to come on line, so that the planning for port and hinterland services (e.g. cargo inspection and biosecurity facilities, bonded storage, cross-docking; intermodal hubs; international forwarders; livestock handling; cold storage) can be optimised.
10. Ensuring terminals and rail/road connections are **designed for 24/7 operations**, considering international communications and local amenity.

# 1. Alignment of government agendas and Newcastle gateway business plans

## 1.1 National agendas

### *Defence White Paper*

The 2016 Defence White Paper outlines a decade long investment in Defence capabilities. **RAAF Base Williamtown** is home to the tactical fighter element of the Air Combat Group and the Airborne Early Warning and Control (AEW&C) element of Surveillance and Response Group. It is Air Force's intent that RAAF Base Williamtown remain as the nation's main fighter pilot training base, and will house most of the planned F-35A Joint Strike Fighter capability. The Astra Aerolab precinct located on a 76 hectare site at Williamtown is an example of the alignment with the requirements of the F-35A aircraft supply.<sup>1</sup> **Singleton Military Base** hosts the Army Training Area, School of Infantry, Special Forces Training Centre and Defence support services.

In the Port of Newcastle, the NSW Government has invested in upgrading the **Fitzroy St Shipyard** slipway to lengthen it to 55 metres and lift 1,000 tonne vessels. Thales, as a Defence prime contractor, operates the yard.

In addition to the \$162 billion investment over the next decade, the Australian Government has a target for Australia to join the top 10 global suppliers of Defence equipment and technology. An example of the capability of the Defence-oriented companies in the Region is Armor Engineering's development of body armour to supply Defence.

Newcastle Airport and the Port of Newcastle have longstanding relationships with the Australian Defence Force. Recently, Defence Hunter has been formed from a consortium of Defence suppliers and regional business leaders to advocate the Region's Defence capabilities and further Defence contracts for the Region. Providing international gateways for Defence Materiel and the ecosystem of contractors located in the Region will support the growing activities of this sector.

### *Inquiry into National Freight and Supply Chain Priorities*

This Inquiry is a part of the formation of a National Freight and Supply Chain Strategy, anticipated for release by the Australian Government in 2019. There are a series of recommendations from the priorities report that are relevant to Newcastle Port and Airport, such as -

- *Develop a better understanding of regional air freight requirements to enhance regional export opportunities, for example through airport upgrades and/or improved road, or domestic air, connections to international airport gateways.*
- *Promote training and re-skilling of employees in the freight industry appropriate to current and future needs, within the context of technological advancement, for example, increasing automation.*
- *Support the development and implementation of a 'single window' for international trade which promotes the use of standardised trade and transport information and documents to reduce regulatory burden in the context of customs and quarantine arrangements at the border.*

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<sup>1</sup> Australian Defence Magazine July 2018 <http://www.australiandefence.com.au/business/nsw-funds-defence-precinct-near-williamtown>

### *Infrastructure Australia Priorities*

Infrastructure Australia (IA) (2019) makes no mention of the previously identified “priority project” *Lower Hunter Freight Corridor rail bypass of Newcastle between Fassifern and Hexham* in its new 2019 Priority Project list. Pending development and acceptance of a business case, which the NSW Department of Transport has committed to, RDA Hunter anticipates this initiative will move to priority project status in the IA Priorities. The 2017 NSW Budget allocated \$11.8m planning and pre-construction to 2018 on this initiative.

Two road network projects are listed in Infrastructure Australia’s Infrastructure Priority List (IA: February 2019 pp 89, 98) as described below -

***Pacific Highway (M1) – extension to Raymond Terrace:*** *The section of the Pacific Highway from Black Hill to Raymond Terrace is also part of a strategic junction where the north–south traffic flows between Sydney and Brisbane cross the east–west traffic flows between the Hunter and New England region and the Port of Newcastle.*

*Traffic speed during the morning peak is estimated to be 60 km/h by 2021, dropping to 23–39 km/h by 2031. In 2016, an average 22,000 vehicles used the route during the afternoon peak. This is expected to increase by 36% by 2031. The major growth drivers are the planned industrial developments at Black Hill, Tomago Road and Weakleys Drive. It is estimated that road network improvements could increase travel speed by around 20 km/h.*

*The current road network does not adequately cater for High Productivity Vehicles. Heavy vehicles travelling to and from Tomago industrial area and the Port of Newcastle are required to undertake contra-flow movements during the night. The use of High Productivity Vehicles to transport freight is estimated to generate significant productivity benefits.*

*It is estimated that these vehicles could perform the freight task with up to 37% fewer trucks and vehicle kilometres travelled compared to other vehicles.*

***New England Highway Upgrade:*** *The initiative includes a number of potential projects to upgrade the New England Highway, including: ■ bypasses of the towns of Singleton and Muswellbrook ■ duplication between Belford and Singleton ■ duplication between Singleton and Muswellbrook ■ realignment at Rocky Cut (north of Scone)*

Figure 1 Infrastructure Priority Projects Source: Infrastructure Australia 2019

Infrastructure Australia also recognises the importance of reserving corridors for future connectivity, specifically using the example of the need to identify and protect the alignment of the Lower Hunter Freight Corridor rail bypass of Newcastle between Fassifern and Hexham. *“The savings differ between the corridors, due mainly to variations in the size and location of the corridor. For the larger projects, failing to protect a corridor and subsequently building sections of the project in tunnel adds many billions of dollars to their cost. Smaller projects, such as the Hunter Valley rail freight re-alignment, deliver important savings from corridor protection but on a more modest scale.”<sup>2</sup>*

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<sup>2</sup> Infrastructure Australia, 2017, Corridor Protection: Planning and investing for the long term, <https://www.infrastructureaustralia.gov.au/policy-publications/publications/files/CorridorProtection.pdf>



### *Inland Rail*

The \$9.9 billion Melbourne to Brisbane inland rail project commenced construction in 2018 and is due for completion in the mid-2020s. Newcastle's current connections via Narrabri and Narromine will create an advantage for cargoes using the inland rail, as a recent indication from ARTC shows –

*Table 1 Rail distance to port from select NSW locations*

Location	Distance (km)			
	Newcastle	Botany	Kembla via Stockinbingal	Brisbane
Narrabri	410	582	943	655
Narromine	514	504	657	935
Gilgandra via Troy Jnc	631	623	846	1100
Gilgandra via Curban/Narromine (IR)	670	660	814	926
Coonamble via Gilgandra/Troy Jnc	541	531	756	1033
Coonamble via Curban/Narromine (IR)	620	610	763	1041
Moree	506	678	1043	558
Dubbo	478	468	693	970
Parkes	623	455	545	1042
Goondiwindi	640	812	1178	425

Source: ARTC January 2019.

The above data is based on rail connection to the port of Newcastle via Narromine or Narrabri. A more direct route from Parkes to Newcastle would significantly reduce transit times and cement Newcastle as the port of choice for many trades. Port connections are currently being investigated for Brisbane and Melbourne (terminus terminals and shuttles). It is expected that key locations for intermodal hubs directly on the Inland Rail will be investigated in 2019-20. Further connectivity to Eastern seaboard ports will likely be a Federal-State negotiation to follow, as these are currently out of scope for the Inland Rail project delivery.

### *Agricultural exports*

The 2019 Federal budget has allocated \$29.4 million over a four year period to increase access to offshore markets and break down non-tariff barriers.

The Regional Airports Program will also provide \$102.8m over the four years to 2022-23 to provide assistance to the owners of regional airports to undertake essential works, promote safety and access for communities. A \$100 million fund will also be established by the Federal Government to improve infrastructure and security at regional Australia's airports.

## **1.2 State agendas**

As a part of the goal of encouraging investment in the freight industry – particularly for infrastructure, NSW Government has indicated its plan to work in partnership with commercial infrastructure operators, including the Port of Newcastle, as they deliver their master plans. Furthermore, the Government has indicated that it will support the Port of Newcastle to explore trade opportunities in new markets (NSW Government, 2018, p 48).

Improvements to the freight rail connection between Newcastle and Sydney have been undertaken in recent years as a joint NSW-Federal Government project – the Northern Sydney Freight Corridor Stage 1. Stage 2 of this corridor improvement plan, involving further freight and passenger rail separation to enable additional freight services daily (West Ryde to Rhodes and Thornleigh to Hornsby), has completed the design phase. Infrastructure Australia has prioritised this project as an initiative for a 10-15 year timeframe, anticipating support from the NSW Government.<sup>3</sup>

The Lower Hunter Freight Rail Corridor (LHFC) is a dedicated freight bypass between Fassifern and Hexham which has been supported by Transport for NSW as an important infrastructure to enable freight movement and amenity improvement in the City of Newcastle. According to Transport for NSW, “the preservation of the Lower Hunter Freight Corridor is an Action in the NSW Freight and Ports Strategy, the State Infrastructure Strategy and a ‘high priority initiative’. The project is awaiting the completion of technical investigations and community consultation. There is concern that the route may be compromised by the development of the Wakefield Motorsport development.

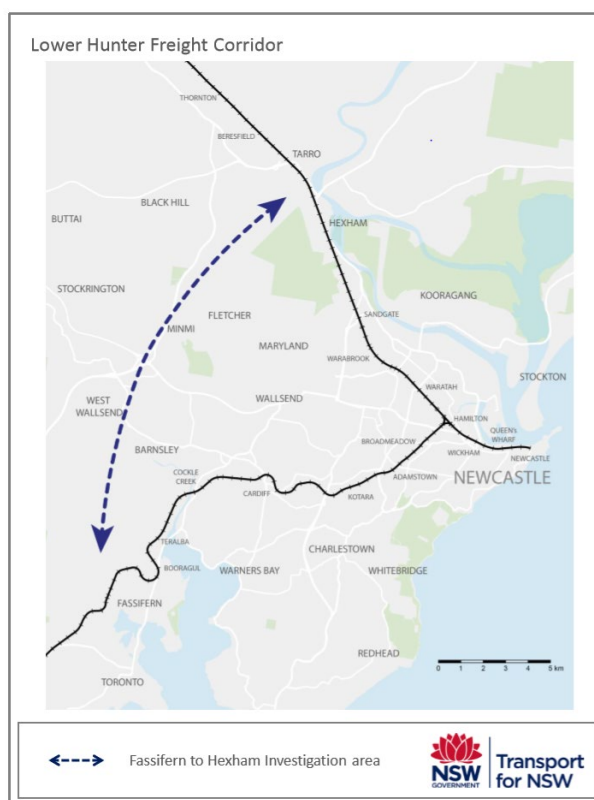


Figure 2 Lower Hunter Freight Corridor Source: Transport for NSW

### NSW Freight and Ports Plan 2018-2023

The NSW Government highlights several initiatives to be delivered by the Government that have synergies to the business opportunities being pursued by the Port of Newcastle and the Newcastle Airport in relation freight movements and related growth strategies.

<sup>3</sup> Infrastructure Priority List February 2019 <https://infrastructureaustralia.gov.au/projects/infrastructure-priority-list.aspx>

For example, there are plans to trial high productivity trains for bulk freight movements to Port Kembla and Newcastle (NSW Government, 2018, p 8). It could be argued that this initiative could potentially have favourable implications for containerised freight movements to the Port of Newcastle.

There is an explicit recognition by the NSW Government that the leasehold owners of the Port of Newcastle are planning to diversify and expand the Port's trade base. However, the document indicates a view that *"medium to long-term constraints on this expansion include the pressures on the shared rail network in the Upper Hunter Valley and access via the New England and Golden Highways."* (NSW Government, 2018, p 39). The NSW Government understands the need for managing congestion around Newcastle, particularly with the increasing number of freight distribution sites, together with growing population and the associated rise in traffic around Newcastle (NSW Government, 2018, p 41).

An important goal of the NSW Freight and Ports Plan 2018-2023 is to improve flow of freight through trade gateways. In this regard the Government is keen to work with freight operators and owners to increase rail freight efficiency. The NSW Government will work with rail freight operators to optimise freight train cycle times, with an initial focus on freight moving to trade gateways. This will achieve more efficient allocation and use of freight train paths. The NSW Government will also continue to work with network owners and freight train operators to: develop optimal freight paths, including the ongoing development of train schedules and timetables; improve on time presentation of freight trains and address root causes of incidents; and trial higher productivity trains for bulk freight movements to Port Kembla and Newcastle (NSW Government, 2018, p 61). This could potentially have favourable implications for application into the container freight movements to the Port of Newcastle via the rail network.

It is important to note that during the consultation process to develop the NSW Freight and Ports Plan 2018-2023, one of the key issues consistently raised by the stakeholders includes interest in containerised freight terminal at Newcastle Port (NSW Government, 2018, p. 78). The Plan recognises the interest of the Port of Newcastle in diversifying and expanding the port's trade base. An initiative has been included in the Plan to support the Port of Newcastle as the commercial operator of the port, to explore other trade opportunities as they deliver their masterplan, such as examining landside capacity constraints that may need to be addressed beyond the timeframe of this Plan. The NSW Government policy position is that Port Kembla has been identified as the location for the development of a future container terminal to augment capacity of Port Botany when required. Current arrangements do not prohibit the development of a container terminal at the Port of Newcastle but rather allow for the growth of container volumes through Newcastle that service the region (NSW Government, 2018, p 81).

### Greater Newcastle Future Transport Plan

Two key tenets of this transport plan for Greater Newcastle produced in late 2017 by the NSW Government are the protection of freight movements and reinforcing key links to the port and airport; and the separation of passenger and freight rail services through the Lower Hunter Freight Corridor.



Figure 3 Global gateways NSW Source: Transport for NSW

### Special Activation Precincts

As part of the NSW Government's \$4.2 billion Snowy Hydro Legacy Fund, a Special Activation Precinct is planned for the Astra Aerolab located at Newcastle airport. Special Activation Precincts offer 5 elements to support business activity, including:

- Fast tracked planning
- Infrastructure investment
- Government-led studies
- Government-led development
- Business concierge
- Support for relocation.

### From paddock to plane to plate

The NSW Government recently announced an investigation to determine suitable regional airports for upgrade to international freight operations.<sup>4</sup> Funding from the Snowy Hydro Legacy Fund is being used for a pre-feasibility study currently underway.

<sup>4</sup> <https://www.nsw.gov.au/your-government/ministers/deputy-premier-minister-for-regional-new-south-wales-industry-and-trade/media-releases-from-the-premier/frnew-media-page/>

### *Hunter Regional Plan 2036*

A key goal of the *Hunter Regional Plan 2036* is to develop the region as the leading regional economy in Australia. In order to achieve this goal, Direction 2 will “enhance connections to the Asia-Pacific through global gateways” and undertake the following actions -

#### **Actions**

- 2.1 Promote diversification of operations at the Port of Newcastle and the Newcastle Airport and enhanced connectivity to the Asia-Pacific.
- 2.2. Develop and review strategies and precinct plans for the global gateways and surrounding lands to support their growth, diversification and sustainability.
- 2.3. Prepare local plans that adequately respond to air, noise and other issues relevant to the gateways to protect their ongoing operations and expansion.

*Figure 4 Hunter Regional Plan 2036 Source: NSW Department of Planning & Environment*

Protecting land needed for freight and logistics uses and infrastructure is also an important goal of the NSW Freight and Ports Plan 2018-2023 (NSW Government, 2018, pp 68)-69. In this regard, the NSW Government will ensure that freight and logistics land and corridors are identified and protected from sensitive land uses, including land around important trade gateways such as the Newcastle Port. This also includes the Central West to Newcastle/Sydney/ Wollongong corridor study (a joint-government agency review focussing on all modes of transport connecting the Central West and Greater Sydney, Newcastle and Wollongong, and considering Inland Rail and Western Sydney Airport.

The Port of Newcastle has the potential to play an integral role in fulfilling the strategies and plans for regional development in NSW. For example, the Hunter Regional Plan, developed by NSW Government, outlines the Government’s goals and aspirations for the region to 2036. A key goal for the plan includes positioning the Port of Newcastle and Newcastle Airport as global gateways, through improved interregional links and infrastructure for freight movements (Deloitte Access Economics, 2018, p. xviii).

### *Greater Newcastle Metropolitan Plan*

The NSW Department of Planning and Environment has a five element plan to shape Greater Newcastle into “a dynamic and entrepreneurial city with a globally competitive economy and a great lifestyle.” One of these five elements is titled “trading hubs” on the basis that “*Greater Newcastle is the only place in regional NSW where national road and rail routes intersect with an international trade port. The hubs and routes converge near Tomago and Beresfield-Black Hill, the trade nexus of the area.*”

Figure 5 indicates the key features that form part of the Plan, including the air and sea port.



Figure 5 Greater Newcastle Metropolitan Plan Source: NSW Department of Planning & Environment

Catalyst Precincts are areas where employment growth is expected to be focussed, including Newcastle City Centre, Beresfield–Black Hill, Broadmeadow, North West Lake Macquarie, Callaghan, East Maitland, John Hunter Hospital, Kotara, Newcastle Port, Tomago and Williamtown.

## 1.3 Regional and local agendas

According to RDA Hunter (2017, p 7), Newcastle has a long heritage as a shipbuilding centre; over 300 vessels built, specialist module constructions and hundreds more ships repaired and maintained in the region. There is significant infrastructure around the working harbour to support the re-establishment of this industry and land available for further development. With businesses such as Thales and Cvmec's riverfront heavy engineering and shipbuilding facility, Forgas's Marine and Defence, the region has a demonstrated partnership approach to shipbuilding and repair contracts. As such, the Port of Newcastle is well-placed to expand its role in maritime freight task and merchant fleet maintenance.

RDA Hunter (2017) presents a long-term view of industry development in the Hunter region across a range of economic sectors include agriculture, value added agrifood and wine products etc., to cater for an increasing Asian market that demands higher value products. Increasing demand for high value added and high protein agricultural products points to prospects for economic growth if adjustments can be made locally to meet new market demands in taste and product preference. This long term view is consistent with the appetite to diversify cargoes of the Port of Newcastle, which supports RDA Hunter's industry development plans (RDA Hunter, 2017, pp.8-9).

### *Upper Hunter Economic Diversification Action Plan*

This Action Plan, developed in 2017, looks to diversify economic activity in the Upper Hunter region from coal-fired power generation to a range of other industries, *"supporting transition into agribusiness production, building on regional advantages in commodity exports (infrastructure, logistics, and expertise) and economic agreements with Asian trading partners."*

The Plan will seek relocation of food processing plants from the Greater Sydney region, and new production sites for oilseeds, industrial hemp, protected cropping (vegetables, herbs and flowers), poultry farms and processing plants, with the support of the NSW Government, Hunter Regional Development Australia and Hunter and Central Coast Development Corporation. Outputs from these processing plants are potentially a mix of domestic and export product, some with ingredient and machinery import for food manufacturing.

### *Newcastle Smart City*

A range of initiatives are being advanced through Newcastle City Council, including –

- Work with Port Stephens Council and Williamstown Aerospace Centre to support the growth of advanced aerospace, defence and associated industries in Newcastle and the Hunter.
- Actively develop the regional innovation ecosystem's capacity to nurture businesses, artists, creatives and innovators and generate economic growth in key industry sectors.

## 2. Enhancing international logistics capability

### 2.1 The case for an inter-port coordination strategy

The Hunter Region and indeed the northern half of NSW may benefit from the transport network and nodes available at present and developed in future years. Civic leaders are keenly aware of the potential to exploit these investments to grow the regional economy and service the businesses incumbent in the region.

Studies undertaken in recent years have identified the potential locations that would be freight-favoured to the Port of Newcastle, however the question to be addressed is how the trade gateways will facilitate trade and what value-added logistics facilities and services and transport connectivity requirements will be required to fulfil a comprehensive international trade and business role.

The research has examined models both internationally and in Australia where air and sea ports have created a regional logistics capability, creating location endowments and economies of agglomeration for regional economies.

It has been noted that the efficient coordination of sea and air cargo sectors are, in most continents, in a fairly rudimentary state (Ducruet and Van der Horst, 2009). Indeed, it seems that, by comparison, maritime connectivity and inter-seaport coordination is substantially more prevalent globally than seaport and airport coordination (OECD, 2013), and it is of concern, in an environment of increasing reliance on sea/air transfer of cargo, that this should be the case.

In this regard, there is limited evidence regarding examples of efficient coordination between different kinds of ports, either at the metropolitan or regional scales (OECD, 2013). This presents a somewhat interesting situation, since it has been commented that various mega-logistics regions in the world consider the presence of both a large seaport and a large airport to be a competitive advantage. Indeed, it has been specifically observed that having the option of more diversified gateways (multiple airports and seaports within a radius of 70 km from the 'core' of the activity centre) generates larger traffic volumes and logistics clusters than those that specialise exclusively as air or sea gateways (O'Connor, 1989).

### 2.2 Drivers of inter-port coordination and strategic linkages

Commentators have noted that inter-port coordination can be seen as an astute strategic response to a competitive environment, in which jointly-led activities give participants a superior advantage over their competitors (OECD, 2013). In addition, coordination initiatives between elements of the adjacent ports generates an overall operating environment that is larger than the sum of its parts. Indeed, in most cases, inter-port coordination of varying degrees and scale, improves the quality of information transfer, enhances supply chain integration, and facilitates the effective allocation of infrastructure. An important key to the success of these coordination mechanisms, is to accurately identify the areas of common interest between stakeholders which can provide the basis for future action, and to subsequently ensure that these areas are contained in a clear action framework from the very outset of the intended collaboration (OECD, 2013).

It is suggested that sea and air transport sectors suitable for collaboration be considered as those concerned with providing high quality support services to both domestic and international trade in goods and services. The innate competitiveness of these sectors, particularly within specific transport corridors of interest, will be capable of being extended well beyond the normal boundaries of a group of enterprises. In other words, they could collaborate to form transport and logistics clusters, whereby



all modes of transport are utilised, each within their best capacity and within a network of infrastructure, for their common advantage.

There are several reasons for speculating that this might be the case. First, transport corridors can operate suitable links within domestic and/or international supply chains. Second, cooperation of all these transport chain links (including all modes of transport both air and sea related) allows not only the reduction of transport costs, but also to strategies to more effectively address emergent environmental and ecological issues. Third, such intimate cooperation promotes more rational involvement and utilisation of a country's valuable transport capacities. Fourth, in some cases, it enables the formation of a single, unified regional transport system which will provide opportunities to develop a new physical and locational transport field. Finally, such relevant air-seaport cooperation can create a healthy competitive business environment and enhancement of transport corridors between enterprises and the public sector (see Nežerenko *et al.*, 2017).

A further review of relevant studies by Nežerenko *et al.* (2017), indicates that transport and logistics clusters, in particular air and seaport clusters which are supplemented by regional agglomerations of cognate companies and other institutions in industries connected through different types of linkages and spill overs, can contribute to higher levels of overall regional and national economic performance.

It is persuasively argued that the creation of a single regional transport cluster can lead to a significant increase in efficiency in both business formations and activation of innovations in the field. In turn, these parallel activities would be eminently capable of creating a favourable developmental environment for the business sector, and hence would stimulate economic growth and improvement both regionally and nationally. In an attempt to understand the nexus between freight transport and economic activity, many researchers suggest that export performance and import penetration rate are the relevant indicators, rather than the traditional reliance on GDP (Nežerenko *et al.*, 2017).

In identifying the circumstances under which air and sea transport could develop a competitive relationship, Rigas *et al.* (2011) argue that a new operational environment provided by a cluster can lead to market consolidation, although it is clearly recognised that the condition of these markets should be regarded as somewhat fluid and under continual transition. It is also noted that the final form of the cluster will largely depend on the intensity and the duration of the drivers which initially led to the creation of the cluster.

Based on an analysis of relevant literature, Nežerenko *et al.* (2017) have indicated that there is a very wide range of factors influencing the development processes of transport fields, notwithstanding them being air, sea or a combination of transport fields and corridors. A useful conceptual relationship between these factors (based on comments made by Brodin (2003)), is shown in Figure 5. It was also noted that transported cargo volumes, international trade volumes, the development level and capacity of transport infrastructure, and comparative levels of investments and business activities, are the factors that have been more frequently analysed in the literature (Nežerenko *et al.*, 2017).

We suggest that it is important to recognise that the broad group of factors shown in Figure 5 represent the areas of synergies capable of supporting potential cooperation between seaports and airports. Key issues include the servicing of common trades, instituting the shared use of equipment, introducing common land ventures, developing joint logistics park facility usage (such as cold storage sites, fumigation equipment and facilities, transport cross-docking areas, specialist packing services and a secure bonded storage area), collective administrative activities, co-operative regulatory and security training and deployment, a pooled marketing function, and shared strategic planning approaches.



## Transport Geography

*Figure 6 Conceptual relationships between factors affecting the analysis of a collaborative field of transport*

Source: Nežerenko et al., (2017), based on Brodin (2003)

## 2.3 Anticipated benefits of multi-modal transport interfaces

An important issue which is of particular concern to this project, is the introduction of an accurate examination of the potential impacts upon air-seaport interfaces within multi-modal chains in the context of the ports' ability to serve new and increasing numbers of customers. This ability will be substantially influenced by the 'captive' and 'contestable' hinterlands which define the operating area of the interfacial cluster. In this respect, those regions in which the ports have a substantial competitive advantage because of lower transport costs (for example, due to short distances to its customers' final destinations) belong to the 'captive' hinterland. In 'contestable' hinterlands, ports may be seen to have a limited cost advantages over other port competitors.

Amber Coast Logistics (2011) based on a UN analysis, highlights several advantages of multimodal transport, particularly in the context of captive hinterland port interfaces. These advantages include:

- *Minimisation of time loss at trans-shipment points:* Multimodal transport, which is planned and coordinated as a single operation, minimises the loss of time and the risk of loss, pilferage and damage to cargo at trans-shipment points;
- *Provision of faster transit of goods:* The faster transit of goods is made possible under multimodal transport, and this helps to reduce the disadvantages of distance from markets and the tying-up of capital;
- *Reduction of burdens related to documentation and formalities:* The burden of issuing multiple documentation and other formalities connected with each segment of the transport chain is reduced to a minimum;
- *Savings of cost:* The savings in costs resulting from these advantages are usually reflected in the freight rates charged by the multimodal transport operators and also in the cost of cargo insurance. As savings are passed onto the consumer, it is likely that competitive advantages will emerge, leading to demand increases; and
- *Reduction in cost of exports:* The inherent advantages of multimodal transport system will help to significantly reduce the cost of exports and improve their competitive position in the international market.

It is also relevant to note that container transport is clearly one of the most efficient and cost-effective modes of multi-modal transport. The efficient transshipment of containers from train to ship or from truck to ship (and vice versa) is now well understood and appropriate infrastructure is readily available. This facility enables the construction of a well-developed hinterland (involving rail and road freight paths in the direction of the ports), and this becomes an important factor in achieving a successful and efficient operation in the multimodal transport chain (see Amber Coast Logistics, 2011).

According to Rodrigue and Notteboom (2006) quoted by Amber Coast Logistics (2011), the integration of transport functions provided by logistics and the re-orientation of maritime networks has substantially redefined the functional role of ports in value chains. Consequently, this has generated new patterns of freight distribution and new approaches to port development. Also, the development of better hinterland connections has, in many cases, become as important as the port facilities themselves in efforts to secure additional traffic. Maritime shippers and inland transport companies have become actively involved in providing more efficient hinterland connections, in terms of capacity, cost and time savings.

It has been claimed that there are at least three ways to have new/additional clients for air and/or seaport terminals:

- (i) to have a good location and good hinterland connections and serve the clients from the main hinterland reliably;
- (ii) to get clients in the competition margin, and offer lucrative and reliable services on good price and with good quality service; and
- (iii) to attract them from another hinterland area in the way of creating good relationship and connecting the terminal with main transport corridors (Rodrigue and Notteboom (2006) quoted by Amber Coast Logistics, 2011).

A further driver of ports and landside cooperation is the anticipation of growth in carrier haulage in Australia, as opposed to merchant haulage.<sup>5</sup> The carrier haulage model prevails internationally, however in Australia merchant haulage, which involves the freight owner arranging landside transport, has become the norm. This has created a high reliance on freight forwarders and integrated logistics service providers as representatives of the owner to arrange haulage to and from the port of choice.

As liner shipping undergoes further consolidation through acquisition and mergers and alliancing, a number of shipping lines are directly investing in port terminals and intermodal infrastructure and operations.<sup>6</sup> Shipping lines deploying higher capacity vessels in services to Australia are more likely to extend service offerings to landside transport networks in order to capture customers through higher service levels, thus increasing utilisation of available slots in the mega carrier vessel class, the ultra large container vessel (ULCV). It is in the interests of shipping lines to facilitate clearing cargoes as efficiently as possible at ports, especially in anticipation of further cascading of vessel capacity from the east-west hub services to north-south operations such as those servicing Australian container terminals with limited handling capacity.

The ACCC Container Stevedoring Monitoring Report for 2017-18 observed that “Australian quayside productivity levels do not compare favourably with other highly industrialised economies where significantly higher performance benchmarks were being achieved a decade ago. This finding is consistent with views raised by numerous stevedores and shipping lines. Indeed, comparing Australian national quayside productivity with New Zealand has revealed that local productivity levels are much lower.”

The Port of Newcastle will be in a unique position of being able to not only provide channel depth for these ULCVs, but also provide a high capacity and high velocity operation, using on-dock rail, automated terminal equipment and systems for stevedoring, and a supply of back up land for high volume container exchanges.

## 2.4 A collaborative service model for sea-air port cooperation

Based on the background analysis presented here, we present below a ‘Collaborative service model for sea-air port cooperation’. This framework can be adapted to allow implementation of air and sea port cooperation in order to service regional production and supply chains, and to enhance regional economic benefit. This framework is largely based on the work of Toh *et al.* (2010).

First, it could be reasonably argued that a key supply chain component of a major city such as Newcastle, is its physical trade link to regional, domestic and international trade in goods and services *via* its established trade gateways - Port of Newcastle and Newcastle Airport. With the presence of relevant administrative and regulatory institutions responsible for transport security, customs and biosecurity, these gateway ports have an important role in facilitating connectivity and access to regional, national and international markets. In seeking to identify the unique characteristics or specific attributes of a city such as Newcastle, there is a need to put greater emphasis on the nature of its networks, in which key ports are nodes. The above proposition is based on the concept of a ‘collaboration service model’ developed by Toh *et al.* (2010) which, in turn, is built upon the arguments of Robinson (2002). This argument suggests that a port must go beyond being ‘territorially embedded’ in supply chains where third party logistics service providers generate, share and compete with other

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<sup>5</sup> Merchant Haulage is the inland movement of the container by the consignee directly using his nominated haulage contractor. Carrier Haulage is the inland movement of the container under the control of the shipping line using a haulage contractor nominated by the shipping line.

<sup>6</sup> Merk O. 2015, *The Impact of Mega-Ships*, OECD International Transport Forum.

players in a supply chain, and this notion highlights the importance of a sea and air port community, with significant collaborative systems.

Extending this concept of a trade gateway port is an international trade cluster, coordinating activities of the Port of Newcastle, Newcastle Airport, off-port logistics precincts such as Beresfield-Black Hill and the regional leadership team with global businesses would create an international trade ecosystem or cluster. Following the work of Porter (2000), a cluster can be described as a geographic concentration of interconnected firms, specialised suppliers, service providers and associated institutions in a specific field such as regional, national and international trade in goods and services. Several 'layers' exist within such a cluster, and there are freight generators who will benefit significantly from immediate co-location with a port and other services that require virtual connectivity. The study of 'agglomeration economies' has been used to describe the economic benefits to be derived from co-location of interdependent organisations within common infrastructures, such as transport, warehousing, supply chain and related logistics services (Porter, 2000).

An alternative way of looking at aspects of an international trade cluster, is in the form of a 'virtual network' of independent entities. These entities work together on a basis of shared values and a common goal of doing business to jointly exploit particular business opportunities. This can be, for example, in regional, national and international trade in goods and services.

The notion of an international trade cluster is thus made up of firms relying on the transfer of goods and their inward/outward distribution. In the cluster, the major freight generators and receivers, together with industrial areas and distribution centres, depend on their close proximity to the ports within the 'captive' hinterland. The cluster also includes supply chain activities as well as processing and value-adding firms and administrative agencies, and as such, requires relevant professional activities including information gathering and diffusion, knowledge generation and creativity. These joint behaviours result in the production of new goods and services, the outcome of which feeds directly into trade within the region, as well as nationally and internationally. The success of an international trade cluster is thus influenced by a model of collaboration to underpin the business architecture and the ICT systems in this current age of advanced digital and telecommunication technologies (Toh *et al.*, 2010).

The following section relates some international and Australian examples of air-sea port cooperation and alliancing and the development of logistics clusters with international gateways in cooperation.

## 2.5 International examples

### *Amsterdam*

The Association Amsterdam Airport Area (AAA) is a partnership of public and private organisations involved in the development of business locations in the Amsterdam Metropolitan Area (AMA). Through joint international marketing and promotion activities, AAA and its members aim to attract and facilitate international companies to locate in the Amsterdam Metropolitan Area (AMA). Both the Port of Amsterdam and Schiphol Airport are partners. <https://www.sadc.nl/en/about-sadc/partner-projects/amsterdam-airport-area-aaa/>. It is notable that the Port of Amsterdam, Europe's fourth busiest port and known as the "partner port", is only 98 nautical miles from the Port of Rotterdam, the largest port in Europe.



[https://www.sadc.nl/wp-content/uploads/2016/07/007\\_SADC\\_AAA\\_POSTER-A2\\_v3.pdf](https://www.sadc.nl/wp-content/uploads/2016/07/007_SADC_AAA_POSTER-A2_v3.pdf)

AAA provides services to its partners such as logistics companies, as follows –

- Location advice
- Market intelligence
- Investment climate information
- Fact-finding missions
- Legal and tax advice
- Talent
- Business and partner networks
- Support for international staff.

#### *Dubai*

Dubai Logistics City is aimed at increasing the possibilities for certain goods to be initially transported by a sea leg then followed by an air leg, in order to reduce overall travel time. It is noted that, in 2009, Dubai’s Port of Jebel Ali Free Zone joined forces with the Dubai Aviation City Corporation to form one of the largest multi-modal logistics platforms in the world, linking sea, land and air cargo. The Logistics City has incumbent freight forwarders experienced in multimodal cargoes, logistics service providers, contract logistics suppliers, industry and trading companies, support businesses, light assembly suppliers and support consulting services for those wishing to set up, helping with approvals and regulations. <http://www.dubai-world-central.com/dwc-free-zone/dubai-logistic-city/>

#### *China’s Smart Logistics Strategy*

While China’s logistics costs are high and infrastructure capacity low, China is expected to rapidly overcome this impediment to growing the world’s largest logistics market through implementation of the 2014 Logistics Plan and subsequent development of Smart Logistics precincts, where logistics service providers (LSPs) collocate and share digital and physical infrastructure for efficiency. Shared booking platforms and cooperative arrangements with air and sea port are a feature of these precincts.<sup>7</sup> An example is Cainiao’s Smart Logistics platform and network, servicing the growing ecommerce market.

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<sup>7</sup> Xin L, Perina M, Le Bizec J, 2016, China’s logistics industry and the trends of smart logistics, Bank of China, Just Logsit, [http://www.justlogsit.com/resources/documents/china\\_smart\\_logistics\\_en.docx](http://www.justlogsit.com/resources/documents/china_smart_logistics_en.docx)

The National Development and Reform Commission and the Ministry for Transport will implement a strategy to develop smart logistics precincts across China. In 2019 it will build 30 logistics hubs and 150 in the following five years as part of a major expansion and transformation of its supply chain industry. The new logistics hubs will bring advanced internet-of-things (IoT) and artificial intelligence (AI) technologies to the country's supply chain, to give greater efficiency and higher intelligence to its manufacturing and services economy. Logistics centres will be "fully automated terminals, unmanned stations, and intelligent warehousing". The strategy also describes a national supply chain which is buoyed by wide-ranging electronic documents, and capable of "full process monitoring and cargo traceability". China wants "intelligent multimodal transport stations", featuring automated trucks, smart shuttles, intelligent robots, and drones. The three-phase plan sets out a "deep integration of modern information technology and national logistics hub operation management".

In total, the strategy defines six types of logistics hub, for the transport, storage, and transshipment of cargo by road, rail and sea, variously, both inside and outside the country. It identifies 212 locations for them, including 41 land ports, 30 sea ports, 23 airports, 47 industrial ports, 55 commerce and service ports, and 16 border ports. Certain locations will operate as twin sites, for two or more port functions.

All the country's major cities, sea ports, and border posts will be covered. The plan sets out a loose timetable to 2035, with the rate and extent of connectivity and intelligence of the country's logistics industry accelerating through the schedule.<sup>8</sup>

#### *Xi'an*

A collaborative operation between the Xi'an International Inland Port and the Xi'an International Airport in the Shaanxi province in China has been introduced. Jia (2017) has recently analysed the collaborative operation in Xi'an International Inland Port and Airport in the Shaanxi province in China. The Xi'an International Inland Port is a linked facility with a highway port and a railway container terminal, and the nearby Xi'an airport is in the special customs surveillance zone aimed to provide service for international air logistics hub.

By evaluating the efficiency and effectiveness of the functionality of cooperation between the Xi'an international inland port and Xi'an airport in the Shaanxi province in China, Jia (2017) highlights some commonalities and differences of the two ports. Jia (2017) found that the commonalities between the ports included logistics functions, international logistics dependence, and multi-modal transport forms. In relation to logistics functions, both ports have: adequate information processing facilities; a significant amount of through freight; a bonded logistics area; on-site freight forwarders; a business support service; and the required public administration services. With regard to international logistics, the inland port relies on the existing sea port facilities, while the airport conducts its international logistics functions directly. In this complex, road, rail and sea transport modes all contribute to the multi-modal nature of transport used by the inland port, while the airport relies on road and air transport modes.

It has been noted that the differences between the functionality of the cooperation between the inland port and the airport relate to issues regarding international routes, goods sourced, container service functions and the interchange with the highway network. It is also evident that the airport operations cover a large number of international routes, while the inland port has a limited number of international freight trains operating to Central Asia. Understandably, the inland port covers a wide variety of goods, but the airport focuses on smaller, high value products. It has also been noted that the container service functions are comparatively efficient in the inland port, whereas they face more

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<sup>8</sup> Blackman J, January 27 2019, "China to build 150 automated and intelligent smart logistics hubs by 2025", Enterprise IoT Insights, <https://enterpriseiotinsights.com/20190107/channels/news/china-to-build-smart-logistics-hubs>

difficulties of management in the airport environment, and that the interchange functions within the highway network are more efficient at the inland port relative to those at the airport (Jia, 2017).

According to Jia (2017), the external motivations for this high level of cooperation between the Xi 'an international inland port and the Xi 'an airport in the Shaanxi province, are twofold. First, there was specific policy guidance to establish the linkage mechanism between the Xi'an inland port and airport as a part of the 'Silk Road Economic Belt' initiative of the Chinese government, and second, there was a transformation from intense inter-market competition to cooperation in order to achieve lower logistics costs and greater customer service levels.

These internal motivations included identifying and enhancing inherent linkages between the existing logistics nodes of the two ports, and searching for new revenue and profit sources through the integration of logistic capabilities characteristic of both the inland port and the airport. These initiatives allowed improvements to be made in customer satisfaction through increased utilisation efficiency of existing logistics resources, demonstrating what can be achieved whilst reducing logistics operation costs.

It was suggested that the coordination of Xi'an inland port and the airport could be divided into (i) strategic synergy, (ii) tactical coordination and (iii) business synergy (Jia, 2017). The element of strategic synergy is based on collaborative mechanisms, which include collaborative planning and management mechanisms in areas such as communication technology, distribution systems, and risk control and prevention schemes. Tactical coordination refers to work in areas such as the management of internal logistics network subsystems, collaboration involving bonded logistics subsystems, and the synchronisation of international and domestic logistics subsystems. Examples of useful business synergy coordination actions include the coordination of transport and warehousing, together with their related financial services.

### Air cargo initiatives

Air cargo ports in the Netherlands and Asia are responding to the need to create an international trade ecosystem summarised in Figure 6 below.

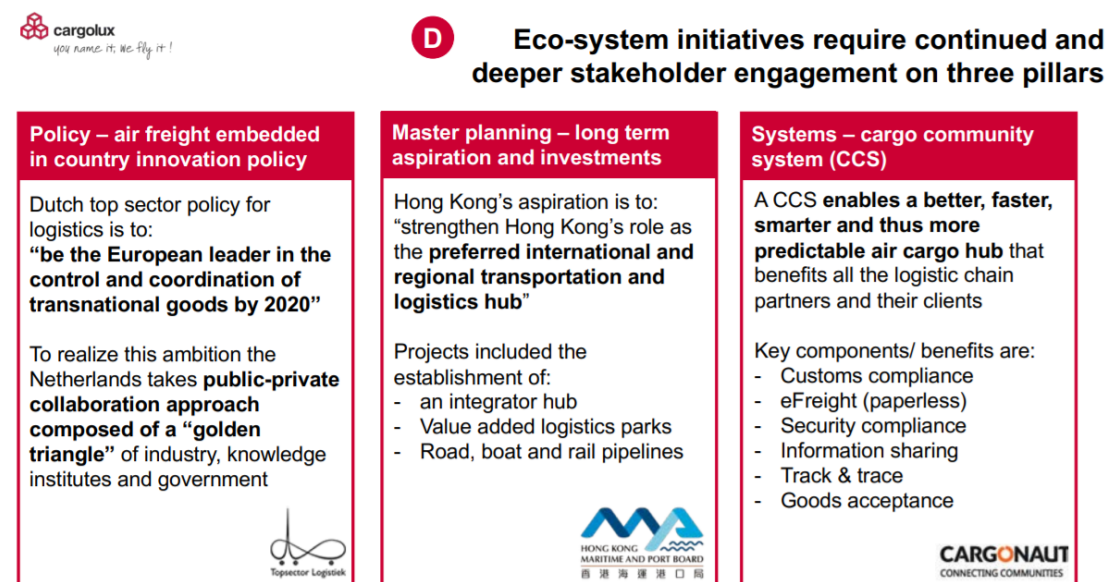


Figure 7 Ecosystem initiative requirements Source: IATA 2018



## 2.6 Australian examples

*Australia TradeCoast Region, Brisbane*



Australia TradeCoast Limited is a partnership between the Queensland State Government, Brisbane City Council (Brisbane Marketing), Brisbane Airport Corporation and the Port of Brisbane. The brand and organisational details were announced at a press conference at Brisbane Airport in May 1999. Australia TradeCoast Limited is the region's independent economic development agency committed to driving the long term development and growth of the region through marketing and promotion, attraction of new business, retention and growth of existing business and delivery of long term land use and infrastructure planning.

Australia TradeCoast is expected to release and develop 1,300 hectares (3,200 acres) of land by 2026. In 2014 there were 32 industry precincts held by the partners. Business activities within the Australia TradeCoast region include around 1,500 businesses with over 60,000 employees. The region is forecast to employ more than 110,000 people by 2026.

The second largest Queensland business precinct after Brisbane's central business district, Australia Trade Coast is targeting the following industry sectors:

- Aviation & Aerospace
- Building & Construction
- Business Services
- Food Manufacturing
- Innovative Manufacturing
- Retail
- Shipping & Marine
- Transport & Logistics.

[Australia TradeCoast](#)'s partners are investing heavily in infrastructure for the region. The partnership has invested \$1 billion and is committed to investing an additional \$5 billion in infrastructure within the region. Infrastructure investments include:

- major road upgrades
- airport and port expansion
- drainage and fill
- water infrastructure
- public and active transport
- electricity
- public amenity.

The infrastructure activities of each of Australia TradeCoast's partners are coordinated through the Infrastructure Working Group Forum. This group brings together the relevant representatives from each of Australia TradeCoast's partners to discuss common infrastructure issues that exist within the region and facilitate a coordinated response to these issues.



Western Trade Coast

<https://www.westerntrade coast.wa.gov.au/>

From the website -

The Western Trade Coast is a 3,900 hectare industrial region that has been designed as a gateway to global industry wanting to access the growing economy, secure infrastructure and skilled workforce in WA. The location, facilities and infrastructure make it the perfect option for business collaboration with China and South East Asia.

Located 30 minutes south of Perth at Cockburn Sound, the Western Trade Coast has direct links to air, sea, and road and rail networks, making it the ideal place to locate for strategic business.

The Western Trade Coast provides the opportunity for businesses to be part of WA's strong economic growth. With world-class infrastructure, export facilities and significant government partnerships, the Western Trade Coast is one of the fastest growing trade and industry regions in Australia, supplying businesses with all they need to support major operations.

The four primary estates within the Western Trade Coast are known as [Kwinana Industrial Area](#), [Latitude 32 Industry Zone](#), [Rockingham Industry Zone](#) and the [Australian Marine Complex](#).

The mix of industries provides businesses within the Western Trade Coast with direct access to customers, suppliers, end-users and services all in the one location, making it Western Australia's premier location for trade and industry.

Business activities within the Western Trade Coast region are a major contributor to the economy. The region employs over 11,000 people and generates more than \$15 billion per annum.

The region accounts for two per cent of WA's Gross State Product, contributing over a third of all value added in WA's manufacturing sector. When fully developed, Western Trade Coast is forecast to employ more than 22,000 people with a forecast value to the WA economy of \$28 billion.

As the Western Trade Coast continues to become a globally recognised industrial and port region, it will both underpin and benefit from WA's bright future.

The Western Trade Coast provides businesses with the following:

- Support infrastructure including deep-water port access, high wide load transport routes, warehousing and transport services and land access
- A strong relationship exists with community through an agreed buffer zone protecting both community and industry
- Ideal location that supports WA's oil, gas and mineral resources industry and the 1.9 million people that live in the Greater Perth Region
- A critical training ground for skills required in the resources sector
- Local content benefits from the growth of WA's oil, gas and mineral resources sectors
- Continued business growth close to \$2 billion to be injected into the region over the next 5 years to increase their capacity and efficiency
- Integrated, innovative and adaptive business environment.

## 2.7 Observations

At first glance, the key objective of these initiatives appears to be the development of property proximate to freight transport nodes for value-added logistics activities. These are likely to be large, brownfield sites proximate to the port gateways and arterials, zoned for heavy industry that are less likely to attract re-zoning for higher land use.

However, investigating each initiative, a much broader set of objectives are at play to create an outcome beyond individual site investment attraction, based on the high connectivity of the trade gateways and inland transport networks.

These objectives include –

- Trade facilitation
- Lowering logistics costs for international trade performance
- Employment creation
- Smart cities enactment, involving digitisation of logistics processes
- Agglomeration economies
- Attraction of talent to a region
- Creating a positive business environment
- Promotion of the region and
- Optimisation of transport networks.

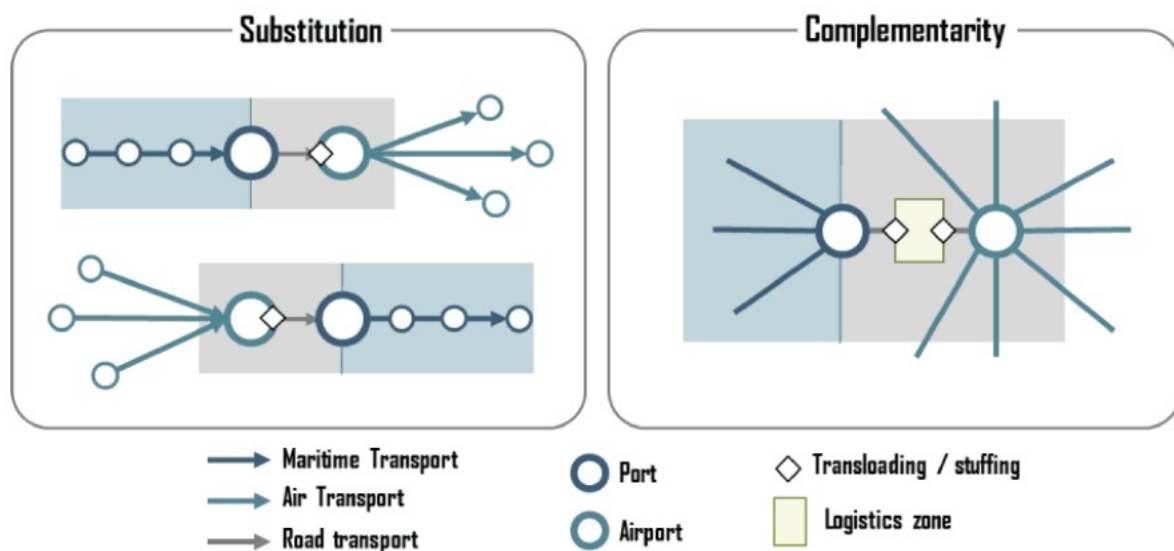
Another key feature of the global trade ecosystem models is the strong support and partnering of the state and local governments, dedicating resources from their industry and planning programs and contributing funds and advocacy for the infrastructure (transport, communications, and regulation) required to facilitate the trade role.

### 3. Complementary supply chains

The concept of complementary supply chains is based on the following principles –

- Moving beyond the time and cost coefficient as being the only determinants of which international gateways will be used
- Building capacities and offering companies a suite of supply chain services additional to international port access
- Enabling multimodal choices to be made to best suit the needs of shippers
- Focusing efforts on complementing the existing trades in the region.

This concept of complementarity is summarised below.



Integration between Port and Airport Terminals

Figure 8 Integration between port and airport terminals Source: Rodrigue J, *The Geography of Transport Systems* 2017

In researching the potential for complementary trades and functions, we have examined *existing* as well as *new* trades through both the airport and port. The potential of each entity to cooperate to expand or better service that trade has been considered in addition to the potential associated with containerised cargo or new facilities for non-containerised product.

The methodology used is largely desktop research, supplemented by a number of confidential shipper and logistics service provider interviews. Our focus has not been on ascertaining propensity to shift or augment trade through Newcastle’s gateways but to understand the requirements of different trades in terms of logistics and business facilities and services.

## 3.1 New logistics models

### eCommerce

Research from Roy Morgan shows that over the year to March 2018, 9.46 million Australians 14+ (46.8%) purchased something online in an average four week period, an increase of 590,000 in just 12 months. It also represents an increase of 2.3 million since 2014.<sup>9</sup> With an estimated 500,000 people aged over 14 in the Hunter RDA region this would equate to 6 million on-line purchase deliveries per annum. An estimated half of purchases are from Australian companies, while the remainder is from a mix of Australian and overseas sources. One in five purchases are internationally sourced.

B2B eCommerce is a market that is twice the size of the B2C market. It is growing faster and permeating all aspects of business transactions, as buyers expect the convenience and experience of B2C transactions. Mobile eCommerce is also strongly influencing the B2B environment as suppliers and customers gain greater visibility of inventory and account history and can order and track their product from suppliers. Forbes estimates that over 40 percent of buyers are using mobile devices for B2B activity.<sup>10</sup> eCommerce relies on speed and visibility as fundamental to business activity.

eCommerce has implications for the aspirations of Newcastle to service diversified trade and to offer the logistical and business support for the region's growing economy.

eCommerce logistics requirements are distinct from retail and manufacturing supply chains in that they require levels of velocity beyond a distribution or replenishment model typical of these existing arrangements.

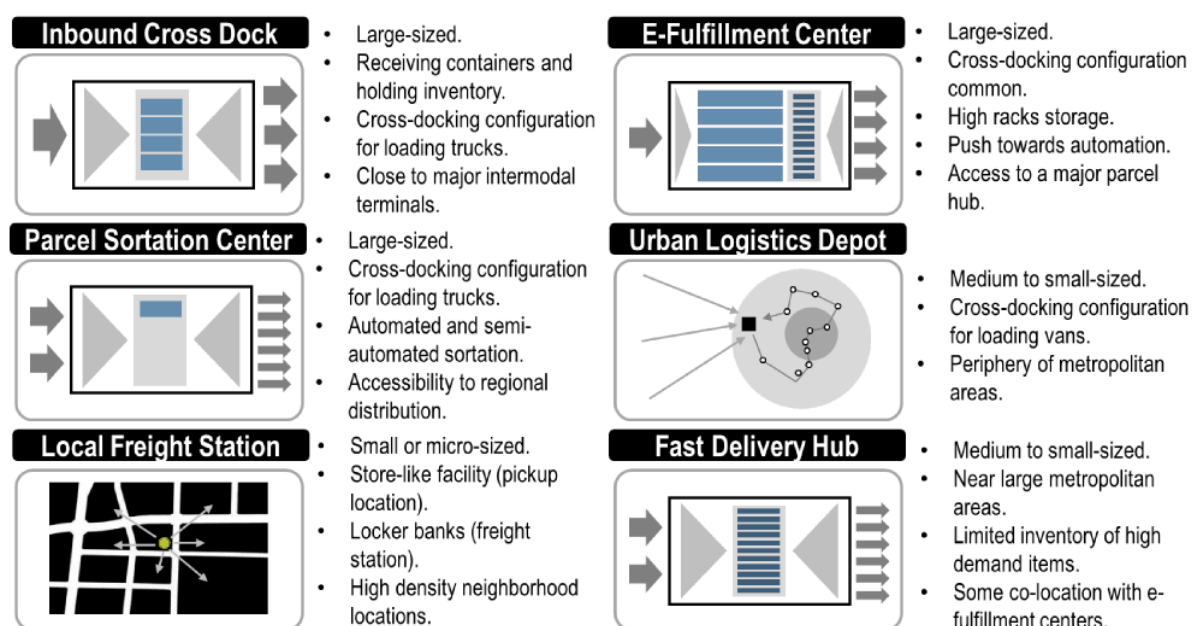


Figure 9 eCommerce logistics requirements Source: Rodrigues 2017

<sup>9</sup> Roy Morgan, June 2018 "Who's shopping online? Nearly 9.5 million Australians"

<http://www.roymorgan.com/findings/7612-whos-shopping-online-nearly-9point5-million-australians-201806080733>

<sup>10</sup> <https://www.forbes.com/sites/theyec/2018/02/15/b2b-e-commerce-trends-to-take-notice-of-in-2018/#7eae18af7339>

This model differs significantly from the typical IMEX or domestic distribution model of logistics, as it requires speedy sortation at item level and grouping into destination locales. The network of logistics service providers goes beyond a traditional distribution centre model to penetrate to near-customer delivery nodes.

Investment in facilities near airport, sea port and road arterials is critical to the ecommerce model of logistics. In other cities, large format parcel post sortation facilities have emerged, for example the Ipswich Redbank Motorway Estate, Sydney's Oakdale Industrial Estate at Eastern Creek, TOLL sortation centre at Tullamarine in Melbourne. These facilities are highly automated and handle item level freight. These facilities can process between 20,000 and 40,000 items per hour, or between 100 and 135 million parcels per year.

These facilities create a network of road transport suppliers and parcel delivery digitally-enabled businesses for last mile service to end customers or local pick-up sites e.g. post offices or retail outlets.

#### *eCommerce exports*

Australian businesses are finding an international market for their products via on-line marketplaces e.g. Alibaba, JD.com. Shipments may require consolidation, being less than a container load (LCL). A trading ecosystem offering consolidation of cargoes can assist new exporters manage shipping costs.

#### *Made to Order logistics*

Made to Order (production based on actual sales) and Assembled to Order (customisation to specification), as opposed to Made to Stock (production based on sales forecasts), is a growing trend in logistics. This model allows for highly customised, high value products to be produced and shipped in single item or small batch consignments, favouring airfreight as a mode.

Made to Order reduces waste and inventory storage costs but relies heavily on the effectiveness of the transport legs of the supply chain for shipping orders. It is particularly used for fashion and small, bespoke production.

## 3.2 Assessment of potential trades

Trade is influenced by Free Trade Agreements and trade liberalisation. Figure 9 indicates the impact of trade liberalisation over a 30 year period. Further FTAs have been concluded since 2016, particularly the Australia-Indonesia FTA (IA-CEPA) signed on 4 March 2019.<sup>11</sup>

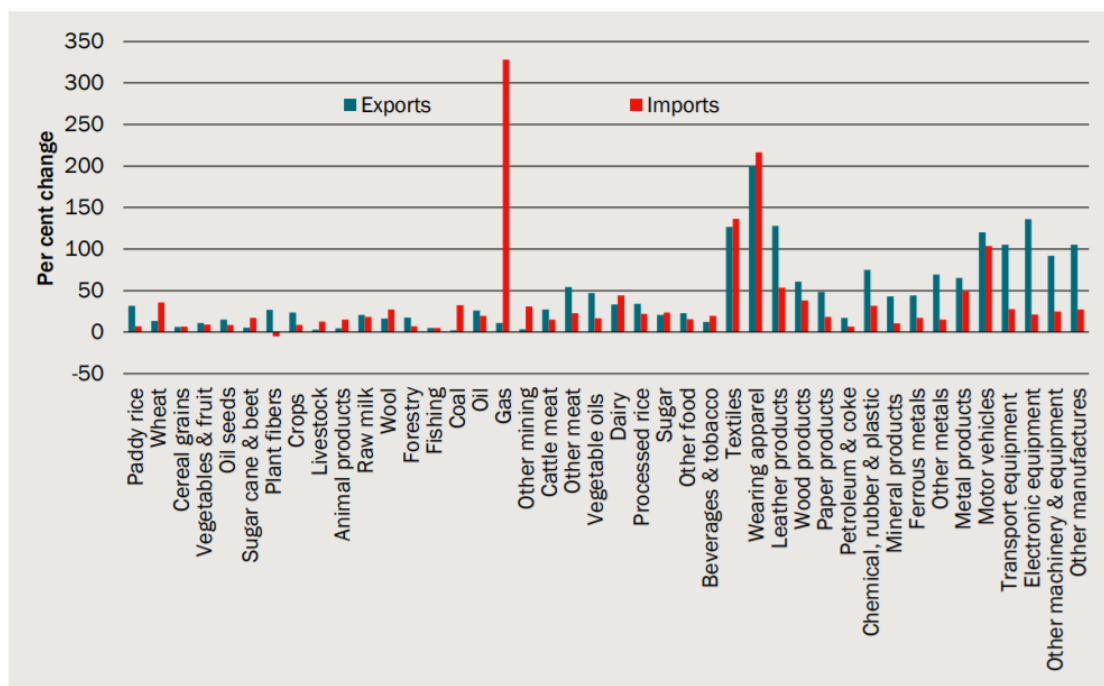


Figure 10 Impact of trade liberalisation 1986 - 2016 Source: Centre for International Economics, DFAT 2017

The research to date has investigated the potential of 25 existing or potential trades that may be amenable to air or sea freight handling through international Newcastle gateway ports. The following summary of these trades indicates potential for growth, new opportunities for complementary trade and some trades that are not expected to result in significant international freight opportunities.

By way of context, in 2018 Australian top 10 **imports** were –

1. Machinery including computers: US\$31.9 billion (14% of total imports)
2. Mineral fuels including oil: \$30.3 billion (13.3%)
3. Vehicles: \$30.1 billion (13.2%)
4. Electrical machinery, equipment: \$25.6 billion (11.3%)
5. Optical, technical, medical apparatus: \$8.3 billion (3.7%)
6. Pharmaceuticals: \$8.2 billion (3.6%)
7. Gems, precious metals: \$6.6 billion (2.9%)
8. Plastics, plastic articles: \$6.4 billion (2.8%)

<sup>11</sup> In addition to reducing non-tariff barriers to trade and simplifying paperwork, IA-CEPA will allow 99% of Australia's goods exports to enter Indonesia duty free or with significantly improved preferential arrangements. All Indonesia's goods exports will enter Australia duty free. (DFAT)

In 2018, the Australian top 10 **exports** were –

1	Coal, solid fuels made from coal	\$47 billion	+16%
2	Iron ores, concentrates	\$46.7 billion	-5.2%
3	Petroleum gases	\$32.4 billion	+58.3%
4	Gold (unwrought)	\$14.2 billion	+8.5%
5	Aluminium oxide/hydroxide	\$7.7 billion	+33.6%
6	Crude oil	\$5.9 billion	+46.8%
7	Copper ores, concentrates	\$4.5 billion	+23.3%
8	Frozen beef	\$4 billion	+14.1%
9	Aluminium (cast)	\$3.2 billion	+24%
10	Wheat	\$3.1 billion	-33.4% <sup>12</sup>

## Airfreight cargoes

Cargoes that may require domestic or international airfreight include –

- Consumer electronics
- Computers and computer components
- Telecommunications equipment
- Perishables—flowers, fruit, vegetables, and seafood
- Economically perishable materials e.g. newspapers
- Aerospace—equipment and parts
- Automotive—equipment and parts
- Documents
- Banking materials
- Pharmaceuticals
- Pharmaceuticals—active product ingredients
- Jewellery
- Medical diagnostic equipment
- Medical devices
- Textiles—garments, apparel, shoes, and textile parts.

### *Biomedical devices*

The medical device and diagnostic industry in Australia has developed at a rapid rate, with strong growth in digital health technologies and devices using advanced materials, robotics, imaging, IT, design and adaptive diagnostic technology platforms. The industry is also evolving with the convergence of technology and skills from aligned innovation sectors, such as ICT, medical research and advanced materials.<sup>13</sup> In the last 20 years, Australia has seen a 25% decline in annual mortality, 25% decline in disability rates, 56% reduction in hospital bed days and an increase in life expectancy by 4.6 years, which can all be attributed to medical technology.<sup>14</sup>

There is evident research and innovation capability in medical devices and technology in the region. However, manufacturing of medical devices is dominated by a small number of large, global scale companies with an 80% market share, so export volumes may be limited. The ageing Australian

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<sup>12</sup> Trade Map, International Trade Centre <https://www.trademap.org/> note: US dollars

<sup>13</sup> Austrade, 2016, *Medical Devices and Diagnostics Industry Capability Report*, <file:///D:/UserData/erose/Downloads/Medical-Devices-and-Diagnostics-Industry-Capability-Report.pdf>

<sup>14</sup> Medical Technology Association of Australia <https://www.mtaa.org.au/industry-statistics>



population offers potential for growth in this trade for Newcastle Airport and the Port of Newcastle as containerised sea freight and underbelly airfreight import trade.

#### *Vaccines and pharmaceuticals*

The market includes controlled medicines and substances; medicinals, botanicals, and dietary supplements; pharmaceutical preparations; in vitro diagnostics; and veterinary drugs. Australia exports largely to China and New Zealand, and to a lesser extent to the United States, Japan and Turkey. Imports come from Ireland, Germany, United States, Switzerland and the UK.

Pharmaceutical are the sixth most valuable import trade for Australia, with Australia importing \$2.3 billion of blood fractions (including antisera) in 2018, a rise of 17.5% on the previous year.

Pharmaceuticals and vaccines are shipped under strict conditions and usually through a specialised international freight forwarder.

Increased aged population and vaccinations are driving demand. Newcastle is well-connected in medical innovation and is servicing a large regional health care system and strong equine industry. There is ample scope to further investigate volumes of these products currently being consumed and distributed in the region and to anticipate growth, based on the ability of international forwarders to supervise these supply chains.

#### *Aquaculture*

According to RDA Northern Rivers *“With increasing pressure on wild fish stocks, aquaculture is a growing industry in NSW. More than 1,500 full and part time jobs, predominantly in regional NSW, with approximately 3,000 further jobs caused by the flow on effect. Aquaculture product accounts for over 30% of Australian fisheries gross value and has been the fastest growing primary industry in Australia with a growth of over 8% per year. In Northern NSW, the predominant aquaculture types include: Oysters, prawns and fingerling hatcheries. By economic value, oyster production is the main aquaculture activity in NSW. Oyster production in northern NSW occurs in the Tweed, Brunswick, Richmond & Clarence Rivers. Hatcheries that produce fingerlings for aquaculture farms, stocking of farm dams and aquarium fish are also located throughout NSW.”*

Aquaculture has been focused largely on supplying the domestic market, with fisheries finding difficulty competing with SE Asian imported product. Australian aquaculture exports are expected to be for premium Northern Asia markets (e.g. hotel food service). There is certainly scope for growth in this market for chilled or frozen product.

Distance from processing to port is key to time-sensitive chilled product. The other factor is volume, and wholesalers are the consolidators of product for export and domestic markets. The Northern Rivers product (e.g. Searle Aquaculture mulloway and oysters) is freight-favoured to the ports of Brisbane, where existing infrastructure and market consolidators and international freight forwarders are available. Newcastle is twice the distance for road transport.

If aquaculture operations expand in the Hunter and Central Coast and attract a wholesale export consolidator, both the air and sea port may benefit. Attraction of aquaculture investment has not been at a scale to deliver export volumes to date.

#### *Cut flowers*

Flower growers, a number specialising in native cut flowers, are located in northern coastal NSW and in the Central West. Demand is strong and there is presently a shortage of growers, with volumes having increased fivefold since 2010. The industry is valued at \$350 million. Flowers Australia indicates that the export market is a better option for growers attracting up to ten times the value for blooms as compared with domestic sales.

Temperature control in storage and transport is critical to shelf life. The supply chain from the grower to exporter or direct to wholesale importer is based on pre-cooling and packaging, temperature-

controlled transport, holding and delivery to international air terminal. Japan has been a major market for cut flowers from Australia. Native cut flowers are an opportunity for Newcastle Airport and potentially for the Upper Hunter region.

#### *Native foods export*

The key issue for native food exports is market access and the industry is working to overcome this barrier.<sup>15</sup> Food manufacturers using native foods such as the Wild Hibiscus Flower Company <https://www.bushtuckershop.com/> are growing their export businesses internationally using a range of native plant ingredients. Most are focused on tropical zone production to source these native ingredients.

### **Combination air and sea freight cargoes**

#### *Defence manufacturing and technology*

The NSW Government in 2018 articulated its view of the role of the regions in supporting advanced manufacturing and exploiting strengths in Defence supply, both domestically and internationally, in its NSW Advanced Manufacturing Industry Development Strategy.<sup>16</sup> The NSW Government aspires to develop an advanced manufacturing capability in Western Sydney. It anticipates the Hunter Region will advance manufacturing in Defence systems and equipment, aircraft maintenance, shipbuilding and Defence products. Figure 10 describes the plan to cover Defence requirements in NSW.

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<sup>15</sup> Australian Native Food & Botanicals

[https://anfab.org.au/main.asp?\\_=Developing%20market%20access%20for%20Australian%20native%20foods](https://anfab.org.au/main.asp?_=Developing%20market%20access%20for%20Australian%20native%20foods)

<sup>16</sup> [https://www.industry.nsw.gov.au/\\_data/assets/pdf\\_file/0007/159388/NSW-advanced-manufacturing-industry-development-strategy.pdf](https://www.industry.nsw.gov.au/_data/assets/pdf_file/0007/159388/NSW-advanced-manufacturing-industry-development-strategy.pdf)

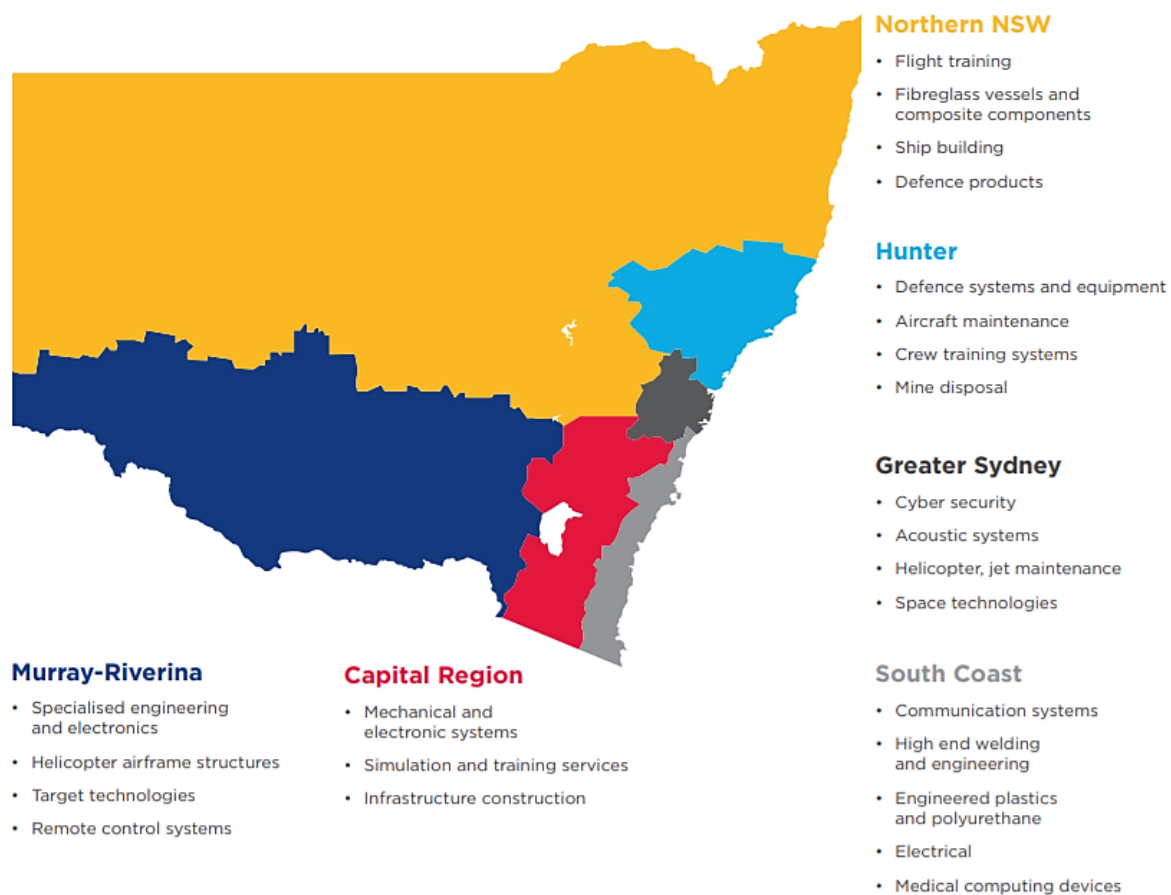


Figure 11 Regional NSW Defence manufacturing activity Source: NSW Department of Industry 2018

Williamtown Aerospace Centre adjoins Newcastle Airport and the Williamtown RAAF base. It provides leaseholds for companies in aerospace, defence, technology, aviation and related business. All buildings have been designed and built to Defence zone level security requirements and have access to Defence Secure IT Networks (subject to Defence approval).

### Defence Logistics

Twelve sites nationally are engaged in the Defence Explosive Ordnance Logistics Reform Program, including RAAF Williamtown and Myambat in the Upper Hunter. These improvements cover bulk warehousing storage, processing facilities, storage for non-explosive dangerous goods and associated roads and administration facilities, but do not include ports infrastructure remediation such as docks and associated infrastructure. Existing storage facilities are being upgraded.

No Defence Materiel major logistics hubs are allocated in the Hunter region.

### Industrial supplies and safety equipment

These products are typically a mix of import and domestic supply, coordinated through a centralised distribution centre for on-line purchases and via a regional replenishment model for retail outlets. The region has a proliferation of suppliers and may benefit from shared regional warehousing located near the M1. Demand is expected to remain strong and expand into gear for major renewable energy plants and further large infrastructure projects.

Emergency supplies and specialised products will also favour airfreight, domestic and international. Export volumes generated by regional manufacturers of equipment are at present unclear.

### *Meat*

NSW produces over 65% of the 5.8 million goats available for meat processing in Australia, with key production regions freight-favoured to Newcastle and rangelands with 500,000 goats located in western and central NSW. Only 15% of goat meat from NSW is processed in NSW. The remainder is processed in Queensland and Victoria. If the region could harness this supply chain through its existing meat processors or through a specialised goat processing plant, it could achieve a significant trade in a high demand product in SE Asia.

The Central West, Western NSW and Northern Tablelands are wool and sheep meat producing regions.

The Indonesia Australia Comprehensive Partnership Agreement (IA-CEPA) was signed on 4 March 2019 and is expected to benefit the growth of Australian meat products to Indonesia from 2020.

There are 3-4 meat processors accredited for export in the Hunter and surrounding regions. At least one is exporting chilled product, which sells for premium prices in global markets. Supermarket shelf ready airfreight of thermoform packaged lamb and beef is a growing market. This product is favoured to air freight.

Cold chain management is critical to this product. A mix of temperature controlled short term storage is required for this product, with frozen meat requiring storage at -18 to -25c and chilled product usually +4c (offal at -1c). The majority of product is frozen and shipped by refrigerated sea freight containers. Reefer slots at the container terminal enable export product to be held prior to loading.

Tamworth airport has expressed an intention to become a meat export airport, in response to concern that regional transport infrastructure needs to facilitate market access.<sup>17</sup> In the longer term this could become a competitor for northern NSW airfreight meat product volumes.

### *Manufacturing parts*

Advanced manufacturing supply chains are global in reach with procurement and sales requiring logistical support. A 2015 Hunter Region study on innovation in manufacturing identified the need for regional companies to diversify markets for export to buffer dependency on single domestic contract supply. A number of initiatives have commenced to support the ecosystem of innovation in manufacturing, to add smart technologies, automate processes and generate new applications for industrial and Defence manufactures.

### *Wine*

In 2016-17 the combined Hunter, Mid North Coast and New England crush was 3,724 tonnes. The wine exported from the region is focused on high value, premium product. While the regions in northern NSW do not produce the volume of the Riverina, as shown in Figure 11, the northern wines tend to be premium class >\$10/bottle wholesale. They are also associated with agri-tourism ventures, where visits to vineyards result in small consignments amenable to airfreight.

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<sup>17</sup> Ferguson, D 2018, *Advancing Australian Agriculture in Partnership with Asia*  
<http://www.agriculture.gov.au/abares/outlook/Documents/presentations-2018/doug-ferguson.pdf>

## Regional Crush 2016-17 (tonnes)

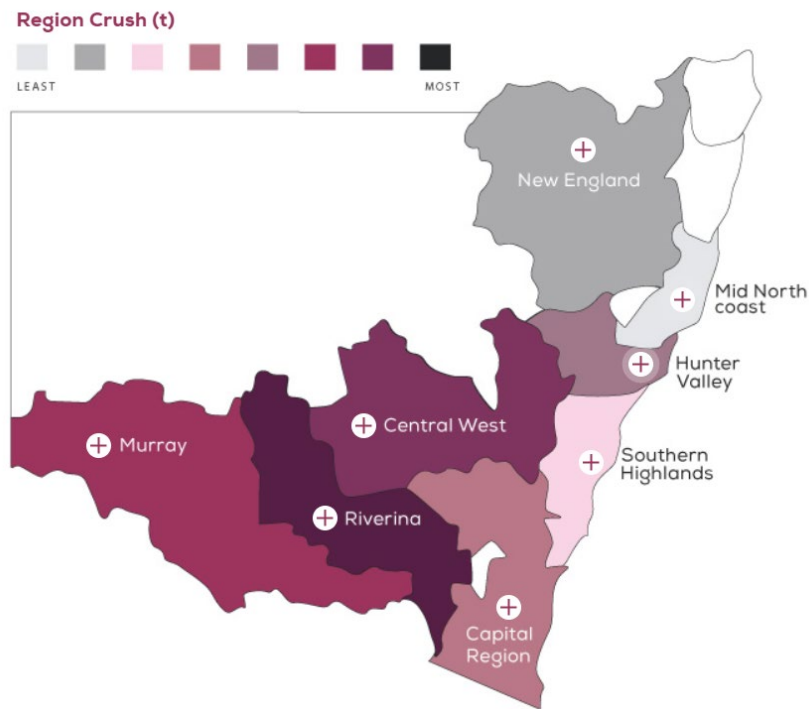


Figure 12 Wine production regions NSW Source: NSW Department of Primary Industries

### Live animals

Cattle, goats and sheep are currently being airfreighted to destinations across Asia to replenish breeding stocks. In January 2019 an estimated 3722 livestock were airfreighted for this purpose.

Livestock require specific terminal facilities and they need to comply with Australian Biosecurity requirements on and off-port. A detailed business case for livestock trade is advised to ascertain the return on investment of these facilities in both ports, however this trade is likely to be amendable to sharing of livestock staging facilities. Given the presence of a strong equine industry in the Region, there is merit in further exploration of livestock trade through the Newcastle gateways.

### Processed foods

The Upper Hunter Economic Diversification Action Plan (2017) has identified food processing as a potential development for the Upper Hunter region, pending the closure of two power plants and future diversification of economic activity. There are proposals to encourage food manufacturers from Sydney to relocate on the basis of lower operating and real estate costs, promoting the uptake of brownfield industrial sites.

#### UPPER HUNTER OPPORTUNITIES

- **Expansion of existing industries:** dairy, beef, cereals, oil seeds, wine and equine
- **Emerging industries:** industrial hemp and protected cropping
- **New industries:** processing plants – dairy, pork, poultry and hemp

Agribusiness seen as suited to these locales include oil seeds; industrial hemp; protected cropping (for vegetables, herbs and flowers); and poultry (farms and processing plants).

Protected cropping is growing rapidly and now captures 20% of the value of vegetable and cut flower production in Australia.<sup>18</sup> Water infrastructure is critical to the success of this industry, which is well aligned to the industrial technology capabilities of the Hunter region. The industry is indeed very water efficient and often captures and generates its own power and water (for example, see Sundrop Farms desalination and solar sourcing).

Protected cropping requires facilities to blast chill and pack produce to reduce core temperature prior to distribution to wholesalers or for packing for export. Smaller operators would benefit from shared coolstores and transport brokerage to reduce distribution costs. In establishing manufacturing sites, consideration of storage for longer shelf life products in the Upper Hunter or in Newcastle's industrial estates will be a key consideration. Third party logistics-operated multi-client warehousing will be vital to enabling companies to outsource their logistics and focus on growing markets.

The Central Coast has attracted a number of food processors and their outputs for exports are likely to be contestable, given the congestion and need to access sites such as Moorebank for transit to Port Botany container terminals. While a number of food manufacturers and processors store on site and load FCL consignments, others will require consolidation and the services of a 3PL storage facility. A key issue for consideration is the availability of 3PL food storage facilities within 30 minutes of the Port of Newcastle container terminal. These storage facilities tend to be multi-user, multi-temperature 3PL facilities controlled by integrated logistics service providers.

### Industrial hemp

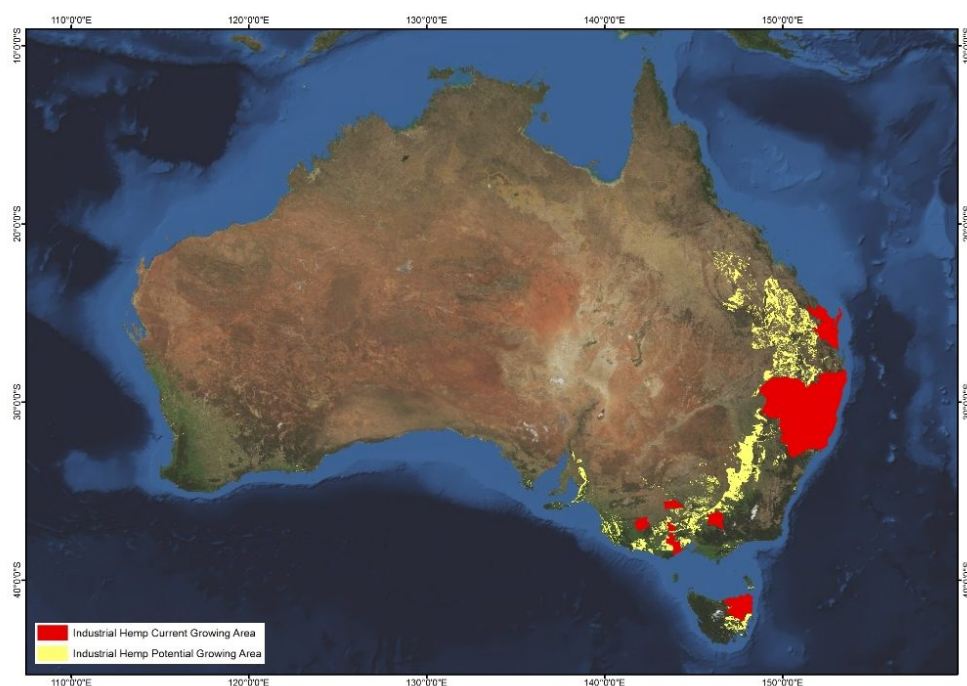


Figure 13 Current and potential hemp growing areas Source: AgriFutures Australia Industrial Hemp<sup>19</sup>

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<sup>18</sup> Protected Cropping Australia [http://www.protectedcroppingaustralia.com/?page\\_id=94](http://www.protectedcroppingaustralia.com/?page_id=94)

<sup>19</sup> AgriFutures Australia Industrial Hemp <https://www.agrifutures.com.au/farm-diversity/industrial-hemp/>

Industrial hemp growing has been mooted as a potential product diversification for the Upper Hunter. According to AgriFutures Australia –

*For plant fibre cropping to be viable, the proximity to regional processing is paramount, enabling growers to sell to the processing facility and the processor to market substantial volumes of fibre to both global and local markets. These markets are primarily major manufacturing industries, requiring large supply capacity rather than entry-level niche production.*

*There are a number of companies developing regional processing facilities for processing stem and seed. Once these facilities are in place, growers in these areas will have a better idea of the potential returns on hemp crops grown. There is a processing facility that can hull and cold press seed for food but as hemp seed food is not yet approved in Australia the market is limited.*

*There is also a company that has a processing plant in the Hunter Valley, producing bales of garden mulch and horse bedding in small bales (similar to how sugar cane mulch is sold through hardware stores).<sup>20</sup>*

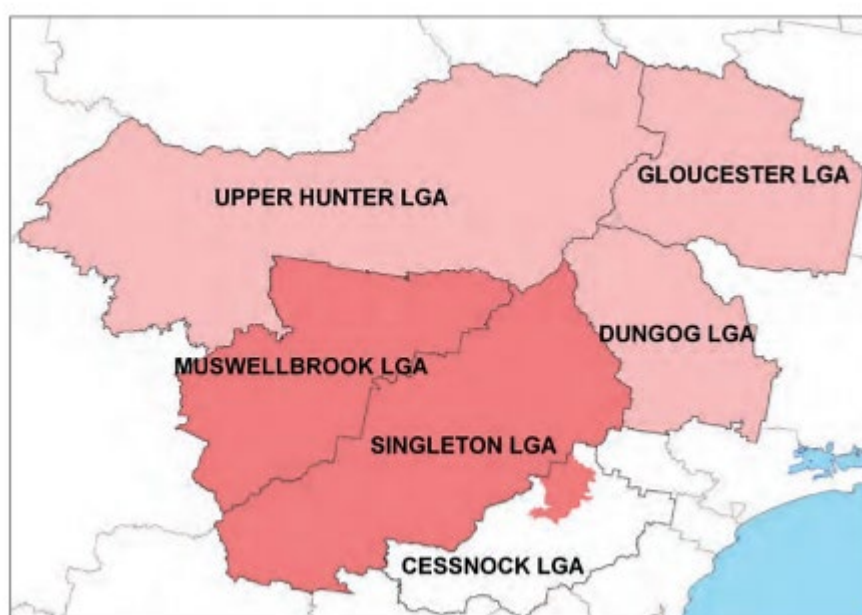


Figure 14 Upper Hunter hay and hemp production areas Source: NSW Department of Primary Industries

According to the NSW Department of Primary Industries, in 2011 the Upper Hunter grew 87% of licensed hemp production.<sup>21</sup> Smaller land holdings appear to be able to achieve profitability, although the industry for hemp seed oil manufacturing may favour large landholdings. The commercial phase of production in Australia is in its early stages, so strategic decisions regarding value-adding to production will favour early responders. Advice from incumbent business in hemp production in the Upper Hunter is to focus on food products as opposed to medicinal cannabis.

The hemp production industry is advanced in countries without restrictions on cultivation, so the industry is likely to attract international investors with experience.

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<sup>20</sup> Industrial Hemp <https://www.agrifutures.com.au/farm-diversity/industrial-hemp/>

<sup>21</sup> Upper Hunter Region Hay and Hemp Profile 2013 NSW DPI  
[https://www.dpi.nsw.gov.au/\\_\\_data/assets/pdf\\_file/0004/471028/hay-hemp-profile-upper-hunter-region.pdf](https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0004/471028/hay-hemp-profile-upper-hunter-region.pdf)

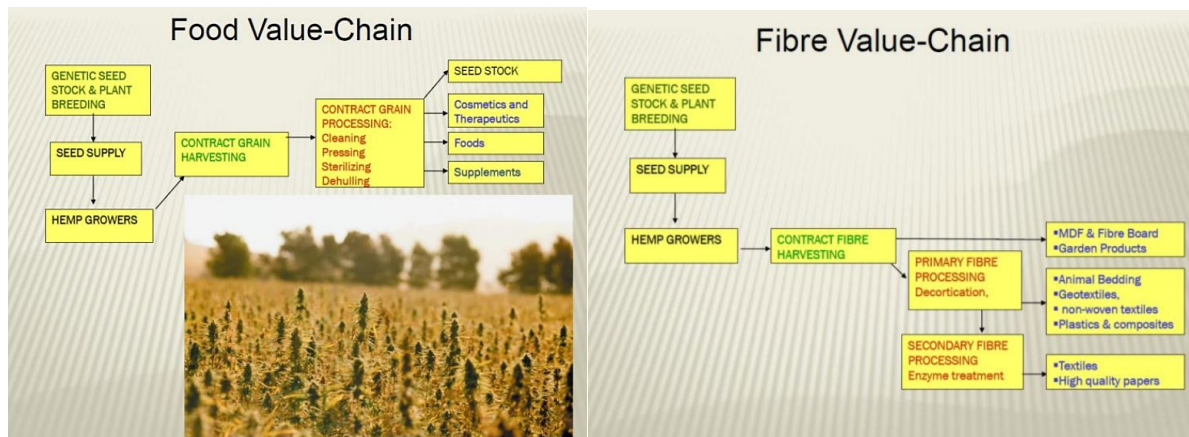


Figure 15 Hemp value chain for foods and fibre Source: Warner P, Ecofibre Australia 2018

There is potential for this product to advance in growing and processing in the region. Product may be in the form of livestock feed (containerised seafreight) or in food products (air and sea freight). However, given the shortage of industrial hemp in Australia for food and construction products, the focus may be on supplying the domestic rather than export markets.

### Dairy

Strong global demand for dairy products is pitched against low farmgate prices and high input costs for Australian producers.

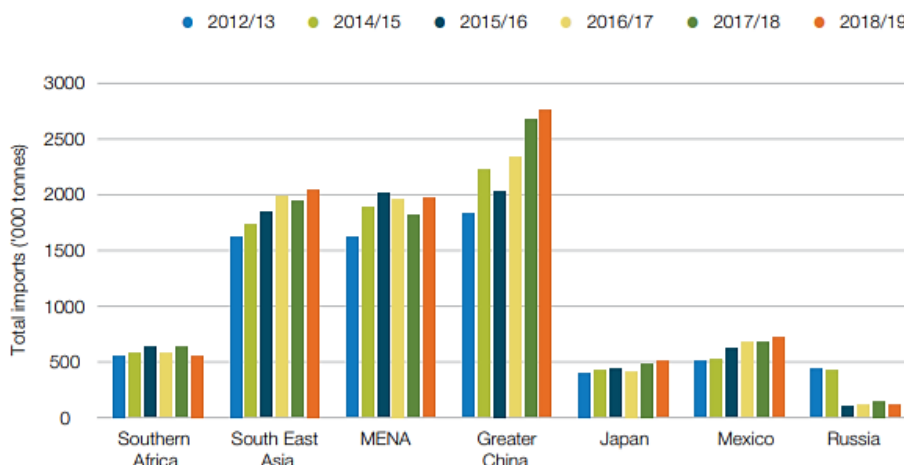


Figure 16 Growth in global dairy demand Source: Dairy Australia 2019

Milk production in NSW is largely dedicated to domestic fresh milk consumption. Setting aside the impact of drought conditions on State production in recent years and the subsequent loss of farming enterprises, a NSW assessment of Growing the Dairy Industry (2014) indicated that a sea change was required to shift production to larger scale, vertically integrated operations and a focus on export sales. There is undoubtedly a growing market for dairy (Dairy Australia points to Indonesia as an emerging market) but the suppliers in northern NSW are not at a scale to deliver supply certainty. An example of a successful model is Richmond Dairies located in Casino, which exports freeze dried dairy ingredients, sourcing milk from far northern NSW and Southern QLD. This product is shipped through the Port of Brisbane. Figure 15 indicates the global demand for Australian dairy by key markets.

There may be opportunities for airfreighted premium dairy product such as exports to SE Asia and this trade could be a by-product of agri-tourism and artisanal production activity stimulated by international passenger services at Newcastle Airport. Cold chain management facilities at the Airport would be required. If a shipment is to be sea freighted, a consolidator is likely to be required, as supply



may be limited from small scale production. In this case, temperature controlled storage for LCL (less than container load) shippers will be required.

### Passenger Fly-Cruise

Fly-cruise packages relate to the necessity of connecting to a cruise that departs in one location and ends in another. It enables flexibility for passengers to take part in a cruise for a shorter period, or to connect to a cruise vessel at any port. Typically it involves wholesaling of fly-cruise, transfers and overnight accommodation between the flight and cruise legs. An example might be a flight from Newcastle to Auckland to join a New Zealand cruise experience, or an inbound international tourist wishing to join an Australian cruise.

Fly-cruise passenger packages for domestic and international tourists using both ports will involve both ports providing the facilities and services required. The new permanent cruise shipping terminal at Channel Berth combined with runway strengthening at Williamtown will facilitate this opportunity in terms of prerequisite infrastructures.

The opportunity to create fly-cruise tourist experiences for wholesaling will require tourism industry participants, both ports, local economic development leaders working with both ports to facilitate the passenger logistics.

## Sea freight cargoes

The following trades represent a range of seaborne cargoes.

### Project Cargoes

Infrastructure Australia has identified \$58 billion of priority projects in a pipeline extending beyond the coming decade, across telecommunications, energy, water and transport network infrastructure. Infrastructure NSW in *Building Momentum: State Infrastructure Strategy 2018-2038*, has identified a significant infrastructure program for NSW in upcoming years, including plans to improve international gateways and strengthen growing regions. It can be expected that the Hunter Region, northern NSW and Sydney will utilise the Port of Newcastle’s facilities for a number of import materials and structures for construction of these projects.

<p><b>NSW</b> Gateway to Australia and to international markets</p>	<ul style="list-style-type: none"> <li>• Improve access to NSW’s international gateways.</li> <li>• Facilitate investment in all levels of high quality digital infrastructure.</li> <li>• Facilitate investment in secure, reliable, affordable low emissions, energy efficient infrastructure.</li> </ul>
<p><b>Regional NSW</b> Strengthening growing regions with new jobs</p>	<ul style="list-style-type: none"> <li>• Improve east-west connections to markets and access to international gateways.</li> <li>• Provide connections to and from Inland Rail.</li> <li>• Ensure water supply and wastewater treatment to enable industry and population growth.</li> <li>• Provide health infrastructure upgrades to align with settlement patterns and population.</li> <li>• Ensure education infrastructure and technology are comparable to that in Greater Sydney.</li> </ul>

*The Port of Newcastle supports the growth of Sydney, receiving project cargo imports such as trains, tunnel boring machines and construction materials for CBD projects, and it can do much more in this area. The future growth in project cargo is likely to be influenced by several factors: the changing face of the local/regional economy, including the opening of a high- tech naval shipyard; and accommodating the movement of potential project cargo from other areas due to the rising congestion in the Greater Sydney Metropolitan area. Project cargoes imported into/exported out of Australia in general include oil field equipment, refinery equipment, pipes for mining industry, power generation, transformer, windmills and steel structures.* <sup>22</sup>

<sup>22</sup> <https://shippingaustralia.com.au/wp-content/uploads/2012/03/Break-Bulk-Study-Final.pdf>

Project cargo imports such as manufacturing, mining, agricultural and renewable energy-related machinery and equipment will be influenced by the investment outlook for those industries. In this context, it is noteworthy to highlight the current and potential trade in project cargo related to the renewable energy sector in NSW. Wind energy is a gradually expanding as a renewable energy source in NSW and trade in wind energy-related project cargo is an activity in which the Port of Newcastle is actively involved.

NSW has a large range of potential sites with excellent wind speeds – generally better than European wind farms. Average annual wind speeds of around seven metres/second are currently considered suitable for low-cost wind power generation. However, improvements in wind turbine technology mean that increasingly wind farms may be established in areas with lower wind speeds. There are a significant number of sites in NSW with estimated speeds of seven metres/second or greater at 80 metres, which is the hub height of modern wind turbines.

Wind energy analysts are forecasting substantial growth in NSW wind farms. This is reflected in the number of wind farms approved or under assessment by the NSW Department of Planning and Environment. If all wind farms approved or under assessment are built, renewable energy consumption in NSW would increase from around 6% to 19% based on the 2008 total electricity consumption in NSW. <http://masg.org.au/wp-content/uploads/2008/06/Wind-Energy-In-NSW-Myths-and-Facts.pdf>

Because of its long coastline and stable continental shelf, NSW has large potential for offshore wind power generation. Currently no plans are in place to develop offshore wind projects. NSW has a strong pipeline of proposed new wind energy projects. As of August 2018, there are over 800 megawatts of wind generation under construction. These projects will almost double the State's total wind energy capacity (see <https://energy.nsw.gov.au/renewables/renewable-generation/wind-energy-nsw#-the-future-of-wind-energy-in-nsw> . Seventy wind turbines were shipped to Newcastle from China between October 2016 and April 2017 and unloaded at the Port's Mayfield precinct. The turbines were being progressively transported around 500km from a storage area at the Port to wind farm sites such as the White Rock Wind Farm near Glen Innes in the New England Tablelands.

Recognising an opportunity to partner and innovate, Port of Newcastle has driven a collaborative process with key logistics service providers, including freight forwarders, stevedore and heavy haulage transport companies to deliver efficiencies and cost savings for the wind turbine cargo owners. Port of Newcastle has invested in reconfiguring the Port's internal roads to accommodate these oversized loads. The Port road network is now well positioned to receive and handle similar size cargo in the future. Storage of the wind turbines on Port land near the berth allows technicians to prepare the turbines for road transport as the project site is ready to receive them. The Port of Newcastle's proximity to the relevant wind farm sites and the ability to store the cargo for after-hours transport when roads were quiet has been noteworthy.

These project cargo-related activities consolidate Port of Newcastle's position as the port of choice, with demonstrated capabilities for wind turbine imports servicing the multiple wind farm developments located across the State. Recent wind farm related project trades demonstrate Port of Newcastle's capability to import large and heavy cargoes for developments happening around New South Wales. With 200 hectares of vacant portside land and a shipping channel that is currently only 50 per cent utilised, the Port is well placed to support more wind farm, property, rail, and road projects across northern and western New South Wales.<sup>23</sup>

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<sup>23</sup> <https://www.portofnewcastle.com.au/General/CASE-STUDY---Wind-Turbine-Imports.aspx>

Heavy lift cargo operations have the flexibility to occur at Carrington and Mayfield precincts at the Port of Newcastle. Both locations are sited in close proximity to large parcels of portside land, with short term and long term storage of varying sizes adjacent to berths. In the Carrington precinct, there are direct rail to ship connections to and from the main rail line including road access to the heavy vehicle network. In Mayfield, there is road access to the heavy vehicle network and the upgraded internal roads can handle long and oversized trucks. The berth is adjacent to an approximately 12 ha long term storage area.<sup>24</sup>

### *Prefabricated buildings*

Prefabricated buildings make up under 5% of construction in Australia, as opposed to 70% in Sweden. Demand for prefabricated buildings is expected to rise due to the speed of construction, affordability and environmental sustainability.

China, USA, Netherlands, Germany and Czech Republic are the main exporters of prefabricated buildings.

Modular prefabricated construction is now moving into all forms of construction, including high rise (e.g. International House Sydney) rail stations (Victoria) and commercial properties e.g. McDonalds fast food restaurants).

In Australia, the growth of the market is constrained by two major factors –

- Financing models, where release of staged finance depends on construction progress on-site, whereas prefabricated construction costs are up front and off-site
- Quality and compliance with Australian building codes which require additional trades on-site to re-fit, attracting additional costs.

As these two issues are being addressed, we can expect growth in Australian prefabrication across all construction modes, particularly as Australian companies servicing the resources industry turn to commercial and residential construction.

### *Grains*

The Port of Newcastle has 2 bulk grain terminals, GrainCorp and Newcastle Agri Terminal (NAT). Both have ample capacity for growth. According to East Coast grain exporters, a downturn in coal exports has also provided capacity on the rail network to haul grain and to build new partnerships and service agreements.<sup>25</sup> During non-drought periods, NSW ports handle around 4 million tonnes of grain, mostly wheat. With new terminal investment in recent years e.g. Quattro at Port Kembla and NAT Newcastle (2014) competition is strong for up-country grains. The 2017-18 ACCC Bulk Wheat Ports Monitoring Report indicates despite the impact of drought conditions on terminal activity, there is extensive opportunity to attract this trade.

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<sup>24</sup> <https://www.portofnewcastle.com.au/Resources/Documents/Project-cargo---For-web.pdf>

<sup>25</sup> ACCC Bulk Wheat Ports Monitoring Report 2016-17.

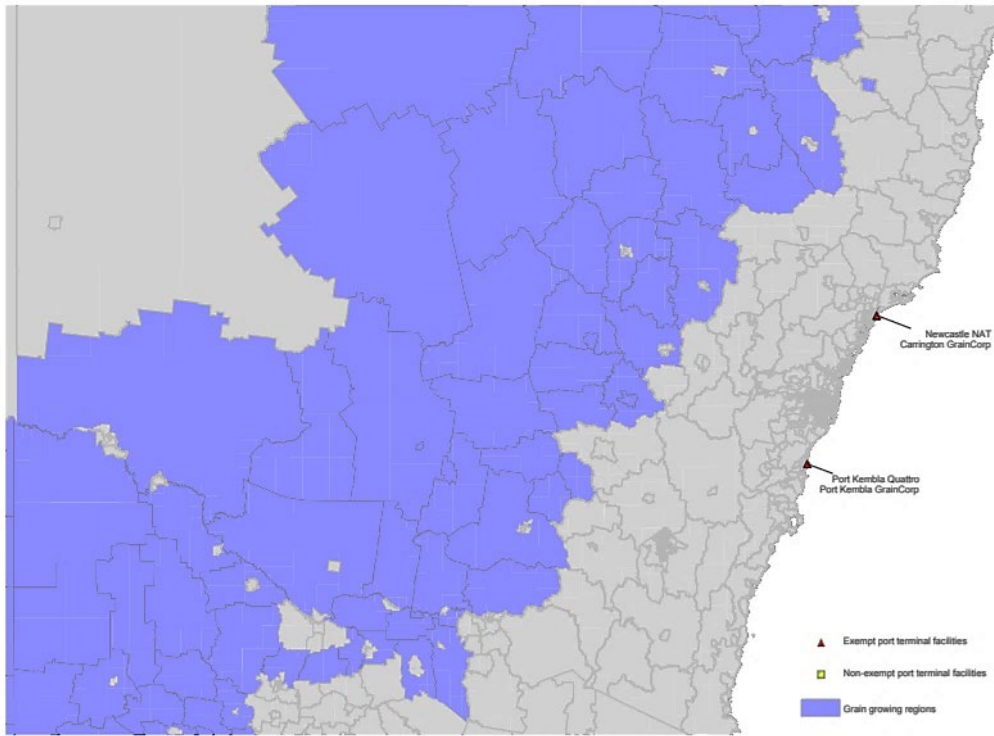


Figure 17 NSW grain growing areas and bulk grain ports Source: ACCC Bulk Wheat Ports Monitoring Report 2017-18.

### Silica sands

Around 60,000 tonnes of silica sand is exported through the Port of Newcastle. A further expansion of silica sand dredging by Ammos Resource Management in Newcastle’s Stockton sand dunes, currently undergoing environmental and planning approval and licensing process, would extract a further 750,000 tonnes per annum of silica sand for domestic use and to boost international sales. The sand is used for construction and demand is high across Asia.

The CBH ConPorts shiploader in the Port has capacity for 500,000 tonnes per annum. It currently services a number of mining operations, including Endeavor and Rasp mines.

### Bulk Liquids

The Port of Newcastle has a strong competency in logistics to fuel Defence, mining, agriculture and rail operations as well as domestic and commercial vehicle consumption in outlets across northern NSW. There is capacity to expand storage and current investment by incumbents demonstrates the potential.

For the foreseeable future, aviation fuel is likely to be stored and supplied by road from the storage facilities located at the BP jet fuel depot and the planned Stolthaven Mayfield storage in the Port of Newcastle or delivered from Sydney by road. However, Transport for NSW is undertaking preliminary work to identify route options for a fuel pipeline corridor that would connect the Port of Newcastle fuel import terminals to a Central Western NSW location via the Hunter (Hunter-Orana Fuel Pipeline).<sup>26</sup> The project aims to provide a cost-effective, safe and reliable fuel supply alternative to road transport for important agricultural and mining industries, and regional commuters. This would boost the role of the Port of Newcastle fuel terminal in supplying this alternative mode.

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<sup>26</sup> Hunter-Orana Fuel Pipeline <https://www.transport.nsw.gov.au/projects/current-projects/hunter-orana-fuel-pipeline>

Energy imports increased by 2 per cent to 2,327 petajoules in 2016–17. Most imports are of refined petroleum products and crude oil. Domestic refineries imported three-quarters of their feedstock, while over half of refined product consumption in Australia was met by imports.<sup>27</sup>

	2016–17		Average annual growth	
	PJ	share (per cent)	2016–17 (per cent)	10 years (per cent)
Coal	1,936.9	31.5	-1.0	-1.9
Oil	2,315.4	37.7	2.1	1.7
Gas	1,515.0	24.7	1.1	2.9
Renewables	378.7	6.2	5.3	3.2
<b>Total</b>	<b>6,145.8</b>	<b>100.0</b>	<b>1.1</b>	<b>0.8</b>

Figure 18 Australian energy consumption by fuel type Source: Department of Environment & Energy 2018

Figure 17 shows the strong growth in consumption of diesel fuel, jet fuel and avgas, and steady consumption of petrol.

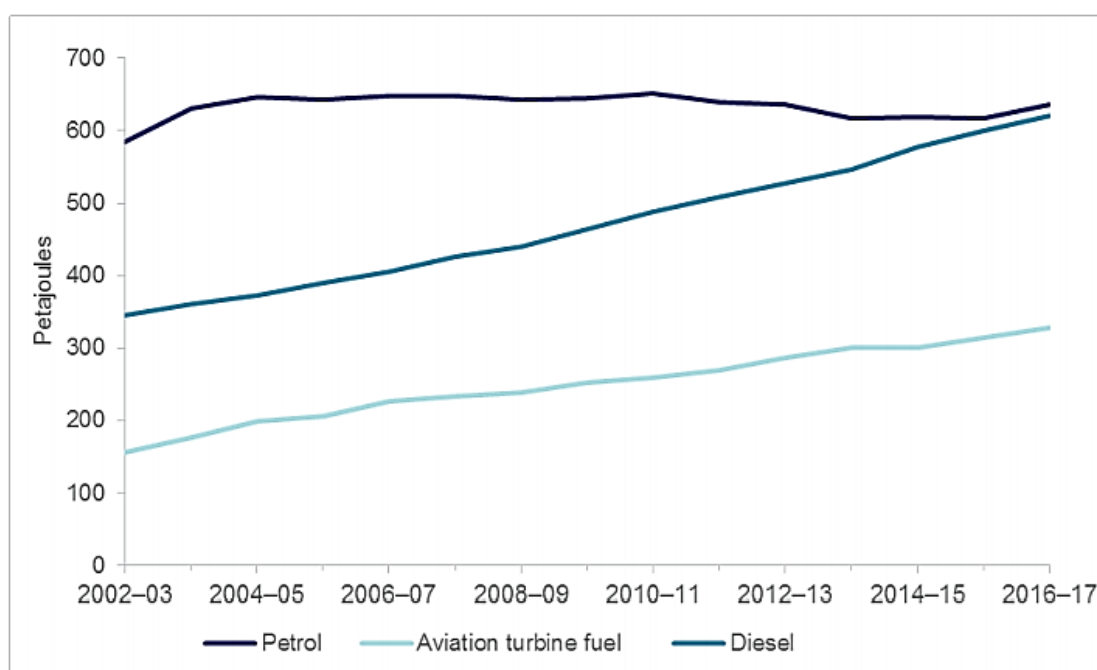


Figure 19 Australian fuel consumption by type Source: Department of Environment & Energy 2018

Fuel imports for Hunter Valley coal operations (on-site and mine to port transport) may be impacted through capping of coal production volumes in the foreseeable future. However, passenger vehicle consumption will expand with population growth in the region and large fuel accounts for minerals mining and Defence operations are expected to expand.

<sup>27</sup> Australian Energy Update 2018

[https://www.energy.gov.au/sites/default/files/australian\\_energy\\_update\\_2018.pdf](https://www.energy.gov.au/sites/default/files/australian_energy_update_2018.pdf)

## Cement

The Port of Newcastle handled 280,000 tonnes of cement in 2017-18. This is reported as an 11% per annum increase and represents a record year of construction activity in the Region as well as supplying further afield in NSW. Cement was previously a coastal trade, shipped from several cement production sites across Australia. In recent years, this has largely been replaced by cement from China, which now represents 60% of cement trade through the Port.

Indicative of the anticipated growth in demand for concrete on the East Coast, CivMec, a heavy engineering and construction provider to the oil and gas, metals and minerals, infrastructure, water and energy and marine and Defence sectors, has established a plant in Tomago producing pre-stressed concrete. The Tomago facility has already undertaking contracts to manufacture and supply concrete and steel for Sydney Metro Northwest and WestConnex, and is supplying precast prison cells for the new Grafton Correctional Centre from a transportable precast facility established onsite.

Levels of commercial and residential construction are also high in Newcastle and represent trade in cement for the Port of Newcastle. Programs to attract fintech professionals to the city and strategies such as Smart City, may help to offset the cooling of house prices in Australia. Newcastle represents a solid value proposition if professionals can find employment.

*With \$6.5 billion worth of infrastructure planned or under way and nearly \$2 billion in private development projects, Newcastle is a construction zone. Newcastle's [crane count is the highest on record](#), with ten cranes dotting the Newcastle skyline, up from eight six months ago. Residential cranes represent 60 per cent of the city's crane count. Population growth, low unemployment and a nearly 50 per cent price disparity compared with Sydney has fuelled significant residential development in Newcastle. Apartment stock has increased 50 per cent in the last year, with 300 apartments released on to the market in 2018, increasing to 428 in 2019 and 478 in 2020.<sup>28</sup>*

## Aluminium

The Tomago Aluminium smelter produces 585,000 tonnes of aluminium per annum and exports 90% of production. The Port also benefits by handling the bauxite coastal shipping trade which feeds the stock for aluminium production. China is the largest producer and consumer of aluminium and the demand globally for aluminium is described as “solid”.

The key threat to supply relates to the consumption of power by the plant, with Tomago being the largest energy user in NSW. Pot shutdowns are regular as power overloads related to extreme weather and network capacity occur. Tomago Aluminium has sought to address this issue through negotiating a 10 year agreement with an energy supplier.

## Ammonia

The use of ammonia (NH<sub>3</sub>) as a hydrogen vector can potentially enable renewable energy export from Australia to markets in Asia and Europe (Engineers Australia 2018).

The Port of Newcastle handled 38,732t of export ammonia in 2017. In a 2018 report by the Australian Renewable Energy Agency (ARENA) and subsequent report to the Council of Australian Governments (COAG) the Chief Scientist concludes that “the most immediate economic opportunity for Australia is to establish itself as hydrogen supplier of choice to Japan and other nations such as South Korea that

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<sup>28</sup> “Revitalising Newcastle: Behind the City's Billion-Dollar Boom”, *The Urban Developer*, April 2018. <https://theurbandevolver.com/articles/revitalising-newcastle-behind-the-citys-billion-dollar-boom>

are hungry for hydrogen as a cost-effective route to reducing emissions.”<sup>29</sup> Potential for growth in port trade of this commodity exceeds 6% p.a. according to analysts.

Upgrade of the Kooragang Orica plant places Newcastle in a position of hosting this renewable energy resource, which in turn supports mining operations in the Region. The key variable indicating risk is the high cost of power inputs to production.

#### *Oilseeds*

Oilseed includes cottonseed, soybeans, sunflowers and canola. Oilseed represent a small export trade. The Port of Newcastle handles barley, sorghum, canola meal, and maize and cottonseed meal.

Canola and cottonseed are the largest export trades in oilseeds. Oilseeds Australia indicates that sustainably grown canola is highly valued in the EU market, for use in fuel production. Exports from the Port of Newcastle are to China and New Zealand. Growth in canola production indicated in Figure 19 should provide moderate growth in supply in the port catchment.

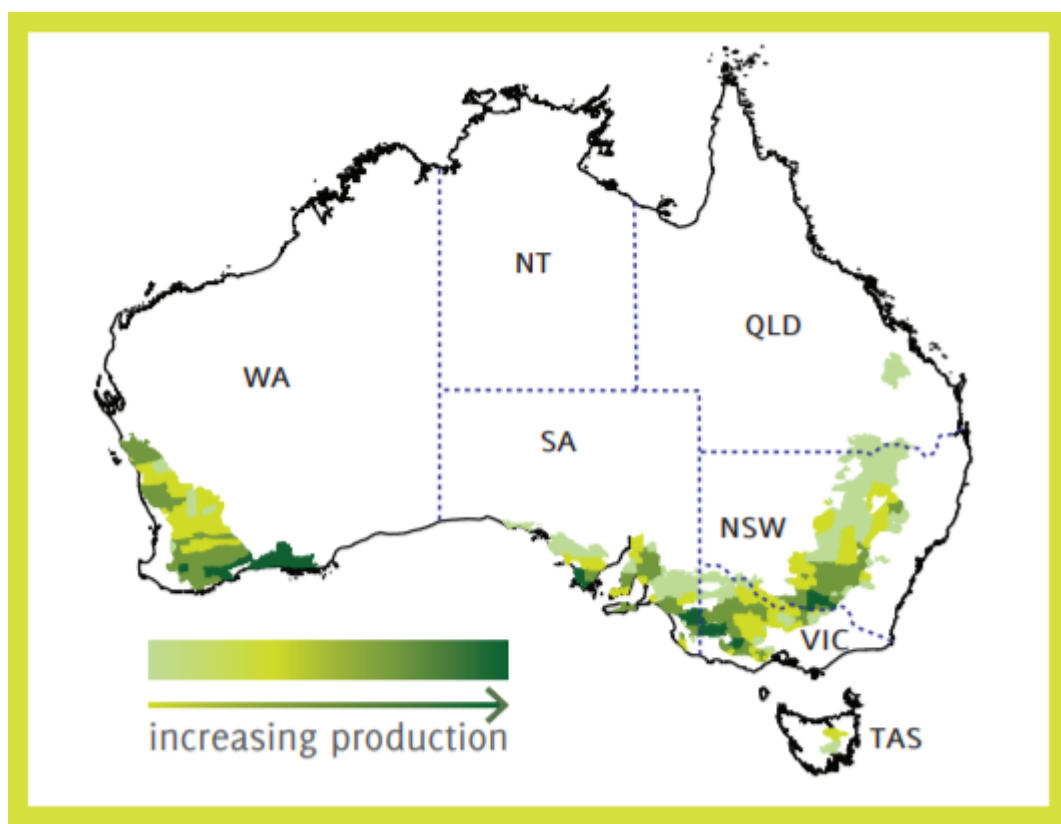


Figure 20 Canola production areas Source: AEGIC

<sup>29</sup> <https://www.ammoniaenergy.org/ammonia-energy-coming-on-like-gangbusters-in-australia/>

## Cotton



Figure 21 Cotton growing areas Source: Cotton Australia

Cotton supply chain logistics involves movement of farm equipment to and from farms, and heavy vehicle transport from farm to gin of cotton modules. Once processed, cotton fibre is pressed into bales and containerised or stored in warehouses for shipment. Six gins operate in Western and Northern NSW. Currently cotton is exported through the ports of Brisbane, Sydney and Melbourne. The largest export market is China. It is likely that this trade will be well-positioned to take advantage of the Inland Rail service. For this trade, rail junctions with the Inland Rail will be critical. Notably the Namoi Cotton Case Study cited in the AlphaBeta (2018) report indicates a freight cost saving for cotton containers shipped via a container terminal located at the Port of Newcastle.<sup>30</sup>

### Ro-ro trade

Roll on-roll off cargoes include any wheeled machinery and vehicles such as cars, trucks, heavy construction, mining and earth moving machinery and farm machinery that cannot be transported in a shipping container.

Given the mix of industries in the Hunter and surrounding regions, access to port facilities to handle these trades is likely to represent a positive business case. Recently the Port of Mackay invested \$10

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<sup>30</sup> Alphabeta, 2018, Global Gateway for NSW: the economic impact of a container terminal at the Port of Newcastle.



million in supporting this trade for the mining industry in its hinterland, resulting in autoliner calls from the US and Latin America. For used machinery and vehicles, biosecurity requirements will need to be met where pre-cleaning prior to import has not been certified. Having a facility for inspection and cleaning on-port will be an important advantage.

Around 1.15 million new vehicles are sold in Australia each year. The current trend is for steady growth of around 2% per annum, featuring SUVs and light commercial vehicles. Current shipping patterns are as follows –

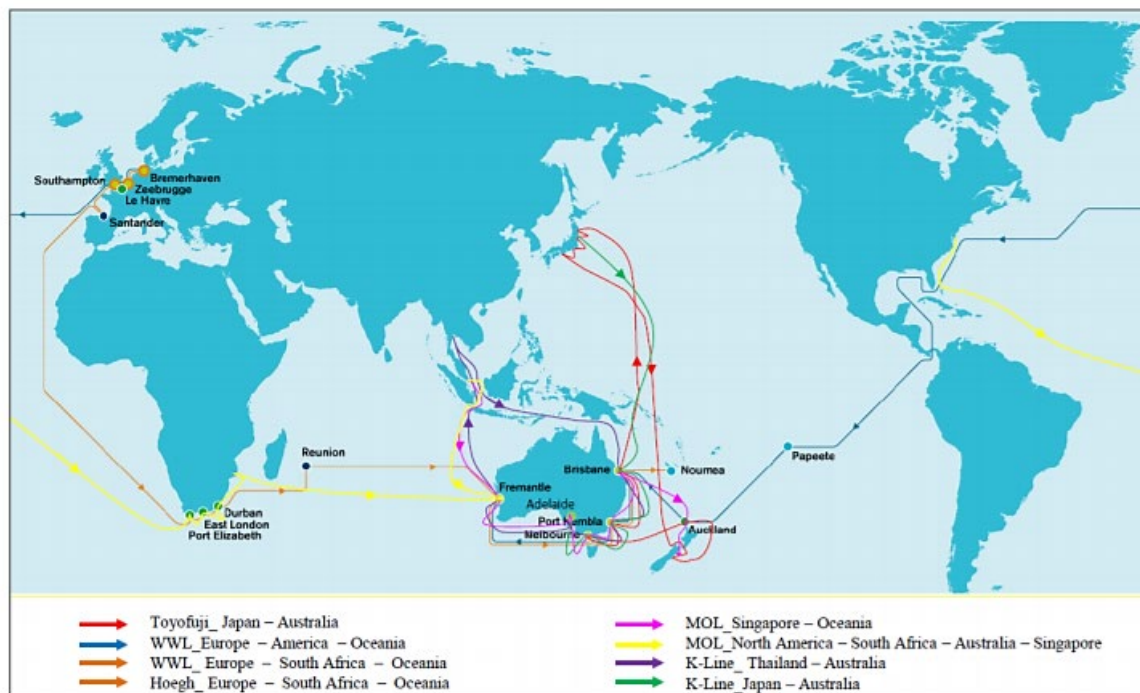


Figure 22 Vehicle shipping services to Australia Source: Nassirnia 2017.

Williams (2014) estimated that 90% of the total fleet capacity of ro-ro vessels is controlled by 10 major shipping lines, several of which service Australia including NYK, MOL, K-Line, Wallenius Wilhelmsen Line (WW2), Höegh Autoliners, Toyofuji (Toyota) and Glovis (Hyundai). Automotive terminals are land-hungry and given low levels of fuel carried in the vehicles, require on or near-port pre-delivery inspection (PDI) facilities and storage areas. Having on-dock rail is a significant advantage in shipment directly from dock through the inland rail connection to east coast markets.

East Coast competition in automotive terminal ro-ro operations are Melbourne, Port Kembla and Brisbane with Australian Amalgamated Terminals (AAT) owned by Qube and MIRRAT owned by WW2 operating the open access-regulated terminals.

Having a dedicated ro-ro terminal would also enhance coastal shipping opportunities in the Port of Newcastle. There is also a link with Defence deployment and ro-ro capacity.

Newcastle has demonstrated its capability in ro-ro operations for heavy machinery. Whether the strategic approach is to go beyond improving that capacity to introducing passenger vehicle trade will require careful consideration, given the investment of the two dominant incumbent terminal operators in other ports. Extending the offering to automotive trade and understanding the threshold terminal volume are key considerations requiring further examination.

### Timber

Timber trade represents a range of products with variable trade trends. The trade in timber products through the Port of Newcastle currently favours imports in break bulk and a small containerised volume, while exports are a small trade volume.

Australian hardwood is now largely sourced from plantation forests (87%) and most of the hardwood from these plantations (96%) is for pulp logs for export. The value of hardwood pulp has increased by 16% in 2016-17 on previous year's export. Softwood pulp represents the largest volume of export (61%) and it grew by 13% during this period. Softwood saw and veneer logs (61% of logs harvested) also grew in value (15%) and volume (7%) in this period.

Imports of wood products are dominated by paper and paperboard and this has declined marginally in value, with the exception of panelboard and books from China.<sup>31</sup>

Industry analysts are advising that the trade of raw softwood logs to China has reduced domestic supply to the domestic construction industry, exacerbated by drought, bushfires and loss of sawmills. This has resulted in a higher finished product import trade. Governments are now being called on to restrict export volumes of softwood sawlogs to guarantee domestic supply and to avoid housing price escalation.

On the North Coast of NSW, the State Government has identified 2.9 million hectares of privately owned forest that has been mapped and grouped into potential timber harvesting zones. Landholders are being encouraged to engage in sustainable harvesting of timber resources, in an effort to access timber supply outside State-managed forests.<sup>32</sup>

In the foreseeable future export log trade may be more subdued, despite record prices, while import finished wood products will be largely linked to Australian housing market volatility.

Having a container terminal to handle import timber products will provide greater capability for the Port to handle the dominant import trade of processed and finished timber products.

### Steel

Steel product manufacture and fabrication in Newcastle has continued since the closure of steel production in 1999. Located in Mayfield, Liberty OneSteel operates two mills producing steel rods and wire. The products largely service the domestic market and New Zealand. Steel is coastal shipped to Newcastle for manufacture at these mills. If the Gladstone steel mill becomes part of the Liberty OneSteel brand, ongoing coastal trade can be expected to support product manufacture in Newcastle. The Liberty OneSteel global supply chain will source product from Australian mills, although it is likely that steel product manufacturing would increasingly be undertaken *in situ* in countries where there is high demand (e.g. Africa) rather than supplied via Australian plants.

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<sup>31</sup> ABARES <http://www.agriculture.gov.au/SiteCollectionDocuments/abares/afwps-overview-sep-dec-2017.pdf>

<sup>32</sup> Private Native Forestry Review <https://northcoast.ils.nsw.gov.au/sustainable-land-management/pnforestry>

### 3.3 Summary of trade opportunities

The following figure indicates the opportunities for international trades for each port and the potential shared trades which both ports may focus on to deliver a coordinated service model. The trades listed as “Air and Sea” are recommended for further investigation and potential development of trade strategies for coordination of international trade gateway services.

TRADE	AIR	SEA	AIR & SEA
Aluminium		Medium	
Ammonia		High	
Aquaculture	Medium	Modest	
Automotive and ro-ro		High	
Biomedical devices	Medium		
Cement		High	
Cotton		High	
Cut flowers	Medium		
Dairy	Modest	Modest	Modest
Defence logistics	High	High	High
Defence manufacturing and technology	High	High	High
eCommerce	Modest	Modest	Modest
Fly-cruise passengers	High	High	High
Fuels		High	
Grains		High	
Industrial hemp	Modest	Medium	Medium
Industrial supplies and safety equipment	High	High	High
Live animals – breeder stock	Medium	Medium	Medium
Manufacturing parts	High	High	High
Meat	High	High	High
Native foods	Modest		
Oilseeds		High	
Prefabricated buildings		Medium	
Processed foods	High	High	High
Project Cargo		High	
Protected cropping	High		
Silica sands		High	
Steel		Modest	
Timber		Medium	
Vaccines and pharmaceuticals	Medium		
Wine	High	Medium	Medium
Zinc and copper concentrates		Medium	

Key:  modest potential  medium potential  high potential

## 4. A logistics ecosystem for 21st century international trade

The *Global Gateway for NSW* report (AlphaBeta, 2018) indicates a trade shadow for the Port of Newcastle which extends west to the NSW-SA border and north to the NSW-QLD border, with the exception of the Tweed and Northern Rivers regions. Containerised product able to flow via high quality road and rail connections could extend this trade further.

The potential addressable market for the Port of Newcastle

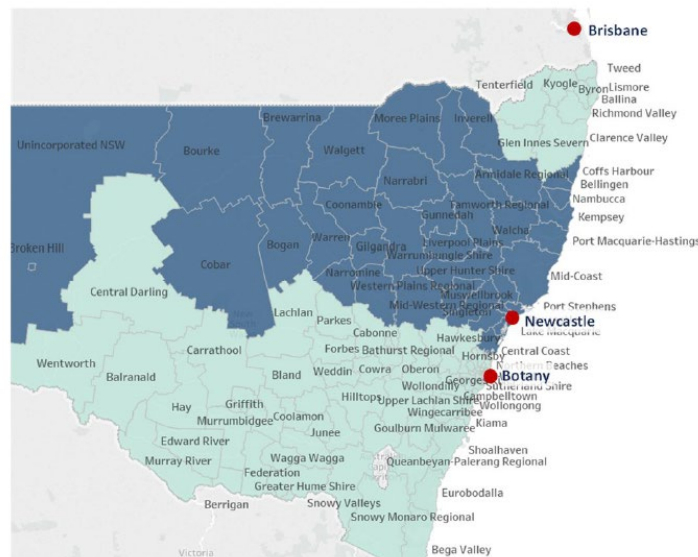


Figure 23 Newcastle Port container trade catchment Source: AlphaBeta 2018

### 4.1 Velocity container terminal

A velocity container port is one that uses the advantages of high quality water and landside connectivity to extend its trade catchment beyond what would normally be considered its natural hinterland. If Newcastle Port is to create value for investors in a container terminal through optimising its excellent connectivity to national transport networks, it will need to attract freight volumes to match the capacity of the shipping lines using the Port.

Container port choice is influenced by a range of factors (Yeo et al, 2014) including the following –

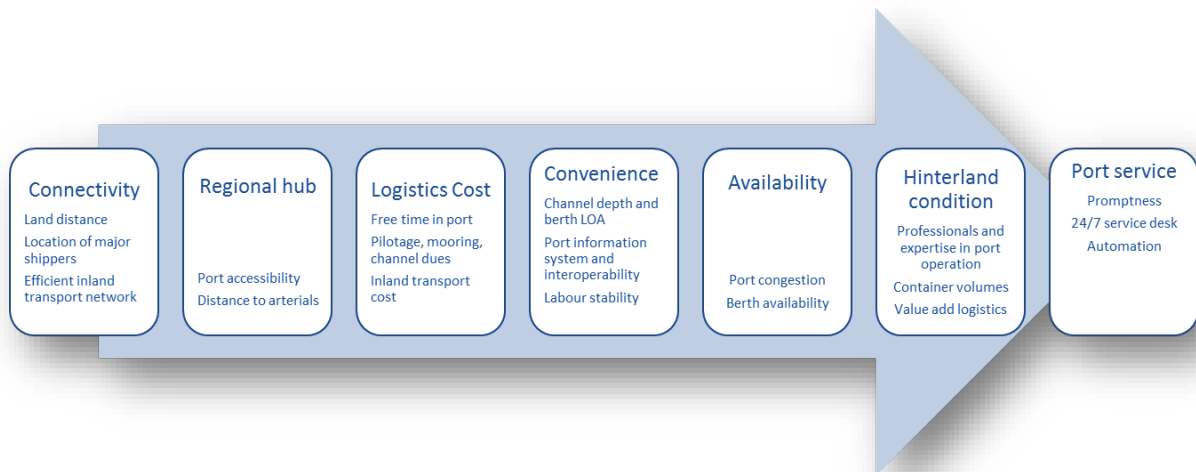


Figure 24 Factors influencing port choice Source: Deakin CSCL 2019 based on Yeo et al 2014.

Figure 23 indicates the range of factors that the key stakeholders (shippers, lines and logistics service providers) in container trades take into consideration in their choice of port. Notably they go well beyond the primary offerings of channel depth, berth infrastructure and road/rail interface and therefore require a cohesive, integrated offering to attract these stakeholders.

The following are examples of velocity container terminals that focus on increasing the flow of product through the port to service a much wider hinterland population, including cross-border trade.

#### *Port of Vancouver (British Columbia, Canada)*

GCT DeltaPort is a deep water (15.9m) container terminal located in the Port of Vancouver, Canada. It was designed and built to be a velocity port, to not only serve Canada, but to quickly clear flows of containerised products by rail. This port has made deep inroads into the US market as congestion has impacted major city ports. The Canadian National and CP railroads offer direct service to Chicago, the largest US inland hub, as well as destinations in the South and eastern half of the country. Due to its deep channels and on-dock rail capacity, the port has been able to achieve faster terminal turnarounds and improved flow of containers compared to west coast US container terminals. The Port intends to develop an additional container terminal at Roberts Bank to expand capacity by 2029.

*GCT Deltaport is Canada's flagship container terminal and the first semi-automated facility in the country. As the Gateway to the Pacific, the 85 hectare state-of-the-art terminal is located in the outer harbour at Roberts Bank, supported by a 1,100 metre contiguous berth. The facility's fleet of electric, high-speed, super post-Panamax cranes serve the largest transpacific container vessels calling the trade lane, boasting seamless ship-to-rail productivity. Employing state-of-the-art computer systems to embed the highest levels in safety and efficiency into our operations, following full buildout of the GCT Deltaport Intermodal Yard Reconfiguration Project, the expanded on-dock rail yard will be the largest and most productive intermodal facility in the world.*

<https://globalterminalscanada.com/gct-deltaport/>

#### *Liverpool Port (UK)*

The Mersey River port located in Liverpool in northern UK is building a velocity container terminal in this deep water river port to provide a more direct global linkage for the region. The container trade has been previously dominated by southern UK ports. This development will not only benefit the north of England, Scotland and Ireland, but it will generate jobs, training, and investment in logistics capability.

*Superport is an integrated cluster of logistics assets and expertise that will deliver faster, greener, global market access for business to and from the northern UK and Ireland via an enlarged post-Panamax container port.*

<http://www.superport.co.uk/>

<https://www.liverpoollep.org/growth-sectors/superport/>

What these two container terminals demonstrate is the effectiveness of the velocity port model in servicing a broader hinterland than that identified as the “natural” catchment of a regional port. The container port is proposed at a scale model in step with the next generation of shipping and logistics.

### **Intermodal facilities**

The Inland Rail project under construction opens a wider hinterland for the Port of Newcastle to connect through rail. A number of towns along the route are now vying for intermodal hub status and two are on the juncture of the Inland Rail route and the rail path to Newcastle. Once completed the Inland Rail will also function to free up capacity on the coastal NSW rail route connected to the Port of Newcastle.

In order to service a velocity port model, the critical factor is achieving an intermodal “pairing” for discharge and loading of containers for direct loading on-dock and distribution to population centres (regional and metropolitan). Development of intermodal hubs in regional centres (e.g. Parkes) enable containerised product to be assembled for direct to terminal transit. The Port of Newcastle might consider further strategic intermodal locations for cargoes such as cotton in northern NSW. However, the key intermodal twin for containerised trade would ideally be located in outer Sydney on the northern or western outskirts, so that metro distribution can be staged.

For regional import cargoes such as consumer goods or industrial supplies for the energy, agrifood and resources sectors, container distribution facilities on-port would enable storage and distribution to avoid staging and port cartage trips. Storage on-port for export containers requiring LCL consolidation or cold chain management would enable transfers to dock by automated guided vehicles/bomb carts.

### **Empty container parks**

As containers are the property of the shipping lines, they will determine the appropriate siting of hire and de-hire sites. Empty container parks can generate amenity issues in nearby neighbourhoods as they attract older cartage vehicles and create noise during transport and off-loading. Shipping lines prefer empty container parks on or near-port to limit the associated costs of hiring and de-hiring.

One option for the port to attract shipping lines would be to provide a common user empty container park, which would enable on-port storage of empties. This would facilitate greater efficiency if the vehicle booking system was coordinated with the empty park, to enable two way loadings of full and empty containers. It would also facilitate block transfers of empties for vessel loading, as shipping lines work to reposition surplus containers back to Asia. This facility would require the cooperation of the shipping lines to form a joint venture or cooperate with a port-owned management entity. Discussions on a strategic approach to the provision of empty container facilities is advised.

## Other value-add logistics

Value-adding refers to services that exceed the main logistics facilitations such as storage in warehouses and shipping. The value-added services practically increase the initial value of the cargo shipped, thus benefiting the proprietor of the cargo and stimulating the efficiency of the supply chain.<sup>33</sup>

Koch (2006) makes the point that unless a port can offer superior services that add value to a shipper's supply chain, competition will devolve to cost comparison. The evolution of ports offering in-and near-port value-added logistics enhances the competitive advantage of the port, while helping to preserve the amenity of the city in which it is sited, through co-locating these facilities and limiting the externalities associated with transfers taking place on surrounding roads and empty truck running.

The following schematic describes the evolution of value-add logistics in a port setting –

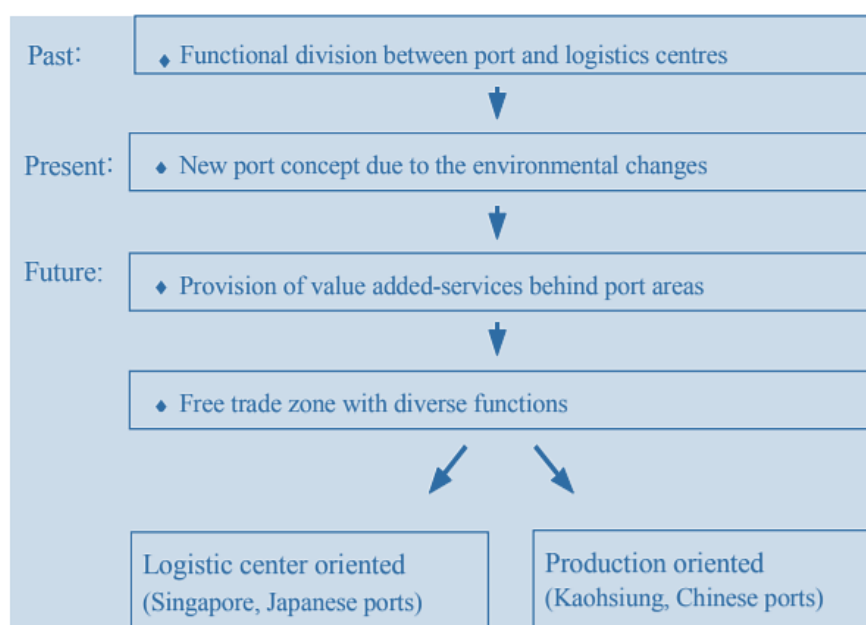


Figure 25 Development phases of logistics centres in port areas Source: Koch 2006

Facilities and services required on and off-port in addition to terminal infrastructure may include –

- Customs and Biosecurity inspection areas and equipment
- Container depots and staging sites with reefer slots
- Security
- Fumigation services
- Container packing/unpacking facilities
- Multi-user warehousing
- Dangerous goods handling area
- Bonded warehousing (77G and Biosecurity licensed)

<sup>33</sup> Koch U., 2006 *Logistics potential for value added services in port-located areas*

Menagakis A, Alexopoulos, A, 2017, Evolution of logistics centres and value-added services offered in port areas and the importance of marketing, Chapter 10, *Strategic Innovative Marketing*, Springer [https://link.springer.com/chapter/10.1007/978-3-319-56288-9\\_39](https://link.springer.com/chapter/10.1007/978-3-319-56288-9_39)

- Telecoms and data
- Pavements
- Road and rail access, including HPV routes
- Truck marshalling and driver comfort facilities
- Fuel service stations equipped with high capacity pumps
- Cross-docking sites on key arterials
- Driver rest areas
- Road transport and haulage operators
- International freight forwarders
- Freight visibility systems
- Vehicle booking systems
- Animal lairage and on-port holding sites.

There will be a linkage of on-port and off-port logistics operations, with sites at Beresfield and Black Hill developing to manage distribution of landed goods. For these operations including transport depots and cross-docking, 3PL warehousing, etc, the focus is on PUD operations, logistics such as de-stuffing, pick and pack, kitting and intra-regional and interstate transport operations. These sites are particularly applied to merging of domestic and international supply for East Coast distribution or export.

## **4.2 International air cargo terminal**

In Australia, air cargo represents 21% of the value of goods traded in import and export. Between 80 and 90% of Australian airfreight is carried as underbelly freight.<sup>34</sup> Carriage of cargo represents an estimated 9% of revenue for the airline carrying freight as underbelly cargo. This is double the income from first class travel. Sydney Airport has entrenched its market share of imports at almost 50%, with 28% of dedicated freighter visits.

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<sup>34</sup> Australian Airports Association, 2018, Submission to National Freight & Supply Chain Strategy



Airport		Highest value products	Main countries of origin or destination
Sydney	Imports	Telecommunications and sound recording equipment; medicinal and pharmaceutical products; commodities and transactions not in merchandise trade*	China USA France
	Exports	Commodities and transactions not in merchandise trade*; miscellaneous manufactured articles; professional, scientific and controlling instruments	USA New Zealand UK
Melbourne	Imports	Commodities and transactions not in merchandise trade*; office machines and automatic data processing machines; telecommunications and sound recording equipment	USA China France
	Exports	Commodities and transactions not in merchandise trade*; medicinal and pharmaceutical products; meat and meat preparations	USA New Zealand Singapore
Brisbane	Imports	Commodities and transactions not in merchandise trade*; miscellaneous manufactured articles; professional, scientific and controlling instruments	USA China France
	Exports	Commodities and transactions not in merchandise trade*; transport equipment excluding road vehicles; meat and meat preparations	New Zealand USA Singapore
Perth	Imports	Non-monetary gold; Commodities and transactions not in merchandise trade*; general industrial machinery and equipment.	Japan USA Papua New Guinea
	Exports	Non-monetary gold; commodities and transactions not in merchandise trade*; gold coin and other coin being legal tender	UK Hong Kong China

\*The category 'Commodities and transactions not in merchandise trade' includes:

- goods exported after being imported on a temporary basis—ships, boats, floating structures, goods for public exhibition and goods such as racing cars and associated equipment, race horses, paintings for art exhibitions
- goods exported on a temporary basis and intended to be re-imported
- goods exported for repair, alteration or renovation and subsequent re-importation
- goods re-exported from Australia after being imported for repair, alteration or renovation
- passengers' personal effects for which a customs entry is required
- goods exported by the Australian Defence Force (ADF), for use by the ADF, for operational, training or military exercise deployment.

Figure 26 International air cargo profile Source: BITRE 2018

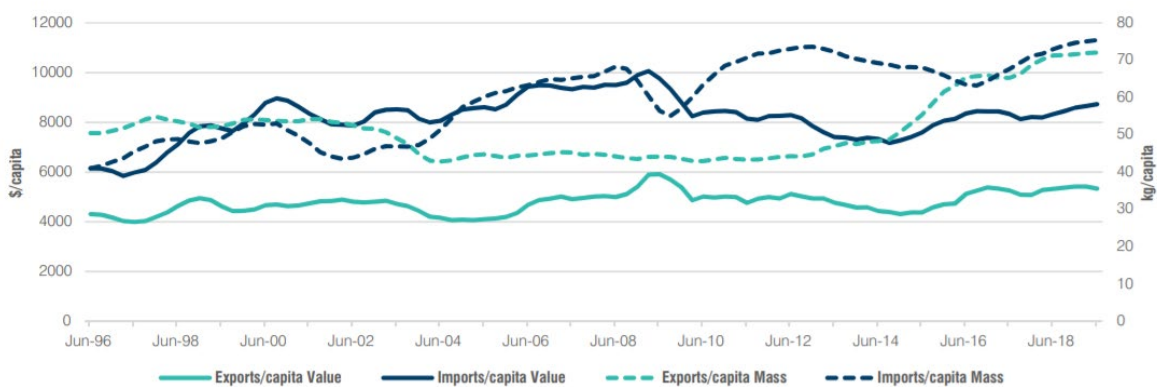


Figure 27 International airfreight per capita Source: IPA 2019

Figure 26 indicates the volume growth of air cargo in both export and import, with an estimated 150 kilograms airfreighted per capita.

Sorted by Section by Value		2017-18		% change				10-year trend	
				2017-18		2018-19		2007-08 to 2017-18	
		\$ million	tonnes	\$ million	tonnes	\$ million	tonnes	\$ million	tonnes
Import		66,418	582,168	3.3%	9.5%	6.2%	4.7%		
XVI	Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	29,134	149,027	10.9%	10.7%	14.2%	14.3%		
XI	Textiles and textile articles	1,920	44,300	11.9%	7.3%	1.1%	1.1%		
VI	Products of the chemical or allied industries	9,659	43,222	-1.0%	9.5%	-11.4%	-11.5%		
II	Vegetable products	389	37,229	2.7%	-5.2%	-0.2%	-0.2%		
XV	Base metals and articles of base metal	1,036	27,209	13.6%	17.9%	4.8%	4.9%		
XVIII	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	9,283	26,687	8.5%	14.0%	7.5%	7.5%		
VII	Plastics and articles thereof; rubber and articles thereof	616	24,163	12.3%	12.1%	4.8%	4.9%		
XVII	Vehicles, aircraft, vessels and associated transport equipment	2,338	16,250	-30.4%	10.3%	-1.6%	-1.6%		
I	Live animals; animal products	331	14,863	4.6%	-0.7%	0.3%	0.4%		
IV	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	222	14,817	34.0%	44.9%	2.8%	2.8%		
XX	Miscellaneous manufactured articles	701	14,679	2.7%	1.3%	-4.8%	-4.8%		
X	Pulp of wood or of other cellulosic material, recovered (waste and scrap) paper and paperboard, and articles thereof	383	14,329	11.2%	1.5%	1.2%	1.3%		
VIII	Raw hides and skins, leather, furskins and articles thereof; saddlery and harness, travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)	738	6,546	12.0%	2.7%	14.5%	14.8%		
XIII	Articles of stone, plaster, cement, asbestos, mica or similar materials, ceramic products, glass and glassware	157	5,472	10.0%	13.8%	1.3%	1.6%		
XII	Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops, and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	343	5,042	6.0%	-3.3%	5.7%	5.6%		
XIV	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	8,837	1,666	-8.8%	-3.1%	3.7%	4.0%		
IX	Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	20	971	23.9%	1.2%	11.8%	11.5%		
V	Mineral products	9	959	13.5%	7.4%	2.4%	2.6%		
III	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	14	696	24.9%	10.0%	2.6%	2.1%		
XIX	Arms and ammunition; parts and accessories thereof	133	451	-49.7%	-30.2%	-5.7%	-5.4%		
XXI	Works of art, collectors' pieces and antiques	151	268	-5.4%	-7.7%	0.6%	0.4%		
Unknown					12.0%		0.0%		

Figure 28 Airfreight imports Source: IPA 2019

Sorted by Section by Value		2017-18		% change				10-year trend	
				2017-18		2018-19		2007-08 to 2017-18	
		\$ million	tonnes	\$ million	tonnes	\$ million	tonnes	\$ million	tonnes
<b>Export</b>		42,442	568,679	4.7%	10.9%	1.6%	2.4%		
I	Live animals; animal products	2,662	165,726	14.7%	18.2%	6.9%	6.8%		
IV	Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	1,905	105,105	12.7%	11.8%	-0.5%	-0.5%		
II	Vegetable products	413	92,079	2.4%	0.6%	1.6%	1.6%		
VI	Products of the chemical or allied industries	3,259	34,418	22.4%	49.1%	-0.3%	-0.3%		
XVI	Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	5,389	32,789	4.9%	-1.9%	5.4%	5.5%		
XV	Base metals and articles of base metal	250	18,078	3.4%	-9.6%	7.1%	5.5%		
X	Pulp of wood or of other cellulosic material, recovered (waste and scrap) paper and paperboard, and articles thereof	248	15,644	15.0%	28.3%	-5.6%	-4.7%		
XVIII	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	3,454	8,019	6.3%	6.9%	1.5%	1.5%		
XVII	Vehicles, aircraft, vessels and associated transport equipment	1,750	7,025	19.3%	14.8%	-18.8%	-18.6%		
VII	Plastics and articles thereof; rubber and articles thereof	170	5,050	-5.1%	-1.1%	2.1%	2.1%		
XI	Textiles and textile articles	244	4,775	11.6%	15.2%	7.4%	7.5%		
XX	Miscellaneous manufactured articles	274	2,892	-13.7%	-11.0%	-8.1%	-8.5%		
XII	Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops, and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	74	1,884	36.0%	32.2%	5.8%	5.8%		
VIII	Raw hides and skins, leather, furskins and articles thereof; saddlery and harness, travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)	129	1,839	7.5%	5.9%	2.5%	2.5%		
XIV	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	21,175	994	0.9%	14.9%	2.3%	0.8%		
XIII	Articles of stone, plaster, cement, asbestos, mica or similar materials, ceramic products, glass and glassware	53	779	7.2%	-18.7%	-1.9%	-2.2%		
IX	Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	7	395	35.4%	-19.3%	1.9%	2.2%		
V	Mineral products	3	286	-8.1%	-86.1%	4.8%	5.0%		
III	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	13	259	-34.2%	-22.1%	2.9%	3.2%		
XXI	Works of art, collectors' pieces and antiques	78	131	-8.7%	-33.7%	-2.2%	-2.9%		
XIX	Arms and ammunition; parts and accessories thereof	33	65	-23.3%	-18.6%	-5.0%	-6.2%		
Unknown			70,449		9.5%		0.0%		

Figure 29 Airfreight exports Source: IPA 2019

As can be seen from the above figures, airfreight is growing at a rate of 4.7% for imports and 2.4% in exports. Products experiencing growth in export are live animals and animal products, machinery, equipment and foodstuffs.

### New Zealand airfreight

An estimated 80% of airfreight in New Zealand is handled through Auckland Airport. Australia is New Zealand's key export destination, with over 40% of airfreighted exports destined for Australia. These exports are dominated by perishables such as fish, vegetables, fruit, meat and dairy. A number of these trades are highly seasonal and peak between November and February. Imports from Australia are dominated by higher value products including machinery and electrical equipment.

Newcastle Airport has expressed a vision to become the second international airport in NSW.<sup>35</sup> Virgin Australia has provided seasonal international flights to and from Auckland New Zealand in 2018-19. Qantas operates ground handling for freight at Newcastle Airport and can connect with international flights, however this transfer must compete with surface transport to Sydney Airport to connect with international flights.

Some important trends related to airfreight that may influence the strategic response of Newcastle Airport include –

- The global growth of eCommerce is currently 20% per annum.<sup>36</sup> This results in more special commodities, less mail, more parcels and more periods of high demand. In terms of on-airport facilities this means higher floorspace demands for item level product and an increase in pickup and delivery (PUD) access requirements, such as marshalling and multiple docks. It also mean peaking factors on approach roads.
- Property value differentials have driven a trend to off-airport location decisions for freight forwarders, although their preference is to be located as close to the terminal as possible, given the short loading windows. However, few have been able to justify the higher rents on airport through time savings as compared to near-airport. Having ample current land available, this is not a short term concern for Newcastle; it may indeed be an inducement for freight forwarders to locate on-airport.
- An estimated one third of airfreight is pharmaceuticals, mobile phones and computer equipment.
- Code sharing, alliancing, merger and acquisition has created a propensity for gateway airports to consolidate airlines and deter alternative airport options, regardless of likely cost savings through cheaper airport fees, faster freight clearances and cheaper land for forwarders.
- 50% of airfreight exports are destined for China and are mostly food products.
- Australians generate 150 kilograms of airfreight per capita per annum.<sup>37</sup>
- Integrated logistics service providers and eCommerce marketplaces are investing in freighter operations.
- Companies take advantage of road freight back loading rates to transport export products from the region to Sydney Airport.

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<sup>35</sup> Newcastle Airport Pty Ltd, 2036 Newcastle Airport Vision

<sup>36</sup> IATA White Paper March 2019 <https://www.iata.org/whatwedo/cargo/Documents/StB-Cargo-White-Paper-cargo-facility-future.pdf>

<sup>37</sup> IPA 2019 International Airfreight Indicator <https://infrastructure.org.au/wp-content/uploads/2019/03/2019-International-Airfreight-Indicator-digital.pdf>

### *Dedicated freighter operations*

In relation to domestic freight delivery, Qantas and Australia Post have invested in a dedicated six aircraft freighter fleet for StarTrack parcel post deliveries. This space is additional to the existing underbelly capacity offered in their passenger services. Virgin Australia Freight operates a dedicated freighter network using British Aerospace 146, Boeing 737 and Convair aircraft, with Aerocare handling four flights each in Townsville and Adelaide. DHL has an express overnight freight carrier (Boeing 767) between Sydney and Auckland five times a week. In 2016, Amazon invested in its first 40 freighters and Alibaba, through its Cainiao logistics platform, has leased freighter fleet from carriers. Re-purposing of passenger aircraft for freighter operations is also taking place on a large scale in China and Europe.

The fundamental infrastructures and facilities required for international freight services to be developed at Newcastle Airport depend on the airport and airfreight model that informs the strategic role of the transport hub and the cargo services to be delivered. While Newcastle Airport proposes to become an alternative East Coast passenger hub for NSW, it is unclear whether the intention is to also become a significant East Coast freight hub, or capable of servicing dedicated freighter operations beyond underbelly freight.

The key infrastructure requirement to facilitate direct international freight is the strengthening of runway pavement to land Code E aircraft. Currently the Airport can land Code C aircraft.

Off airport, the capacity of connecting local roads is essential, particularly the access to the M1 Motorway extension to Raymond Terrace and via Cabbage Tree Road, which has attracted some funds for upgrading from the NSW Government in 2017.

The process for airfreight movement (see Figure 29) engages multiple processes and custodians of the freight (Figure 30). As such, it is vital that the airport plays its part in this process with the appropriate infrastructure, facilities, equipment, processes and systems to ensure the elements of the flow under the responsibility of the airport are as smooth as possible. It is also vital that the actors mentioned below in Figure 30 share the vision of the Newcastle Airport in relation to airfreight and are prepared to advocate for the required infrastructure, facilities and services in the region.

Facilities required on-airport can include -

- cargo area (within 1-5 minutes tug travel time from passenger area for underbelly operations and 15 minutes for dedicated freight operations)
- space for CTO facilities, equipment and operations
- dedicated domestic freighter apron and parking
- Re/fuelling area for long haul carriers
- Animal biosecurity inspection and holding/loading areas as well as off-port quarantine site
- Cold storage (multi temperature; dry icing; humidity controlled areas)
- Sites for freight forwarding leaseholds
- Transport marshalling area.

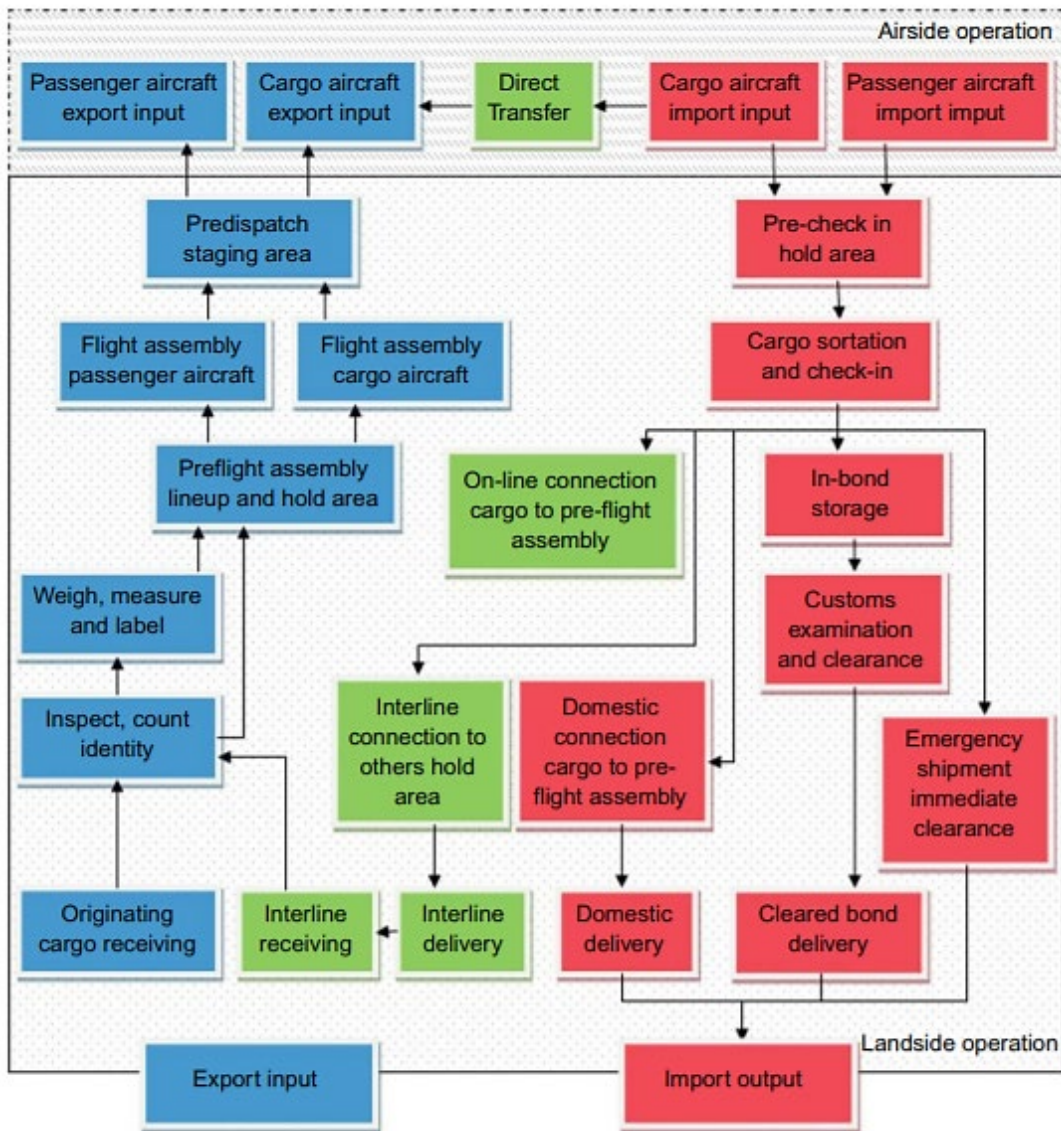


Figure 30 Cargo processes for airfreight Source: Merkert & Alexander 2016

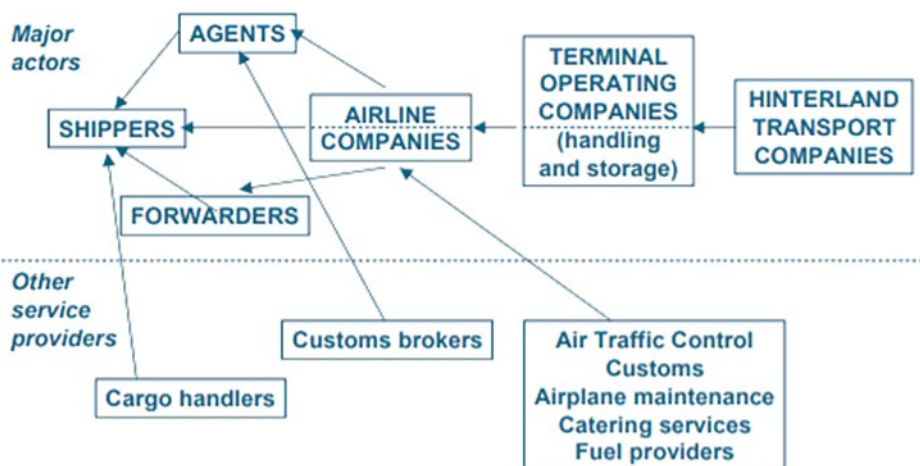


Figure 31 Actors in airfreight supply chains Source: Merkert, 2017

## Conclusions

The Port of Newcastle, having committed to a vision to expand its trade offering to incorporate an East Coast velocity container terminal, will need to develop the model to encompass the landside logistics capabilities to match the gateway.

It is unclear whether Newcastle Airport shares a similar vision in relation to freight. In its vision for 2036, international passenger services are a development carefully planned for. There is an acknowledgement that passenger aircraft underbelly space would be available for freight carriage, however the scope of freight services provided for is not articulated in detail. The proximity of the Aerospace industrial park and Defence operations represent an opportunity worth exploiting.

For both organisations, responsibility for the fundamental international terminal infrastructure to handle container liners and wide-bodied passenger aircraft, is the main focus at present. It is the precursor to seeking further investment to extend the offerings to the air and shipping lines and shippers.

It is also vital for both organisations to extend their strategy beyond the port into the landside logistics that service international trades. Taking a supply chain systems approach will align with the needs of the lines and the importers and exporters.

There is also a common dynamic of contributing to regional development and responding to the Smart City future of Newcastle, focusing on growing jobs, planning for the expertise needed at international gateways and basing the international terminals on operational automation and information system and transaction digitisation. The growth of an international trading ecosystem will enable both organisations to play their role in attracting new global connectivity and investment in the region.

There are a number of identified trades that each port can target in order to meet import and export requirements, helping to expand global market access for growers, manufacturers, builders, miners and retailers. For Newcastle Airport these include high value components and equipment for Defence manufacturing and supplies, food, electronic devices, pharmaceuticals and livestock. For the Port of Newcastle, consumer goods, cotton, processed agrifood product, and mining and resources equipment will be key to container trade. For both gateways, a shared offering to the agrifood industry<sup>38</sup> (e.g. meat, agricultural technology and equipment, animal vaccines, containerised grains, ingredients, livestock), Defence operations supply and Aerospace manufacture, Resources and Energy sector (e.g. PPE, safety and testing equipment, machinery and parts, wind turbines) will support the growth of the region and signal to these industries that the international gateways are responsive to their flows of product and people.

A shared vision will incorporate a plan to supply the skilled expertise a trade gateway requires, encompassing staffing in-port operations, border clearance and inspection, automation systems and port community systems which facilitate the smooth flow of goods. Skills for landside logistics activities to support international supply chains will be needed, now capable of storing and distributing short cycle consumer goods, eCommerce orders and perishables.

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<sup>38</sup> The **agrifood** industry is a highly integrated value chain spanning the full range of food and beverage related enterprises operating from 'paddock to plate'. **Agrifood** also has significant overlaps with other innovative sectors, such as biotechnology and information and communications technology (ICT). [www.business.gov.au](http://www.business.gov.au)

The research has established the necessity of transport infrastructure, but also the need for the ecosystem of services, technology, skills and trader support that will fulfil sufficient conditions for international trade. There are extant models that provide examples for both ports. Trade in a 21<sup>st</sup> Century global context is about achieving scope, scale and a trade-oriented environment that embraces all technology solutions that support goods flow.

Interactions between the two ports can enhance trade offerings and potentially create savings through shared marketing work, training in safety and security compliance, systems for monitoring freight, data sourcing and sharing, and vehicle booking systems for terminal access. Understanding the product and people flows for specific supply chains can enable both organisations to reach a fuller picture of how they might tailor a package of offerings.



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# Appendix A: Research methodology

## The research question

How will both trade gateways (Newcastle Airport and the Port of Newcastle) facilitate trade and what value-added logistics facilities and services and transport connectivity requirements will be required to fulfil a comprehensive, complementary international trade and business role?

How, through working in cooperation, both ports might create more than the sum of the parts in facilitating trade and growing the regional economy; and what complementary trades can both gateways service to grow the regional economy?

## The research methodology

A review of current government policies and strategies was conducted to determine the alignment of the two gateway ports plans and strategies with government agendas. Interviews were also conducted with relevant government agency representatives.

To locate and describe relevant models of air and sea ports cooperating to service regional production and supply chains to enhance regional economic benefit, a desktop review of academic journals and port/airport industry reports was conducted. For domestic examples, contact was made with entities established to delivery trade activity.

To identify new and additional import and export goods and products for the Newcastle ports, the research examined a suite of more than 30 trades, current and potential, by analysing their trade performance and growth potential, their suitability to the port's catchment area, and their supply chain requirements. A cross-section of shippers were interviewed to gain an understanding of their supply chain requirements and the drivers of sea and air port choice.

The researchers then analysed what requirements these trades have if they are to expand or commence at Newcastle air and sea ports. This was undertaken through consultation with logistics service providers, regional economic development bodies and review of documentation on these product supply chains in industry media, academic journals and through industry peak bodies. Staff of the Port of Newcastle and the Newcastle Airport provided feedback on the analysis, options and draft findings.

The current trades indicating feasibility were then examined to identify those that have a propensity to utilise both air and sea shipments and conversely, where a logistics service or facility could service both modes. Desktop research from peak industry bodies and trade data were used to anticipate trends in the commodities. This was complemented by interviews with companies engaged in import or export of the product and the relevant logistics service providers.



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Newcastle Airport

# Runway Upgrade Project

Economic Impact Statement Overview



**Creating jobs, supporting local businesses, saving residents' travel costs and growing our economy by bringing international passengers and air freight direct to the Hunter Region**

# Newcastle Airport runway upgrade project: Key facts

Over the next 20 years, spending \$150M on the runway and airport upgrade, will deliver:



Data provided by Synergies Economic Consulting and Morrison Low

# It's time to give the Hunter the international gateway it deserves

Newcastle Airport's vision is to be the airport the region deserves, providing a freight gateway to northern NSW by offering more direct international flights to key trading and tourism destinations. The region's desire to travel internationally from its airport was confirmed with the recent seasonal service to Auckland. This also demonstrated the airport's ability to handle international traffic on a regular basis. The significant economic uplift that can be provided by facilitating freight traffic has been characterised by a number of recent independent studies.

To truly be the airport the region deserves, Newcastle Airport is proposing that the runway it accesses from RAAF Base Williamtown should be widened, strengthened and upgraded to a 'Code E' aircraft standard. This will allow the airport to safely land longer range, greater capacity aircraft, increasing the viability of Newcastle as a new destination for airline partners.

This will open up the Hunter region for much needed longer-range international passenger services with increased freight capabilities – to the significant benefit of the Hunter community, the state of NSW and Australia more broadly.

This is endorsed by the [Greater Newcastle Metropolitan Plan](#), which notes that... "anticipated growth and expansion of passenger flights will need to be supported by... runway surface and freight handling capacity upgrades".

Currently, most direct international travel into and out of the region requires travellers to take at least one connecting flight at another domestic airport. Not surprisingly, there is enormous and enthusiastic local community demand from both leisure and business travellers for Newcastle Airport to expand passenger services to include direct international flights to a wide range of destinations.

Local industries are also crying out for more direct international connections. According to the [20-Year Economic Vision for Regional NSW](#), the evolution of the consumption patterns of Asia's new middle class will shape the export profile of regional NSW. As demand grows in Asian economies for products and services associated with education, health, agriculture, resources and tourism, a direct air link to Newcastle from across Asia Pacific will greatly support trade growth out of the Hunter region. Based on the experience of other airports, such as Adelaide, growing numbers of international, wide-bodied passenger aircraft greatly improves exporters' avenues to these markets.

A December 2018 report by Morrison Low, made clear the substantial international freight opportunities that would flow from an upgraded runway. The report estimated that the cumulative economic impact of potential new industries utilising Newcastle Airport would total in excess of \$6.5B over 20 years.

This included direct impacts to local industries as well as the estimated 2,810 jobs that would flow from the increase in economic activity.

## The final piece of the puzzle

Newcastle Airport has already completed an international arrivals and departure processing facility, including installing the necessary security technology, IT technology, passenger screening equipment and furniture for the border agencies.

## Why now?

### Leveraging Defence spending

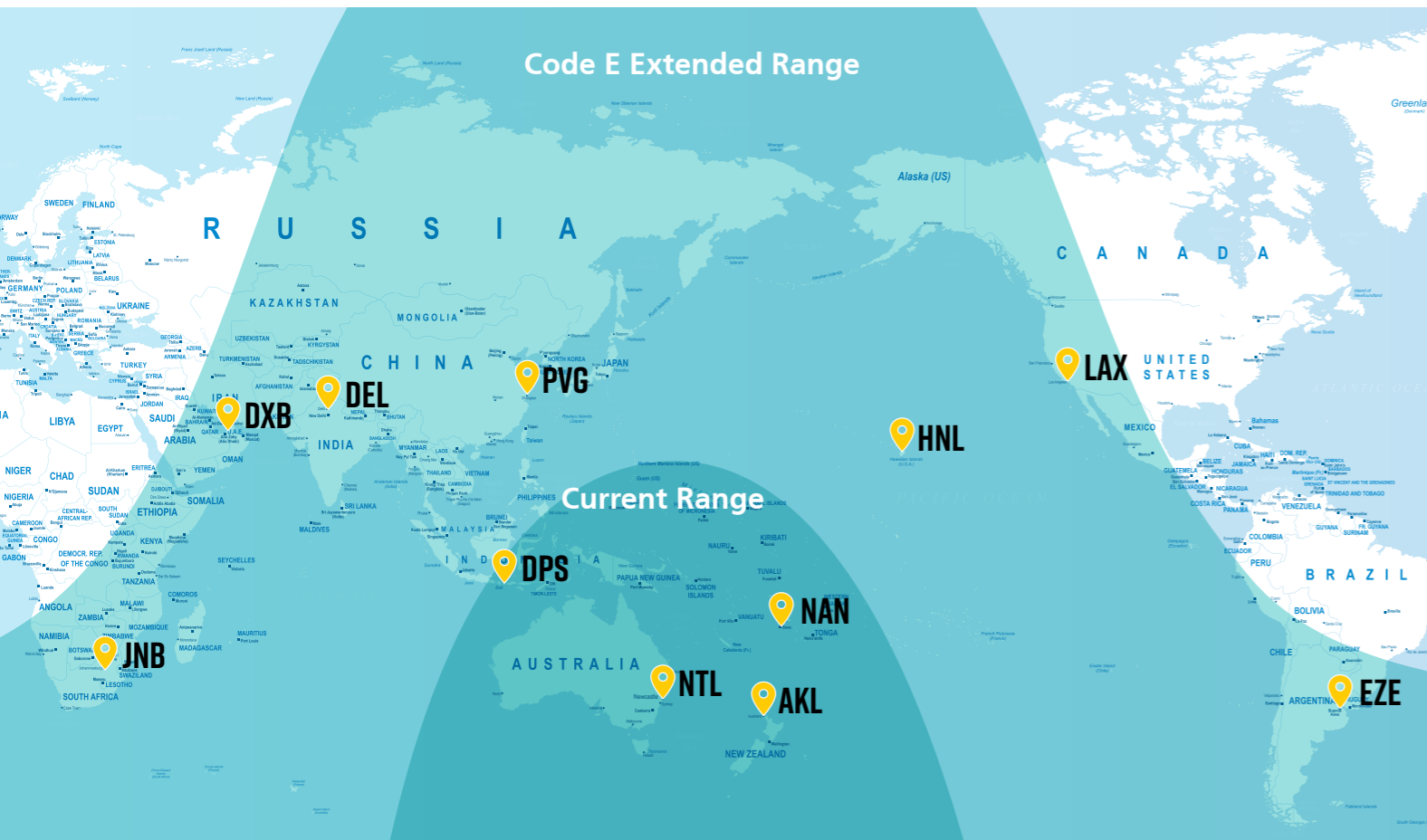
The project will build on some already planned, and budgeted for, Defence maintenance and overlay works, which will resurface the runway. At this point in time, the upgrade would be a value-added, but non-essential capability, for Defence. However, eventually, the upgrade to Code E will happen. Building on Recommendation 11 of the Federal and NSW Governments' [Joint Study on Aviation Capacity in the Sydney Region](#), the [Newcastle Airport Master Plan](#) has confirmed it is not an "if" but a "when" for the delivery of a runway to meet the needs of the Hunter region.

**This is an important opportunity for our civilian airport to seize the moment and secure the completion of this essential long-term upgrade, so its substantial economic benefits can be delivered as quickly as possible.**

*"Port Stephens is advocating strongly for the crucial upgrade of Newcastle Airport. This should expedite critical regional drainage upgrades and accelerate the rezoning and development of surrounding PFAS affected lands. In turn, driving significant long-term social outcomes and economic benefits for the region."*

**Ryan Palmer,**  
Mayor of Port Stephens

# Upgraded runway delivers longer-range international passenger services and freight capabilities



# Delivering sustained economic growth

Newcastle Airport commissioned independent economic impact assessments by Synergies Economic Consulting and Morrison Low to estimate the benefits that can be expected from the runway upgrade project. The reports concludes that, in the next 20 years, spending \$150M on the runway and terminal upgrades will boost regional economic income by \$12.7Bn and create 4,410 new full-time jobs in the region that otherwise wouldn't have been achieved through natural airport growth.

In fact, the *Newcastle Airport Master Plan* calculated the additional passenger numbers that would be attracted to the region if the runway upgrade resulted in new, twice daily international and domestic direct flights and additional capacity on existing routes. The master plan suggests that, on this 'high case' basis, the project will lead to approximately 850,000 extra passengers per year, including 175,000 additional international visitors, beyond the 'base case' calculated without the introduction of direct international flights and additional domestic flights the upgrade will support.

By FY2024, Synergies estimates that the annual economic impacts attributable to this increase in international tourist visitation will be:

- \$82.8 million contribution to NSW Gross State Product
- \$55.7 million additional factor income
- 722 new full time jobs

These benefits will come from:

## Attracting more international visitors to the Hunter Region

With the growing interest in Australian wine and other agricultural products, the natural experience offerings of locations such as the Hunter vineyards, Barrington Tops World Heritage Site, the beaches and coastal wildlife off Port Stephens, along with the vibrant and contemporary city of Newcastle, international tourists would be able to fly directly to the Hunter region without incurring the travel and time costs of travelling via Sydney.

Newcastle Airport serves Australia's sixth largest passenger catchment area, but is only the nation's 13<sup>th</sup> busiest airport, indicating the strong capacity for new direct international and domestic flights.

*"We're waiting to see what happens... before we push the button on a second hotel."*

*We need confidence that Newcastle will attract international routes from quality airlines.*

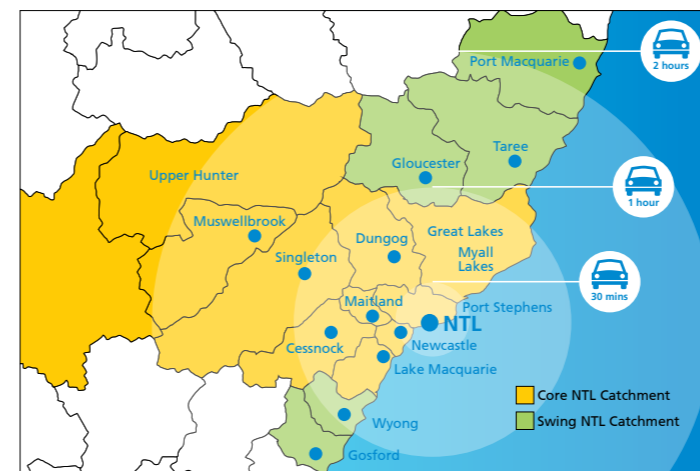
*There's so much opportunity here. Newcastle is a great market for us now.*

*But, with better air capacity, it could be a brilliant market."*

**Patrick Lonergan**, Director of Hotels, Doma Group

*"We foresee significant growth across all quality grades of accommodation services should international flights arrive directly in Newcastle."*

**Will Creedon**, Managing Director, Alloggio



## What will the Code E runway upgrade deliver?

- Longer range aircraft, opening up more direct destinations
- Increased aircraft capacity
- Additional freight capabilities

*"We need to plan for an upgrade to our airport facilities to ensure that Hunter is not left behind. The ability to rapidly move people and products from Williamtown will mean the difference between growing our regional economy or becoming a commuter satellite of Sydney. Cargo loads, utilise a far reaching catchment area for people and freight to benefit not only our region, but the greater inland and North Coast areas without adding to growing State road and rail congestion. Transport operators not only in Hunter but across the state would benefit from significant growth if international flights with air cargo loads call Newcastle Airport home. It would also be a catalyst to attract new business and bring increased economic activity and jobs into regional NSW."*

**Leigh Bryant**, Principal, Scorpion International



# Delivering sustained economic growth (cont'd)

## Strong economic impact of the expanded Newcastle Airport cluster

Over the 10-year construction period, Newcastle Airport will:

- Contribute \$168 million to the NSW economy
- Support more than 125 additional full-time jobs during the build

The increased activity at Newcastle Airport when the project is complete will expand the size of the airport cluster of related businesses and industries and its impact on the regional and State economies. For example, the runway upgrade project will enhance the region's connectivity to international centres, enhancing its attractiveness to new investment in the aeronautical and defence sectors.

The annual economic impacts attributable to this increase in the expanded airport cluster, from 2021 forward, will be an additional:

- \$60 million contribution to NSW Gross State Product
- \$39.2 million additional factor income
- 564 new full time jobs

*"Failure to capitalise on our natural advantages by developing Newcastle Airport would limit the Hunter. We would not realise the same economic opportunities for the regional economy as we would by planning for a fully connected, asset-rich system."*

**Samantha Martin-Williams**, Supply Chain & Logistics Association of Australia Advisory Board

## Benefits for residents

The project will also benefit residents in the Hunter region by avoiding the more than \$80 million annual cost of travelling to and from Sydney Airport.

*"A good airport is a significant enabler – not having one would be a serious disincentive to staying in this region. Having a local ability to airlift would improve our service to our clients who work in the global arena and have high expectations."*

**Chris Knowles**, Director of Sales and Marketing, McLanahan

## Benefits for exporters

Finally, upgrading the runway will help to stimulate and exploit freight opportunities for regional exporters throughout Northern NSW. This would occur, firstly by increasing existing freight out of Newcastle Airport that would otherwise be transported to a congested Sydney terminal. Secondly, it would stimulate extra freight, either through expansion of existing industry, or development of new industry to meet demand from newly developed international markets. In total, it is estimated the effect on Gross Regional Product would exceed \$6.5B and generate over 2,810 full time jobs across the life of the runway.

A March 2019 report by Deakin University, Centre for Supply Chain and Logistics further solidifies the size and scope of the freight opportunity. This joint study with the Port of Newcastle assesses the economic benefits that a collaborative approach between the organisations would unlock for the region and beyond. Deakin's investigation into current and potential future freight industries provides compelling evidence that an upgraded runway would without doubt transform Newcastle Airport into a global export gateway, expanding current industries and opening up an impressive range of new industries.

Industry examples include:

- Aquaculture
- Meat
- Dairy
- Cut flowers
- Native foods
- Industrial supplies
- Defence Manufacturing and Technology

*"I strongly support an airport upgrade for Newcastle. The lack of air freight capacity is a brake on our aspirations for growth. Having flights to Asia from Williamtown would give us more confidence to invest in expansion to meet the market demand. It would open new markets and increase demand for our products. At the Co-Op, we would grow. Our members would also scale-up to take advantage of the opportunities that an efficient local air freight system offers."*

**Robert Gauta**, CEO, Newcastle Commercial Fishermen's Co-Operative

# Making Newcastle a Global Gateway City

*"Newcastle Airport plays a key role in our city's ongoing transition from a great regional centre to an emerging global city, connecting our local communities with family, friends and colleagues across the nation and across the globe."*

**Nuatali Nelmes**, Lord Mayor of Newcastle

## Bringing an international air services capability to Newcastle Airport is critical to supporting regional, state and national economic and transport plans.

The [Greater Newcastle Future Transport Plan](#) for future transport out to 2056 recognises the growing importance of Greater Newcastle as a Global Gateway City, due to its:

- Catchment of more than one million people
- Strong health and education precincts, world class sporting facilities and economic development opportunities such as tourism
- Growth of specialised manufacturing and small-medium enterprises, Defence facilities and a growing knowledge industry base

The Plan stresses the need to grow access to international markets through Newcastle Airport, the only meaningful way to do this is to upgrade the airfield and terminal.

This is reinforced by the [2036 Hunter Regional Plan](#), which considers expanding the capacity of Newcastle Airport as a global gateway as one of the four important elements of the [Greater Newcastle Metropolitan Plan](#). The plan envisions a vibrant new metropolitan area with global gateways that maximise exports and tourism, and a centre of excellence for health and education.

We recognise and applaud the NSW Government's foresight and vision with NorthConnex tunnel linking the M1 Pacific Motorway at Wahroonga to the M2 Motorway at Pennant Hills. NorthConnex will provide greater connectivity, improving not only the efficient movement of state and national freight, it will more reliably move passengers delivering benefit to the visitor economy, and is aligned to the broader growth plans of Newcastle Airport.

## Complementing Western Sydney Airport

Similarly, the Federal and NSW Governments' [Joint Study on aviation capacity in the Sydney region](#) found that, while Newcastle Airport is too far from the Sydney market to serve as Sydney's second airport, it will serve an important and growing market for the Hunter and Central Coast regions.

The upgrade will establish NSW as a state with three international airports. Even when more international direct flights are in place, Newcastle will not compete with Western Sydney Airport (WSA). Just as the Sunshine and Gold Coast airports enhance Brisbane International Airport, an upgraded Newcastle runway will be an important complement to the state's air infrastructure. Also, while WSA is being built, enhanced passenger and freight air capacity at Newcastle could be vital in helping to alleviate the building pressure on Sydney Airport and its attendant road congestion.

**We believe these plans, and the anecdotal evidence gathered in interviewing the local businesses quoted in this report, present a compelling case for upgrading the runway at Newcastle Airport to accommodate increased international air services.**

## What will the Code E runway upgrade bring?



Strengthened runway



Upgrades to airfield lighting



Wider runway, an additional 7.5m either side of the shoulders



Upgrades to terminal and aprons



**Newcastle Airport is a global transport gateway** that is “...significant to unlocking the potential of the region’s tourism industry and providing an opportunity for the Hunter and Central Coast regions to export services and skilled labour to other parts of Australia and internationally.”

Hunter Regional Plan 2036

## About Newcastle Airport

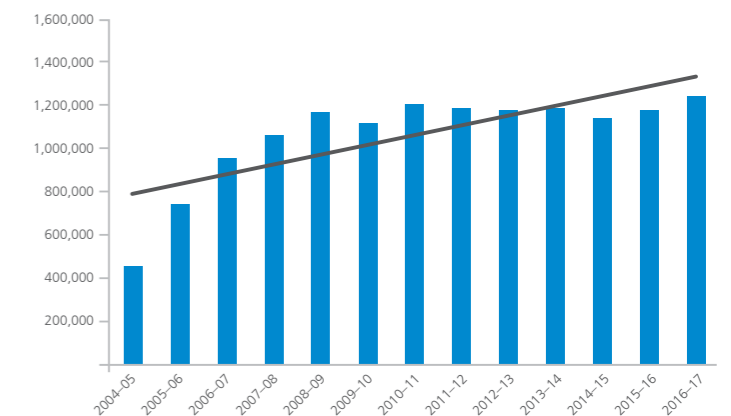
Newcastle Airport is a strategic asset of the region and an important gateway to the Hunter region. It currently contributes more than \$1.16 billion in economic activity; \$698 million to the NSW economy and supports more than 5,600 FTEs across tourism and the airport cluster.

With close to 1.3 million passengers annually, the airport serves five airlines: Jetstar, Virgin Australia, QantasLink, Fly Pelican, and Regional Express. It operates to the following destinations: Adelaide, Ballina/ Byron Bay, Brisbane, Canberra, Dubbo, Gold Coast, Melbourne, Sydney and Taree.

Last year, Virgin Australia operated a seasonal direct flight to Auckland over the November to February holiday period. The route successfully opened up new market of first time travellers to New Zealand from the region and supported local business to explore and strengthen trade opportunities across the Tasman.



### Newcastle Airport Passenger Throughput



Data source: Newcastle airport Annual Reports 2004–2017.

# Comments, queries and further information

If you have any feedback on or questions about the Newcastle Airport Runway Upgrade Project and its economic impact, please contact:

Peter Cock  
Chief Executive Officer, Newcastle Airport  
[peterc@newcastleairport.com.au](mailto:peterc@newcastleairport.com.au)

This project is supported by the following research:

- *Economic Impact Assessment of Newcastle Airport Runway Strengthening*  
– Synergies Economic Consulting, August 2018
- *Newcastle Airport International Air Freight Demand Forecasts and Economic Impact Assessment*  
– Morrison Low, January 2019
- *Complementary Freight and Supply Chain Opportunities in the Port of Newcastle and Newcastle Airport*  
– Deakin University – Centre for Supply Chain and Logistics, March 2019

## Limitation of work

General use restriction. This report is prepared solely for the internal use of Newcastle Airport Pty Limited. This report is not intended to and should not be used or relied upon by anyone else and we accept no duty of care to any other person or entity.

We would like to thank all those that provided input and contributed to the development of this report:

- Leigh Bryant, Scorpion International
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- Hunter Research Foundation Centre





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**REGIONAL COMMUNITIES DEVELOPMENT FUND  
NEWCASTLE AIRPORT TERMINAL UPGRADE  
STAGE 1  
BUSINESS CASE**

**PORT STEPHENS COUNCIL  
V1.0  
10 October 2018**

# NOMINATION DETAILS

MP who nominated project	Kate Washington
MP Electorate	Port Stephens
Which NSW Government Regional Growth Fund program or other Restart NSW Fund program has the project been submitted? OR How have you faced significant barriers to submitting the project under a Regional Growth Fund program? (Needs to be supported by written evidence)	Rebuild NSW Regional Growth – Environment & Tourism Fund
Outline any feedback you have received on your project under different Programs and highlight any adjustments you have made to respond to this feedback	<p>In 2015 Newcastle Airport Pty Ltd (NAPL) with Port Stephens Council (Council) applied for funding under the Tourism Infrastructure Fund. The application at that stage consisted of the following three projects. Each project is described below in order of priority for Newcastle Airport:</p> <p><b>Project priority 1:</b> Fit-out of the current international processing areas to provide fit-for-purpose processing areas for the introduction of direct international services to Newcastle Airport. Project cost: \$855,000 - <b>successful</b>.</p> <p>This project was completed without incident to the satisfaction of all aspects of the grant deed. It was instrumental in NAPL securing international flights to Auckland commencing 22 November 2018.</p> <p><b>Project priority 2:</b> The construction of a Code E aircraft parking apron to the east of the terminal Project cost: \$19.4 million - <b>unsuccessful</b>.</p> <p><b>Project priority 3:</b> Construction of terminal development to expand the current arrivals area, increase the capacity of the current baggage collection area, provide space for airline lounges, and international swing gate facilities for up to two Code C aircraft. Project cost: \$14.145 million – <b>unsuccessful</b>.</p> <p>Since the time of the 2015 application a number of key influencing factors have changed:</p> <p>NAPL has completed and released its Airport Master Plan, this plan was approved by both the Newcastle Airport Board and the Department of Defence. The plan had significant stakeholder engagement and support. It clearly establishes the future growth priorities and aligns to NSW State Government plans such as 2036 Greater Newcastle Metropolitan Plan.</p> <p>The number of passengers passing through the Airport has continued to grow beyond projected. This includes the commencement of flights to Adelaide domestically and from November 2018, Auckland internationally</p> <p>Following on from endorsement of the Airport Master Plan, NAPL has completed a Terminal Master Plan. This plan assesses in detail the staging requirements to</p>

	<p>incrementally meet passenger demand whilst not over building. Significant attention was paid to identifying triggers for building.</p>
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	<p>In this context the application has evolved, become more focused and matured. It has secured the support of the owning councils, the local state member and business leaders.</p>
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# KEY PROPOSAL DETAILS

PROPOSAL INFORMATION	
Proposal name	Stage 1 Newcastle Airport Terminal Upgrade: Increasing Regional Economic Growth through increasing arrival capacity.
Lead proponent (e.g. Council)	Port Stephens Council
Lead proponent ABN	16744377876
Proposal partners	Newcastle Airport Pty Limited
LEAD CONTACT	
Name	Dr Peter Cock
Position	Chief Executive Officer
Phone	02 4928 9807
Email	peterc@newcastleairport.com.au
Fax	02 4965 1927
Address	Williamtown Drive, Williamtown, NSW 2318
PROJECT SUMMARY	
<p>Proposal summary for publication</p> <p><i>(This wording will be used to describe your project as part of the stated preference surveying to assess your project. It is very important that the scope of works and expected outcomes are described very succinctly in no more than 150 words)</i></p>	<p>The community of the Hunter has a strong vision that Newcastle Airport will develop into a major facility capable of connecting passengers to all Australian capital cities and internationally.</p> <p>Specialist research and modelling shows that the single most immediate constraint to achieving that vision is the capacity of the terminal, in particular the Arrivals area.</p> <p>This Project is tightly focused on building facilities to lift arrival capacity. This will have an immediate impact of allowing an additional 780,000 passengers a year. This capacity will accommodate two new international destinations as well as flights to Adelaide, Cairns and Perth. It is totally consistent with the long-term planning for the Airport, market research around customer needs and strategies for Hunter tourism and business growth.</p> <p>The Project will contribute over \$245m to the economy and support 1,489 direct and flow on jobs in the Airport cluster and in Tourism.</p>
PROPOSAL LOCATION	
Proposal address	Newcastle Airport, Williamtown Drive, Williamtown, NSW 2318
Local government area	Port Stephens
NSW electorate	Port Stephens
Federal electorate	Paterson
LAND OWNERSHIP	
Who owns the land that the project will be on? If the land is leased, who is the lessor? (If on private land, please outline the public benefit- Maximum 50 words)	The Commonwealth of Australia owns the land.



	The lease is jointly with Port Stephens Council and Newcastle City Council and Commonwealth of Australia. The current lease agreement expires in 2076.
<b>PROJECT TIMELINE</b>	
Start date:	March 2019
End date:	June 2020
<b>TOTAL ESTIMATED PROJECT COST</b>	
<i>Total Cost of the project</i>	AUD\$15 million
<b>TOTAL FUNDING REQUEST</b>	
<i>Total amount of funding you are requesting from the Regional Communities Development Fund</i>	AUD\$8 million

# SUPPORTING DOCUMENTATION

REQUIRED SUPPORTING DOCUMENTS	
<i>The following documents are required, please confirm you have attached.</i>	YES/NO
Evidence of ABN or ACN	YES
Previous two years financial statements	YES
Appropriate detailed project budget	YES
Evidence to support your costings ie cost plan, quotes	YES
Appropriate project plan (if relevant)	YES
Previous application(s) submitted under other NSW Government Regional Growth Fund Program (if relevant)	YES
Confirmation of land ownership or landowner consent to use the land	YES
Confirmed co-contribution	YES
Data sheet (template provided)	YES

OTHER SUPPORTING INFORMATION	
<p>Attachments</p> <p><i>Please list out all supporting information provided</i></p>	<p>Attachment 1: Evidence of ABN/ACN</p> <ul style="list-style-type: none"> <li>- Australia Business Register Extract NAPL</li> <li>- ASIC Registry extract NAPL</li> </ul> <p>Attachment 2: Financial Statements</p> <ul style="list-style-type: none"> <li>- Financial Statements FY2016/17 (Pty Ltd)</li> <li>- Financial Statements FY2016/17 (Partnership)</li> <li>- Financial Statements FY2017/18 (Pty Ltd)</li> <li>- Financial Statements FY2017/18 (Partnership)</li> </ul> <p>Attachment 3: Terminal Upgrade Detailed Budget</p> <ul style="list-style-type: none"> <li>- Detailed Budget (Spreadsheet)</li> <li>- Detailed Budget (Cash flow)</li> </ul> <p>Attachment 4: Evidence of Costing Newcastle Airport: East End Terminal Expansion</p> <p>Attachment 5: Project Summary Program - Terminal Upgrade</p> <p>Attachment 6: Previous Application – Newcastle Airport Regional Tourism Infrastructure Fund 2015</p> <p>Attachment 7: Land Owners Consent</p> <p>Attachment 8: Confirmation of co-contribution from NAPL</p> <p>Attachment 9: GLE Application Data Sheet</p> <p>Attachment 10: Newcastle Airport Master Plan</p> <p>Attachment 11: Terminal Master Plan Images</p> <p>Attachment 12: Architect Impression of the Facility</p> <p>Attachment 13: Terminal upgrade letters of support</p>

	<ul style="list-style-type: none"> <li>- Port of Newcastle</li> <li>- Regional Development Australia Hunter</li> <li>- Hunter Business Chamber</li> <li>- Property Council of Australia</li> <li>- Destination Port Stephens</li> <li>- Destination Sydney Surrounds North</li> <li>- Alloggio - Holiday Property Management</li> <li>- Committee for the Hunter</li> <li>- Hunter Joint Organisation</li> <li>- Hunter Valley Wine and Tourism Association</li> </ul> <p>Attachment 14: Economic Impact Assessment – Terminal Project</p> <p>Attachment 15: Project Strategic Alignment</p> <p>Attachment 16: DA Approval No. 16-2008-940-4</p> <p>Attachment 17: Terminal Upgrade Risk Register</p>
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## DOCUMENT INFORMATION

Document Summary Information	
Version	
Version Release Date	
Document Security	

Document History			
Version	Amendment	Amendment Date	Amended by

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# 1 EXECUTIVE SUMMARY

## 1.1 LOCATION AND CONTEXT

Newcastle Airport is the main airport in the Hunter region and is located on the east coast of NSW, 20 kilometres north of the city of Newcastle and 160 kilometres north of Sydney. The Airport site is owned by the Commonwealth Government and is leased to the Port Stephens and Newcastle City Councils, the operating entity collectively known as Newcastle Airport Pty Limited (NAPL). The 28-hectare site includes an apron, terminal, ground transport and parking and business, commercial and aviation support. **Figure 1.1.1** shows the location of the airport.

**Figure 1.1.1 Newcastle Airport in locational context**

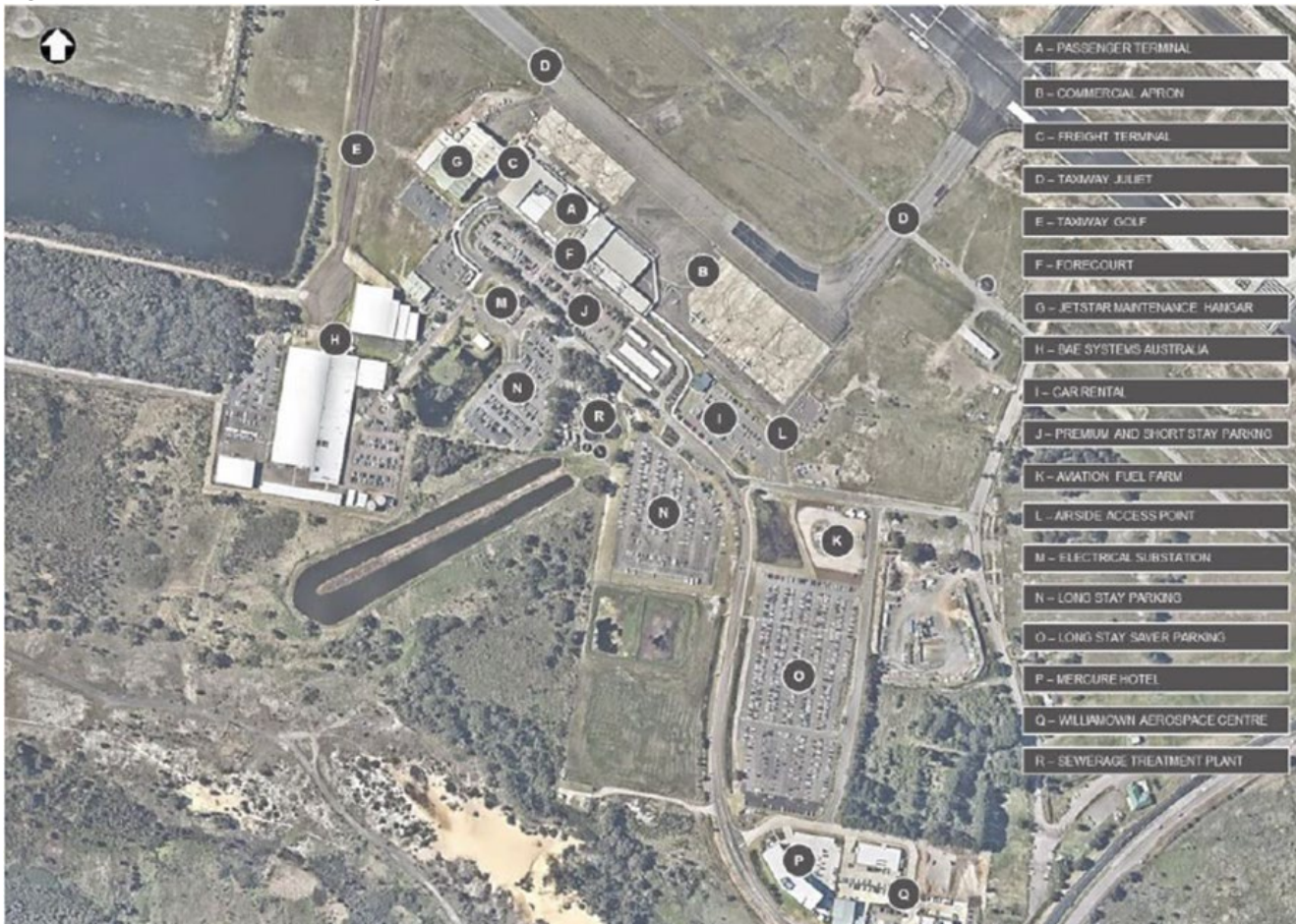


Source: Newcastle Airport Master Plan 2036

Port Stephens and Newcastle City Councils own and operate the Airport, it is located on a 28ha site leased from the Commonwealth of Australia through the Department of Defence. Also located on the site is Royal Australia Air Force Base Williamtown, the civilian airport has access to the airfield owned and operated by the RAAF. The military base provides both air traffic control and fire and rescue services to civilian / commercial operations. RAAF Base Williamtown has been operating since 1942 and is currently undergoing a significant \$1.5 billion expansion program that is being delivered in stages. The works include sequential

runway extensions, new military accommodation and support facilities. The **Figure 1.1.2** below shows the current civilian airport configuration.

**Figure 1.1.2 Current airport configuration**



Source: Newcastle Airport Master Plan 2036

Figure 1.1.3 shows Newcastle Airport in strategic context of the Greater Newcastle Metropolitan Plan (GNMP). The GNMP describes Newcastle as a “global” city.

Figure 1.1.3 Greater Newcastle Metropolitan Plan



Source: Greater Newcastle Metropolitan Plan 2036

## 2 CASE FOR CHANGE

### 2.1 BACKGROUND

Figures 2.1.1, 2.1.2 and 2.1.3 demonstrate the range of users at Newcastle Airport and its wide community and business impacts and market, the already at capacity facilities during peak times and the scale of the existing facility.

Figure 2.1.1 Terminal users at peak time



Figure 2.1.2 Terminal users at peak time





Figure 2.1.3: Terminal users at peak time



Newcastle Airport is significant transport gateway for the people of the Hunter, Central Coast and surrounding districts. Direct air transport is vital to facilitate both social and economic prosperity of the region.

The NSW Government's plans guide how to ensure the region is a vibrant hub attracting net migration and taking pressure off other parts of the State. This will be achieved through affordable and available housing, high quality of life and availability of meaningful employment. Air transport allows for efficient connection of families and for leisure trips, this enhances lifestyle for those living in the area. Quality of life is a vital part of the value proposition which must be used to attract people to live in the region.

Tourism and the visitor economy more generally is a growing source of economic activity for the region, providing diversification from the traditional industries such as mining and manufacturing. Direct air services are vital in the dispersal of tourism into the region. Experience shows that a direct air route can increase visitation by as much as three times.

More broadly ease of access via air transport facilitates economic activity and removes barriers for the establishment and relocation of business into the region.

For these reasons the ability for Newcastle Airport to meet the air transport needs of the region is vital. To do this there needs to be adequate spare capacity to allow for growth in existing routes and for the establishment of new routes. Particularly international routes which facilitate high value visitor economy traffic.

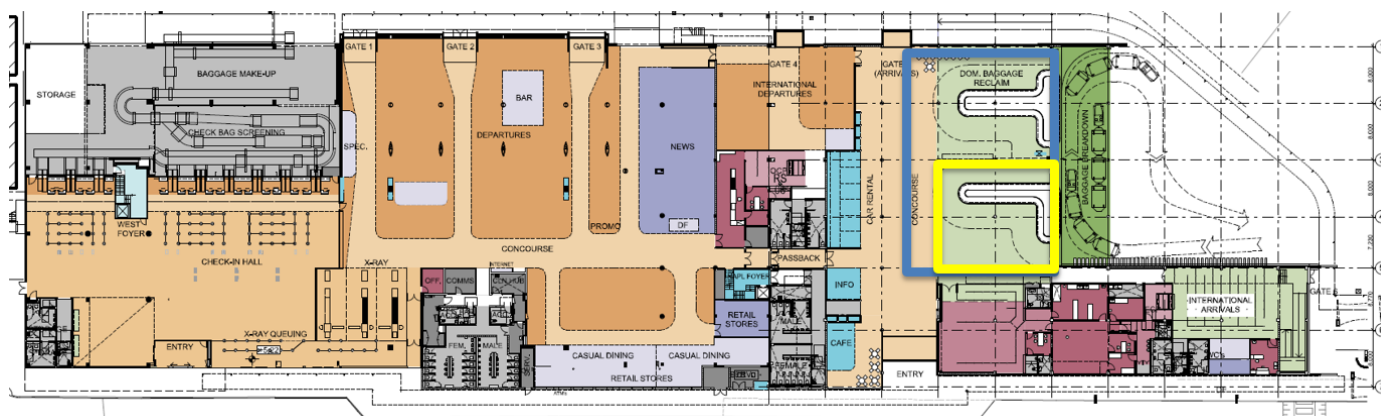
The proposal is to extend the current terminal building to allow for the construction of a new and larger Arrivals area. The current forecourt road also needs to be redirected around the new building, this cost is in scope for this project. There is also a requirement to relocate some parking facilities, these costs are not included within the project scope and budget (excluded works).

It is important to note that the expansion which is the subject of this application is entirely consistent with the 2015 terminal expansion and the 2016 international fit-out project where NSW Government support was provided. All the facilities constructed under those projects will continue to form an important part of the Airport facilities. Also the works described in this application are aligned to the long term vision for the terminal captured in the Terminal Master Plan.

## 2.2 RATIONALE FOR INVESTMENT

Arriving passengers at Newcastle Airport are currently facilitated through a 379m<sup>2</sup> area containing two arrivals belts. The area is arranged in a swing gate system, which is to say that both belts are utilised when there is only domestic arrivals. However when there is international traffic then one belt is used for international traffic and one for domestic traffic. The existing layout is shown below, with the arrivals area highlighted and the internal swing capacity shown in yellow outlined in **Figure 2.2.1**.

**Figure 2.2.1 Existing arrivals configuration**



Currently the Airport has a constraint in arrivals capacity and is unable to accept additional domestic flights during periods of the day or approximately 1-2 hours and has long periods, up to 6 hours, during which it is not able to accept international flights. Further there currently exist periods of the day when the amenity of the existing facilities is below recognised acceptable standards.

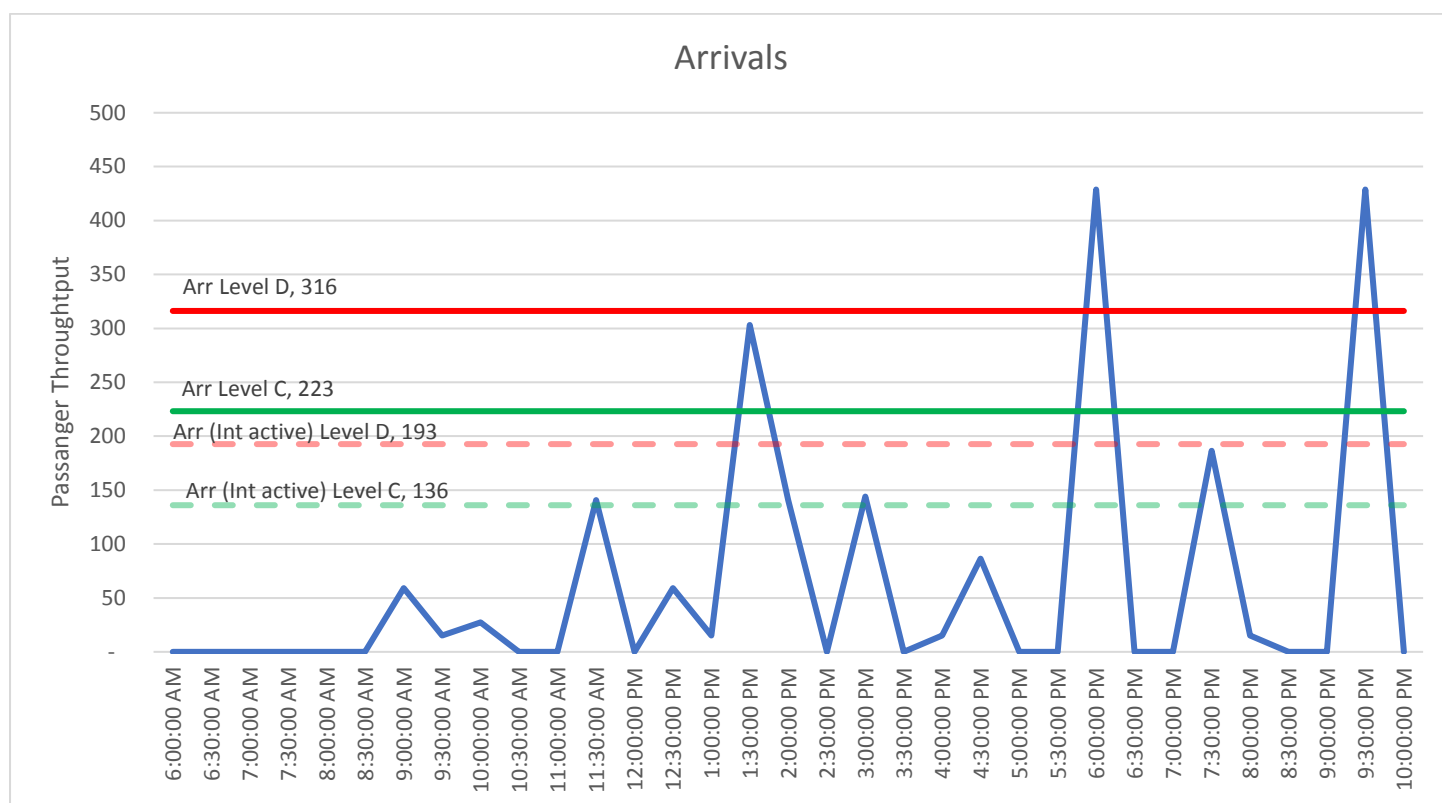
The standards used are those developed by the International Air Transport Association (IATA). Levels of service (LoS) categories are a standardised and a globally recognised approach to categorising conditions in airport terminals. The LoS categories are outlined below in **Table 2.2.2**.

**Table 2.2.2 Level of service categories**

<b>A</b>	An Excellent Level of Service. Conditions of free flow, no delays and excellent levels of comfort.
<b>B</b>	High Level of Service. Conditions of stable flow, very few delays and high levels of comfort.
<b>C</b>	Good Level of Service. Conditions of stable flow, acceptable delays and good levels of comfort.
<b>D</b>	Adequate Level of Service. Conditions of unstable flow, acceptable delays for short periods of time and adequate levels of comfort.
<b>E</b>	Inadequate Level of Service. Conditions of unstable flow, unacceptable delays and inadequate levels of comfort.
<b>F</b>	Unacceptable Level of Service. Conditions of cross-flows, system breakdowns and unacceptable delays; an unacceptable level of comfort.

NAPL has a current peak hour of 429 people arriving, which occurs twice a day (based on the IATA standard 80% load factor does not including off schedule arrivals or seasonal LF peaks, i.e. conservative.) Represented graphically as shown in **Figure 2.2.3** there are currently three times per day when the LoS fall below C to D and twice a day when the LoS fall below D to E, i.e. inadequate levels of service. The lighter dashed lines describe the situation if the swing gate is unavailable for domestic arrivals. This results in six times a day when LoS are not adequate and three when they are so poor as to be non-functional.

Figure 2.2.3 Passenger throughput in arrivals area current



Capacity constraints at particular times of the day, are critical points of failure in the ability attract new flights and increased traffic on existing routes into Newcastle Airport. The domestic and many international airlines currently have limited fleet availability. Airlines therefore have a need to maximise the utilisation of aircraft activity, this means when making decisions about bring aircraft to Newcastle there is likely to be little or no flexibility around the available time slot. For reasons of a commercial nature airlines often seek to align flight times with competitor airlines, resulting in the peaks or waves of arrivals and departures that are often seen.

For a regional airport such as Newcastle if capacity is not available when required by an airline it's likely that the aircraft time will be utilised at one of the many other airports bidding for the capacity increase.

Experience has also shown that substandard experiences by passengers at airports reduces traffic. This has been clearly demonstrated at Newcastle Airport. Following the August 2015 terminal expansion, majority funded by NSW Government, passenger numbers have grown steadily and are at record levels. The prior 3 years comprised flat and reducing passenger traffic.

The current poor levels of service have been independently quantified. This has been done through a regular survey overseen by the Airports Council International (ACI). In this survey passengers use a 1-5 ranking system to score various part of their experience at an airport. The survey methodology is overseen by ACI; globally there are over 340 participating airports in over 85 countries. The survey allows an airport to both measure its own performance and compare with like airports. At Newcastle Airport the current arrivals and baggage collection area receives the lowest ranking metric of all Newcastle Airport terminal facilities. When compared with other major airports in Australia and New Zealand the area ranks as the worst experience across the comparator airports. Whereas Newcastle Airport is currently ranked top 3 in 25 out of the other 31 categories.

## 2.3 STRATEGIC ALIGNMENT

There are very few strategies in the tourism, community planning and economic development spaces in the Region and in NSW that do not only recognise the importance and potential of Newcastle Airport as a valued resource, a driver of growth and a platform for change.

**Attachment 15: Project Strategic Alignment** provides more detailed evidence of the strategic alignment of the Project with a wide range of strategies, plans and recent NSW funding priorities and initiatives.

**Table 2.3.1** provides as summary of the project's alignment with key strategic documents impacting on the State and the Region.

**Table 2.3.1: Project Strategic Alignment**

<b>State Plans</b>	<b>Strong and specific reference to Newcastle Airports role, growth and expansion</b>	<b>Indirect or referred reference</b>	<b>No reference</b>
Premier's Priorities		Yes	
NSW Government 20 Year Vision for Regional NSW (July 2-18)		Yes	
NSW State Infrastructure Strategy Update		Yes	
Restart NSW/Rebuilding NSW			Consistent
NSW Visitor Economy Industry Action Plan		Yes	
Regional Development Framework		Yes	
Joint Study on Aviation capacity in the Sydney Region (2012)	Yes		
<b>Regional Plans</b>			
Greater Newcastle Metropolitan Plan 2036	Yes		
Hunter Regional Economic Development Strategy 2018-2022	Yes		
Hunter Regional Plan 2036	Yes		
Committee for the Hunter Draft Priorities	Yes		
Destination Sydney Surrounds North	Yes		
Hunter Business Chamber priorities 2018	Yes		
Hunter Transport Plan 2018	Yes		

<b>State Plans</b>	<b>Strong and specific reference to Newcastle Airports role, growth and expansion</b>	<b>Indirect or referred reference</b>	<b>No reference</b>
<b>Local</b>			
Destination Port Stephens Management Plan	Yes		
Port Stephens Community Strategic Plan	Yes		
Terminal Master Plan	Yes		
Newcastle Destination Management Plan			
Airport Master Plan	Yes		
<b>Recent state funding initiatives</b>	<b>Strong positive relationship</b>	<b>Minor connection</b>	<b>No relationship</b>
Newcastle Airport Aviation and Aero Space Hub	Yes		
Newcastle Cruise Terminal Development	Yes		
The University of Newcastle expansion inner city campus and Innovation Hub	Yes		
Newcastle City Centre Renewal Investments	Yes		
Nelson Bay Road Upgrade	Yes		
Port Stephens Koala Sanctuary	Yes		
Redevelopment of Broadmeadow Sports and Entertainment precinct	Yes		
Bannisters Hotel and Restaurant DNSW funding		Yes	
M1 Black Hill to Raymond Terrace extension	Yes		

## 2.4 EXPECTED OUTCOMES

Outcomes of the project are diverse and multi-layered. Fundamentally this is about making Newcastle Airport “fit for purpose”. It is about matching airport facilities to community demands and visitor expectations while delivering long term social and economic benefits to the Region.

Many of the outcomes are quantifiable:

- Increased passenger numbers
- Increased tourism numbers through NAPL
- Increased flight destinations
- Quantified through passenger satisfaction surveys, which are independently audited
- Increased business activity and marketing located at NAPL and in the surrounding hubs
- Reported increase in resident and stakeholder satisfaction evident in NAPL’s program of customer surveys
- Measurable financial benefit to owners (local Councils)

Other outcomes are less easily quantified, but they will contribute to the quantifiable outcomes listed above:

- Increase in local community pride
- Improved sense of Newcastle as a world class city in the eyes of visitors
- Improved sense of local ownership through improved flight services for local air commuters in mining and other sectors
- Contribution to regional growth by providing stronger links between the Hunter, Port Stephens, Lake Macquarie and Newcastle – as a destination package
- Brand strengthening through association for business users
- Better and safer working conditions for NAPL staff

Expected outcomes are detailed by sector in **Table 2.4.1**

**Table 2.4.1: Expected outcomes for stakeholder groups**

Stakeholder Groups	Expected Outcomes
Local Residents	<p>Easier and more comfortable direct access to a range of flights both domestic and international. Growing sense of pride in an Airport that they consider to be “their local”. Improvement to the image of the local area.</p> <p>Enhanced activity at the Airport and RAAF base and improved building facilities act as an attractor to the local community for other services and employment hubs. This enhances local liveability and sustainability. For example – the newly proposed Catherine McCauley Catholic College, adjacent to the RAAF base at Medowie, will become a local community hub and a much-welcomed educational facility for the area.</p> <p><i>Quantitative benchmark: local resident satisfaction increases over time in Newcastle Airport’s regular surveying work.</i></p>
Tourists	<p>Sense of arrival at a world class tourist destination. Improved accessibility to the triangle of attractions: The Hunter, Port Stephens and the City of Newcastle.</p> <p><i>Quantitative benchmark: measurable increase in tourist visitation over 5 years.</i></p>
Mining Sector	<p>Ease of access for local mine workers to significant employment hubs interstate. Reduced travels times and enhanced comfort at the Airport contributes to a more relaxed journey to work and better rested employees.</p>

Stakeholder Groups	Expected Outcomes
	<p><i>Quantitative benchmark: measurable increase in mining worker usage over 5 years.</i></p>
Tourism Sector	<p>Brands all of Port Stephens, Newcastle, Lake Macquarie, Maitland and the Upper Hunter as more desirable places to live, work and play. The first impression on arrival sets up the entire tourist experience and leaves the last positive memory on departure. An enhanced Airport supports growth in the tourism sector.</p> <p><i>Quantitative benchmark: increased tourism advertising at the Airport and a 50% increase in branding events (e.g. wine tasting, whale watching videos, local live music etc.)</i></p>
Manufacturing Sector	<p>Ease of access for local manufacturing workers and for freight services.</p> <p><i>Quantitative benchmark: measurable increase in manufacturing related business over 5 years.</i></p>
Aviation and Aero Space Hub	<p>Newcastle Airport is a critical piece of infrastructure at the heart of the aviation and aerospace hub. This proposal is commensurate with the significance of this sector the Region and brands the Hub as a major contributor to international aviation and science and trends.</p>
University of Newcastle	<p>Newcastle Airport development responds to increases in international student numbers and the importance of access to family, and the feeling of being in a world class city. This proposal allows the Airport to keep pace with developments at the University and across the City of Newcastle.</p> <p>Recent State Government investment into renewing the city ultimately should spread to the major gateways; the Airport being the most significant gateway for a growing number of visitors from outside the area and from overseas. University of Newcastle has for a long time been engaged in building connections between its international students and the local business community with the aim of enhancing the Regions international networking and export potential. The arrival portal is a key to branding the potential of the Region for the wider community engaged through international students.</p>
Start-ups and emerging businesses	<p>An expanding Airport with state-of-the-art facilities attracts new and emerging businesses to fly form their local port and hopefully maintain that behaviour as they grow. A renewed Airport reflects and affirms the energy of new business in the city and in the Region.</p>

The expected outcomes in terms of jobs and growth in the Region and State output are provided in Section 3.6 of the submission.

## 2.5 STAKEHOLDER & COMMUNITY SUPPORT

### 2.5.1 LETTERS OF SUPPORT

Stakeholder and community support for the Airport and the Project is very strong. **Attachment 13 – Terminal upgrade letters of support** provides copies of letters of support from key organisation across the Region including:

- Port of Newcastle
- Regional Development Australia Hunter
- Hunter Business Chamber
- Property Council of Australia
- Destination Port Stephens
- Destination Sydney Surrounds North
- Alloggio - Holiday Property Management
- Committee for the Hunter
- Hunter Joint Organisation
- Hunter Valley Wine and Tourism Association

### 2.5.2 MEDIA

Recent Newcastle Airport developments and announcements have been strongly supported by a breadth of stakeholders as investments and activities that support job growth and boost economic development in the Region. The attention Newcastle Airport receives in the media demonstrates this community support. Some extracts from recent media reports are provided below.

**Headline: Astra Aerolab coming to Newcastle Airport, 21 September 2018**

*Relating to the announcement of Newcastle Airport's investment into Astra Aerolab.*

“Property Council Regional Director for the Hunter, Anita Hugo said that this is a welcome investment in infrastructure and will be important in driving growth across the region.

“The Hunter is home to a large number of defence and advanced manufacturing capabilities and the commercial precinct will provide an important hub for defence, aerospace and related industries.

“This ultimately means more jobs, a greater regional profile, and improved outcomes across related education, research and business growth in our region,” Anita said.<sup>1</sup>

**Headline: Newcastle aerospace precinct gets \$11.7m boost from NSW government, 13 September 2018**

NSW Minister for Trade and Industry, Niall Blair, said the news couldn't come at a better time with the NSW Government's recent commitment of \$400,000 for the STEMship Program, which will equip Hunter students with the technical skills they need to work in the defence and aviation industries.

“The precinct will deliver employment opportunities across a range of professions, creating jobs in industries with an important future,” Blair said.

“With this project we are actively creating attractive, engaging career pathways for people living in the regions, supporting local economies and backing our local defence industry,” he said.<sup>2</sup>

“This investment will capitalise on the existing economic strengths of the region, securing 76 hectares of special land committed to defence and aviation-related industry and employment.

<sup>1</sup> [https://propertycouncil.com.au/Web/Content/News/NSW/2018/Astra\\_Aerolab\\_coming\\_to\\_Newcastle\\_Airport.aspx](https://propertycouncil.com.au/Web/Content/News/NSW/2018/Astra_Aerolab_coming_to_Newcastle_Airport.aspx)

<sup>2</sup> <http://www.manmonthly.com.au/news/newcastles-aerospace-precinct-gets-11-7m-boost-nsw-government/>



“Over its lifetime, this new precinct will create thousands of direct and indirect jobs including roles for aviation IT and avionics specialists, mechanics and engineers, in the Hunter,” Barilaro said. “With this project we are actively creating attractive, engaging career pathways for people living in the regions, supporting local economies and backing our local defence industry,”<sup>3</sup>

**Headline: Direct flights a boost for tourism, 25 July 2018**

*Relating to Newcastle Airport’s announcements direct Auckland services will commence in November 2018*

Hunter Valley Wine and Tourism Association general manager Jo Thomas said the new flight route will open up a range of opportunities for the Hunter Region. “The HVWTA congratulates Newcastle Airport for their dedication in striving to become a second international gateway into NSW and recognises the significant contribution this will have for our local economy.”<sup>4</sup>

**Headline: Crunch time on international flight demand, 19 September 2018**

*Relating to Newcastle Airport’s announcements direct Auckland services will commence in November 2018*

Deputy Prime Minister and Minister for Infrastructure and Transport Michael McCormack told media on Wednesday. “Importantly, these flights will help drive regional tourism growth and dispersal of visitors to Australia’s most popular tourism destinations,” he said.<sup>5</sup>

Virgin Australia’s general manager, network, revenue and alliances, Russel Shaw, said the Auckland service would be a “much more seamless international travel experience”. “The greater Hunter region will also benefit from increased tourism opportunities, with New Zealanders now able to travel direct to Newcastle and explore the region and all it has to offer, including wineries, restaurants and pristine beaches.”<sup>5</sup>

**Headline: International flights from Newcastle a step closer, 1 May 2017**

*Relating to Newcastle Airport preparing the terminal for international flights following receipt of funding*

NSW Infrastructure Minister Andrew Constance said the upgrade’s wider impact could add \$147 million to the Hunter’s economic output.

“Newcastle Airport is recognised as one of the fastest growing airports in NSW and making it ready for international flights is the next smart step,” Mr Constance said.<sup>6</sup>

**Headline: Visionary plan to expand airport to meet community needs, 22 April 2018**

*Relating to Newcastle Airport’s release of its 20-year Master Plan*

Supported by the NSW Government and developed in consultation with local, state and federal government stakeholders plus the community, the Master Plan provides a clear direction and capitalises on the role of the Airport in stimulating economic and social prosperity.

Intended to guide the ongoing development of New South Wales’ second busiest airport, the Master Plan supports continued investment in vital infrastructure that provides capacity to support strong regional, national and global connectivity, benefiting both the NSW visitor and knowledge economies.

<sup>3</sup> <http://www.manmonthly.com.au/news/newcastles-aerospace-precinct-gets-11-7m-boost-nsw-government/>

<sup>4</sup> Advertiser (Cessnock) 25/07 ‘Direct flights boost for tourism’

<sup>5</sup> Newcastle Herald 19/09 ‘Crunch time on international flight demand’

<sup>6</sup> <https://www.theherald.com.au/story/4629942/international-flights-from-newcastle-a-step-closer/>

Commenting on the Newcastle Airport 20-year Master Plan, Parliamentary Secretary for the Hunter, Scot MacDonald MLC said, "The plan provides a clear vision for this vital piece of infrastructure to continue to serve the Hunter community well into the future.

Aligned with the NSW Government's Hunter 2036 Regional Plan, the Newcastle Airport Master Plan will ensure enhanced linkages to support economic growth, foster strong strategic trade and employment centres, enable connections to the Asia Pacific and maximise the presence and contribution of Defence related industries. The Airport delivers over \$1.1 billion in economic impact to the region. This is only the beginning," Scot MacDonald added in support. <sup>7</sup>

**Headline: Newcastle Airport welcomes first flight to Adelaide, 28 March 2018**

*Relating to Newcastle Airport's announcement of Newcastle to Adelaide services with FlyPelican*

Lue Fagan from Irrawang High School told News of The Area, "Without a doubt, the stars of the day were our amazingly awesome Drum Corps, they put a smile on the faces of everyone who boarded, and the ground staff around them."

"Big thanks to Newcastle Airport for giving us the opportunity of showcasing our students to a much wider audience," she said.<sup>8</sup>

**Headline: One step closer to direct international flights at Newcastle Airport, 08 May 2017**

*Relating to Newcastle Airport's completion of its international facilities project*

Hunter-based construction firm, Kingston Building, will carry out works on the \$1.9 million project, which is partly funded by the NSW Government's Restart NSW Fund, and set to create more jobs for the region. "As a Hunter-based builder we understand what a vital piece of infrastructure Newcastle Airport is for the region," said Kingston Building's Managing Director, Col Robards. "For our team to be awarded these works, which are a next vital step in bringing international flights to the Hunter region, is such an honour. We're looking forward to working with the Newcastle Airport team to deliver this project." <sup>9</sup>

**Headline: International flights from Newcastle a step closer, 1 May 2017**

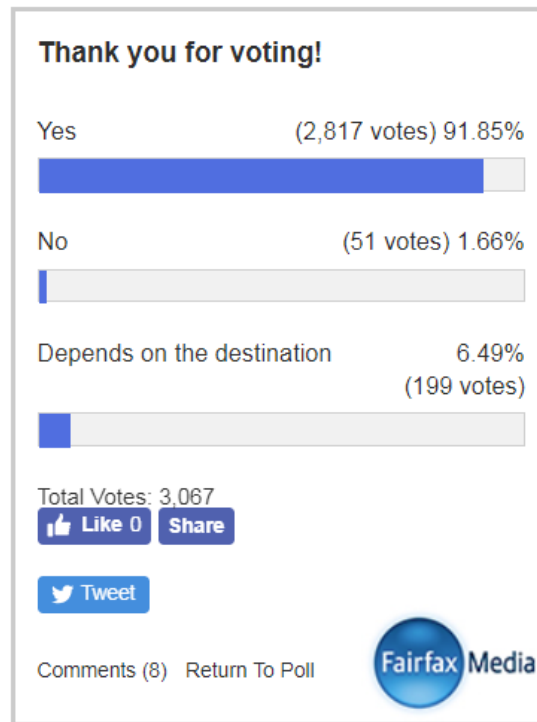
In this article published 1 May 2017, the Newcastle Herald asked the question, 'will you fly internationally from Newcastle if possible?'<sup>10</sup> 92% of respondents indicated they would.

<sup>7</sup> <http://www.hbrmag.com.au/article/read/visionary-plan-to-expand-airport-to-meet-community-needs-2707>

<sup>8</sup> <http://www.newsofthearea.com.au/newcastle-airport-welcomes-first-flight-adelaide-38965>

<sup>9</sup> <https://www.portstephens.nsw.gov.au/your-council/news/one-step-closer-to-direct-international-flights-at-newcastle-airport>

<sup>10</sup> <https://www.theherald.com.au/story/4629942/international-flights-from-newcastle-a-step-closer/>



In addition to the support in the media, Newcastle conducts regular rigorous research within the Region and this reveals strong support for the development of the Airport while providing insights to critical indicators for successful growth. Some key research findings are outlined under Community Sentiment below.

### 2.5.3 COMMUNITY SENTIMENT SURVEYS

Newcastle Airport maintains contact with its community and stakeholders through monitoring local media, networking and through rigorous independent research. In 2016 *Key Insights* Pty Ltd undertook the following research with Newcastle Airport's stakeholders:

Conducted focus groups scoping the FIVE issues with the following segments:

1. A group of frequently flying strategic thinkers who are likely to deliver high value input to the research.
2. A group of Newcastle residents; mostly occasional flyers.
3. A group of current and potential champions with connections to flyers including local related business (car hire, hotel etc.), key University and Health Personnel, Business Chamber representatives and other key industry group representatives.
4. A group of Central Coast residents with strong connections to the local market (Travel Agents, Business Chamber and Tourism Office personnel)
5. A representative selection of Newcastle Airport staff.

The focus group research, which underpinned comprehensive quantitative research, revealed the following about community sentiment:

“Priority issues most frequently identified as “game-changers” across all focus groups:

- Flight Times (not always suitable – sometimes linked to not enough flight choice)
- Connections (e.g. long lay-overs in Brisbane on international outbound, or no connections for inbound international looking to connect SYD-NTL)
- Direct flights (particularly domestic – more direct destinations)

- International flights (Direct flight to hub in Asia)
- Public transport to the Airport (fast and direct)

Also identified but not as strongly emphasised universally across all focus groups:

- Luggage allowance (needs to match international business class outbound)
- Presence in the marketplace (particularly Central Coast)
- Business lounge (desirable – along with meeting rooms)
- Quantum of value for the drive north to Williamstown
- United regional effort and marketing persistence – Newcastle Airport needs to act in partnership with the Region in promoting inbound traffic. Regional players need to strongly support Newcastle Airport.
- Grow existing domestic routes and build out from there.
- Facilities/service provision that also market Newcastle; e.g. “skybus”, flight information boards, joint ventures with partners such as The Mercure.”<sup>11</sup>

**Follow-up quantitative research** in the Hunter and Central Coast regions found the following statistically significant insights to community sentiment:

“The analysis of the facilities and services that might support travellers to select Newcastle Airport as their starting point identified options for potentially addressing leakages for some travellers. The average ranking (on a scale from -2 to 2) across all respondents shows that the following facilities and services were highly ranked and are likely to provide valuable support for travellers considering Newcastle Airport as their starting point:

- Direct flights to my destination (Ranking 1.78)
- Price competitive airfares from Newcastle (1.70)
- Luggage transfer from Newcastle through to my end destination (1.52)
- A direct flight to an international airport (1.49)
- Better scheduling of flight times and connections (1.47)
- Cheaper parking at Newcastle Airport (1.45)
- Minimum connection times between flights (1.43)

**Of these highly ranked facilities and services, those mostly likely to improve selection of Newcastle Airport as a starting point are *Direct Flights to my destination* and *Price competitive airfares*.** In addition to the highly ranked facilities and services listed above, *Easy access via public transport to Newcastle Airport* (ranking 1.29) may also provide some support for travellers. A Business lounge, business class luggage allowance and family friendly areas were not highly ranked and are not likely to improve selection.”<sup>12</sup>

Newcastle Airport is currently developing further research and specific strategies targeted at the Central Coast. This proposal is an enabler for Newcastle Airport to meet community expectations. It allows the Airport to become “fit for purpose” and deliver the range of services that its community expects and deserves.

<sup>11</sup> Key Insights Stage One Market Research September 2016 (internal report)

<sup>12</sup> Key Insights Pty Ltd: Newcastle Airport Market Research Survey December 2018 (internal report)

Newcastle Airport has undertaken significant stakeholder and community engagement in the lead up to this application. It continuously consults with its customers and from time to time commission's expert strategic research in order to make a rigorous case to airlines for new services and to monitor and report on its community performance to its Board. The next tranche of this research has been commissioned and will be occurring in October / November 2018.

The current Project is a core component in the refinement and implementation of the Airport Master Plan. The Master Plan was developed with considerable stakeholder input and support and was subsequently approved by RAAF and the Department of Defence. **Tables 2.5.3.1** and **2.5.3.2** below show the level of cross stakeholder engagement in the process of developing the Master Plan.

**Table 2.5.3.1: The Planning consultation group included**

Name	Position	Organisation
Trent Kneebush	Managing Director	Kneebush Planning
Shane de Wit	Director Commercial (previously Partner and Senior Consultant PTC)	Northern Territory Airports
Tony Samson	Regional Director	Office of Regional Development, Department of Premier and Cabinet
Jill Gaynor	Manager Strategic Planning Services	Newcastle City Council
Wing Commander Amanda Cornell	Air Base Executive Officer, RAAF Williamtown	Department of Defence
David Rowland	Strategy and Environment Section Manager	Port Stephens Council
Katrine O'Flatery	Director Regions, Western Planning Services	Department of Planning and Environment, NSW Government
Richard Bath	Senior Team Leader Planning, Hunter Central Coast Regional Operations	Office of Environment and Heritage, NSW Government

Table 2.5.3.2: The Defence consultation group included

Name	Position	Organisation
Arie van der Eijk	Managing Director	To70
Wing Commander Amanda Cornell	Air Base Executive Officer, RAAF Williamtown	Department of Defence
Squadron Leader Phil Mackie	Deputy Air Base Executive Officer , RAAF Williamtown	Department of Defence
Group Captain Ron Tilley	Director Strategic Infrastructure Planning, Royal Australian Airforce	Department of Defence –
Dave Harrison	Acting Director, Planning and Regional Aviation	Department of Defence

## 2.5.4 KEY STAKEHOLDER SUPPORT

The strong and unanimous regional support and commitment to the development of the Airport as a critical leaver and enabler of economic growth is based on both its performance and its long term strategic and vision. The following quotes in relations to the approved Master Plan demonstrates support for the project and for the continued growth of the airport not only as a business than generates value in its own right but as a piece of unparalleled infrastructure for regional growth.

### 1. HunterNet

*“Newcastle Airport is essential infrastructure that allows the Hunter, Australia’s largest regional economy, to thrive.*

*“Proactive planning to ensure that it is able to continue to deliver benefits to our knowledge and visitor economies is not only a must for the airport, it provides certainty for those whose businesses rely on the airport to connect them to Australia, and beyond.*

*“The Newcastle Airport Master Plan is a catalyst for our region and a reminder that success is a long game that requires clear and communicated vision.”*

*Attributed to: Tony Cade, CEO, HunterNet*

### 2. Destination Sydney Surrounds North

*“Newcastle Airport provides a vital second entry into NSW for regular airline passenger services: more than 1.25 million people use the airport each year. These visitors play an essential role in driving the region’s visitor economy. The Newcastle Airport Master Plan will be key to unlocking future tourism potential, delivering the facilities required to cater for up to 5 million people in the next two decades. The impact of this will be a game changer for the Hunter.”*

*Attributed to: David Fellows, Chair, Destination Sydney Surrounds North*

### 3. Hunter Business Chamber

*“Newcastle Airport is one of the Region’s infrastructure pillars and plays a key role in connecting our people and businesses with Australia and the world. The 20-year Master Plan is clear and provides the certainty and vision that will foster further investment and expansion of the economy and bring benefits to our region.*

*Attributed to: Bob Hawes, Chief Executive Officer, Hunter Business Chamber*

#### 4. TAFE

*“TAFE NSW maintains close relationships with Hunter businesses and industry to ensure that we equip their workforce of the future with job-ready skills and knowledge. We recognise Newcastle Airport as an essential link to industries across the state, the nation and beyond.*

*The TAFE NSW Infrastructure, Energy and Construction SkillsPoint looks forward to collaborating with the Hunter to create fresh pathways to employment, boost the number of skilled construction workers in the region, and develop best of breed, future focussed learning products that can support the Newcastle Airport 20-year Master Plan”.*

*Attributed to: Chris Pracy, Head of SkillsPoint Infrastructure, Energy and Construction, TAFE NSW*

#### 5. Port of Newcastle

*“Infrastructure plays a vital role in the continued growth of our economy and community. This was highlighted in the NSW Government’s 2036 Hunter Regional Plan with both the Newcastle Airport and the Port of Newcastle recognised as two nationally significant global gateways. Importantly, infrastructure such as ports and airports drive trade, investment, employment opportunities, business innovation and more.*

*“It is essential that we have a strong program to develop this infrastructure and I commend Newcastle Airport on the launch of their 20-year Master Plan.*

*“Capacity to accommodate additional passengers, potentially freight and of course a growing roster of international flights will benefit our region, and beyond.”*

*Attributed to: Geoff Crowe, Past Chief Executive Officer, Port of Newcastle*

#### 6. University of Newcastle

*“Connectivity, both virtual and real, is vital to education and innovation. At University of Newcastle, we value the role the Newcastle Airport plays in our region and support the new 20 year Master Plan.*

*Exciting things happen when people connect, be they our international students forming bonds in our community, or visitors to our region helping to fuel the local economy.*

*The Airport’s Master Plan is a road map for the future that will ensure we are able to continue to connect and prosper. “*

*Attributed to: Caroline McMillen, Immediate Vice-Chancellor and President*

### 7. BAE Systems – subject to corporate approval

*“BAE Systems has had a neighbouring presence at Newcastle Airport for 18 years. This is a key business precinct for us as it provides direct secure access to the airfield, enabling our close collaboration with the RAAF. This unique proposition has positioned our business for growth, and we are looking forward to the opportunity to invest and further expand as the 20-year Master Plan rolls out.*

*BAE Systems is particularly interested in the development of further industry infrastructure, and the opportunity this will provide to collaborate with academic organisations across industry networks to provide outstanding support to our customers.”*

*Attributed to: Andrew Gresham, Operations Support Director*

### 8. Property Council of Australia

*“We have seen the impact of the recent development in our region – growth fuels growth. Newcastle Airport’s Master Plan will be a key driver for our region as we expand our businesses and global connections.*

*“Importantly, the plan identifies that the current airport footprint will not be enough to support future requirements. Knowing this, and acting on it, is essential to secure future capacity. I applaud the vision of Newcastle Airport and their courage to push development that will foster not only passenger numbers to our region but also investment, education, innovation and talent.”*

*Attributed to: Neil Petherbridge, NSW Regional Director - Hunter*

### 9. Government

*“The Newcastle Airport 20-year Master Plan provides a clear vision for this vital piece of infrastructure to continue to serve the Hunter community well into the future. Aligned with the NSW Government’s Hunter 2036 Regional Plan, the Master Plan ensures enhanced linkages to support economic growth, fosters strong strategic trade and employment centres and provides enhanced connections to the Asia Pacific. The Master Plan will also assist in maximizing the presence and contribution of Defence related industries and R&D. The Airport drives over \$1 billion in economic impact to the region. This is only the beginning.”*

*Attributed to: Scot MacDonald MLC, Parliamentary Secretary for Planning, the Central Coast and the Hunter*

### 10. Regional

*The City of Newcastle values the clear vision and direction this 20-year Master Plan provides for our community. Newcastle Airport plays a key role in our city’s ongoing transition from a great regional centre to an emerging global city, connecting our local communities with family, friends and colleagues across the nation and across the globe. The masterplan complements our city’s vision for a smart, liveable and sustainable Newcastle, with the growth of key infrastructure and associated industry bringing significant long-term benefit to people and business in our region. We are very pleased to share this journey with Newcastle Airport.*

*Attributed to: Councillor Nuatali Nemes, Lord Mayor of the City of Newcastle*



## 11. Local

*“We recognise the economic and social benefit Newcastle Airport brings to Port Stephens and are delighted to support the Airport with its bold vision for the next 20 years. Supporting our community and connecting us to the world, the Newcastle Airport’s Master Plan provides a well-defined direction, exciting opportunities and we are sure it will bring continued and substantial benefit to our community”.*

*Attributed to: Ryan Palmer, Mayor of Port Stephens*

These comments demonstrate the Project will have a significant impact and support throughout the Region. Newcastle Airport’s research has shown strong ownership of the Airport by the community, and potential significant increases in Regional usage if the Airport can attract more direct flights and improve its offerings and facilities in line with expectations for a modern airport in an important regional employment and tourism area.

## 2.5.5 STAKEHOLDER ALIGNMENT

Table 2.5.5.1 defines the stakeholder groups, their key issues and interest in the Project and an assessment of a positive or negative impact.

**Table 2.5.5.1: Key Stakeholder alignment and impact**

Organisation	Key Issue and Interest	Impact
Hunter Business Chamber	Supporting economic and business growth in the region.	Positive
Property Council of Australia	Creating an environment for quality development.	Positive
RDA Hunter	Facilitating regional development and encouraging alignment across sectors and stakeholders.	Positive
Newcastle Tourism Industry Group	Support regional tourism growth.	Positive
Destination Port Stephens	Supporting tourism growth in Port Stephens	Positive
Destination Sydney Surrounds North	Promoting and attracting business to North Sydney and surrounds.	Positive
University of Newcastle	Regional education leadership and growth in international markets	Positive
Hunter Valley Coal Chain	Efficient and effective resource management and export	Positive
Hunter Valley Tourism	Supporting tourism growth in the Hunter Valley	Positive
SMART Cities	Positioning Newcastle as a city of innovation and growth in the smart economy	Positive
Port of Newcastle	Servicing the state of NSW and international markets with world class maritime services.	Positive
Local Neighbours	Enjoying the local amenity with access to a world class airport as a gateway to domestic and international travel for themselves and their visitors.	Positive
Existing Users	Minimised travel time. Comfort and state of the art airport services.	Positive

## 3 ANALYSIS OF THE PROPOSAL

### 3.1 OBJECTIVES & INDICATORS

Table 3.1.1 Key stakeholder problem, project objective and success indicator

Key problem/issue	Key proposal objective	Key success indicator
Number of flights per day	Current arrivals capacity limits the ability to accept both domestic and international flights. The objective is to remove this restriction.	No Airport facility constraints in the ability to accept aircraft arrivals.
Number of destination services	New destinations will potentially coincide with current peaks at which time the Airport terminal has capacity constraints. The objective is to remove this restriction.	No Airport facility constraints in the ability to accept aircraft arrivals.
Capacity to accommodate international arrivals	Currently international arrivals are limited to specific times of the day. This restricts the ability of NAPL to compete for services. The objective is to remove this restriction.	Unrestricted operating times. Ability to concurrently process international and domestic aircraft.
Passenger satisfaction and repeat use	Currently the arrivals area is ranked as one of the worst experiences at Newcastle Airport and as one of the worst arrivals experiences across Australian and New Zealand comparator airports. Poor experiences impact on passengers decisions about propensity to fly and which airport to fly through. The objective is to improve customer satisfaction.	Arrivals area to be rated by passengers at a level consistent with remainder of Airport. Measured through the regular ACI ASQ surveys.
Escape of businesses to other airports	Reduced choice of direct destinations and flight times influences people's choice of using the Airport. Reducing this capacity restriction will allow for increase in destinations and times of the flights.	Continued growth in use of Airport by regional population. Measured through routine passenger surveys.
Limited time windows to accept international flights	There is currently a limit on the times during which the Airport has the capacity to accept international flights due to constraints in arrivals capacity.	Unrestricted ability to accept both domestic and international flights.
NAPL, as a community owned asset, has an objective to drive regional	This proposal will be a key step in facilitating an increased profile of the Hunter region as a destination	Jobs achieved (temporary construction and long-term); and career opportunities for regional residents as

Key problem/issue	Key proposal objective	Key success indicator
economic and social growth	(business and leisure) and increase passenger use of Newcastle Airport services.	part of the visitor economy and at the Airport itself.
Increasing passenger numbers through Newcastle Airport	Reduced amenity and limits on ability to accept flights is currently limiting growth at Newcastle Airport. The objective is to remove these restrictions.	Consistent growth in annual passenger numbers. Jobs created directly at the Airport and in flow on industries.
Deliver returns to Port Stephens Council (PSC) and Newcastle City Council (NCC) communities	The objective is to drive NAPL as a profitable business that continues to deliver economic returns to the local community through its shareholders.	Consistent growth in dividends returned to PSC and NCC annually which flow into and benefit local communities.
Ensuring environmental and social responsibility is a key pillar of the development project	The objective is to develop the Airport precinct in a manner which minimises environmental impacts and maximises societal benefits.	Use of environmentally appropriate design and construction. Effective community consultation and engagement.

## 3.2 THE BASE CASE

As noted the current constraint within the arrivals area of the Airport is limiting Airport growth through two mechanisms:

- Current poor levels of service in the arrivals area is almost certainly reducing the propensity of local people and visitors to use Newcastle Airport. This is resulting in either reducing overall travel or causing individuals to choose to use Sydney Airport.
- Constraining NAPL's ability to compete for new routes and increases in frequency for existing routes.

There is good historic precedent to understand the performance of the Airport. Previous experience showed that once constraints existed within the Airport, growth stalled and made passenger traffic through the Airport more susceptible to drops due to economic shocks. With the current base case there is likely to be a curbing of growth.

Therefore a reasonable base case would be to assume that growth at the Airport declines to an average of 0% over the coming years as has occurred in the recent past when the Airport was suffering infrastructure capacity constraints.

### 3.3 OTHER OPTIONS CONSIDERED

As part of the Master Plan process NAPL went through a detailed assessment of the potential demand for aviation services across the Region. This work was based on engagement with airlines, business leaders and also relied on extensive customer surveys. It was clear that the Region is currently being underserved for in respect of air transport services. The need to be able to accommodate increased services was therefore a clear basis to the Master Plan.

Following on from the Airport Master Plan a large body of work was undertaken by a group of consultants lead by Design Inc. This study determined the most efficient and effective approach to developing the terminal. This included assessing items such as, appropriate tranches to build, so as to be effective but not over-build, buildability and cost effectiveness, and continuing to be a functional Airport both during the build and at each stage of terminal development. The following is a high level response from the detailed study that was undertaken.

#### Do nothing option:

As described in the previous section the do nothing option would cause a reduction in growth of passenger traffic at the Airport and thus reduce the flow on economic benefit to the Region and NSW more broadly.

NAPL will continue to seek to develop new air routes, though this will be in a constrained environment, particularly with respect to international traffic.

There is little that can be done to mitigate the customer service impacts associated with existing traffic.

#### Do a minimum option

Due to the nature of Airport terminal development there is no cheap fix to the current situation. The design proposed in this application was the subject of significant review by Design Inc. who are experts in the design of Airport passenger terminals.

Reducing cost by decreasing the size of the building envelope would significantly compromise the long term value of any build.

#### Defer to future funding

Deferred funding would have the effect of the do nothing option. Whilst future build would install the required arrivals capacity the momentum that currently exists with airline partners and the public would need to be re-established.

#### Changes from previous submission

Since the previous submission the design has been updated and revised. This was based on the outcomes of the Airport Master Plan and the considerable work undertaken in the Terminal Master Plan. The plan essentially achieves the same outcomes, though the design puts it in the context of the long term development of the terminal. The upstairs elements previously outlined are still required, though not until later stages of the terminal development.

## 3.4 INFORMATION ABOUT THE PROPOSAL

### 3.4.1 SCOPE OF WORKS

The site of Newcastle Airport has an area of approximately 28 hectares and is located entirely within the Port Stephens Council Local Government Area (LGA) in the suburb of Williamstown. The site is formally described as Lot 11 Deposited Plan (DP) 844528, Lot 103 DP873512, Lot 102 DP873511, Lots 41, 42 & 43 DP1045602, Lot 21 DP1053667 and Lot 1 DP854099.

Newcastle Airport is located on land owned by the Commonwealth Department of Defence (DoD) that has been leased to Port Stephens Council and Newcastle City Council, in 2016 the lease period was extended to a period of 60 years with three additional 10-year options. The site locality plan is shown below in **Figure 3.4.1.1**.

**Figure 3.4.1.1 – Newcastle Airport site locality plan**



Newcastle Airport has recently completed a terminal precinct master planning process, which identified that the existing arrivals hall does not meet required levels of service standards during peak periods and that any uplift in the existing domestic arrivals would require an increase in terminal space and the length of the baggage reclaim carousel. Stage 1A proposes to address the current deficiency and to also allow for future growth.

The overall project scope incorporates design development, stakeholder engagement, and statutory approvals, procurement of equipment and tendering and construction of the works.

The physical works will introduce a new arrivals area to the eastern end of the existing terminal building and will incorporate the following key items:

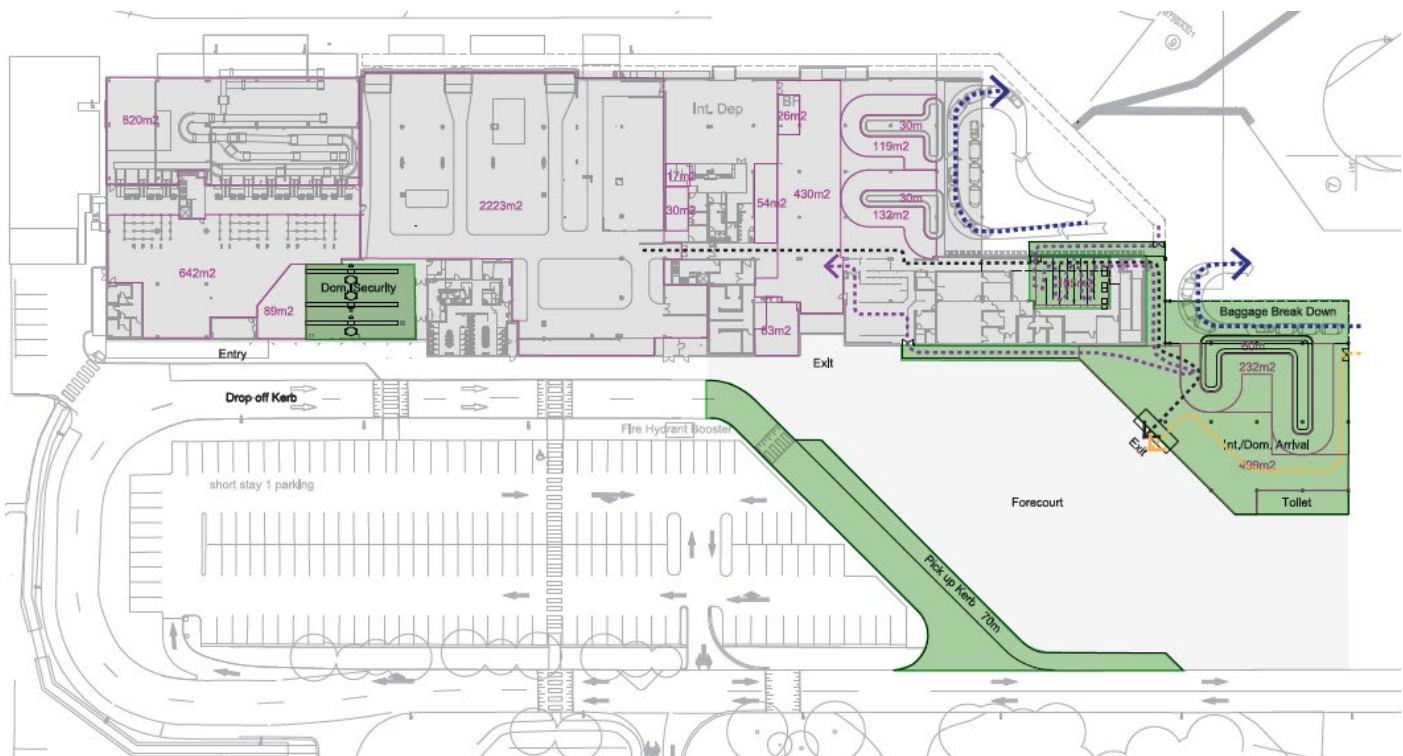
- Demolition of existing carpark area;
- Relocation of services infrastructure;
- A new 250sqm baggage breakdown area for unloading baggage;
- A new 60m long baggage reclaim carousel;
- Reconfiguration of the 135sqm of existing passenger queuing space in the border control areas;

- A new 435sqm extension to the arrivals hall;
- A new 68sqm passenger amenities area;
- Construction of a first floor slab to safeguard future first floor development
- A new passenger forecourt area;
- Realignment of the existing terminal loop road.

The placement of the facility in this location optimises the retention of the existing terminal building, safeguards developed pathways, positions hard points away from expansion paths, incorporates swing capability, minimises temporary works, aligns with the layout of the ultimate state of the terminal and minimises the impact of the work on existing Airport operation.

The Master Plan for the proposed Stage 1A terminal expansion is provided in **Figure 3.4.1.2** below.

**Figure 3.4.1.2 – Stage 1A terminal expansion layout**



### 3.4.2 PROPOSAL EXCLUSIONS

The Stage 1A terminal expansion will trigger the requirement for reconstruction of the existing premium car park. The estimated cost of this project is approximately \$1.5m, which is excluded from the request for funding and will be funded by Newcastle Airport:

#### Related Projects

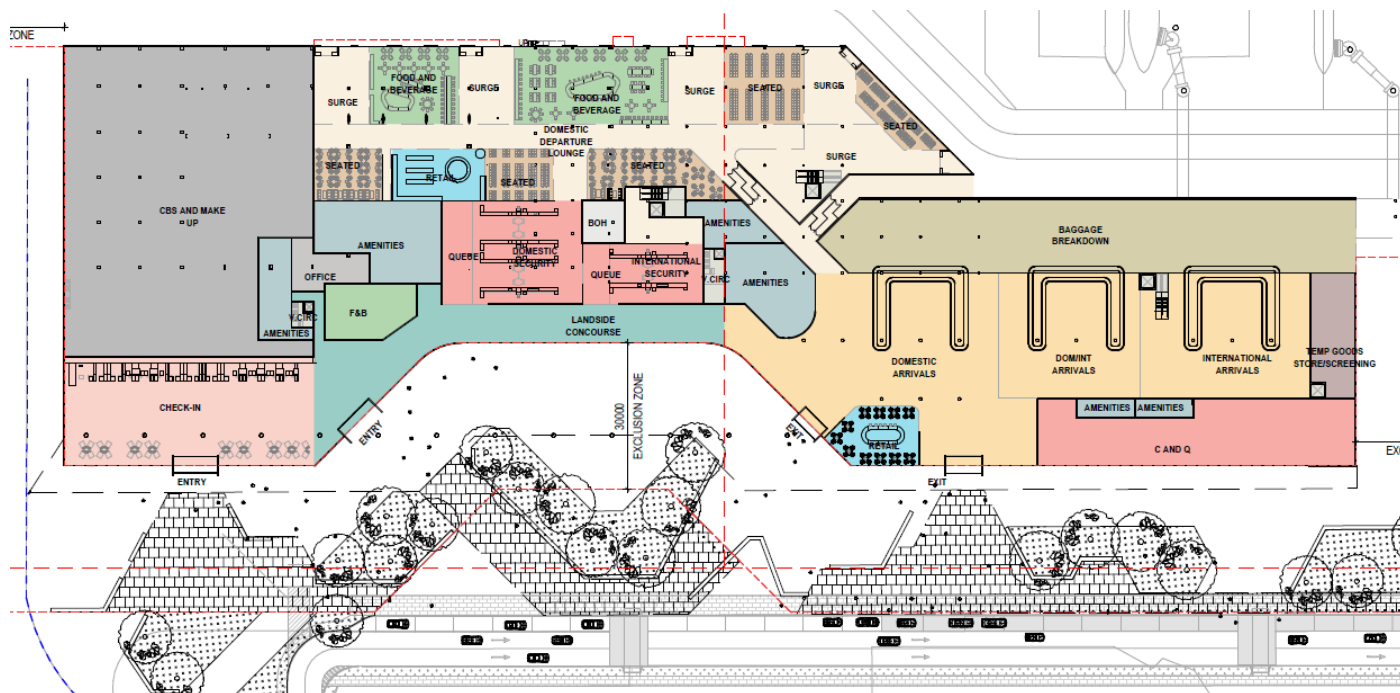
Stage 1A of the terminal expansion is the first stage of a wider plan for the development of the terminal up to an ultimate capacity of 5m passengers over a period greater than 20 years.

This broader terminal development program beyond stage 1A is planned to be staged as follows

- Stage 1B – First Floor Expansion to Arrivals
- Stage 2 – Arrivals Expansion
- Stage 3A – Check-in Area
- Stage 3B – Baggage Handling System Expansion
- Stage 4 – Ground Floor Departures Expansion
- Stage 5 – First Floor Departures Expansion

The Master Plan for the ultimate state of the terminal is provided in **Figure 3.4.2.1** below.

**Figure 3.4.2.1 – Ultimate terminal Master Plan**



For clarity, Newcastle Airport Board has not yet committed to undertaking works beyond Stage 1A.

## 3.5 PROJECTED COSTS

### 3.5.1 PROJECTED CAPITAL COSTS

A summary of projected capital cost is provided in **Table 3.5.1.1**.

**Table 3.5.1.1 Projected capital costs inclusive of contingency (\$000s)**

Stage	2017-18	2018-19	2019-20	2020-21	Future Years	Total
<b>Pre-Construction</b>						
Principal Design Consultant		\$ 650,000				\$ 650,000
External Project Management		\$ 40,000				\$ 40,000
Legal Advice		\$ 20,000				\$ 20,000
Pre-Construction Contingency (10%)		\$71,000				\$71,000
Authorities (1%)		\$ 147,450				\$ 147,450
<b>Construction</b>						
Principal Design Consultant		\$10,000	\$ 65,000			\$ 75,000
External Project Management		\$20,000	\$ 120,000			\$ 140,000
Certification			\$ 20,000			\$ 20,000
Procurement (Baggage carousel)			\$ 640,000			\$ 640,000
Construction			\$11,840,872			\$11,840,872
Construction Contingency (10%)			\$1,248,087			\$1,248,087
<b>Nominal cost</b>		<b>\$ 811,000</b>	<b>\$14,081,409</b>			<b>\$14,892,409</b>



The Project budget, the Project cost structure and budget expenditure to date and forecast cash flow will be established, monitored and routinely updated by the Senior Project Manager in a monthly management report and when there is any amendment to the forecast final cost.

The Senior Project Manager will be responsible to manage and update the financial system as required throughout the project.

Any required variation to the Project budget will be outlined, justified and recommended by the Senior Project Manager for approval to the appropriate level within the management team or NAPL Board in accordance with the NAPL Delegations matrix. Budget variations will be approved prior to the commitment of additional expenditure.

A Project budget, cash-flow and construction estimate prepared by quantity surveying consultants is provided in **Attachment 3: Terminal Upgrade Detailed Budget**

### 3.5.2 PROJECTED ONGOING COSTS

**Table 3.5.2.1** provides an indication of the projected operational costs of the expanded facilities.

**Table 3.5.2.1: Projected ongoing costs (\$000s)**

Year	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	Total
Cleaning	-	-	128	131	135	139	N/A
Utilities	-	-	85	88	91	93	N/A
Maintenance	-	-	60	62	64	66	N/A
	-	-	<b>256</b>	<b>264</b>	<b>272</b>	<b>280</b>	

The Project is anticipated to be completed in June 2020 and become operational immediately thereafter. Once operational, the expanded terminal can be considered to have reached a steady state i.e. 2020/21.

## 3.6 COST-BENEFIT ANALYSIS

A detailed assessment of the economic impact of the Project has been undertaken and is provided in **Attachment 14: Economic Impact Assessment – Terminal Project**.

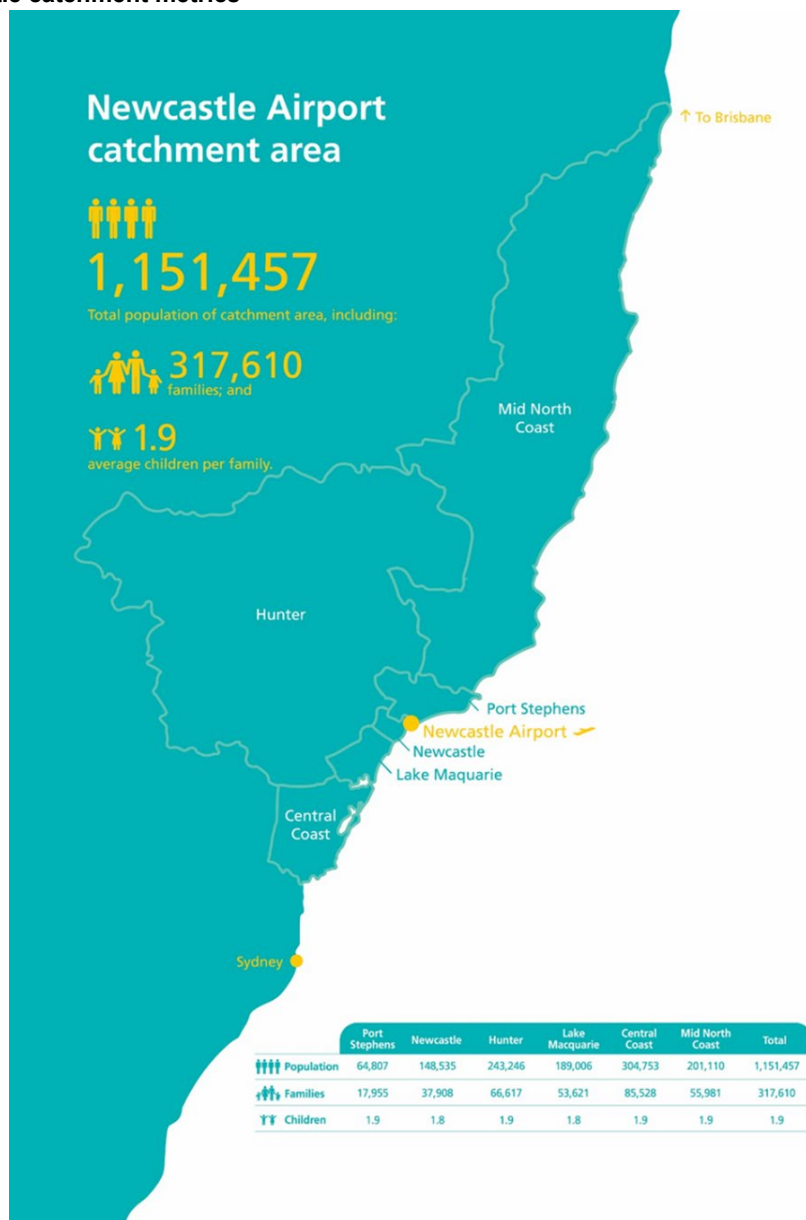
The key outcomes of the work are provided below. Consistent with input to section 3.5.1.

### 3.6.1 PROJECT METRICS

- Capital cost of the Project \$15m
- Grant \$8m
- Contribution \$7m
- Excluded but related works \$1.5m
- Project and excluded costs \$16.5m
- Existing operations 1,294,710 (Pax)
- Increase in capacity related project 788,566 (Pax)
- Outcome capacity 2,083,276 (Pax)

Figure 3.6.1.1 below details the Newcastle catchment metrics.

Figure 3.6.1.1 Newcastle catchment metrics



### 3.6.2 CONSTRUCTION PHASE IMPACTS

The \$15m Project will have:

- **a total direct and flow on impact on output of \$31.882m**
- **generate 76 direct and indirect EFT<sup>13</sup> jobs**
- **a total wages impact of \$5.864m, and**
- **a value-added impact of \$11.386m**

The significant co-contribution funding of \$7m provided by NAPL will generate the following impacts within the overall project outcomes:

- **a total direct and flow on impact on output of \$14.878m**
- **generate 36 direct and indirect EFT<sup>14</sup> jobs**
- **a total wages impact of \$2.736m, and**
- **a value-added impact of \$5.313m**

Note the co-contribution is equivalent to 88% of the grant request.

The combined Project and excluded works impacts and shows that overall construction value will be \$16.5m and will deliver:

- **a total direct and flow on impact on output of \$35.070m**
- **generate 85 direct and indirect EFT jobs**
- **a total wages impact of \$6.45m, and**
- **a value-added impact of \$12.524m**

**Attachment 14 Economic Impact Assessment – Terminal Project** speaks to the social impacts and need for construction jobs in the regional community.

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<sup>13</sup> EFT Equivalent Full Time jobs

<sup>14</sup> EFT Equivalent Full Time jobs

### 3.6.3 DEMAND ANALYSIS

**Attachment 14: Economic Impact Assessment – Terminal Project** considers how the additional capacity will be taken up and indicates that there are four targeted sources of business:

- capture of leakage
- projected natural growth in regional tourism
- conversion to aircraft travel, and
- growth related new routes

The focus of the analysis is on capturing and growth of inbound interstate and international tourism travel as well as facilitating the growth opportunities in the Region around non-tourism business.

**Table 3.6.3.1** shows the combined increase in Pax that the identified market segments can drive. These figures are conservative and indicate growth potential of 1,131,633 Pax which is 343,067 Pax in excess of planned growth in capacity of 788,566 Pax. This suggests that capacity might be taken up more quickly than projected and that the planned Project capacity is achievable and realistic.

**Table 3.6.3.1 Cumulative potential project passenger growth**

Market source	Pax net growth
Capture in-region originating domestic travel	494,122
Capture in-region originating international travel	118,011
Capture of regional growth (arrivals by aircraft and total visitation)	392,000
Growth from new routes inbound	51,000
Growth from new routes outbound	76,500
<b>TOTAL</b>	<b>1,131,633</b>

Source NAPL and Castlecrest

### 3.6.4 OPERATING PHASE IMPACTS

In terms of the operation of the Airport as a facility the Project will deliver a net impact of:

- **\$5.55m Direct regional output**
- **\$12.64m Gross regional output/turnover**
- **\$7.97m Gross State product**
- **\$5.08m Factor income**
- **56 Employment supported EFT**

The Airport will have an additional annual asset investment related impact. Based on current it will spend an additional \$0.7m for this purpose annually. This is a net increase of \$0.7m direct output which has a flow on impact of \$1.32m and 6.5 in EFT positions annually.

The Airport's and the Project's impact will not be isolated to the business but will impact on the strong aviation, tourism and related business cluster that now surrounds the facility.

The analysis shows that the Project will increase direct cluster employment to 1,022 EFT from 755 EFT. This projection does not account for any impact on Defence operations or employment although it is likely that flight connections to other locations and increased services to Canberra would increase Defence Pax and flow on impacts.

**The total direct and flow on impact on the cluster's regional output is estimated to be in the order of \$102.88m net increase, bringing its value to \$470.38m and its direct and flow on employment to 2,943 EFT (an additional 710 EFT). Table 3.6.4.1.**

Table 3.6.4.1 Annual economic impact of Newcastle Airport cluster operation with the Project

Measure	Final Demand	Industry Effects	Consumption Effects	Total
Gross regional output/turnover (\$m)	199.29	38.14	232.95	470.38
Gross State product (\$m)	131.83	22.39	165.11	319.93
Factor income (\$m)	70.53	11.52	125.83	207.88
Employment supported EFT	1,022	181	1,740	2,943

Source Synergies and Castlecrest

While these straight-line growth scenarios are significant in their own right, the evidence would suggest that expansion and business attraction around airports is not linear, but that once a critical mass is achieved that growth can be exponential. This potential is supported by the recent announcement of the \$11.7m NSW GLE grant for access and civil works to ensure that the adjoining aviation and aerospace precinct "Astra Aerolab" can be developed and marketed to compatible and complementary businesses. This Project adds further value to the potential of that project and may accelerate land take up and business development. The outcome will likely be greater than the sum of the two parts.

Based on the modelling presented in **Attachment 14 Economic Impact Assessment – Terminal Project Appendix** (summarised in **Table 3.6.4.2**) the Project could generate an additional \$85.5m in tourist spending based on existing and not accounting for new interstate and international routes.

**Based on the additional \$85.5m spending in the Regional economy generated by the Project it is estimated that the Project will stimulate growth in direct and flow on regional output of \$141.95m annually and support some 595 direct and 779 direct and indirect EFT annually. (Table 3.6.4.2)**

Table 3.6.4.2 Economic impacts from additional tourist to the Hunter region supported by the Project

Impact Summary	Direct Effect	Supply-Chain Effect	Consumption Effect	Total Effect
Output (\$M)	85.50	29.679	26.776	141.955
Employment (Jobs)	595	89	95	779
Wages and Salaries (\$M)	25.769	7.103	5.871	38.744
Value-added (\$M)	40.545	12.985	15.239	68.769

Source Remplan and Castlecrest

The Project will have the following intangible but very real impacts:

- Reduced cost and time associated with travel from the Hunter Region to Sydney Airport. (Indicative impacts on avoided travel time \$80m over 20years.)
- Reduced risk of time delay and missed flights due to events on the M1. Avoided cost and time associated with accidents and death in motor vehicles.
- Reduced congestion at and around Sydney Kingsford Smith Airport due to reduced reliance by Hunter travellers on Sydney originating flights.
- Better and more efficient access for travellers originating their journey in regional NSW to other Australia cities or overseas (i.e. Tamworth to New Zealand).
- Better access by residents of regional NSW to medical facilities, specialist and services not available and regional NSW and difficult to access in Sydney.
- Greater access for international and non-Hunter students to University of Newcastle (UoN).
- Increased enrolments at UoN and therefore residents. (consistent and aligned with UoN inner city CABLE campus and Callaghan STEMM strategies)
- Attraction of new residents in emerging communities such as Medowie which support strategies for increased social and education services.
- Stronger relationships between regional NSW towns and Newcastle and the potential for business connections, expansion, service provision and collaborative tourism opportunities e.g. fly to the Hunter then to Bathurst 1,000, fly Auckland to Tamworth Music Festival.
- Connections for Hunter mine operators, equipment and service suppliers and staff to Inverell, Tamworth, and Bathurst.
- Global connections to manufacturing businesses based on the regions (e.g. Westrac Caterpillar at Tomago).
- Better connecting friends and relatives in Pacific island nations and regional NSW.

### 3.6.5 COMBINED CLUSTER AND TOURISM OPERATING PHASE IMPACTS

Table 3.6.5.1 Annual NET ADDITIONAL economic impact of Newcastle Airport cluster operation with the Project

Measure	Final Demand	Industry Effects	Consumption Effects	Total
Gross regional output/turnover (\$m)	43.59	8.34	50.95	102.88
Gross State product (\$m)	28.83	4.89	36.11	69.83
Factor income (\$m)	15.43	2.52	27.53	45.48
Employment supported EFT	247	43	420	710

Source Synergies and Castlecrest

Table 3.6.5.2 Economic impacts from additional tourist to the Hunter region supported by the Project

Impact Summary	Direct Effect	Supply-Chain Effect	Consumption Effect	Total Effect
Output (\$M)	85.50	29.679	26.776	141.955
Employment (Jobs)	595	89	95	779
Wages and Salaries (\$M)	25.769	7.103	5.871	38.744
Value-added (\$M)	40.545	12.985	15.239	68.769

Source Remplan and Castlecrest

## 3.6.5.3 Combined impacts of the Project on the Cluster and Tourism

Impact Summary	Direct Effect	Supply-Chain Effect	Consumption Effect	Total Effect
Output (\$M)	129.09	38.019	77.726	244.835
Employment (Jobs)	842	132	515	1,489

### 3.7 FINANCIAL APPRAISAL

The financial forecast for the scope of works entailed in this proposal is as follows. **Table 3.7.1** shows cash flows for the first 5 years of the project.

**Table 3.7.1: Financial appraisal (\$000s)**

Year	2018-19	2019-20	2020-21	2021-22	2022-23
Capital expenditure	959	13,933	-	-	-
Operating costs	-	-	273	282	290
<b>Cash outflows</b>	<b>959</b>	<b>13,933</b>	<b>273</b>	<b>282</b>	<b>290</b>
Revenues	-	-	521	1,074	1,106
<b>Cash inflows</b>	<b>-</b>	<b>-</b>	<b>521</b>	<b>1,074</b>	<b>1,106</b>
<b>Net cash flows</b>	<b>(959)</b>	<b>(13,933)</b>	<b>248</b>	<b>792</b>	<b>816</b>

Construction is expected to be completed by June 2020, taking account of the anticipated development timetable. Revenue enabled by the facility is expected to commence mid FY2020/21. Revenue to be derived from the Project has been calculated on the basis of the expected return from the terminal expansion asset.

As shown in **Table 3.7.1** above, over the term to FY2022/23 a negative cash flow position is forecast for the Project. The Airport has assessed the long-term feasibility of the project and has projected a positive cash inflow over the life of the expanded terminal. Like all capital project considerations, the Airport has considered the costs associated with the future preservation and upgrade of the expanded terminal and has determined that it will be able to maintain the expanded terminal over its useful life.



## 3.8 PROPOSED FUNDING ARRANGEMENTS

Table 3.8.1: Proposed capital funding contributions (\$000s)

Stage	2018-19	2019-20	2020-21	2021-22	Remaining Years	Total	Confirmed Y/N
Proposal capital costs	959	13,933				14,892	
<b>Funding sources</b>							
RCDF funding (subject of this request)	515	7485				8,000	
Other NSW Government (not including subject of this request)							
Council contributions							
Industry contributions							
Community contributions							
Commonwealth government contributions							
Newcastle Airport funding	444	6448				6,892	Y
<b>Sub-total</b>	<b>959</b>	<b>13,933</b>				<b>14,892</b>	

## 3.9 FINANCIAL HEALTH & SUPPORT

### 3.9.1 FINANCIAL PERFORMANCE

Newcastle Airport has a history of consistent profitability. Net profit for FY2017/18 was \$7.5 million, with forecast net profit for FY2018/19 of \$8.1 million. Key revenue streams are aviation charges (passenger fees and landing charges), retail leases, car parking, car rental and property. Revenues are supported by long-term contracts with key customers such as airlines. The passenger base for the Airport is relatively diverse across leisure / business and inbound / outbound travellers, which enhances the stability of earnings. Profit growth is supported by relatively low variable costs, which has seen the Airport's profit margin increase in recent years.

### 3.9.2 FINANCIAL POSITION / CASH FLOWS

Newcastle Airport has a conservative financial profile with underlying strength in operating cash flows and prudent capital management. Newcastle Airport's shareholders are committed to the Airport's growth through a policy on annual distribution of profits (target maximum distribution ratio of 50%). This provides a significant buffer of retained equity (cash) available to the Airport that is used to fund growth investment in the form of capital and operational expenditure. At August 2018 the Airport held \$32 million in available cash and short-term investments, with interest bearing debt of \$12.5 million in the form of a term bank loan.

The Airport has a low-level financial leverage (gearing ratio of debt to tangible assets of 13%, interest coverage ratio of 25x at August 2018) and strong relationships with the current lender (ANZ) and prospective lenders. This provides ample capacity to fund the Airport's capital program through appropriate use of debt financing together with operating cash flows. Capital for the Airport's contribution to the project will be sourced from a combination of retained cash and debt funding.

Net assets at August 2018 were \$67.7 million (measured at historic cost). Net cash flow for FY2017/18 was positive \$2.4 million, which reflected the strong level of operating performance over the previous year.

Audited financial statements for the past two years are provided in **Attachment 2: Financial Statements**. **Table 3.9.2.1** below provides a summary of key financial metrics for the same period:

**Table 3.9.2.1: Key financial metrics for past two years**

Item	FY2016/17 (\$000s)	FY2017/18 (\$000s)
Total assets	89,544	93,982
Total liabilities	26,869	27,631
Total cash	27,691	30,115
Total borrowings	12,500	12,500
Net profit	8,135	7,483
Net change in cash	5,583	2,424

## 4 IMPLEMENTATION CASE

### 4.1 PROGRAM & MILESTONES

The path to implementation, delivery and registration of the completed works is well understood. Newcastle Airport's project delivery program is shown below. This is based on the understanding that the grant will be awarded in December 2018 and that the funding deed will be expedited to be signed prior to the end of the calendar year. Should these date be unachievable then **Table 4.1.1** and the program provided in **Attachment 5: Project Summary Program- Terminal Upgrade**, will vary accordingly.

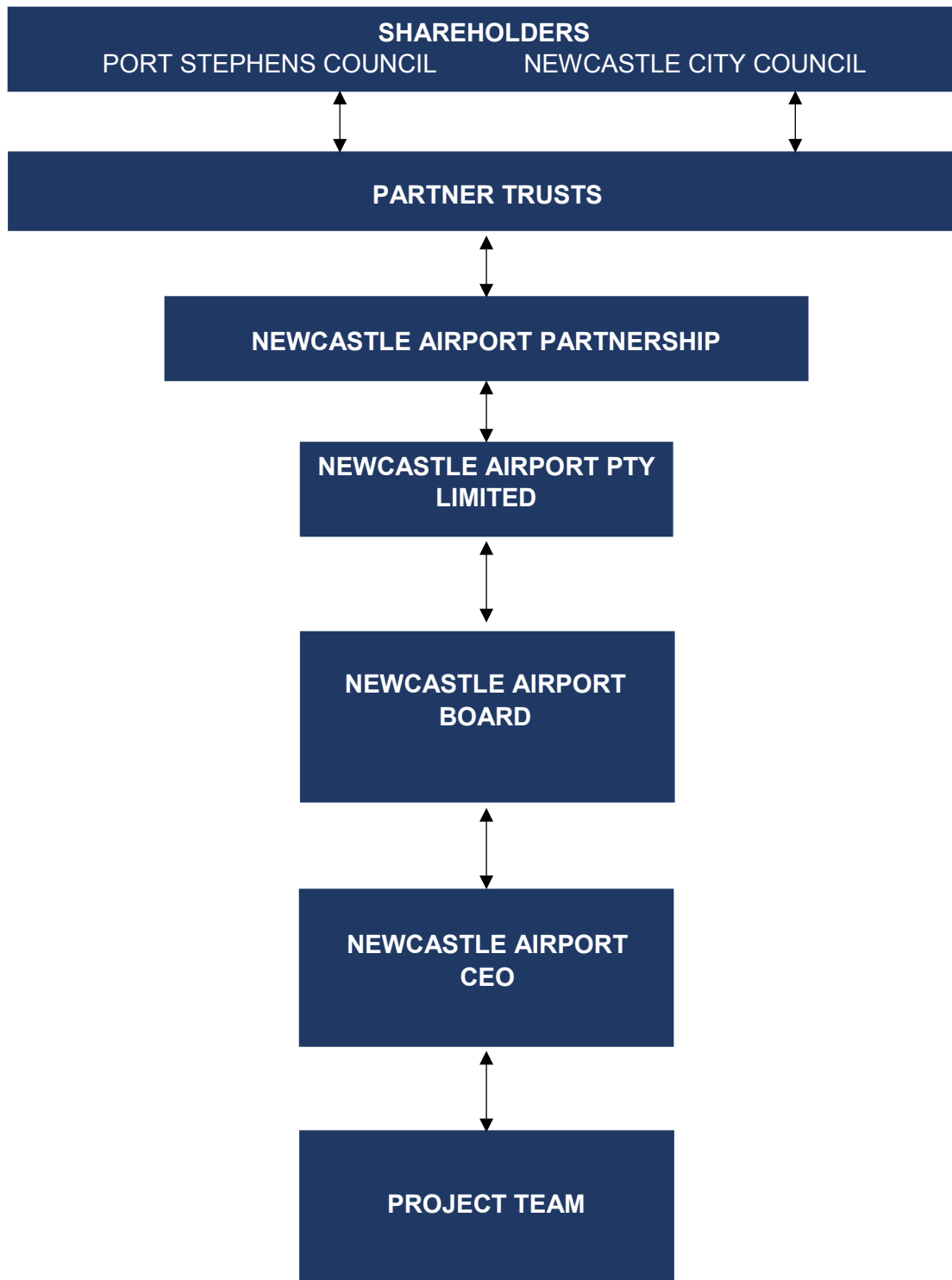
**Table 4.1.1: Key events**

Event	Start	Finish
Project Planning	December 2018	January 2018
Concept & Schematic Design	December 2018	March 2019
Preliminary Site Investigation Works	February 2018	February 2019
Statutory Approval (Section 4.55 Amendment)	March 2019	April 2019
Detailed Design	May 2019	June 2019
Statutory Approval (Construction Certificate)	June 2019	July 2019
Tendering	June 2019	August 2019
Construction	September 2019	June 2020

## 4.2 GOVERNANCE

The following diagram **Figure 4.2.1** shows the various parties relevant to governance of the Project.

**Figure 4.2.1 Governance Diagram for the project showing parties and relationships.**



## 4.2.1 PROJECT MANAGEMENT STRUCTURE

### Project sponsor

The Project sponsor is Wayne Wallis, General Manager Port Stephens Council and Director of Newcastle Airport Partnership and of Newcastle Airport.

### Project Director

The Project is led by Dr Peter Cock, CEO of Newcastle Airport. The CEO is responsible for:

- Managing the project team;
- Major Project Steering Group; and
- Reporting to the Newcastle Airport Board.

Both Wayne Wallis and Peter Cock have extensive experience in delivering large-scale infrastructure projects.

## 4.2.2 PROJECT TEAM

The Project team reports to the Project Manager and is led by Kurt Boyes, Senior Project Manager of Newcastle Airport.

The team comprises:

- Kurt Boyes, Senior Project Manager, Newcastle Airport;
- Andrew Gill, Executive Manager Corporate Services and CFO, Newcastle Airport;
- Brendon Cook, Senior Operations Manager, Newcastle Airport; and
- Melissa Rowe, Executive Manager Corporate Performance, Newcastle Airport;

In addition, NAPL is currently recruiting an Executive Manager Operational Delivery who will take a leading role in the project.

## 4.2.3 INTERFACES WITH GOVERNMENT AGENCIES

Newcastle Airport's Chair and CEO will oversee the company's engagement with key government stakeholders (including Ministerial and departmental contacts).

## 4.2.4 CORPORATE STRUCTURE

Newcastle Airport is operated and managed by Newcastle Airport Pty Limited (NAPL) as agent for the Newcastle Airport Partnership (NAP). NAP is an unincorporated partnership, the sole partners of which are a set of trusts owned and controlled by Newcastle City Council and Port Stephens Council. Each Council holds a 50% interest in NAP via their ownership of these entities.

NAPL is managed by its own employees under the supervision of the NAPL Board. The management structure of NAPL is separate from the management structure of each Council.

## 4.2.5 GOVERNANCE AND DECISION MAKING

Key Project decisions will be made through the governance framework in place within NAPL. These are controlled through a documented governance overlay including company constitution, Board charter and delegation arrangements.

Further Newcastle Airport, as a council entity, is required to comply with the tendering requirements established with the Local Government Act 1993. Where required under this act, key decisions will require approval of both Port Stephen's and Newcastle City Councils, either by resolution or through delegated authority of the General Manager and CEO. Contracting and payments to nominated suppliers are based on the successful completion of agreed key milestones.

## 4.3 KEY RISKS

Newcastle Airport has a structured and consistent approach to risk management that is embedded in all business activities and ensures the systematic management of risk. The company has a clearly expressed and communicated risk appetite that defines the approach to risk in relation to how it does business.

As the operator of a large, regional transport infrastructure asset, Newcastle Airport takes its corporate social responsibility very seriously. It has a zero tolerance for harm to individuals, and strives to do no harm socially, economically or environmentally.

The company's approach to risk is documented as part of its Enterprise Risk Management Framework. It assesses, evaluates, treats, monitors and reviews risk across the business systematically using continuous improvement methodology.

Newcastle Airport has delivered \$62.2 million in capital infrastructure projects in the last 10 years with no lost time injuries (LTIs) or serious incidents associated with these projects.

Newcastle Airport has undertaken a full risk assessment of this Project. A preliminary Project risk register is provided as **Attachment 17: Terminal Upgrade Risk Register**. Assessments were made using the Newcastle Airport Risk Management Framework. WHS risks have been assessed and identified and are discussed further in section 4.5 below, WHS risks are not captured in the attached preliminary register as yet but will be incorporated in due course.

## 4.4 LEGISLATIVE, REGULATORY ISSUES & APPROVALS

The legislative framework and approval pathway for the works with regard to statutory planning approvals is well understood.

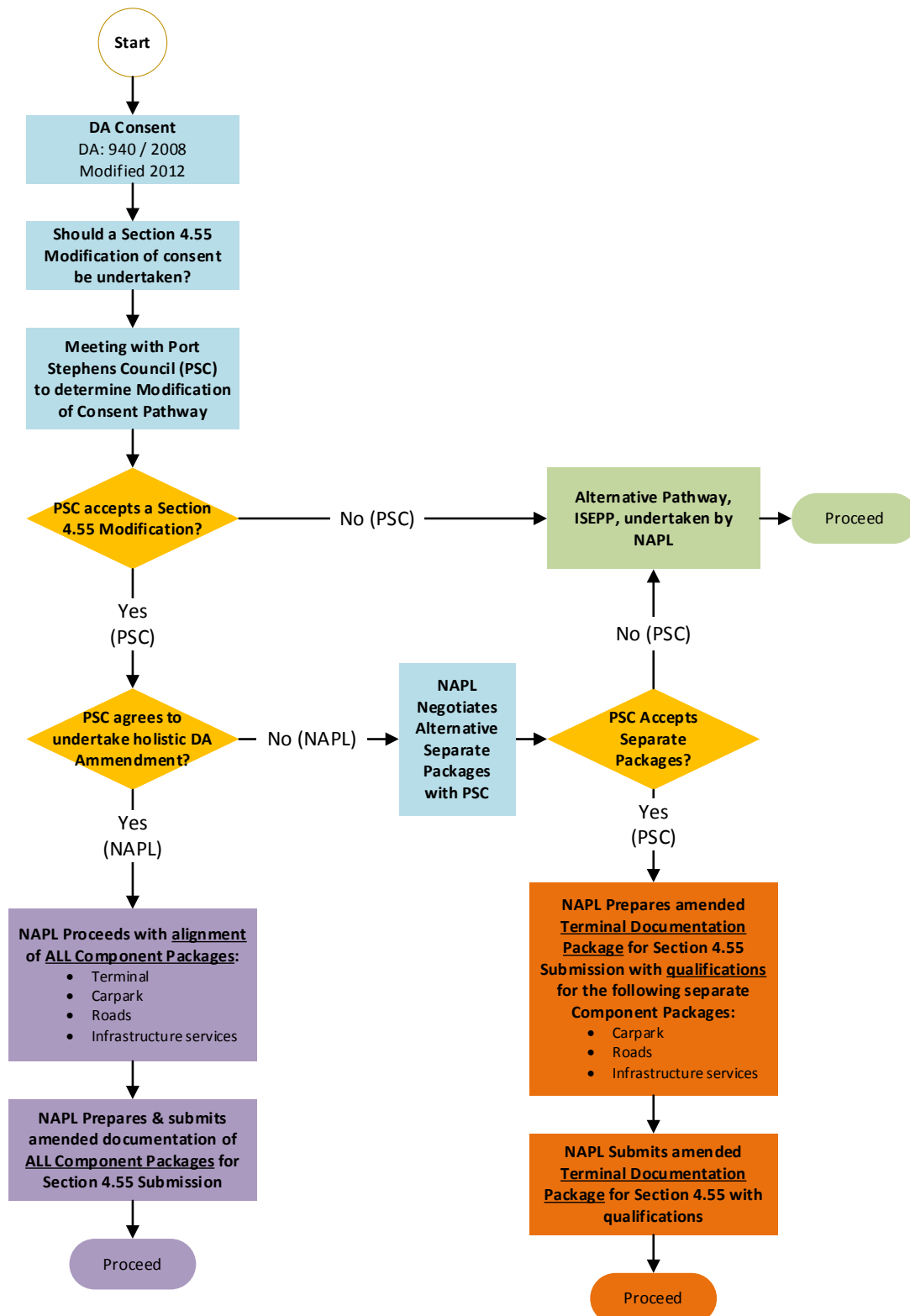
The site of Newcastle Airport is zoned as a combination of SP2 – Infrastructure (Defence / Air Transport Facility) and SP2 – Infrastructure (Defence) under the PSC Local Environmental Plan (LEP). The proposed development is consistent with the objectives for this zone.

A Development Application (DA 16-2008-940-4) for the expansion of the terminal to 2.5M passengers was submitted and approved in 2008. The preferred statutory approvals pathway is through a Section 4.55 (formerly section 96) modification of this existing consent. A meeting held with Council early in 2018, indicates preliminary agreement to this approach. This modification would incorporate not only the arrivals extension but also the subsequent stages of work.

NAPL can be also considered to be acting on behalf of a public authority (i.e. PSC & NCC) and as such, development can also be undertaken in accordance as development without consent in accordance with clause 22 of the Infrastructure State Environmental Planning Policy (SEPP).

An outline of the approvals pathway for the Project is provided in **Figure 4.4.1** below:

Figure 4.4.1 Approvals pathway for works



## 4.5 PROPOSED MANAGEMENT ACTIVITIES

### 4.5.1 RISK MANAGEMENT

#### General

The general approach to risk management is predicated on the early identification of problems and issues for which responsibility is placed on the entire Project Team, Consultants, Contractors, and the Project stakeholders.

A preliminary Project risk register has been developed for the proposed development, which will guide risk reporting, monitoring and mitigation activities during the delivery. **Attachment 17: Terminal Upgrade Risk Register**. The project manager will maintain the risk register which will be revised throughout the life of the project to reflect those risks relevant at each stage. The project will be regularly assessed against its objectives and outcomes and any required risk mitigation.

Risk review workshops will be held at project initiation and as part of the design development phase at 30%, 50% and 100% gateways. The Principal Contractor will also identify construction phase risks in the preparation of its integrated management plans prior to commencing site works.

Day-to-day risk monitoring will be overseen by the Project Team, led by the Project Director and Senior Project Manager. Generally, key risks and risk management activities will be reported through the governance structure (including monthly Board reporting).

Should critical risks be identified by the Project Team, these risks will be escalated as appropriate in NAPL's risk escalation procedure.

#### Work Health & Safety

As a minimum requirement, tenderers for construction work must submit a WHS Management Plan, or three Safe Work Method Statements, that have been implemented by the tenderer on a contract in the last twelve months and they must confirm whether they have incurred a prosecution or fine for a breach of any Australian WHS legislation during the past two years.

Before starting work on the Site, the Senior Project Manager will ensure that all Contractors submit proof of insurances for workers compensation and public liability, and a site specific Work Health and Safety (WHS) Management Plan for the Works.

The Project Manager will complete regular site inspections that will be focused on monitoring the correct implementation of the Contractor's nominated controls and identifying any non-compliances, or unsafe work practices.

Weekly site meetings will be chaired by the Project Manager and WHS management performance will be included on the agenda.

The Project Manager will coordinate audits of the Contractors WHS management system, within 4 weeks of work commencing on site, or as required if WHS performance issues arise in the execution of the works.

Contractors must immediately report all safety incidents, including near misses, and all visits by WorkCover to the Project Manager and, if instructed must, investigate and submit a written report as soon as practicable after an incident occurs.

The Project Manager will follow the NAPL incident escalation matrix for the reporting of incidents.

Before starting work on the Site, the Senior Project Manager will ensure that the Contractor has successfully completed the NAPL site induction, and that copies of risk assessments for each work activity, such as Safe Work Method Statements, have been submitted, discussed and agreed with the Contractor.



The Senior Project Manager will coordinate the preparation of work permits for high risk work with the contractor as required (Hot Works, Confined Spaces, Excavation etc.).

The Project Manager will conduct inspections of the work area (minimum weekly) to ensure that agreed procedures and methods are being adhered to.

The NAPL Corporate Performance Team provides assurance to the NAPL Board and senior management on the WHS activities of the Project Team and Contractor.

### Quality

All documents completed by the Project Team will be stored and controlled through an electronic document control system used at NAPL, called ELO. The Project Manager will be responsible for the control of documentation in line with NAPL processes for document control.

All services carried out by consultants, including services by sub-consultants and secondary consultants, must be carried out under a quality management system certified as meeting the requirements of AS/NZS ISO 9001:2000 or ISO 9001:2000.

The Project Manager may conduct audits of the Consultant's and sub-consultants' quality management systems, if quality performance issues arise in the execution of the agreement.

Consultant deliverables will be reviewed with key internal stakeholders at relevant design milestones.

Contractors are to supply materials which are new, free from defects and fit for the purposes required by the Contract.

Contractors must use standards of workmanship and work methods which conform to the Contract, relevant Australian Standards and codes of practice and the lawful requirements of any authority.

The Project Manager will complete a defect inspection and the Contractor must make good any defects prior to awarding completion.

### **4.5.2 ASSET MANAGEMENT & OPERATIONS**

The expanded terminal building, forecourt and loop road will be maintained by Newcastle Airport Pty Limited.

The site will remain the property of NAPL. However, some areas of the terminal may be tenanted on a leasehold basis. Sites under lease will be the responsibility of the lessor to maintain. NAPL as landlord, will maintain common areas.

Newcastle Airport employs a dedicated Facilities Manager. The Facilities Manager administers Newcastle Airport's preventative maintenance program that includes multiple trade service level agreements for all existing and new assets.

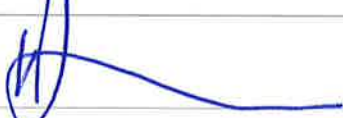
## 5 DECLARATION AND ENDORSEMENT

I certify that the information provided in and supporting this business case is true and correct and that I am legally authorised to sign this application for and on behalf of the applicant organisation/company.

Signed		Date	Click or tap here to enter text. 12/10/2018
Name	Click or tap here to enter text. WAYNE WALLIS	Position	Click or tap here to enter text. GENERAL MANAGER PORT STEPHENS COUNCIL

All Application Forms must also be endorsed and signed off by the Asset Owner/s and Asset Manager/s before the project will be considered.

I, the asset owner, endorse this application for consideration under the Regional Community Development Fund.

Signed		Date	Click or tap here to enter text. 12/10/2018
Name	Click or tap here to enter text. WAYNE WALLIS	Position and organisation	GENERAL MANAGER PORT STEPHENS COUNCIL

All information submitted by applicants may be provided to relevant stakeholders for the purposes of eligibility and project appraisal. The RCDF Assessment Panel may obtain external advice from DPC program staff, the IAU, other NSW Government Departments or other sources that will assist with the assessment process. Applicants should identify any information that they want to be kept confidential, supported by reasons for the request. Except as disclosed, the Department of Premier and Cabinet will keep all information confidential and secure.

Phone: 1300 679 673

Email: [regionalsw.business@dpc.nsw.gov.au](mailto:regionalsw.business@dpc.nsw.gov.au)

Please submit your Business Case to [regionalsw.business@dpc.nsw.gov.au](mailto:regionalsw.business@dpc.nsw.gov.au)

# Federal Budget Submission



City of  
Newcastle

## Newcastle Art Gallery Expansion

### Federal Government Topics:

#### Communication and the Arts

- Arts funding

#### Infrastructure, Transport, Cities and Regional Development

- Cities
- Local government and territories
- Regional development

### Project Description:

The Newcastle Art Gallery is Australia's first purpose-built regional art gallery and is a custodian to a nationally recognised permanent collection of over 6,600 works of art valued at \$95 million. The collection is significant and diverse, providing a time capsule of Australian art dating back to the earliest days of Newcastle more than 200 years ago. The Newcastle Art Gallery is an important part of Newcastle's growing cultural diversity and has been active in purchasing the work of emerging artists, with a focus on artists who have lived and worked in the Hunter region. To meet the growing expectations of the community, the existing building requires upgrading and expanding to provide modern facilities such as a new café and retail shop, multi-purpose and educational program space, improved display and secure international standard loading dock.

### Benefits to be realised:

- A strategic business case has been completed with a preliminary Cost / Benefit Ratio of 1.77 representing a Net Present Value of \$24.1 million.
- Double the size of the exhibition space to provide the public with increased access to the Gallery's highly valuable collection.
- Further develop a culture and arts precinct with the Newcastle Art Gallery within a short walking distance of Newcastle City Hall, the Civic Theatre, Newcastle Library and Newcastle Museum.

For further information see Attachment: Newcastle Art Gallery Strategic Business Case.

# Federal Budget Submission



City of  
Newcastle

## Alignment to Strategic Plans:

### Hunter Regional Plan 2036

- Direction 9 – Grow tourism in the region

### Greater Newcastle Metropolitan Plan 2036

- Strategy 6 – Promote tourism, major events and sporting teams on the national and international stage
- Strategy 11 – Create more great public spaces where people come together
- Strategy 19 – Identify and protect the region's heritage

<b>Estimated total project cost</b>	\$36.6 million
<b>City of Newcastle commitment</b>	\$6.4 million
<b>Federal Government commitment/request</b>	\$14 million
<b>NSW State Government commitment/request</b>	\$14 million

**ASK:** The City of Newcastle requests that the Federal and State Government prioritise funding the expansion of the Newcastle Art Gallery noting the significant benefit it will provide to the local economy.

# Federal Budget Submission



City of  
Newcastle

## Greater Newcastle Light Rail Extension

### Federal Government Topics:

#### Infrastructure, Transport, Cities and Regional Development

- Cities
- Infrastructure
- Local government and territories
- Regional development
- Road and rail transport

### Project Description:

The delivery of the initial 2.7km of the Newcastle light rail system is the first step towards creating an expanded and integrated light rail network linking the city centre with suburban hubs and key infrastructure. Light rail operations in Newcastle are providing a high-capacity and frequent service throughout Newcastle's city centre. The Greater Newcastle Light Rail Extension project would develop a Strategic Business Case for future developments, including the completion of detailed design work and the rezoning of corridors for the future extension.

### Benefits to be realised:

- The Strategic Business Case will identify improved access to various destinations across Greater Newcastle.
- The Strategic Business Case will complement existing initiatives including the Lake Macquarie Interchange project, the expansion of Newcastle Airport and the Broadmeadow Arts & Entertainment Precinct.

### Alignment to Strategic Plans:

#### Greater Newcastle Future Transport Plan

- Customer Outcomes 3 – The appropriate movement and place balance is established enabling people and goods to move efficiently through the network whilst ensuring local access and vibrant places
- Customer Outcomes 4 – Supporting centres with appropriate transport services and infrastructure
- Customer Outcomes 5 – Changes in land use, population and demand, including seasonal changes, are served by the transport system
- Customer Outcomes 6 – Economic development is enabled by regional transport services and infrastructure
- Customer Outcomes 9 – Accessibility to employment and services such as health, education, retail and cultural activities within Regional Cities and Centres
- Customer Outcomes 10 – Customers enjoy improved connectivity, integrated services and better use of capacity

# Federal Budget Submission



City of  
Newcastle

## Hunter Regional Plan 2036

- Direction 1 – Grow Greater Newcastle as Australia's next metropolitan city

## Greater Newcastle Metropolitan Plan 2036

- Strategy 1 – Reinforce the revitalisation of Newcastle city centre and expand transformation along the waterside
- Strategy 20 – Integrate land use and transport planning

<b>Estimated total project cost</b>	\$5 million
<b>City of Newcastle commitment</b>	To be confirmed
<b>Federal Government commitment/request</b>	\$2.5 million
<b>NSW State Government commitment/request</b>	\$2.5 million

**ASK:** The City of Newcastle requests that the Federal and State Government prioritise funding for the development of a Strategic Business Case to inform the future direction and potential benefits of light rail expansion in Newcastle. A partnership approach between all levels of Government will deliver the best outcomes for the community.

# Federal Budget Submission



City of  
Newcastle

## Pensioner Rate Rebates

### Federal Government Topics:

#### Health, Aged Care and Sport

- Aged Care

#### Social Services

- Welfare Entitlement

### Project Description:

The Rate Rebate Concession for Pensions should be increased, commensurate to the Consumer Price Index. The Current rebate waste in 1989 and has not increased since that time despite significant increases in the cost of living. The number of older people in Newcastle is increasing and by 2026 will have increased by 17.1% from the 2016 population. A significant proportion of older people in Newcastle live in lone person households. A higher proportion of people in Newcastle live in a household within the lowest quartile of household income (27.7%) compared to NSW (25%).

### Benefits to be realised:

- Enables older people to remain in their current home as long as possible (age in place)
- Enables older people to stay financially independent for as long as possible
- Enables older people to maintain solid social ties and contact with family and community (reduce social isolation) and
- ensure housing outcomes for older people are affordable and stable.

### Alignment to Strategic Plans:

#### Hunter Regional Plan 2036

- Direction 20 – Revitalise existing communities

#### NSW Ageing Strategy 2016–2020

- Priority 2: Working and Retiring
- Priority 3: Housing Choices

**ASK:** The City of Newcastle asks the State and Federal Government to develop and fund increased pensioner rebates for local government rates.

# Federal Budget Submission



City of  
Newcastle

## Local Playground Upgrades for Disability Inclusion

### Federal Government Topics:

#### Health, Aged Care and Sport

- Sport
- Youth

#### Social Services

- Disability Services

#### Infrastructure, Transport, Cities and Regional Development

- Cities
- Local government and territories
- Regional development

### Project Description:

Support the asset renewal program of the City's extensive playground network to include greater accessibility and inclusion elements to these important community assets. Many of the assets were constructed before disability inclusion was considered in planning and design of facilities. Major improvements are required across the network to cater for a range of access issues to both the play equipment and to the surrounding supporting assets such as access paths, provision of shade and seating.

### Benefits to be realised:

- Maximise ongoing contribution towards creating liveable communities where community places, neighbourhoods and facilities promote health, happiness and wellbeing and contribute to social connectedness. This includes important liveability factors such as community recreation and social inclusiveness.

- Create places and spaces where all members of the community can get to, play and stay.

### Alignment to Strategic Plans:

#### Hunter Regional Plan 2036

- Direction 17 – Create healthy built environments through good design
- Direction 18 – Enhance access to recreational facilities and connect open spaces

#### Greater Newcastle Metropolitan Plan 2036

- Strategy 11 – Create more great public spaces where people come together

### Next step

The City of Newcastle is currently implementing a range of programs identified in our Disability Inclusion Program.

**ASK: The City of Newcastle asks the NSW State Government increase funding to their Sport & Recreation Infrastructure Grant & the Her Sport Her Way Grant and the Federal Government to increase their Community Development Grants program. CN has identified disability inclusion projects and will be seeking additional funding through these programs. A partnership approach between all levels of Government will deliver the best outcome for the community.**



# Federal Budget Submission



City of  
Newcastle

## Port of Newcastle Diversification

### Federal Government Topics:

#### Infrastructure, Transport, Cities and Regional Development

- Cities
- Infrastructure
- Local government and territories
- Maritime
- Regional development
- Road and rail transport

### Project Description:

The Port of Newcastle is a major Australian trade gateway handling 4,600 ship movements each year. With its annual trade worth more than \$29 billion to the NSW economy, the Port enables businesses across the state to successfully compete in international markets. The deep-water shipping channel is currently operating at 50% of its capacity with significant land available and existing national rail and road infrastructure. The Port of Newcastle is positioned to expand and diversify its product away from reliance on coal as identified in its Master Plan 2040. In particular, the Port of Newcastle has developed a concept plan for a staged container terminal development at its Mayfield site. Furthermore, the Port of Newcastle has identified the opportunity for the construction of a Newcastle Cruise Terminal.

### Benefits to be realised:

- A Newcastle container terminal would be a complementary option to Port Botany, create genuine competition between the two port operators and allow NSW importers and exporters to choose the most efficient and cost-effective supply chain for their cargo. A Newcastle container terminal would also save the NSW government billions in infrastructure spending and help reduce Sydney road and rail congestion.
- A Newcastle Cruise Terminal would help to ease congestion on the cruise facilities in Sydney.

For further information see Appendix: Complementary Freight and Supply Chain opportunities in the Port of Newcastle and Newcastle Airport.

# Federal Budget Submission



City of  
Newcastle

## Alignment to Strategic Plans:

### NSW Economic Blueprint 2040

- Recommendation 4.2 – Improve freight networks from regional New South Wales to global gateways to increase exports

### Hunter Regional Plan 2036

- Direction 4 – Enhance interregional linkages to support economic growth
- Direction 26 – Deliver infrastructure to support growth and communities

### Greater Newcastle Metropolitan Plan 2036

- Strategy 23 – Protect major freight corridors

**ASK:** The City of Newcastle requests that the Federal and State Government provide co-contributions to the Port of Newcastle to develop a Newcastle Container Terminal and Newcastle Cruise Terminal. A partnership approach between all levels of Government and the Port of Newcastle will deliver the best outcomes for the community.

# Federal Budget Submission



City of  
Newcastle

## Sporting Amenity Upgrades

### Federal Government Topics:

#### Health, Aged Care and Sport

- Sport
- Youth

#### Infrastructure, Transport, Cities and Regional Development

- Cities
- Local government and territories
- Regional development

### Project Description:

Support the asset renewal program of the City of Newcastle's [CN] extensive sporting ground amenities due to ageing assets and increased demand for provision of amenities that are female friendly to support trend towards greater female participation in sport. CN is currently developing a comprehensive long-term strategic sports plan that includes extensive stakeholder engagement. The initial key directions highlight the need for a significant amenity upgrade program due to the age, condition and suitability of existing assets at our 64 sporting ground complexes.

### Benefits to be realised:

- Support the ongoing and strong level of participation in sport in Newcastle that contributes to healthy, active and connected communities.
- Contribute to the NSW Government *Sport Her Way* strategy, with the vision of enabling women and girls to be valued, recognised and have equal choices and opportunities to lead and participate in sport in NSW. With specific benefit to the 'places and spaces' pillar.

### Alignment to Strategic Plans:

#### Hunter Regional Plan 2036

- Direction 17 – Create healthy built environments through good design
- Direction 18 – Enhance access to recreational facilities and connect open spaces

#### Greater Newcastle Metropolitan Plan 2036

- Strategy 11 – Create more great public spaces where people come together

#### Her Sport Her Way – Shaping the Future of Women's Sport in NSW 2019–2023

- Initiative 2 Places and Spaces Pillar – Improve places and spaces across the sport facility hierarchy: National / State (Stadia); High Performance; Regional; District; and local to better support women and girls

### Next step

The City of Newcastle is currently developing a 10-year Strategic Sports Plan, which will include a prioritisation matrix for our sporting amenities.

**ASK: The City of Newcastle asks the NSW State Government increase funding to their Sport & Recreation Infrastructure Grants & the Her Sport Her Way Grants and the Federal Government to increase their Community Development Grants program. CN has identified projects and will be seeking additional funding through these programs. A partnership approach between all levels of Government will deliver the best outcome for the community.**

# Federal Budget Submission



City of  
Newcastle

## Coastal Management Planning and Erosion Management at Stockton Beach

### Federal Government Topics:

#### Environment & Energy

- Environment policy and programs

#### Infrastructure, Transport, Cities and Regional Development

- Cities
- Local government and territories
- Regional development

### Project Description:

Development of a Coastal Management Program under the NSW State Government Coastal Management Act 2016 to inform long-term management solutions to address coastal erosion issues at Stockton Beach. The project will also include the implementation of the identified long-term management solution, which could involve a variety of options, but the community is seeking beach nourishment to rebuild and restore beach amenity and address on-going shoreline recession which currently impacts community assets and private property and will increase into the future. The City of Newcastle is currently completing the planning process under the Coastal Management Act 2016.

### Benefits to be realised:

- An appropriate long-term management solution is identified and agreed to by all stakeholders.
- A range of social benefits due to the re-establishment of the beach and improvement/retention of local communities coastal identity, economic benefits from increased tourism and environmental benefits from improvement of local coastal habitats.

### Alignment to Strategic Plans:

#### Hunter Regional Plan 2036

- Direction 16 – Increase resilience to hazards and climate change

#### Greater Newcastle Metropolitan Plan 2036

- Strategy 14 – Improve resilience to natural hazards

**ASK: The City of Newcastle asks the NSW State Government to increase their Coastal and Estuary Grants program and prioritise investment at Stockton Beach. The City of Newcastle requests that the Federal Government provide the state government with the resources and framework required to effectively deliver for their local communities.**