



HUNTER PLAN FOR REGIONAL GROWTH

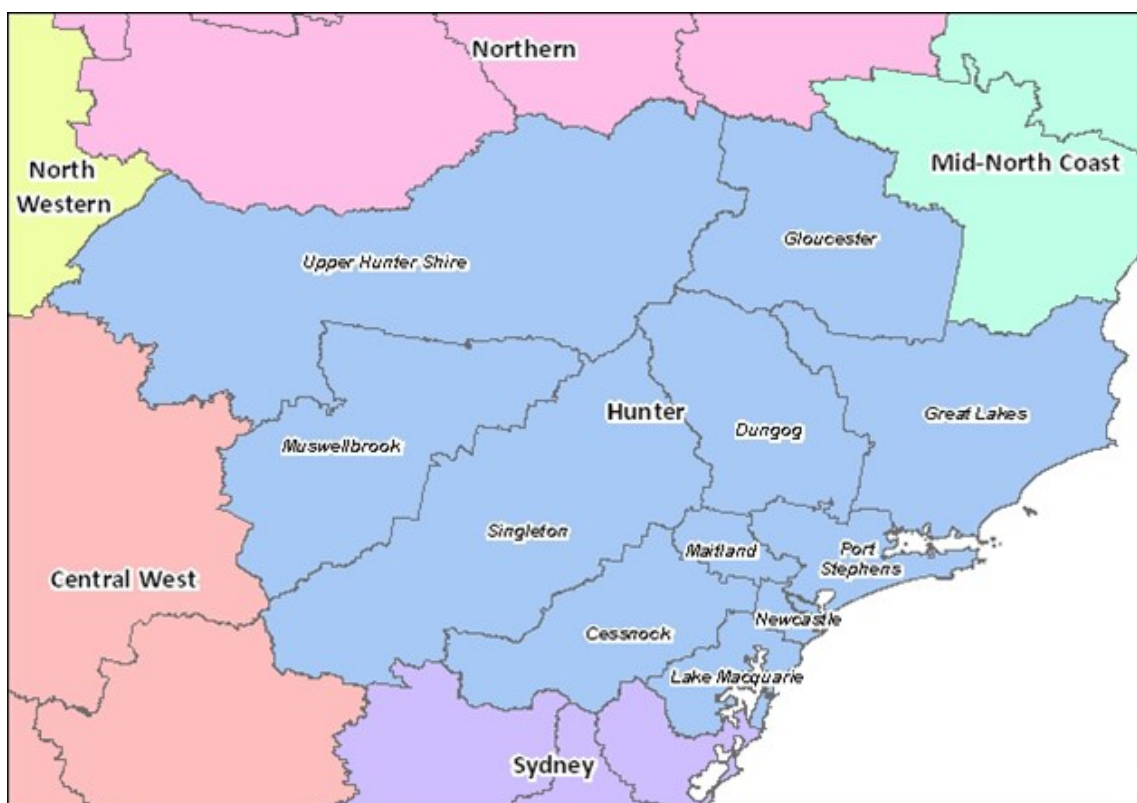
2016—2019

Economic Development Strategy for the Hunter

The Hunter Region New South Wales, Australia

Hunter Statistical Division (Hunter SD) as defined by the Australian Bureau of Statistics using the Australian Standard Geographical Classification, 2007 (Cat. No. 1216.0) incorporates ten (10) local government areas.

NSW Government review of local government boundaries may impact Hunter region boundaries.



Source: http://www.ipc.nsw.gov.au/Lawlink/bocsar/II_bocsar.nsf/pages/bocsar_sd_hunter

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“This report was produced by RDA Hunter and does not necessarily represent the views of the Australian Government, its officers, employees or agents.”

Hunter Plan for Regional Growth 2016— 2019

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1. Message from the RDA Hunter Chairman

RDA Hunter advocates strongly for the economic development of the region by strategically pursuing a vision for the Hunter of sustainable economic growth and global competitiveness. RDA Hunter works with other regional organisations, hosts delegations and makes submissions to relevant inquiries, reviews and Ministers to influence the content of state and national policies and gain support for regional priorities.

We champion the comparative and competitive advantages of the region along with the need for:

- More **investment** into the Hunter;
- Better economic **infrastructure** and connectivity, and
- An **innovation** eco-system that improves productivity and responsiveness to global changes.

RDA Hunter promotes investment in the region's changing industry profile through its annual Investment Prospectus and the Smart Specialisation Strategy (S3) for the Hunter Region. The S3 identifies actions to support the development of seven areas of competitive advantage to drive the Hunter's economy forward. This economic development plan is built on the foundation of the people of the Hunter, a capable workforce equipped with the right skills and access to enabling technologies such as high speed broadband.

Since 2010 RDA Hunter has delivered the ME Program which provides thousands of high school students with educational and industry pathways to help them with careers in a wide range of industries. This local initiative operates in partnership with over 40 schools from government, independent and Catholic sectors and committed industry partners. It has increased the uptake of HSC science, technology, engineering and mathematics (STEM) subjects and delivers essential skills for the region's future. The ME Program's senior school subject iSTEM, helps deliver the outstanding results of this initiative. Incorporating mechatronics, aerodynamics, engineering, 3DCAD/CAM and motion modules, iSTEM is taught in more than 90 schools nationally.

The availability of high speed broadband, coupled with entrepreneurialism and sound business acumen, will encourage the expansion of smart infrastructure and sustainable technologies which promote efficiencies and commercialises research outcomes.

RDA Hunter's Board is committed to prioritising nationally significant infrastructure at a regional level. Federal and State government support will build several of the economic infrastructure projects that have been championed by RDA Hunter, these include: the duplication of Tourle Street Bridge and access roads, Scone bypass and rail level crossing solution, widening Singleton's Gowrie Gate, New England Highway from Belford to the Golden Highway, as well as the Glendale Transport Interchange.

RDA Hunter continues to consult with stakeholders to progress opportunities and solutions to some of the big regional issues, including:

- A bigger Hunter increasing pressure on housing, infrastructure, transport and land use;
- The evolving patterns of Asian demand; and
- Far-reaching challenges of an economy in transition.

The Hunter Plan for Regional Growth 2016 – 2019 recognises that the changes over the period will be pervasive and far reaching and that to secure the benefits of opportunities much will depend on our ability to work together cohesively and strategically. The Board of RDA Hunter endorses this Plan. I commend it to you and welcome your comments, participation and partnership in meeting the prospects and challenges ahead.



Michael Slater
Chairman, RDA Hunter



2. Executive Summary

2.1 Australia's Hunter Region

The Hunter has around 8% of New South Wales' population, with an estimated resident population of 675,199 in 2015. Most of the population of the region lives within 25 km of the coast, with 54.4% of the Hunter's population living in the Newcastle and Lake Macquarie Local Government Areas (LGAs). An overview of the region is presented in Attachment 1.

The Hunter (*see map on p2*) as defined by the Hunter *Statistical Division* incorporates ten (10) LGAs: Cessnock, Dungog, Lake Macquarie, Maitland, Mid-Coast (inc Gloucester, Great Lakes and Greater Taree), Muswellbrook, Newcastle, Port Stephens, Singleton and Upper Hunter Shire. NSW Government is reviewing local government area boundaries (2016).

RDA Hunter has identified the priority areas on which to focus efforts to build a better future for the region. These regional priorities are succinctly captured under three themes:

- **Investment;**
- **Innovation;** and
- **Infrastructure.**

RDA Hunter uses these three 'strategic clusters' to focus on deliverable actions that will progress identified regional priorities. It is clear that there is a high degree of inter-connectedness between these strategic areas. For instance, supporting innovative programs making an investment in the education and training of the Hunter's skilled workforce for the future will ensure the required range of expertise is available to build the planned infrastructure and have the knowledge required take full advantage of the benefits that will flow from these improvements.

RDA Hunter's investment, innovation and infrastructure agenda captures the priority areas for actions to progress regional priorities that:

- support growth of the Hunter's economy and communities,
- respond positively to regional demographic changes,
- develop integrated plans to manage land-use across the Hunter Region,
- encourage investment in the region and expand Hunter markets into growing Asian economies; and
- build and improve infrastructure to increase productivity and provide the levels of connectivity within the region, and beyond, that are required to maintain Australia's largest regional economy.

Investment for the Hunter's future

- **Hunter Investment Prospectus**
- **Government Grants Funding**
- **Workforce and Skills Development**
- **Hunter's future freight and transport connectivity**
- **Corridor preservation for an east coast high speed rail network**

The economy of the Hunter enjoys a number of strengths and makes a significant contribution to the Australian economy. In 2013, the **Hunter's gross regional product (GRP)** was **\$38.5 billion**. The Hunter is positioning itself strongly as an internationally competitive regional economy, with above state average growth of around 75% in the next two decades, contributing an additional \$28 billion by 2036.

It is well known locally, but sometimes comes as a surprise to external investors, that during the past 20 years, the Hunter has transformed from its dependency on heavy industry to a diversified resource, services and business growth centre. The Hunter needs and wants investment in people, productivity and connectivity; both private sector investment and government investment.

We know that to achieve our shared vision for the region we need investment. Investment to improve service delivery and infrastructure will enable this region to achieve sustainable growth and to maintain quality of life for our current and future populations. Investment creates jobs.

The Hunter invests in human capital through numerous high quality educational institutions, in particular the University of Newcastle and Hunter TAFE, as well as a broad network of registered group training organisations and Tocal College delivering agricultural training. Combined, this extensive local education network means the region is well placed to deliver a full range of academic and training programs.

Ensuring the availability of relevant training options is responsive to the requirements of emerging strategic industries will be a priority to support workforce development. RDA Hunter actively supports **innovative workforce development** through the **ME Program**; an effective schools and industries pathways program that is increasing participation of high school students in science, technology, engineering and mathematics (STEM) subjects.

The largest employment sector in the region is Health Care & Social Assistance. As the population ages the demands on this sector will increase with a greater focus on the availability of services being delivered in an acceptable, effective, timeframe.

The annual **Hunter Investment Prospectus** is one of the most important tools for RDA Hunter's ongoing promotion of the comparative and competitive advantages of this region.

Innovation for the Hunter's future

- **Smart Specialisation Strategy (S3) for the Hunter Region**
- **Hunter Innovation Festival / Forum**
- **Hunter Innovation Eco-system**
- **Industry Skilling Schools Pathways Program, the ME Program and MiniME Program in the Hunter**

The Hunter Region's **Innovation system** has developed through a culture of collaboration, most notably in Manufacturing, led by HunterNet and in Health Research/Services, especially at the Hunter Medical Research Institute (HMRI), that encourages and delivers innovative solutions and breakthroughs. These two enabling organisations, and there are others such as entrepreneurial accelerator Slingshot and Newcastle Institute for Energy and Resources (NIER), strengthen the Hunter's competitive advantage as a region that embraces and delivers innovation.

With closer ties forming between the University of Newcastle, CSIRO (Commonwealth Scientific and Industrial Research Organisation), NIER, HMRI and other research institutes, industries and businesses in areas such as energy, resources, clean technology and educational programs, the Hunter's robust innovation system will continue to deliver competitive advantages to businesses located in the region.

Organisational commitment to innovation, has also seen Newcastle Port Corporation work with its industry partners to introduce the Hunter Coal Export Framework which provides certainty for investment in mines and terminals; and, established the Hunter Valley Coal Chain Coordinator, believed to be the world's first arrangement for a multi user bulk supply chain which plans and coordinates the daily use of tracks, trains, storage and delivery of black coal.

One of the most potent new areas of innovation in the region is in creative industries. This is a diverse field including creative arts, entertainment, fashion, design, computer games, publishing, media, music and cultural tourism. Already networks and cooperative thinking, research and products are starting to cluster in the Hunter, around our cultural precincts, our digital services as well as the University and TAFE. RDA Hunter is committed to supporting a regional creative industry cluster that will help our embryonic businesses in this emerging sector gain competitive advantage and feature strongly in the future economy of this region.

In 2013, RDA Hunter launched Australia's first regional scorecard of innovation. The 2014 ***Hunter Innovation Scorecard*** benchmarked the Hunter's innovation environment, latest advancements and cutting-edge solutions with the regions of the European Union. This initiative led RDA Hunter to research and develop a smart specialisation strategy for the region. In March 2016, Prime Minister Malcolm Turnbull launched the ***Smart Specialisation Strategy (S3) for the Hunter Region*** at Parliament House, Canberra.

Infrastructure for the Hunter's future

- **Connectivity: Port of Newcastle, Kooragang Island and Newcastle Airport**
- **Scone – bypass and rail level crossing**
- **Singleton - Gowrie Gates underpass**
- **Water security**
- **New England Highway from Belford to the Golden Highway.**
- **Lower Hunter Freight Corridor—Freight rail bypass of Newcastle between Fassifern and Hexham**
- **Lake Macquarie Transport Interchange at Glendale**
- **Revitalising Newcastle and Connecting the Lower Hunter Urban Area (Greater Newcastle)**
- **High Speed Broadband**

The Hunter's **proximity to Sydney** and existing key **infrastructure** makes the area a prime location as a major regional activity hub. The region has a comparative edge in accessing Australian and International markets due to its location on Australia's east coast, between Melbourne and Brisbane, together with an impressive transport network.

RDA Hunter works with stakeholders and all levels of government to have the Hunter's infrastructure priorities recognised in state and federal government plans. Through the Australian Government's BBRF (Building Better Regions Fund) RDA Hunter supports stakeholders to apply for funds to build regionally significant capital infrastructure projects.

RDA Hunter partnered Infrastructure NSW to develop the Hunter Economic Infrastructure Plan (HEIP). This work was supported by a \$450,000 grant from the Australian Government's Regional Infrastructure Fund.

This Plan takes a whole of supply chain view of mining related activities in the Hunter to identify: capacity constraints; impacts on communities; and the economic infrastructure required to deliver improvements in capacity and community development.

The HEIP also considers the requirements for the Hunter's future water security.

One local project of national significance in the HEIP is the duplication of a bridge and access roads to connect Newcastle Port and Airport to the national highway system. RDA Hunter continues to build on its solid track record of supporting improvements to the region's infrastructure to improve productivity and efficiency.

2.2 RDA Hunter's initiatives and actions

Meeting the Hunter's future challenges

The Hunter Region has a solid base to flexibly absorb and respond to emerging economic circumstances. For instance, the region's comparative advantages include:

- A relatively diverse economic base;
- A considerable pool of skilled workers;
- Good infrastructure;
- High quality education and training facilities;
- Available land;
- Proximity to national and international markets;
- An appetite for research and innovation;
- Experience building collaboration within competitive environments;
- A demonstrated capacity to respond positively to structural adjustment; and
- It is an attractive place to live.

The Hunter is responding to **four major influences**, which are also impacting on the state, national and global economies.

1. The consequences of climate change abatement and adaptation policies

The Hunter may potentially be affected by climate change policies due to the presence of energy-intensive sectors of electricity generation and aluminium production. Coal mining, gas extraction, steel production and large scale manufacturing zones such as Tomago may also be affected.

The combination of an increase in the Hunter's population and a potential decrease in reliable water resource availability associated with climate change is likely to require multiple approaches to deliver **regional water security**.

2. Advancements in information technologies

Being ready to take advantage of the benefits of better connectivity through high speed broadband is promoted by RDA Hunter. The region has opportunities to adopt new business models and practices, enjoy improved communications platforms and devices, and to continue building an environment that welcomes and supports **innovation**.

3. Goods and services demand and competition from industrialising economies

Shipping Hunter coal to China, India, Japan, South Korea and other countries is a well-known story with a long history. The regional economy is intertwined with these foreign economies and susceptible to any reduction in demand and/or commodity prices.

The risks and challenges presented by lower commodity prices present opportunities for other areas of comparative advantage in the Hunter. As the Asian region's economy expands to be as large as Europe and the USA combined, with a middle class of around three billion people by 2020, the Hunter's agriculture producers, and tourism and education providers will have an increasing market that demands higher value products and services.

4. Demographic trends and settlement patterns.

Planning for the Hunter to become home to one million people within the next twenty years is essential for the region's **sustainable communities** and plans for population growth. In 2011-12, the Hunter, Newcastle and Lake Macquarie had the largest and fastest population increases in NSW outside of Greater Sydney. (ABS Cat. 3218.0 30/04/2013)

RDA Hunter sees benefits for the region's productive capacity by growing the working age population at a rate faster than the current annual trend. This will assist industries to meet shortfalls in a skilled workforce and provide a larger base of income earners as the 'baby boomer generation' retires.

The recent competition for the skilled workforce of the region, with an increasing number of skilled workers transferring into the mining sector, is in flux as the resources sector moves from construction to production in a climate of lower commodity prices. Affordable housing in close proximity to jobs is increasingly an issue of concern for many communities in the region.

RDA Hunter's priority initiatives and actions will deliver on the core agenda of **investment, innovation** and **infrastructure** for the region's future.

The following summary of strategic projects captures the scope of activities currently endorsed by the RDA Hunter Board. It is reasonable to expect that the principle of continuous improvement to adapt quickly to changing needs will be applied to the resources of RDA Hunter as new opportunities arise and existing projects are completed.

RDA Hunter's program of activities, projects and initiatives

Investment

Hunter Investment Prospectus

This annual publication promotes the Hunter's comparative advantages, areas of excellence and business opportunities to local and foreign investors.

Government Grants Funding

RDA Hunter will continue to work with industries, businesses, community leaders and other peak body organisations within the region to secure funds from government schemes.

Workforce and skills development

RDA Hunter supports a range of initiatives designed to build the region's human capital capacity, address skills shortages, and attract Australian and overseas businesses to establish new or joint ventures in the region. As a regional certifying body (RCB) for skilled migration (RSMS) visas, RDA Hunter manages visa processing to support investment in skills required by Hunter industries and businesses.

Hunter's future freight and transport connectivity

RDA Hunter's investment agenda includes advocating for investment now in corridor preservation for bypasses of urban areas to provide better access to markets, increase separation of passenger and freight movements, improve road and rail networks, and promote the benefits of an Australian **high speed rail network** along the east coast.

This agenda also includes a freight rail bypass of Newcastle between Fassifern (south) and Hexham (north).

Innovation

Smart Specialisation Strategy (S3) for the Hunter Region

This economic development project has developed a blueprint for strong and focussed growth of the Hunter's competitive strengths and will enable areas with the greatest potential to succeed.

Hunter Innovation Festival / Forum

Partnering in the delivery of the annual Hunter Innovation Festival / Forum is an action that helps to drive economic growth and economic diversity in the region.



Industry Skilling Schools Pathways Program, including the ME Program and MiniME Program in the Hunter

RDA Hunter's innovative approach to education, teacher support and the development of a skilled workforce for the Hunter coordinates local high school education in STEM (science, technology, engineering and mathematics) subjects with industry experience.

Hunter Innovation Network

Initiated by RDA Hunter's S3 to develop inclusive leadership for the Hunter Innovation System. The Hunter Innovation Network links businesses and entrepreneurs to services, facilities and stakeholders to accelerate their innovation and growth. This Network supports RDA Hunter's focus on economic development to maximise wealth creation in the Hunter Region. The National Innovation and Science Agenda will be leveraged to build regional capacity in three focus areas: initiation and support of innovative business start-ups; technology transfer activities; and, economic development. Increasing the size of the region's working age population and retaining talented people in the Hunter are also important goals.

Other Regional Innovation Initiatives

RDA Hunter welcomes a range of innovation initiatives by others in the region, including (as at August 2016):

CSIRO—eighteen04 incubator and co-located working space

DaSH — Lake Macquarie's co-working space, established by Dantia

Hunter DiGiT— Hunter Digital Innovation Growth Industry Taskforce Annual DiG Festival

University of Newcastle

- Courses focussed on innovation, entrepreneurship and collaboration
- Hunter Innovation Project, with Newcastle City Council and DiGiT
- Three76 — Newcastle Innovation Hub, co-working space
- Defence Innovation Technology Hub — Williamstown Aerospace Centre (from mid-2017)
- Upper Hunter Innovation Hub — Muswellbrook
- Creative Industries Research and Innovation Cluster—supported by Newcastle Innovation

Council Smart City Programs—Newcastle City Council; Lake Macquarie City Council

Infrastructure

Priority economic infrastructure projects

As the Hunter's future growth of inbound freight logistics to the mining sector is expected to double over the next two decades, priority economic infrastructure projects include:

- Connectivity: Port of Newcastle, Kooragang Island, Newcastle Airport
- Scone – bypass and rail level crossing
- Singleton – Gowrie Gates underpass
- New England Highway Belford to Golden Highway
- Water security

Lower Hunter Freight Corridor—Freight rail bypass of Newcastle between Fassifern and Hexham

This initiative supports the Northern Sydney Freight Corridor Program and will improve productivity of freight transport; support future growth plans and separate passenger trains from freight trains, with commuter experience improvements at Newcastle suburban level crossing gates. NSW Budget 2016 includes \$14m for a study on this priority project.

Lake Macquarie Transport Interchange

Construction of a new railway station, access roads, intersections, pathways and bridges will improve passenger and freight mobility by creating a new transport interchange strategically located on the main rail line to the Port of Newcastle.

Revitalising Newcastle and Connecting the Lower Hunter Urban Area

The NSW Government has committed to the revitalisation of central Newcastle. RDA Hunter's history of involvement with urban planning and the Creative Industries will guide future collaborations with stakeholders as the CBD of Newcastle is redesigned and rebuilt.

High Speed Broadband

Better communication and information connectivity will improve the Hunter's innovation system, which includes linkages between businesses, education, research and enabling organisations and creative industries.

This program continues RDA Hunter's advocacy presented in the (2010) issues paper, *Connecting the Hunter*, which included:

- "The region must plan for future infrastructure needs within a long-term strategic, comprehensive and consistent regional framework;
- Forecast growth means the region must adopt a proactive, integrated and coordinated approach to transport infrastructure;
- The region must maintain appropriate levels of investment in human capital, knowledge and information infrastructure;
- RDA Hunter believes access to high speed broadband is essential to the region's growth and development;
- The renewal and revitalisation of Newcastle CBD is essential for a broader regional growth strategy; and
- There is considerable opportunity for the state and national economies to leverage off the readiness of the Hunter to embrace long-term sustainable economic development."

3. Vision for the Hunter Region

RDA Hunter Committee's ambitions for the Hunter to 2019:

The Hunter continues to grow and be recognised nationally and internationally for high quality products and services, well-connected liveable places and a collaborative business culture that supports innovation to deliver Australia's largest regional economy.

The Hunter:

- Strives to continuously improve the region's liveable places, health services, educational institutions, research centres, job training programs and choices in employment opportunities.
- Supports high-value export-oriented global industries in resources, energy, manufacturing, education, IT, health research, medical practice, science, tourism, creative industries, sports and recreation.
- Engages with national and international markets via an extensive transit network that reaches out from a deep water sea port, along rail lines and roads through a major regional airport and local airfields.
- Values collaboration and innovation in effective business models; making the Hunter Region the smart place to invest, develop and produce globally-relevant concepts, products and services.

RDA Hunter's vision for this region is built on world's best practice in sustainable economic development, improved productivity, high levels of employment and community well being.

4. Role of RDA

Regional Development Australia (RDA) is a partnership between the Australian, State, Territory and Local governments to support the growth of Australia's regions. Established in 2009, Regional Development Australia Hunter (RDA Hunter) is part of a network of 55 RDA Committees across Australia and is the peak regional economic development consultative organisation for the Hunter.

RDA Hunter works with its communities to develop local solutions to local issues. The RDA Hunter Board knows the region's strengths; knows where the opportunities lie; and are best-placed to identify the key action priority areas for the Hunter.

Regional Development Australia Hunter:

- Fosters regional economic development;
- Works with all three tiers of government, regional business and the wider community;
- Boosts the economic capability and performance of the Hunter region; and
- Facilitates policies, programmes and projects designed to strengthen human capital, productivity, infrastructure, access to markets, regional comparative advantage and business competitiveness.

RDA Hunter works with Hunter communities to:

- Identify funding opportunities, – from January 2010 directly securing approximately \$850million for the Hunter;
- Link with other key stakeholders, – so far leading 55 regionally significant projects and partnering on planning and service delivery programs;
- Help the region attract new industry and investment, – including an annual ***Hunter Investment Prospectus*** and regional promotional tools; and
- Implement strategies to address the unique priorities of the Hunter, – for instance to proactively support innovation and recognise excellence in innovation through the ***Hunter Innovation Scorecard*** and ***Smart Specialisation Strategy (S3) for the Hunter Region***.

The ***Hunter Plan for Regional Growth 2016—2019: Economic Development Strategy for the Hunter***, prepared by the Board of RDA Hunter, is the 4th Plan for the Hunter that represents the region as a coherent and interconnected whole. In setting out the vision for the Hunter, this Plan articulates the drivers of change, identifies strengths, weaknesses, opportunities and priorities for action – local solutions for local problems.

In developing this Plan, RDA Hunter has looked beyond regional boundaries to envision the region's future and has taken into account a range of information. This Plan, also informs Commonwealth and State policy and program development, helping Government to respond to the Hunter region's unique challenges and prospects.

4.1 Framework and key determinants of long-term regional economic development

The Council of Australian Governments (COAG) Regional Australia Standing Council's (RASC) framework and key determinants of long-term regional economic development have been applied by the RDA Hunter Board in the development of this Plan. "The five key determinants:

1. **Human capital, particularly education and skills** is the stock of knowledge, expertise and abilities of a population.
2. **Sustainable communities (economically, environmentally and socially) and population growth** *Sustainable communities* refers to the ability of a region to endure in the long-term. It has economic, environmental and social dimensions. *Population growth* refers to the change in the size of a population over times, caused by migration and natural change through births and deaths.
3. **Access to international, national and regional markets**, is the ability to trade goods and services in a given market.
4. **Comparative advantage and business competitiveness** A region has a *comparative advantage* when it can produce a product, good or service at a lower opportunity cost than another region. *Business competitiveness* is the ability of a business to sell and supply goods and services compared to a competitor. A business has a competitive advantage when its products and services cannot be easily duplicated by competitors.
5. **Effective cross-sectoral and intergovernmental partnerships (including through place-based approaches) and integrated regional planning** *Effective cross-sectoral and intergovernmental partnerships* are areas of formal and informal co-operation between stakeholders, which can help deliver on shared priorities. *Integrated regional planning* aligns the objectives of government, businesses and community to coordinate development efforts at different levels."

Regional Economic Development Guide, 2013

Two attachments add context and further information to the Plan:

1. **Hunter Regional Profile**, presents a concise economic, social, environmental and cultural description of the region structured by the first four RASC determinants; and
2. **Stakeholder Consultation and Partnerships**, identifies the RDA Hunter Committee's support for RASC's fifth determinant, and planning context.

Australia's Hunter Region proudly sustains globally competitive: education and research facilities; wine and equine industries; mining supply chains; emerging digital enterprises; all sectors of the creative industries; vibrant cultural and tourism opportunities; and, quality lifestyle options for its population.

5. Analysis of the Hunter

The RDA Hunter Board's first-hand knowledge of the region (see Attachment 1), together with extensive consultations across the region, with state and national stakeholders (see Attachment 2) combine to inform this analysis of the region.



In March 2013, RDA Hunter launched *Prospects and challenges for the Hunter region: a strategic economic study*. The economic foresighting team at Deloitte Access Economics were commissioned by RDA Hunter to prepare this informative and, for regional Australia, unique report.

The outcomes of this study inform the regional analysis and the priority action areas for RDA Hunter.

As a starting point, **the Hunter has a solid base** to flexibly absorb and respond to emerging economic circumstances. For instance, it has

- a relatively diverse economic base (see Attachment 1 Graphs 11 and 12);
- a considerable pool of skilled workers (see Attachment 1 Graphs 6 and 9);
- offers important lifestyle benefits; and
- natural attractions. (see Environmental features section of Attachment 1).

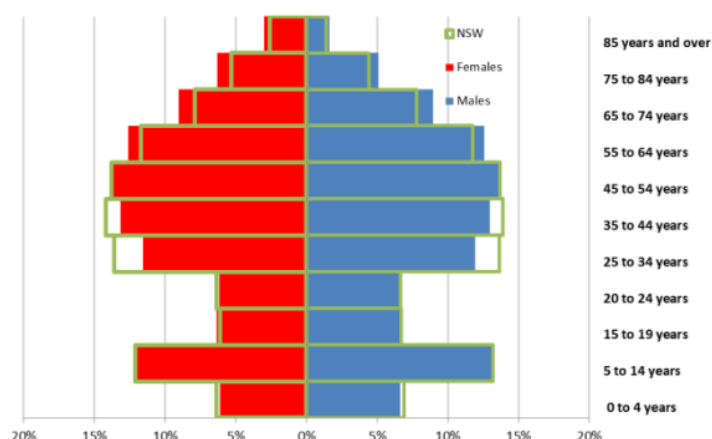
The overall economic **opportunities** for the Hunter over the next two decades are likely to be manifest in growth driven by greater development prospects for the region's strategic industries.

The region's industry base and its services orientation are likely to continue to be clustered around its **strengths** in mining, heavy industries and high value agriculture. The downside **risks** may potentially involve closure or substantial downscaling of parts of the Hunter's industrial base and a flow-on reduction in regional employment.

Changes associated with the **demand for commodities from Asia** and developments in the **digital economy** may cause business conditions to change quite rapidly. In contrast, **population growth and climate change** related factors are slower moving and are likely to impart a more gradual influence on the shape and performance of the Hunter.

(see Attachment 1 Population and A1Graph 1)

Graph1: Hunter and NSW Age Pyramid, 2011



SOURCE: ABS, Census of Population and Housing 2011.

Under baseline growth projections, Deloitte Access Economics models the Hunter's economic output as increasing from around \$36.9 billion in 2012 to \$64.8 billion in 2036. This corresponds to about **\$1.6 billion in additional value added** being generated in the Hunter each year.

Key output forecasts for the Hunter, the rest of NSW and the rest of Australia are set out in Table 1.

Table 1: Economic output projections (2012-13 prices)

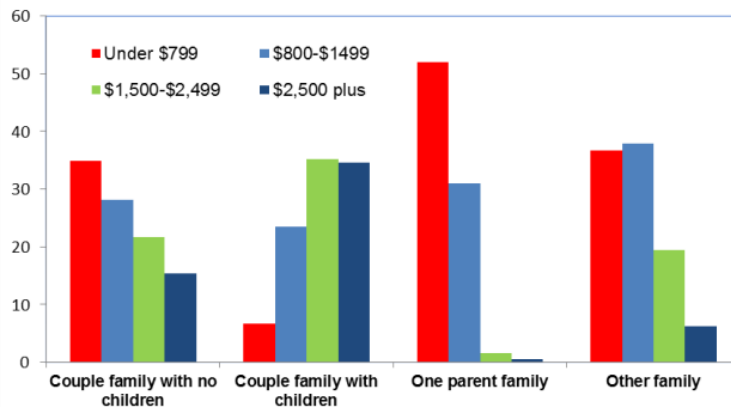
Region	2012 (\$b)	2020 (\$b)	2025 (\$b)	2030 (\$b)	2036 (\$b)	Average annual growth rate (%)
Hunter	36.9	45.7	51.7	58.1	64.8	2.4
Lower Hunter	27.0	33.4	37.7	42.4	47.2	2.4
Upper Hunter	9.9	12.3	14.0	15.7	17.6	2.4
Rest of NSW	421.6	516.2	575.8	633.0	692.7	2.1
Rest of Australia	942.6	1223.4	1434.5	1672.4	1998.9	3.2

Source: Deloitte Access Economics, 2013

The Hunter also has areas of low socio-economic status, a lower than state average for residents with tertiary qualifications, families struggling to find affordable housing and people who have been unemployed for long periods. "Average" employment indicators in areas where investment in mining has been occurring can mask the struggles of the disadvantaged in these areas.

Similarly, perceptions that parts of the Upper Hunter receive higher median incomes has recently been skewed by well-paid mining workers as there are large pay differences in other industries. Improvements in training and employment outcomes across the broad range of Hunter employment sectors are required to prevent income and social disparities between mining and non-mining workers becoming increasingly accentuated. (See Socio-economic Attachment 1 and A1Graph4)

Graph 2: Per cent Families by Weekly Family Income & Family Type, 2011



SOURCE: ABS, Census of Population and Housing 2011.

In *Prospects and challenges for the Hunter Region* Deloitte Access Economics (2013) considers how the Hunter is responding to **four major influences**, which are also impacting on the state, national and global economies.

5.1. The consequences of climate change abatement and adaptation policies.

Policies in response to climate change divide opinions as they impact on the cost of energy production, mining, transport and economic transformation. Climate change as a global environmental trend has the capacity to impact negatively on the natural and built environments.

Fixed pricing, floating pricing, emissions trading schemes and direct action programs are examples of national policies that may be implemented to reduce the amount of carbon in an economy and address climate change. Over the longer term, the Hunter is likely to be affected by climate change policies due to the presence of energy-intensive sectors of electricity generation and aluminium production.

Coal mining, gas extraction, steel production and large scale manufacturing zones such as Tomago will also be affected. If new and larger markets, together with new jobs, are not established for the green energy sector, reductions in outputs from these 'traditional' sectors will lead to a net loss of Hunter jobs.

The combination of an increase in the Hunter's population and a potential decrease in reliable water resource availability associated with climate change is likely to require multiple approaches to deliver regional water security.

Responses in the Hunter include:

- The Newcastle Institute for Energy and Resources (NIER) which researches low pollution and renewable energy sources;
- The CSIRO Energy Centre's state-of-the-art science and research facilities that deliver innovations in renewable energy, energy efficiency and low emission fossil fuel research;
- Smart Grid, Smart City was an initiative providing information and tools to better manage electricity networks and consumption; and
- The Hunter Clean Technology Project which began in 2012 and saw RDA Hunter in conjunction with HunterNet establish a network connecting businesses and researchers in the region to share knowledge and devise effective operational applications of clean technology and renewable energy options.

Resources rich, including the world's best quality coal, natural water sources, and fertile agricultural lands, the Hunter also has significant electricity generation capacity, a resilient manufacturing sector, a progressive and innovative business culture, national and international market expertise, and a skilled workforce.

5.2. Advancements in information technologies that will change how business is conducted and individuals learn, work and play

The impacts of the digital economy on businesses, individuals and political discourse continue to accelerate. Changes to the ways in which people access services, especially education and health services, will remove some of the barriers to living outside of metropolitan centres and businesses participating in larger markets.

At the time of the 2011 Census, fewer homes in the Hunter (75%) had an internet connection compared to the Australian average (80%). According to a Hunter Valley Research Foundation study (2012) only one-quarter of Hunter businesses used their website to sell goods and services. As the National Broadband Network is rolled out across much of the Hunter, it is imperative to be ready to take advantage of the benefits of better **connectivity** through high speed broadband. The region has opportunities to adopt new business models and practices, enjoy improved communications platforms and devices, and to continue building an environment that supports **innovation**.

RDA Hunter sees an increased adoption of digital technologies as a source for stimulating economic growth through a greater level of diversity across the region. High speed broadband also has the potential to drive productivity improvements for Hunter businesses and attract new economic activity.

The Hunter will continue to develop as a globalised virtually connected region, with access to new markets, suppliers, new staffing models and new businesses. The region will also face new challenges regarding future markets, increased competitors, changing business ownership, and more interconnected and complex supply chains.

5.3. Goods and services demand and competition from industrialising economies, eg China, India, Indonesia and South Korea.

Located on Australia's east coast, between Melbourne and Brisbane, and a two hour drive from Sydney, together with an impressive transport infrastructure, the Hunter Region has a competitive edge in accessing Australian and International markets.

Hunter coal being shipped to China, India, Japan, South Korea and other countries is a well-known story with a long history. The region's economy is intertwined with these emerging economies and susceptible to reductions in demand and, or price of coal.

The mining industry in the Hunter, Newcastle Port Corporation and the Port of Newcastle have worked to unblock supply chain bottlenecks and are planning to double the coal export capacity of the port. In tandem with this coal export focus, The Port of Newcastle is also strategically maintaining a diversified port operation, with an eye on opportunities to increase the annual throughput.

As prices for commodities reduce, the profitability of the local mining industry also reduces. This impacts on the level of economic activity in the region's cluster of mining support industries and services and flows through to lower household incomes and consumption.

The risks and challenges presented by lower commodity prices present opportunities for other areas of competitive advantage in the Hunter. As the Asian region expands to be as large as Europe and the USA combined, with a middle class of around three billion people by 2020, the Hunter's **agriculture producers, and tourism and education providers** will have an increasing market that demands higher value products and services.

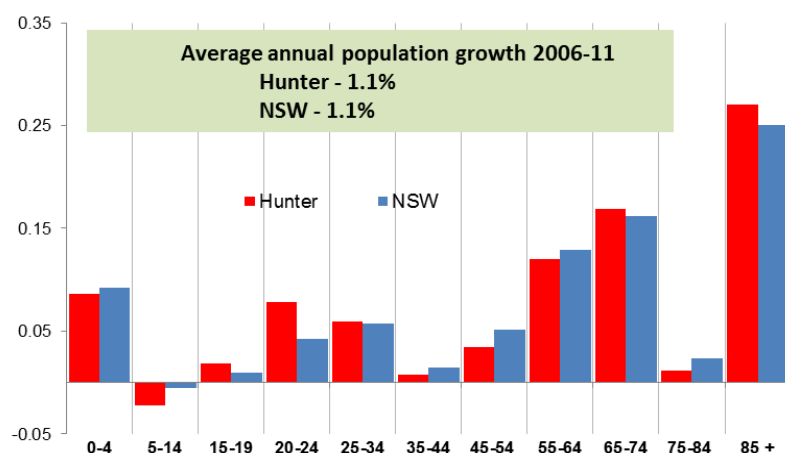
5.4. Demographic trends and settlement patterns.

In 2011-12, the Hunter, Newcastle and Lake Macquarie had the largest and fastest population increases in NSW outside of Greater Sydney. (ABS Cat. 3218.0 30/04/2013)

RDA Hunter sees benefits for the region's productive capacity by growing the working age population at a rate faster than the current annual trend. This will assist industries to meet shortfalls in a skilled workforce and provide a larger base of income earners as the 'baby boomer generation' retires. (see Population forecast, Attachment 1 and A1Graphs1 and 5)

Graph3: Per cent Change in Population Age Groups Hunter & NSW, 2006-11.

SOURCE: ABS, Census of Population & Housing 2006-11.



The ability to attract new, especially younger, people will be affected by developments in and around the greater Newcastle urban area, and the quality of **infrastructure** links and services. The Council of Australian Governments (COAG) has identified 18 Major Australian Cities. One of these cities is located in the Hunter and comprises five local government areas: Cessnock, Lake Macquarie, Maitland, Newcastle and Port Stephens.

In *Urban Planning for the Hunter's Future*, RDA Hunter recommended that regional planning agencies adopt a collaborative approach to address governments' urban policy and consider the regional relationships between:

- Population, land use and housing supply;
- Employment and economically and socially significant infrastructure; and
- Services that best contribute to the long-term well-being of the Hunter region and its people.



The Hunter offers steadily **growing employment and investment opportunities** as well as quality lifestyles for its residents. Planning for the Hunter to become home to a population of one million people within the next thirty years is essential.

Sectoral changes in the economy, including development of the resources and services sectors, consolidation of the region's heavy industries and transformation of the manufacturing base, will place new demands on the Hunter's workforce.

The drivers of these changes include an expectation that compositional changes will generally be gradual, allowing workers and businesses time to adjust according to emerging market opportunities. Further opportunities for workers within the region will emerge, as the Hunter's resources and industrial base expands and as the number of retirees increases. Subsequent demand increases for health, retail and lifestyle services will present new opportunities for service providers.

The Hunter invests in human capital through numerous high quality educational institutions, in particular the University of Newcastle and Hunter TAFE, as well as a broad network of registered group training organisations and Tocal College delivering agricultural training. Combined, this extensive local education network means the region is well placed to deliver a full range of academic and training programs. (see Education in Human Capital, Attachment 1)

Ensuring the availability of relevant training options is responsive to the requirements of emerging strategic industries will be a priority to support workforce development. RDA Hunter actively supports innovative workforce development through the **ME Program**; an effective schools and industries pathways program that is increasing participation of high school students in science, technology, engineering and mathematics (STEM) subjects.

The economy of the Hunter enjoys a number of strengths and makes a significant contribution to the Australian economy. The Hunter is positioning itself strongly as an internationally competitive regional economy.

A realistic scenario for the Hunter would be for the region to achieve an average annual growth of around 2.4% over the next two decades. This represents a solid pace of growth for the Hunter, and cumulatively, is equivalent to overall economic growth of about 76% to 2036.

Deloitte Access Economics, 2013.

6. Regional Priorities

The major influences on the Hunter's future outlined in Section 5 of this Plan will impact on the region's social and economic activities for at least the next decade. It is this context that dictates the strategic priorities for the Hunter are focused on emerging opportunities, future growth, the need for resilience and the importance of driving programs that will deliver a dynamic, productive and liveable region.

RDA Hunter's investment, innovation and infrastructure agenda captures the priority areas for actions to:

- support growth of the Hunter's economy and communities,
- respond positively to regional demographic changes,
- develop integrated plans to manage land-use across the Hunter Region,
- encourage investment in the region and expand Hunter markets into growing Asian economies; and
- build and improve infrastructure to increase productivity and provide the levels of connectivity within the region, and beyond, that are required to maintain Australia's largest regional economy.

6.1 The Hunter's Future Economy and Communities

RDA Hunter activities, projects and initiatives

- **High Speed Broadband**
- **Hunter Innovation Eco-system**
- **Industry Skilling Schools Pathways Program, the ME Program and MiniME Program in the Hunter**

The **mining, manufacturing and energy** sectors provide substantial contributions to the Hunter and national economies, through their strategic functions and widespread employment opportunities. Factors such as carbon pricing and global competition present acute challenges to the long term viability of these industries in their present scale and composition. The Hunter's **capacity to innovate** in the face of such challenges will be a valuable asset in shaping the region's future economy.

Exporters of Australian coal are acutely aware of emerging competitors in this market. As observed earlier (see s5.3), the coal supply chain and the Port of Newcastle are working to **expand the Hunter's export capacity**.

The Hunter is responding to challenges arising from policy responses to global climate change, which creates opportunities for the region to not only capture a significant share of the **clean energy** technology market, but to become the home of Australia's clean and renewable energy sectors.

Improvements to Australia's ability to connect through **high speed broadband** liberates **digital technologies** to further stimulate economic growth, attract a greater variety of service businesses, diversify activity, widen the economic base and promote more balanced development.

Better digital communication connectivity will:

- Provide **employers** with flexible employment conditions;
- Increase the potential for **Telework** to be a viable employment option for those who migrate to the Hunter from Sydney and elsewhere;
- Improve **access** to medical advice (E-Health uptake is sluggish, but is a potentially transformative application of the NBN), the payment of bills **and connection** with community, friends and family.
- Support **innovative teaching and research** programs to deliver new knowledge and educational benefits;
- Bring about **new opportunities** to improve interactions between all levels of government and with their constituents.

Sectoral changes in the economy are placing new demands on the workforce. There is an increased onus on **knowledge-based skills and innovation** for today's preferred employee. Continuation and expansion of pro-active and innovative programs, such as RDA Hunter's ME Program, will support development of the **skilled workforce** that will be required by the Hunter's future industries.



The **ME Program** successfully encourages more high school students to take science, technology, engineering and mathematics (STEM) subjects and follow career pathways into advanced manufacturing and engineering. Delivery of the ME Program is a key action to progress the priority to "drive economic growth and economic activity" described in NSW Government action plans for the Hunter.

A further area of excellence in the Hunter is **defence** and defence industry support. RDA Hunter has taken the lead on the **Hunter Strategic Defence Group** project, and will with support from the delivery partners, increase recognition of the Hunter as a nationally significant 'defence region'.

For **economic sustainability** and **community well-being** of the Hunter, long-term integrated policies and strategies are required that deliver outcomes in:

- **Workforce development** of higher level skills and education;
- Encouragement and adoption of **innovation**;
- Collaboration across the **Creative Industries** sectors and inclusion of creative sectors in all industries;
- Realising the opportunities of the **digital economy**;
- Diversification of the **services economy**;
- Regional **connectivity**;
- **Social inclusion** and means to address areas of regional disadvantage.

The Hunter is Australia's seventh largest population centre. RDA Hunter advocates a regional population of one million people within 30 to 40 years. The Hunter has the capacity to absorb this population growth and boost its position as a significant contributor to the national economy.

Connecting the Hunter: a regional approach to infrastructure, 2010

6.2 Hunter population developments

RDA Hunter activities, projects and initiatives

- **Government Grants Funding**
- **Workforce and Skills Development**

A substantial increase in the size of the Hunter's population over the next two to three decades presents the region with opportunities for increased economic activity. Additional jobs will be created by a broader range of businesses; some of them in new areas for the Hunter. At a social and cultural level, additional residents will bring more vitality to the region through new ideas and new forms of expression and entertainment.

Population growth is not without substantial policy challenges, with key pressures including the provision of adequate housing, infrastructure and transport systems. Policy and planning issues arising from a larger Hunter population include:

- Where to locate additional residents;
- How to get the age balance, or age dependency settings right; and
- What infrastructure, including water resources, will be required to enable urban developments, gains in productivity, adequate healthcare and education services, and effective workforce and community connectivity?

The *State of Australian Cities 2012*, reports, "The gap between population increase and housing supply is now the largest and most sustained in a century. In response, housing occupancy rates, which had been falling steadily for nearly a century, began to plateau in the mid-2000s and have begun to rise slightly in recent years. Most of the increase has occurred in households consisting of families with children." (p16)

The Hunter is **ageing** at a faster rate than the rest of Australia, due in part to an increase in intrastate and inter-state migration for the over 60s over the past 25 years. The Great Lakes LGA has the oldest population in the state and generally the region has a **high dependency ratio** and this is highest in the Upper Hunter. Areas of the Hunter with a smaller population base and a greater concentration of older residents may face difficulties filling employment positions in future years. (see Attachment 1, A1Graph1 & A1Graph 5).

Into the analysis of this issue can be added that an ageing population increases employment opportunities in health care and aged facilities. Deloitte Access Economics (2013) assessed the Hunter's health services to contribute a 0.7% increase in its share of the region's economy to 8.4% in 2036. "Adequate provision of services for a larger population of retirees, including housing and health, and measures to address the implications of the projected rise in the dependency ratio are key challenges that will be faced by the region in coming decades." (p23)

A priority for the Hunter will be the implementation of strategies to attract and retain young people to pursue education and employment locally. This may involve a combination of exploiting the benefits of high speed broadband, improvements to transport infrastructure and targeting higher migration rates for key working age groups from within metropolitan Sydney, skilled migrants outside Australia and international students.

A key area for action is “promoting the safe and sustainable development of our energy resources, ... to develop a world-class multiple land-use framework to promote coexistence, rather than exclusion, as a key principle in land-use policy.”

Energy White Paper 2012

6.3 Managing conflicting land use demands

RDA Hunter activities, projects and initiatives

- Water security
- Revitalising Newcastle and Connecting the Lower Hunter Urban Area
- Hunter’s future freight and transport connectivity
- Corridor preservation for an east coast high speed rail network

Perhaps the most pressing environmental issues facing the region, particularly in the Upper Hunter, arise from competing land uses between local communities, agricultural producers and the thoroughbred horse breeders, and resource companies. These land conflict issues have become more visible and subject to heightened community concern in recent times associated with increased interest and activity in developing the region’s coal seam gas resources. A key challenge facing agriculture in the region is ensuring that safeguards are adequate around the use of productive agricultural land for new mining and resource developments.

After recent experiences, planners need to take into account the impacts of extreme weather conditions on the Hunter, such as extended **droughts** and damaging **floods**. These are critical environmental issues and risks. As future water supplies are likely to be of lower quantities and more variable in availability, it is prudent to focus on securing the region’s long term water security.

Water security is a vital strategic issue for the Hunter’s:

- Drinking water and urban development
- Water for agriculture, animals and mining
- Clean oceans for the fishing and oyster industries
- Clean oceans and rivers for recreational activities and tourism
- Environmental flows to sustain creeks, rivers, lakes, estuaries & wetlands.

The Hunter Valley is a **strong brand in wine** products that also integrates well with regional tourism. At the same time, the growing demand from Asia for high value added and high protein agricultural products points to prosperous communities if adjustments, can be made to meet new market demands in taste and product preference. This is explored further in the next section.

Economic linkages between the Lower Hunter and the Upper Hunter are intensifying due to streamlined supply chains and transport connections crossing notional divides. Effective responses to community concerns regarding land-use management, transport networks and coordinated tourism and events promotion require integrated planning, policy development and statistical analysis for the entire region. RDA Hunter encourages all Hunter planners and policymakers to consider the whole region and its relationships beyond the boundaries of LGAs, electorates or clusters that divide the region into “upper” and “lower” segments.

Asia is the world's largest and fastest growing regional economy. Real GDP is projected to increase from US\$27t in 2011 to US\$67t in 2030, making it larger than the expected GDP of the Americas and Europe combined.

Boston Consulting Group, 2012

6.4 Asia: The Hunter Region's opportunity

RDA Hunter activities, projects and initiatives

- Hunter Investment Prospectus
- Hunter Innovation Scorecard
- Smart Specialisation Strategy (S3) for the Hunter Region

During the previous decade Asia has experienced:

- Sustained investment in infrastructure, construction and human capital;
- Economies becoming more sophisticated as they integrate with each other and the rest of the world; and
- Rising consumer demand for products and services as household incomes increase.

The Hunter's coal supply chain and the Port of Newcastle have been instrumental in the boom of Australian resources exported to Asia. In addition to financial gains from the resources export trade, the Hunter has industry leaders with experiences and relationships across many Asian countries and provinces. A wider range of Hunter businesses now face the challenges of the economic and cultural opportunities afforded by Asia's transformation to build on the established links and continue capitalising on the rise of Asia in coming decades.

Rising incomes in Asia will see the region's middle class increase to around three billion people, comprising around 60% of the world's total middle class.

The Hunter's proximity to markets demanding higher value products and services will present enormous commercial opportunities for the region's:

- **Agricultural** producers with proven premium farming expertise;
- **Export capacity** to grow and diversify to include more wine, meat and dairy products.
- **Education** providers, The University of Newcastle and Hunter TAFE as leading regional Australian education providers;
- **Tourism** providers and the Hunter's existing strengths as a high-quality tourism destination;
- Competitive and robust **airline** market, especially if connectivity and capacity improvements for **Newcastle Airport** are supported; and
- Long-term **business and cultural exchange** benefits.

The challenge for the tourism, education and agriculture industries will be to adapt to the preferences of the Asian market, and respond effectively to growing demand. RDA Hunter advocates strengthening agricultural output from the Hunter, with the wine industry and wine industry tourism important to the region's mixed economy.

Investing in nationally and regionally significant infrastructure projects will secure the Hunter's future for generations to come.

Connecting the Hunter: a regional approach to infrastructure, 2010

6.5 A responsive, forward looking infrastructure sector

RDA Hunter activities, projects and initiatives

- **Connectivity: Port of Newcastle, Kooragang Island and Newcastle Airport**
- **Scone – bypass and rail level crossing**
- **New England Highway from Belford to the Golden Highway**
- **Singleton – Gowrie Gates underpass**
- **Lower Hunter Freight Corridor—Freight rail bypass of Newcastle between Fassifern and Hexham**
- **Lake Macquarie Transport Interchange**

Responding to the Hunter's infrastructure needs is an opportunity for industries and governments to show their ability to be adaptive, nimble and innovative.

Strong population growth in the Hunter will present issues for **transport and other infrastructure planning** to:

- Improve rail and road linkages with Sydney and throughout the region;
- Increase the capacity of the Pacific, New England and Golden Highways;
- Design an efficient and high-demand high speed rail network; and
- Ensure the adequacy of regional water infrastructure.

A major concern is that long term transport planning frameworks do not fully reflect future population growth and there is a need to prioritise a more integrated strategy to meet longer term capacity requirements. The key transport infrastructure issues and priorities for the Hunter centre on freeing up **bottlenecks** and protecting transport **corridors**, including around the port, airport, Newcastle urban area and to provide the land for future **freight bypasses** and a **high speed rail network**. Improving **connectivity** of Kooragang Island, Newcastle Airport/Williamstown RAAF base road network and the Port of Newcastle to improve productivity is crucial.

There have been repeated calls, particularly on the basis of road safety and traffic management, for greater **levels of freight to be carried by rail** to take more trucks off the highway network.

Current operational issues associated with the use of **shared rail infrastructure** for both freight and passenger services impact passenger and freight services.

Improving connectivity, investing in road and rail corridors, reducing congestion and completing priority infrastructure projects will support:

- Growth in **productivity** through improved mobility of freight and workers;
- Plans to expand industries and increase **employment** levels;
- Increases in Port **export** volumes;
- Improvements in **commuter experience**; and
- Better **liveability** across the region.

The Hunter's future

As an internationally competitive regional centre of Australia, the Hunter services national and international markets. The Hunter's future is dependent upon investment, infrastructure and innovation.

As a region, we need to:

- Build on our existing strengths in resources, energy generation, manufacturing and construction;
- Focus on, and secure investment in, areas of likely future comparative advantage such as defence, selected high value manufacturing, technology based digital and creative industries and premium agriculture;
- Generate new service industry opportunities, especially in areas such as high value tourism and education;
- Put in place a range of supporting infrastructure focussed on intra-regional connectivity, national and international markets via land, sea, rail and air – and revitalising urban centres;
- Support and promote innovation and research – particularly our dedicated research centres such as Commonwealth Scientific and Industrial Research Organisation (CSIRO), Newcastle Institute for Energy and Resources (NIER) and Hunter Medical Research Institute (HMRI);
- Invest in knowledge and skills building, including the attraction of skilled and younger workers to replenish human capital and arrest the effect of population ageing on the workforce.
- Grow our population.
- Plan for the region as a whole – the Upper Hunter and the Lower Hunter as a single, unified and powerful entity connected to national and international markets.

7. RDA Hunter activities, projects and initiatives

RDA Hunter continues to develop and implement strategies in the Hunter Region that supports regional Economic development.

Following stakeholder consultations, industry briefings and completion of an economic foresighting study, the RDA Hunter Board has set an agenda to pursue initiatives and manage activities and projects in the strategic areas of investment, innovation and infrastructure.

These three strategic areas are inter-related. The initiatives and activities planned by RDA Hunter that are outlined in this Plan, support the Hunter's development.

The following strategic activities, projects and initiatives capture the scope of works currently endorsed by the RDA Hunter Board. It is reasonable to expect that the principle of continuous improvement to adapt quickly to changing needs will be applied to the resources of RDA Hunter as new opportunities arise and existing projects are completed.

Planning and infrastructure investment frameworks have a big role to play. It is crucial that the Hunter harnesses its existing advantages in terms of space, proximity to Sydney and fewer physical constraints than other metro areas in New South Wales to retain and attract businesses and people.

Deloitte Access Economics, 2013

7.1 Investment

Since 2009, RDA Hunter has actively promoted the benefits of investing in the Hunter Region. RDA Hunter's roles in attracting, advocating and strengthening investment in the region have included:

- Publishing an annual **Hunter Investment Prospectus**;
- Supporting five rounds of the **Regional Development Australia Fund**;
- Supporting three rounds of the **National Stronger Regions Fund**;
- Facilitating applications for other **funding opportunities**;
- Certifying visas under the **Regional Sponsored Migration Scheme**;
- Leading Hunter **delegations** to inform policy-makers and political decision-makers in Sydney and Canberra; and
- Commissioning regional **studies and reports**
 - ◊ *Economic Diversification in the Hunter post-BHP* by Hunter Valley Research Foundation, with NSW Trade & Investment;
 - ◊ *Economic profile of the Hunter Region*, Price WaterhouseCoopers;
 - ◊ *Our Cities Our Future: Assessing the Hunter's integrated planning*, with AECOM; and
 - ◊ *Prospects and challenges for the Hunter Region: A strategic economic study*, Deloitte Access Economics.

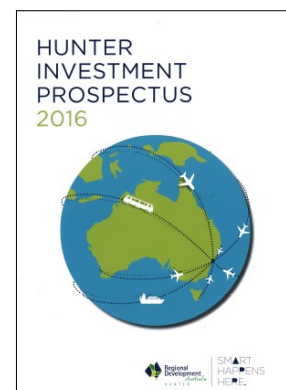
Investment: RDA Hunter's program of activities, projects and initiatives

Hunter Investment Prospectus

This annual publication promotes the Hunter's comparative advantages, areas of excellence and business opportunities to local and foreign investors. In a letter supporting the **2014 Hunter Investment Prospectus**, Deputy Premier of NSW, The Hon Andrew Stoner MP reports that:

"The NSW Government distributes hundreds of copies of the Hunter Investment Prospectus every year through our overseas and Austrade offices as well as at various expos and trade events within the Hunter, NSW and Interstate.

The Hunter Investment Prospectus is provided to visiting delegations with an interest in investing in NSW and it is also used in individual presentations to companies looking to establish or relocate to the Hunter Region."



Smart Happens Here

RDA Hunter has developed a suite of informative and attention-grabbing regional marketing initiatives to support campaigns that communicate the comparative advantages of the region to national and international markets, with Asian markets a priority. Items such as animated videos, websites, publication packs and social media shared interest groups may be combined to promote the **business case for investing in the Hunter** to target market segments.

Government Grants Funding

RDA Hunter will continue to work with industries, businesses, community leaders and other peak body organisations within the region to secure funds from government schemes. As opportunities arise, activities may involve facilitating expressions of interest for investment in infrastructure, developing funding applications and partnering lead agencies in planning initiatives.

Workforce and Skills Development

RDA Hunter supports a range of initiatives designed to build the region's human capital capacity, address skills shortages, and attract Australian and overseas businesses to establish new or joint ventures in the region.

The Regional Sponsored Migration Scheme (RSMS) aims to fill employment vacancies in areas that require skilled workers which are deemed to be in critical shortage and to enhance Australia's ability to compete globally.

As a regional certifying body for skilled migration visas, RDA Hunter manages visa processing to support investment in skills required by Hunter industries and businesses.

Hunter's future freight and transport connectivity

RDA Hunter's investment agenda includes advocating for investment now in corridor preservation for bypasses of urban areas to provide better access to markets, increase separation of passenger and freight movements, improve road and rail networks, and promote the benefits of an Australian **high speed rail network** along the east coast.

Critical freight and transport priorities identified by RDA Hunter in *Connecting the Hunter* (2010) continue to find a place on the agenda, these include:

- Securing north-south and east-west corridors for future rail capacity expansion;
- Acquiring land for road and rail expansion;
- Improving sea and air links to Newcastle Port;
- Completing the M1 extension to the Pacific Highway at Raymond Terrace; and
- Developing the case for High Speed Rail between Newcastle and Sydney.

Australia's future depends on us diversifying and growing by creating new highly-skilled and innovative industries and businesses to transform our economy and strengthen our society.

Universities Australia, CEO, Belinda Robinson, 2013

7.2 Innovation

RDA Hunter's track record in support of innovation includes:

- Inaugural manager of the annual Hunter Central Coast **Innovation Festival**. Other regions, Mid North Coast and Central Coast, have adopted the festival model developed by RDA Hunter.
- Initiating the **Hunter Innovation Scorecard**. The first innovation scorecard for an Australian region was launched in July 2013 and a second in 2014.
- Sponsoring *Creating Spaces: A community renewal conference*, which attracted national and international participants to Newcastle.
- Coordinating stakeholder interest groups to establish an interim Board for the **Australian Energy Industry Innovation Precinct**. RDA Hunter strengthens initiatives in this key sector to drive economic growth and economic diversity.
- Managing the award-winning **ME Program** that coordinates schools and industry pathways to increase the number of high school students studying science, technology, engineering and mathematics in Years 11 and 12.

Innovation: RDA Hunter's program of activities, projects and initiatives

Hunter Innovation Scorecard

This project is supported by AusIndustry, Hunter Research Foundation, PwC, and Newcastle Innovation. The scorecard presents measurements of innovation in the region and promotes innovation as a competitive advantage of the Hunter.



Hunter Innovation Festival / Forum

Partnering the delivery of the annual Hunter Innovation Festival / Forum is an action that helps to “drive economic growth and economic diversity” in the region.

Hunter Innovation Network

Initiated by RDA Hunter's S3 (see next page) to develop inclusive leadership for the Hunter Innovation System. The Hunter Innovation Network links businesses and entrepreneurs to services, facilities and stakeholders to accelerate their innovation and growth. This Network supports RDA Hunter's focus on economic development to maximise wealth creation in the Hunter Region. The National Innovation and Science Agenda will be leveraged to build regional capacity in three focus areas: initiation and support of innovative business start-ups; technology transfer activities; and, economic development. Increasing the size of the region's working age population and retaining talented people in the Hunter are also important goals.

Industry Skilling Schools Pathways Program, the ME Program and MiniME Program in the Hunter

With an eye on transitioning to advanced manufacturing and new jobs arising from the development of the digital economy, RDA Hunter's innovative approach to education, teacher support and the development of a skilled workforce for the Hunter coordinates local high school education in STEM (science, technology, engineering and mathematics) subjects with industry experience.

Local corporate support enables RDA Hunter to engage primary school students in STEM through the MiniME Program.

"In response to the world becoming a more integrated, technological and global community, students must not only master the core skills, but also develop a capacity for problem solving and decision making; creative and critical thinking; collaboration, communication and negotiation; and technology and innovation."

Review of funding for schooling – final report December 2011, David Gonski AO, Chair. P33

Smart Specialisation Strategy (S3) for the Hunter Region

In 2014, the Hunter Innovation Scorecard made the link between innovation and international competitiveness by referencing The European Innovation System. This invaluable comparison provided the Hunter with a global benchmark and a blueprint for how to consolidate and improve.

The strategic approach to economic development taken by RDA Hunter progressed in 2014 and 2015 with implementation of the smart specialisation strategy (S3) framework. The OECD's development of S3 in partnership with the EU created framework to design better public policies for boosting innovation driven growth.

The Smart Specialisation Strategy is an innovation plan for future growth and regional leadership which gives the Hunter the opportunity to work with policy makers, industry and researchers to concentrate resources on innovation and economic development competitive strengths that are future focused and create value.

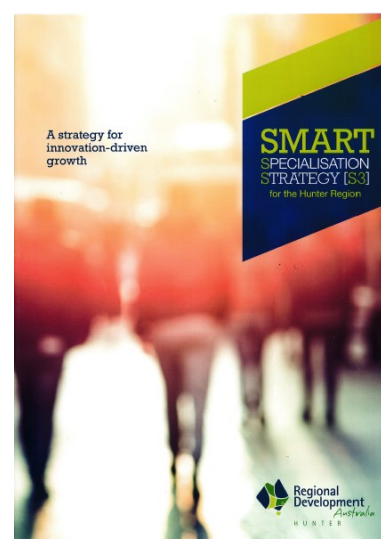
The Strategy highlights the need for increased collaboration between Industry, Researchers, Investors and supporting innovation policy. **S3 for the Hunter** identifies 7 areas of competitive advantage and 13 strategic actions to drive economic growth by improving the region's innovation network.

The Hunter's Strategic Growth areas:

1. Advanced Manufacturing
2. Creative Industries
3. Defence
4. Food and Agribusiness
5. Medial Technologies and Pharmaceuticals
6. Mining Equipment, Technology and Services (METS)
7. Oil, Gas and Energy Resources

Strategic Actions are being pursued in these areas:

- a. Developing Inclusive Leadership, Hunter Innovation Network
- b. Encouraging Entrepreneurship
- c. Developing the Skills for Innovation
- d. Supporting University—Business Research Collaboration
- e. Co-ordinating Policies and Regional Programs



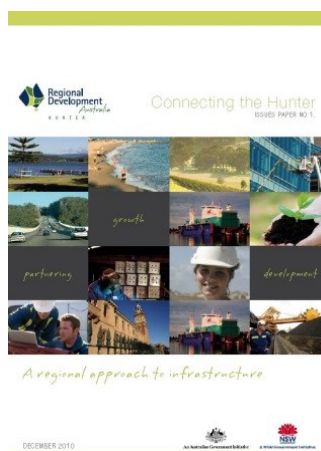
Big national challenges need bold reforms. Reform means change. We need to make changes in the way we approach infrastructure investment, from our Government approval processes to identifying how we pay for infrastructure.

Infrastructure Australia Chairman, Sir Rod Eddington, 2013.

7.3 Infrastructure

The RDA Hunter Committee has been involved in a range of activities aimed at developing the Hunter's economic and social infrastructure to drive efficiencies, increase productivity and improve the liveability of the region. RDA Hunter initiatives regarding regional infrastructure include:

- Prioritising **regionally significant infrastructure projects** for funding through the Building Better Regions Fund;
- Developing the **Hunter Economic Infrastructure Plan (HEIP)**, in partnership with Infrastructure NSW and with funding support from the Regional Infrastructure Fund. The HEIP presents a whole of supply chain view of mining related activities in the Hunter and identifies: capacity constraints; impacts on communities; and the economic infrastructure required to deliver improvements in capacity and community development;
- Establishing a Project Control Group to **align Hunter plans** including the HEIP, the Hunter Strategic Infrastructure Plan funded by the Liveable Cities program, Hunter Infrastructure Investment Fund 20-year plan and Hunter land use strategies;
- Commissioning **research and gap analysis** of the Hunter's urban planning system;
- Publishing the position paper: *Urban planning for the Hunter's future* regarding the paramount role of Australia's major cities in the nations' economic performance, and the ties between the Council of Australian Governments **COAG urban planning principles** and infrastructure funding;
- Submissions advocating the early roll out of the **National Broadband Network** in the region, as well as community sessions, Ministerial delegations and partner coordination;
- Supporting the proposal to host a pilot program for **Smart Grid Smart Cities** in the Hunter;
- Publishing an **Issues Paper** *Connecting the Hunter: a regional approach to infrastructure*.



*RDA Hunter Infrastructure Paper:
Connecting the Hunter (2010)*

Infrastructure: RDA Hunter's program of activities, projects and initiatives

Priority economic infrastructure projects

The Hunter Economic Infrastructure Plan's whole of supply view of mining activities in the Hunter identified the need for road improvements and further investigation of future water resource requirements. As the Hunter's future growth of inbound freight logistics to the mining sector is expected to double over the next two decades, priority projects include:

- **Connectivity: Port of Newcastle, Kooragang Island and Newcastle Airport**

The project to duplicate the Tourle St Bridge and its approaches has been funded jointly by Federal and NSW governments. This initiative has "real potential" to clearly address a significant national issue and improve transit network connectivity that better links the region's international and national gateways to markets. This project also places Newcastle closer to being on the National Highway system.

Current congestion on this section of the national land freight network is hampering productivity: there are plans to double export volumes from the Port by 2020; industries in this area, especially on Kooragang Island and in the Tomago Enterprise Zone, are planning to increase employment levels; and, passenger demand at Newcastle Airport will materially increase over the same time period.

- **Scone – bypass and rail level crossing**

The transit of longer and more frequent coal trains through Scone impacts on the town's connectivity and capacity for emergency services to respond to calls within expected timeframes.

This project has been funded by the Federal and NSW governments. This initiative addresses a nationally significant issue; however "the identification or development of the right solution is at an early stage".

NSW Roads and Maritime Services are providing regular updates and reports on the steps being taken to progress this priority project.

- **Singleton – Gowrie Gates underpass**

The New England Highway travels through a narrow railway underpass that has a record of road traffic incidents. A large-vehicle could cause major structural damage to the railway bridge leading to closure of the highway and rail line. This initiative will upgrade the railway underpass bridge to improve safety, and freight and mining services productivity.

Upgrading the Gowrie Gates underpass is in the *National Infrastructure Plan (2013)* as an "early stage" project.

- **Water security**

RDA Hunter will continue to support long term water supply planning and studies to identify the water infrastructure necessary to support the Hunter's future.

Other infrastructure initiatives include improvements to increase freight productivity and road safety along the **Golden Highway**, duplication of the **New England Highway from Belford to the Golden Highway** and **extension of the M1 to Pacific Highway at Raymond Terrace**.

Lower Hunter Freight Corridor—Freight rail bypass of Newcastle between Fassifern and Hexham

The 2016 NSW Budget allocated \$14m to this initiative, which supports the Northern Sydney Freight Corridor Program and will improve productivity of freight transport; support future growth plans and separate passenger trains from freight trains, with commuter experience improvements at Newcastle suburban level crossing gates.

Lake Macquarie Transport Interchange

Construction of a new railway station, access roads, intersections, pathways and bridges will improve passenger and freight mobility by creating a new transport interchange strategically located on the main rail line to the Port of Newcastle.

This project is located in Lake Macquarie City Council's LGA and has support from all Hunter Councils, and received funding through the Regional Development Australia Fund.

Revitalising Newcastle and Connecting the Lower Hunter Urban Area

The NSW Government has committed to the revitalisation of central Newcastle.

More broadly, RDA Hunter will continue to facilitate efforts to develop a regional framework that unifies *"plans into an integrated strategic planning system that addresses government policies and capitalises on the opportunity to strengthen the regional relationships between population, land use and housing supply; employment and economically significant infrastructure; and services for the long-term wellbeing and benefit of the region and its people"*

(p14 Urban Planning for the Hunter's Future)

RDA Hunter's history of involvement with urban planning and the Creative Industries will guide future collaborations with stakeholders as the CBD of Newcastle is redesigned and rebuilt.

High Speed Broadband

Priority projects for RDA Hunter include ensuring that when the entire Hunter Region has access to high speed broadband, local businesses, community groups and not for profit organisations are ready to take advantage of the opportunities this will bring. Better communication and information connectivity will improve the Hunter's innovation system, which includes linkages between businesses, education, research and enabling organisations and creative industries.

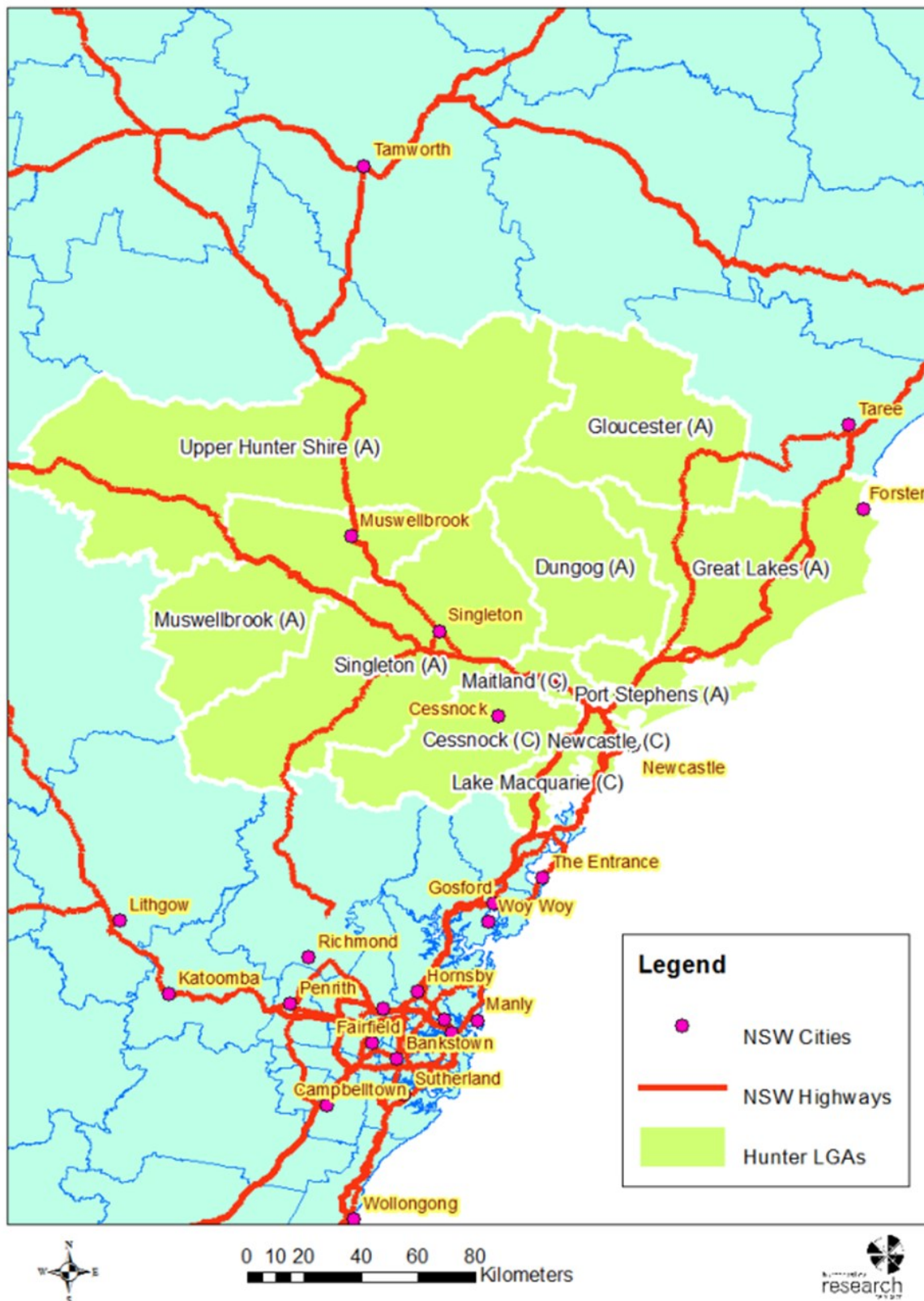
This program to progress regional priorities continues RDA Hunter's advocacy presented in the 2010 issues paper, *Connecting the Hunter*, which included:

- "The region must plan for future infrastructure needs within a long-term strategic, comprehensive and consistent regional framework;
- Forecast growth means the region must adopt a proactive, integrated and coordinated approach to transport infrastructure";
- The region must maintain appropriate levels of investment in human capital, knowledge and information infrastructure;
- RDA Hunter believes access to high speed broadband is essential to the region's growth and development;
- "The renewal and revitalisation of Newcastle CBD is essential for a broader regional growth strategy; and
- There is considerable opportunity for the state and national economies to leverage off the readiness of the Hunter to embrace long-term sustainable economic development."

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Attachment 1: Hunter Regional Profile



KEY DRIVERS

- Existing locational and infrastructural advantages (e.g. port, airport, logistic supply chain and coastal environment).
- Substantial energy resources in terms of coal reserves used both locally and internationally.
- A higher proportion of skilled trade workers supported by strong job growth – jobs growth has outpaced population growth in recent years.
- Proximity to Sydney and relative low cost structure may prove attractive for future alternative & faster public transport links.

KEY STATISTICS

- The Hunter is the most populous region outside the Sydney metropolitan area with an estimated resident population of 650,773 in 2012 (8% of NSW's population).
- Most of the population of the Hunter Region lives within 25 km of the coast, with 54.4% of the region's population living in the Newcastle and Lake Macquarie LGAs. The Hunter's proximity to Sydney and existing key infrastructure makes the area a prime location as a major regional activity hub.
- The Hunter as defined by the Hunter *Statistical Division*, and incorporates 10 Local Government Areas (LGAs).

Lower Hunter	Upper Hunter	Other Hunter
Cessnock Lake Macquarie Maitland Newcastle Port Stephens	Muswellbrook Singleton Upper Hunter Shire	Dungog Mid-Coast, inc Gloucester Great Lakes Greater Taree

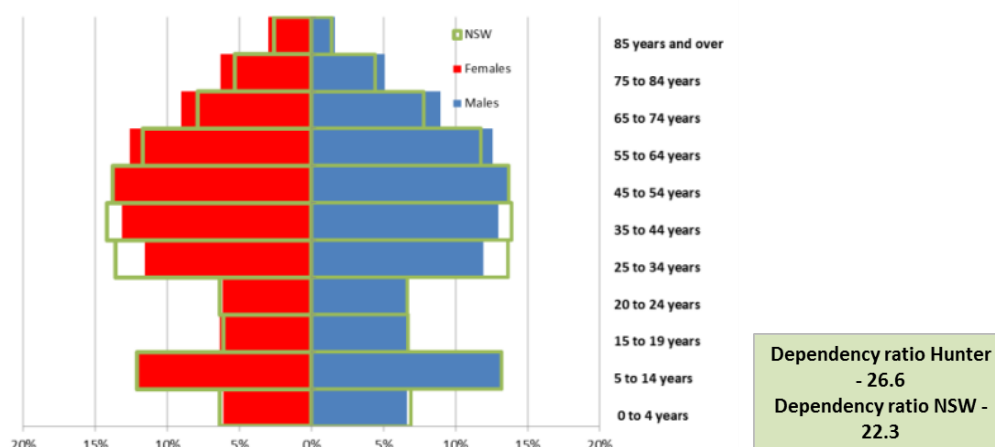
- The majority of the region's population is located in the urban area that defines the Hunter's major city: i.e. the LGAs (2012) of Lake Macquarie (197,338), Newcastle (156,533), Maitland (71,547), Port Stephens (67,746) and Cessnock (53,270).
- The Hunter LGAs comprise approximately 31,000 *sq km* in area. Newcastle is the Hunter's most densely populated LGA with 855 persons *per sq km*, followed by Lake Macquarie (253 persons *per sq km*) and Maitland (181 *per sq km*) in 2012.
- The Hunter Region has a number of locational and natural advantages:
 - ◊Deep sea port (Newcastle) and airport (Williamstown)
 - ◊Range of attractive natural features contributing to the region's tourism industry and an increasing residential population.
 - ◊Energy resources in the form of substantial reserves of black coal, primarily used for electricity generation.
 - ◊Relatively reliable water resources and a healthy agricultural sector with grapes, beef cattle, horses and important fishing and oyster industries.

HUMAN CAPITAL

POPULATION

- The ABS estimated a population of 650,773 for the Hunter Region in 2012.
- Outside Greater Sydney the Hunter had the largest and fastest population increase for NSW,
- up 7,665 residents from 2011 to 2012.
- The Hunter has an older population when compared to NSW, however with significant variations across the region.
- The *old age dependency ratio* is the ratio of the number of people aged 65 years and over to the number of working age people between 15 and 64 years. The Hunter in 2011 has a higher dependency ratio (27) than the figure recorded for NSW (22), reflecting the higher share of persons aged 65 years and over relative to the working age population for the Hunter.

A1Graph1: Hunter and NSW Age Pyramid, 2011



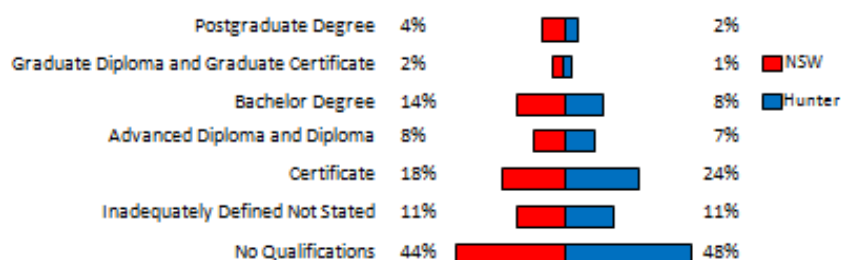
SOURCE: Australian Bureau of Statistics, Census of Population and Housing 2011.

EDUCATION

Post-school qualifications:

Looking at the latest available data on post-school qualifications (2006) shows the region has a higher proportion of residents with trade certificate qualifications, and a lower proportion of residents with tertiary qualifications relative to the state. The proportion of residents with no qualifications is also above the figure for NSW.

A1Graph2: Level of Post-School Qualifications, Hunter 2011



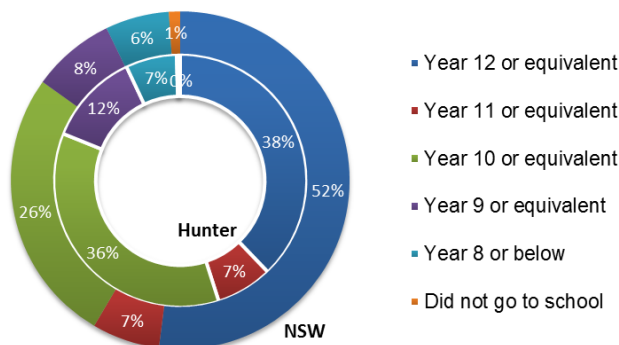
SOURCE: Australian Bureau of Statistics (ABS), Census of Population and Housing 2011.

EDUCATION

Highest year of schooling completed:

The Hunter has a sizeably lower proportion of residents with Year 12 or equivalent qualifications compared to NSW, and a higher proportion of residents with Year 10 or equivalent.

A1Graph3: Per cent Highest Year of Schooling Completed, Hunter 2011



SOURCE: Australian Bureau of Statistics (ABS), Census of Population and Housing 2011. Note: excludes persons still at school.

TERTIARY EDUCATION PROVIDERS

The University of Newcastle is a multi-campus institution located across eight locations in Australia and overseas, including: Callaghan, Newcastle CBD, Central Coast, Sydney, Port Macquarie and Singapore. In 2016, more than 38,219 students were enrolled; many studying online. Including more than 1,000 Aboriginal and Torres Strait Islander students were enrolled. There are more than 7,000 international students. The University has a total head count of staff of 3,114 (2672.16 FTE). This equates to a total head count of 1,213 academic staff and 1,901 non-academic staff (source <https://www.newcastle.edu.au/about-uon/our-university/annual-report>)

The UoN is a leader in research and innovation. Discoveries by UoN researchers have contributed to the knowledge and understanding of global issues across many discipline areas. A UoN initiative the *Hunter Project* streamlines access for partners to expertise to grow the capacity of this region, and support the Hunter's social, environmental and economic development during this period of change.

Hunter TAFE, NSW is an Australian Registered Training Organisation and member of the TAFE NSW network of Institutes. It is Australia's largest regional vocational education and training provider, with more than 64,000 enrolments across 450 programs, delivered by 1,400 industry qualified teaching and support staff at 15 campuses. Campus locations stretch from Gosford in the south to inner city Newcastle, along the Hunter Valley and to Muswellbrook and Scone in the Upper Hunter.

Hunter TAFE's virtual campus was funded by the Federal Government's *NBN Enabled Education and Skills Services program* and utilises the high-speed National Broadband Network. More than 30 courses are offered online through the Virtual Learning Environment (VLE), *Going the distance*. A Memorandum of Understanding between Hunter TAFE, Australian Maritime College (Tas) and Challenger Institute of Technology (WA) strengthens and develops maritime education, training and research. Upper Hunter campuses host specialist Centres of Equine Studies and Mining Skills. A contract with *Kunming Metallurgy College* in China enables Hunter TAFE to share TAFE NSW curriculum for Australian qualification and dual delivery of the *Diploma of Environmental Monitoring & Technology* and *Diploma of Laboratory Technology*.

Tocal College, CB Alexander Campus is situated in the picturesque Hunter Valley about 180 km north of Sydney. It provides a unique blend of agricultural training and practical experience for school leavers and other people who may be interested in rewarding careers in agriculture. Year 10, 11 or 12 school leavers gain a practical pathway to careers in agriculture or gain credit in a variety of university degrees. Tocal College also provides a diverse range of education products and services to farmers, landholders and rural industries. A key component of this is the delivery of PROfarm short courses. Staff at the CB Alexander campus develop and publish high quality education resources including the revised Agskills series of books

RESEARCH INSTITUTES

Hunter Research Foundation (HRF) Coinciding with the HRF's 60th anniversary year, in March 2016 HRF signed a Memorandum of Understanding (MoU) with the University of Newcastle (UoN) to create the Hunter Research Foundation (HRF) Centre.

Hunter Medical Research Institute (HMRI) is a multi-disciplinary medical research hub that delivers internationally-recognised research outcomes in collaboration with global partners to advance health care.

Newcastle Innovation facilitates investment and partnership relationships that enable businesses and industries to benefit and profit from innovative research at the University of Newcastle.

CSIRO Energy Centre is a state-of-the-art research facility specialising in delivering innovations in renewable energy, energy efficiency and low emission fossil fuel research.

Newcastle Institute for Energy and Resources (NIER) is a multi-disciplinary research hub established by the University of Newcastle to address critical and emerging issues of energy and resources.

REGISTERED GROUP TRAINING ORGANISATIONS

Hunternet Group Training Company is led by the management of manufacturing and engineering companies in the Hunter, managing the training and development of over 150 apprentices and trainees, who are hosted by 25 partner companies.

Novaskill (HGT Australia Ltd) is a not-for-profit company that focuses on skill development across a range of Vocational Education and Training areas.

Hunter Valley Training Company Hunter-V-Tec (Lower Hunter) and Upper Hunter Group Training offer career starters to apprentices and trainees that delivers nationally recognised qualifications, practical training and work experience in business, warehousing, mining, engineering, manufacturing, fabrication, automotive and electrical trades.

Master Builders Group Training delivers a specialised building industry training scheme that supports the sustainability of the Hunter's Building and Construction industry.

MEGT Australian Apprenticeships Centre is the largest government contracted provider of support services to employers of apprentices and trainees in Australia.

SUSTAINABLE COMMUNITIES AND POPULATION GROWTH

SOCIO-ECONOMIC PROFILE

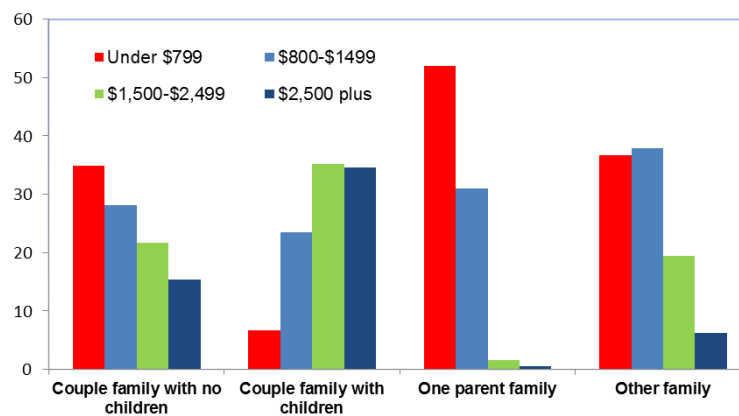
In 2011 9.8% of Hunter residents were born overseas in 2011, compared to 31.4% of NSW residents.

3.3% of Hunter residents are Indigenous in 2011, compared to 2.5% of NSW.

Median household incomes within Hunter LGAs range from \$1,692 in Singleton LGA to \$729 in Great Lakes LGA. Muswellbrook LGA records a median income of \$1,399, followed by Maitland (\$1,292), Newcastle (\$1,165), Lake Macquarie (\$1,117), Cessnock (\$1,042), Dungog (\$1,005) and Gloucester LGAs (\$801). This compares to the NSW median household income of \$1,237.

Looking at the breakdown of income by family type within the Hunter in 2011 a relative large proportion (52%) of one parent families earn under \$799 a week, while couple families with children are more likely than other family types to earn a family income of \$2,500 plus, 34% are in this bracket in 2011.

A1Graph4: Per cent Families by Weekly Family Income & Family Type, 2011



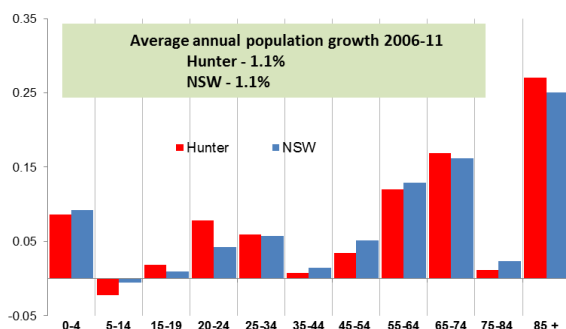
SOURCE: Australian Bureau of Statistics, Census of Population and Housing 2011.

POPULATION FORECAST

Irrespective of selected population trajectories the following will represent a key part of the region's demographic destiny:

- An ageing population is being driven by an increase in the share of Hunter residents 65 years and over.
- This will be slightly offset by an expected increase in the under 15 bracket over the next 20 years.
- Long-term integrated planning for the Hunter needs to accommodate a regional population of at least one million people.

A1Graph5: Per cent Change in Population Age Groups Hunter & NSW, 2006-11.



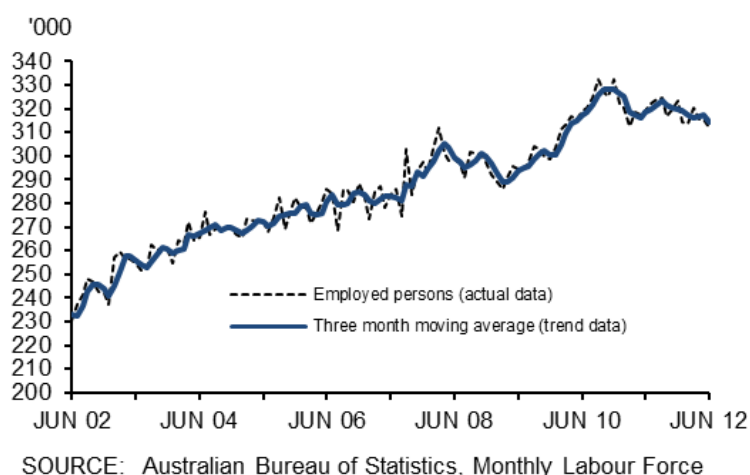
SOURCE: Australian Bureau of Statistics, Census of Population and Housing 2006-2011.

WORKFORCE

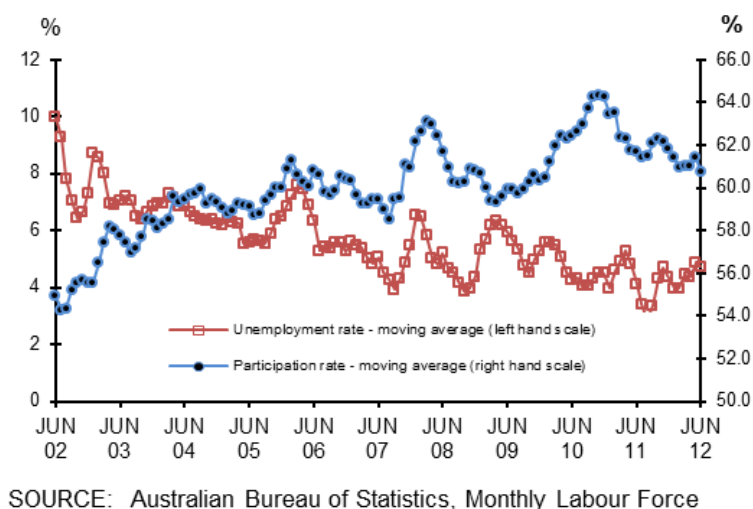
Strong jobs growth: In January 2013, the Hunter's labour force was 429,700 people with an unemployment rate of 5%. Over the last decade job growth has outstripped population growth contributing to a substantial fall in unemployment.

Unemployment rate and labour force participation rate: the Hunter region's robust labour market performance is notable also in a declining overall unemployment rate and rising labour force participation rate over the last decade. Youth (15 -19 years) unemployment at 18.2% in February 2013 is an issue the Hunter shares with the nation.

A1Graph7: Hunter Employed Persons, June Qtr 2002 - June Qtr 2012

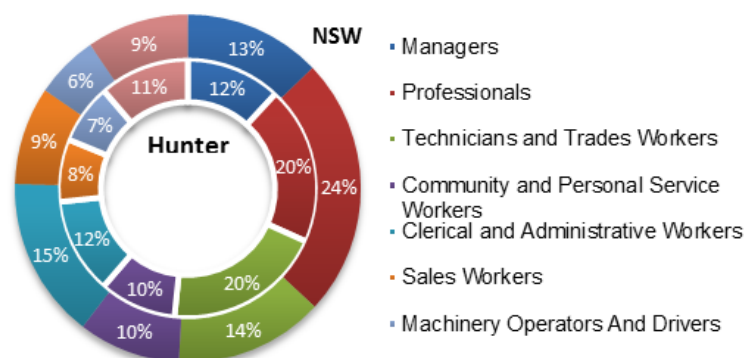


A1Graph8: Hunter Unemployment Rate and Labour Force Participation Rate, June Qtr 2002 – June Qtr 2012.



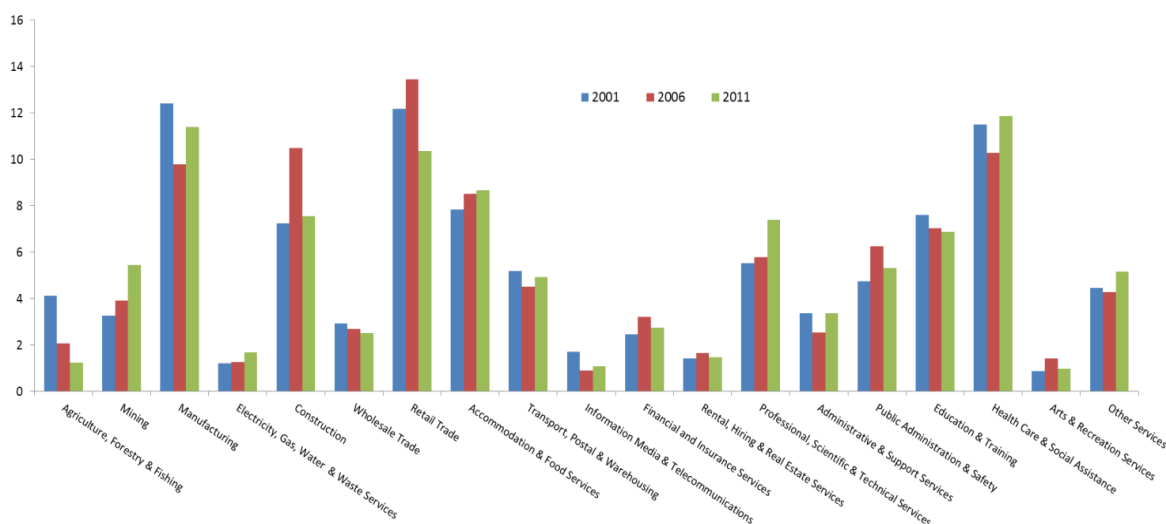
Occupational mix: the Hunter has a higher share of technical and trades workers and a smaller share of professional workers. A significant share of those employed as community and clerical workers are likely involved in healthcare services which is a major employer within the Hunter.

A1Graph6: Per cent Hunter Employees by Occupation, May Qtr 2012



SOURCE: Australian Bureau of Statistics (ABS), Monthly Labour Force Survey 2011

A1Graph9: Hunter Employment (Annualised) by Industry - 2001, 2006 and 2012.



SOURCE: Australian Bureau of Statistics, Monthly Labour Force Survey, 2001-2012.

ENVIRONMENTAL FEATURES

Water

- The Hunter Region incorporates a variety of land types and portions of a number of river catchments.
- The Hunter River is a vital source of water for the Hunter population and many of the region's key industries. It has a wide flood plain and its mouth divides at Kooragang Island north and south through the Port of Newcastle.
- The Hunter River drains the largest coastal catchment in New South Wales, covering some 22,000 square kilometres. Rising in Barrington Tops, the Hunter River is fed by a number of major tributaries including the Pages and Isis Rivers; Rouchel Brook, Goulburn River, Glennies and Wollombi Creeks, and the Paterson, Allyn, Chichester and Williams Rivers, plus a number of minor tributaries.
- The Hunter-Central Rivers Catchment Management Authority has developed a Catchment Action Plan (CAP) for the Hunter river catchment.
- North of the mouth of the Hunter River are extensive sand dunes and the Port Stephens estuary, fed by the Karuah River which runs through the western part of the Great Lakes LGA.
- The extensive coastal lakes system of the Great Lakes LGA is predominately in the Myall Lakes National Park and Wallis Lake, which is a major oyster growing area of NSW.
- Lake Macquarie LGA in the south of the region is not part of the Hunter River catchment, but is the region's most populous LGA. Lake Macquarie is Australia's largest salt water lake and is generally shallow with a low tidal exchange rate.
- The Manning River system drains much of the Gloucester LGA, although its mouth is north of the Hunter's regional boundary.
- The Metropolitan Water Directorate (a unit of the NSW Government, Department of Finance and Services) is leading the development of the Lower Hunter Plan.

Biodiversity

The Hunter River catchment contains diverse vegetation and landscapes, including:

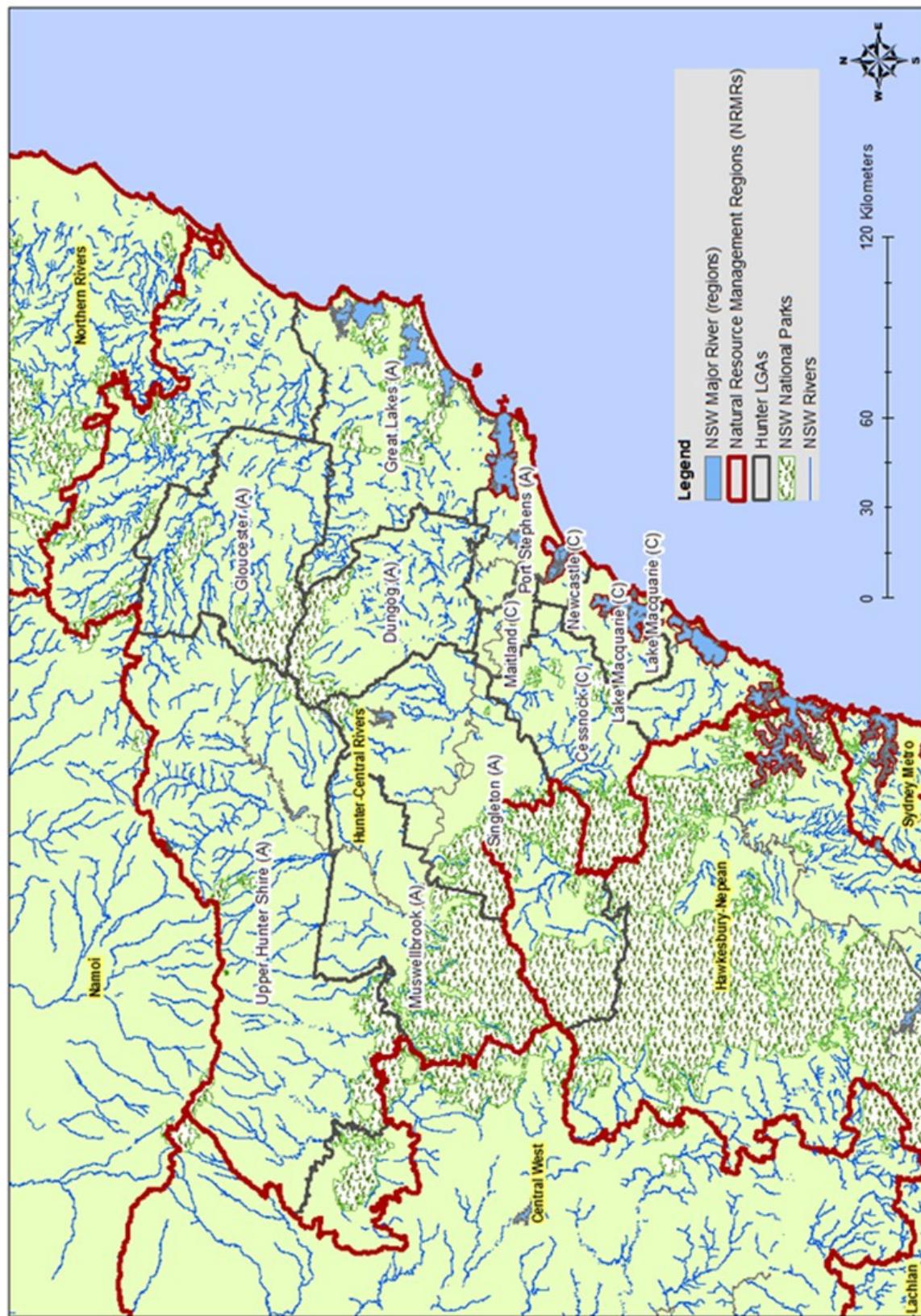
- Southern outliers of the New England Tablelands
- Sub-alpine regions of the Barrington Tops
- Large areas of temperate forest and rainforest
- Important estuarine areas
- Large coastal lake systems
- Large areas of coastline including coastal sand mass ecosystems.

The great biodiversity within the region reflects the junction and overlap of the Sydney Basin, North Coast and Western bio-regions, forming a complex mosaic of ecosystems, due to the varying geology, soils, landforms and climate.

Land use

- European land use in the Hunter commenced in 1804 at Newcastle to supply primary industry resources, particularly, coal and timber, to Sydney.
- Historically, family farm based agriculture has been the most widespread form of land use in the Hunter.
- The internationally recognised Upper Hunter Equine industry is based around sources of clean water.
- The Hunter is also known globally for producing high quality wines, particularly Shiraz and Semillon, from grapes grown and processed in the region.
- Other agricultural land use includes vegetable and fruit farms, chickens for meat and eggs, dairy, sheep and beef.
- Coal mining is the Hunter's largest primary industry, with extensive coalfields throughout the Valley and smaller operations in the Lower Hunter.
- Coal Seam Gas extraction is occurring in the Hunter, requiring a land use management and policy framework that balances the commercial drivers of industry with protection of water resources, agricultural lands, resident communities' health and natural flora and fauna habitats.
- On 1 January 2013, Forests NSW became a state owned corporation, the Forestry Corporation of NSW charged with sustainable management of two million hectares of forests.
- The Hunter's native forests produce a wide variety of decorative and durable timbers, such as tallowwood, white mahogany, spotted gum and ironbark. A private native forestry funding package is being managed by the NSW Environment Protection Authority, in conjunction with TAFE NSW, the Department of Primary Industries and Master TreeGrowers.
- Urbanisation, employment lands, transport corridors and network expansions and new housing for a growing population will continue to be factors in land use management for the Hunter.

A1Map2: Hunter environmental features

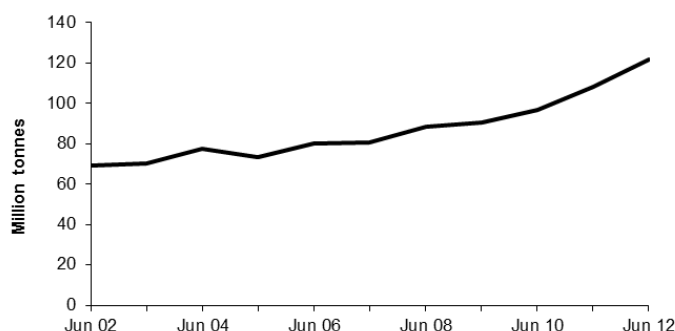


Key Industries: key industries include coal (\$10 billion per year or nearly 90% of NSW's), agribusiness (\$1 billion per year or 13% of NSW's), and wine (\$203 million per year or 13% of NSW's).

Commodities and Exports: The Hunter is home to the world's largest coal export ports, the Port of Newcastle. The port exported 134 million tonnes in 2012. The port accounts for around 90% of NSW's coal export in volume terms. Aluminium is another key commodity produced in the region, accounting for over 36% of Australia's aluminium.

The Hunter accounts for more than 32% of NSW export, in value terms, including coal, mining, manufacturing, food and wine.

A1Graph10: Newcastle Port Statistics, Coal Exports 2002-12

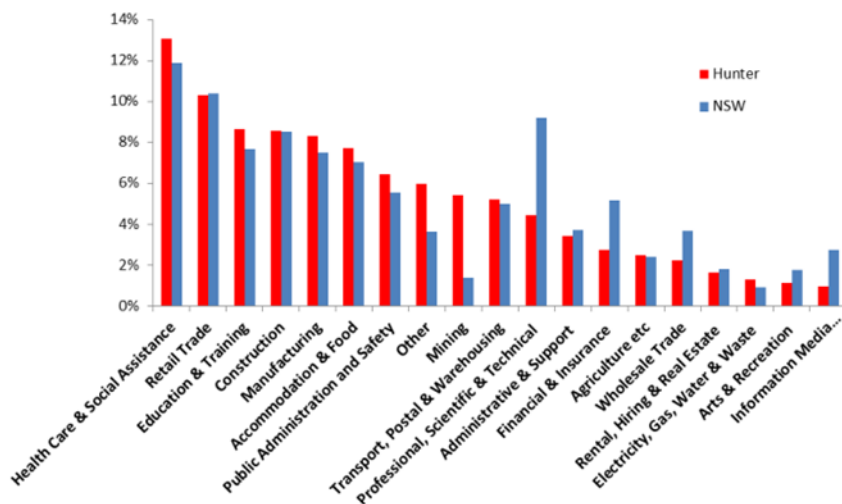


SOURCE: Newcastle Port Corporation

Industry profile compared to NSW: in 2012 the Hunter region had a relatively greater share of employment in the mining, electricity and gas, public administration & safety, and 'other' industries compared to the state. The Hunter has a relatively small share of employment in the information media & telecommunications, finance & insurance and professional, technical & scientific industries relative to NSW profile.

Access to national and international markets: In addition to the Port of Newcastle, Hunter businesses and industries have Newcastle Airport, extensive road and rail networks, and Internet connectivity (with high speed broadband access becoming available across the Hunter) to support their active participation in Australian and global markets

A1Graph11: Hunter and NSW per cent Employment by Industry Sector, May Qtr 2012



SOURCE: Australian Bureau of Statistics, Monthly Labour Force Survey 2011.

COMPARATIVE ADVANTAGES AND BUSINESS COMPETITIVENESS

GROWTH, DIVERSITY AND INNOVATION

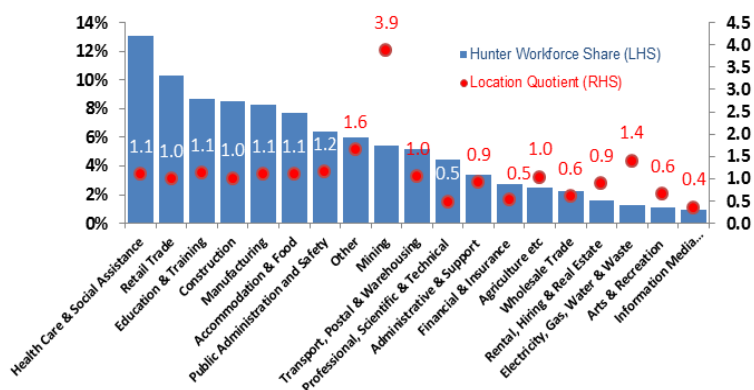
Growth industries: Significant gains in employment have been achieved in last five years within Mining (plus 1,530), *Health Care & Social Assistance* industry (plus 1,590 from 2006 to 2011), which is the largest industry in the Hunter by employment share today.

Employment also grew in Professional, scientific and technical services (plus 1,600) and *Manufacturing* (plus 1,600). Declines have been chiefly recorded in *Agriculture, Forestry & Fishing, Retail Trade, Construction and Public Administration & Safety* over the last 5 years.

Economic diversity: The Hunter has a diverse employment base with an employment profile similar to Australia, and the Hunter has seen increasing economic diversity in the last 5 years. The Hunter Region has a growing service sector with a developed University and health research cluster.

Innovation system: The Hunter has developed a culture of collaboration, most notably in Manufacturing (led by HunterNet) and Health Research/Services (especially at HMRI), that encourages and delivers innovative solutions and breakthroughs. With closer ties forming between the University of Newcastle, research institutes, industries and businesses in areas such as energy, resources, clean technology and educational programs the Hunter's robust innovation system will continue to deliver competitive advantages to business located in the Hunter Region, NSW.

A1Graph 12: Hunter per cent Employment by Industry Sector (Location Quotients), May Qtr 2012



SOURCE: Australian Bureau of Statistics, Monthly Labour Force Survey 2011.

Note: location quotient is the relative share of employment in a region's industry to the same industry share in NSW – a higher quotient, a higher employment share relative to NSW

INFRASTRUCTURE

- The Hunter is serviced by major rail infrastructure, an electrified system links the Hunter to Sydney with a non-electrified system providing further links to the North Coast and North West of the State.
- The Port of Newcastle is a major bulk export port: one of three major bulk goods ports in NSW, and one of the largest coal export ports internationally.
- The Hunter has 3 major highways (F3, Pacific & New England) – the Pacific sees up to 3,000 freight vehicles per day or 14% of total traffic; the F3 sees up to 7,500 freight vehicles per day or 22% of total traffic.
- Highway links into Queensland and Sydney GMA:
 - ◊ Pacific Highway (Newcastle, Port Stephens)
 - ◊ F3 Highway (Newcastle, Lake Macquarie)
 - ◊ New England Highway (Newcastle, Cessnock)
- Newcastle Airport which directs flights to/from major Australian cities and regional towns.
- Newcastle links the Hunter Valley rail corridor and ARTC's North-South rail network for rail services to/from Sydney.
- Major hospitals including John Hunter, Cessnock District, Gunnedah District, Maitland Hospital, Singleton District.
- Major defence facilities – Royal Australian Air Force Base at Williamtown & Australian Army Base at Singleton.
- High speed broadband (NBN) roll out of fibre to the premises commenced in 2013 in Maitland and Newcastle LGAs.

Attachment 2: RDA Hunter Stakeholder Consultations and Partnerships

RDA Hunter works closely with numerous regional stakeholders and community members to develop the Hunter Regional Plan, through workshops, meetings and face-to-face consultations.

Local, state and national stakeholders continue to play a crucial role in the evolution of the Hunter Regional Plan, and comments relating to it or any other aspect of RDA Hunter are welcome. The RDA Hunter Committee has identified the need for comprehensive, integrated strategic planning that sets targets for the future of the Region and guides action in three strategic areas: investment, innovation and infrastructure.

RDA Hunter will continue to host Strategic Conversations with local business leaders to listen to their knowledge and experiences, which will assist the articulation of the business case for investing in the Hunter. A particular focus for this methodology will be on understanding and developing Hunter business opportunities in Asia.

The Committee will review the Hunter Regional Plan and update it where required.

Those consulted to develop this Regional Plan include primary decision-makers, individuals and representatives of government departments, agencies and key organisations.

1. State Government Agencies:

Engaged through the Regional Managers Network and coordinated through the Department of Premier & Cabinet. All State Government agencies are represented through this medium, with 35 in total.

- Departmental & Ministerial briefings
- Regular engagement with NSW Department of Industry, Office of Regional Development

2. Federal Government:

Engaged through committees and briefings such as:

- Regional Employment Plan
- AusIndustry
- Departmental, Ministerial and Senator briefings
- Presentations and briefings with Infrastructure Australia

3. Local Government:

Engaged through individual meetings with the 11 LGAs of the Hunter, the General Managers Advisory Committee of Hunter Councils Inc. and meetings with all Economic Development Coordinators and Managers.

4. Business and Industry Leaders Engagement:

Hunter Business Chamber, representatives from other key business sectors to address issues directly with the Committee at Industry Briefing Sessions, Strategic Conversations, forums and during individual appointments. The CEO also represents RDA Hunter Committee at meetings and events arranged by business and industry groups.

Industry leaders and workplaces are also engaged as partners to the ME Program and MiniME Program.

5. **Strategic conversations:**

- Population and freight connectivity to 2030.
- Investment in the Hunter
- Connectivity of port, airport and associated employment lands
- Creative industries
- Agriculture & Land Use in the Hunter
- Can the Hunter compete for global talent?
- International Engagement and Hunter's Exporters
- EU Delegation and the Innovation Agenda
- Cities—the Hunter's urban future

6. **Innovation**

Scorecard Working Group, with representatives from:

- Newcastle Innovation
 - Price WaterhouseCoopers (Hunter)
 - AusIndustry
 - Hunter Valley Research Foundation
- And support from
- The University of Newcastle
 - Hunter TAFE
 - NSW Trade & Investment (Industry)

Smart Specialisation Strategy (S3) for the Hunter Region

- See Attachment 2 of the published S3 for a summary of over 90 organisations, businesses, associations, groups and individuals consulted by RDA Hunter to develop the strategy.

7. **Community Engagement:**


Facilitated discussions in sessions that engage all relevant groups associated with a topic. Additional meetings and participation in sessions throughout the year occur weekly.

RDA Hunter Board 2016

Mr Michael Slater Chair
Mr John Turner Deputy Chair
Ms Susan Ivens Chair, Finance and Audit Subcommittee
Dr Cameron Archer AM
Mr Paul Hughes
Mr Geoff Lilliss
Mrs Caroline Mara
Dr Kirsten Molloy
Mr Ian Pedersen

Context for Planning – State and Federal Policies and Plans

NSW State and Premier Priorities (NSW Government, 2015)
Jobs for the Future, Adding 1 million rewarding jobs in NSW by 2036. (NSW Government, 2016)
NSW 2021: A Plan to make NSW number one (NSW Government, 2011)
Hunter Regional Action Plan (NSW Government, 2012)
Lower Hunter Regional Strategy (NSW Government, 2006under review, 2013)
Strategic Regional Land Use Plan for the Upper Hunter (NSW Government, 2012)
NSW 20-year State Infrastructure Strategy (NSW Government, 2012 & 2014)
NSW Long Term Transport Master Plan (NSW Government, 2012)
NSW Industry Action Plans (NSW Government, 2012 - 2013)
Economic assessment of mining affected communities (NSW Trade & Investment, 2013)
NSW Freight and Ports Strategy (NSW Government, 2014)
Smart Cities Plan (Australian Government, 2016)
Council of Australian Governments, National Criteria for Cities
Our Cities, Our Future – a National Urban Policy (Australian Government, 2011)
State of Australian Cities (Major Cities Unit, 2012 –2015)
Australia in the Asian Century (Australian Government White Paper, 2012)
A Plan for Australian Jobs Australian Government, 2013)
Regional Employment Plans for Priority Employment Areas (DEEWR Australian Govt, 2012)
Industry Growth Centres: 2016 to 2019 (Australian Government, 2014)
STEM in the National Interest: A Strategic Approach (Australia’s Chief Scientist, 2013)
Energy White Paper (Australian Government, 2012)
Clean Energy Future Plan (Australian Government, 2011)
High Speed Rail Network Feasibility Study (Australian Government, 2010 - 2013)
Intergenerational Report – Australia to 2050: Future Challenges (Australian Government, 2010—2016)
National Aviation White Paper (Australian Government, 2009)
National Broadband Network, (Australian Government, 2009)
National Digital Economy Strategy (Australian Government, 2011)
National Food Plan (Australian Government, 2013)
National Infrastructure Plan (Infrastructure Australia, 2013)
National Land Freight Strategy (Australian Government, 2012)
National Port Strategy (Australian Government, 2012)
National Innovation and Science Agenda (Australian Government, 2015)
Research and Innovation Strategies for Smart Specialisation (European Commission, 2011)
Powering Ideas: An Innovation Agenda for the 21st Century (Australian Government, 2009)
Smarter Manufacturing for A Smarter Australia Australian Government, 2012)
Sustainable Australia- Sustainable Communities (Australian Government, 2011)
2016 Defence White Paper (Australian Government, 2016)
2016 Integrated Investment Program (Defence, Australian Government, 2016)
2016 Defence Industry Policy Statement (Australian Government, 2016)



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