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DEFENCE IN REGIONAL AUSTRALIA

Regional Australia Institute submission – Senate Inquiry into the impact of Defence training activities and facilities on rural and regional communities

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FOR THE GOOD OF AUSTRALIA

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Defence in regional Australia

Submission from the Regional Australia Institute to the Senate Inquiry into the impact of Defence training activities and facilities on rural and regional communities

The Regional Australia Institute (RAI) welcomes the opportunity to contribute to the Senate Inquiry into the impact of Defence training activities and facilities on rural and regional communities, referred to the Senate's Foreign Affairs, Defence and Trade References Committee.

The specific terms of reference to which this submission most closely relate are:

- a. economic, social and environmental impacts
- d. utilisation of local suppliers and service providers to achieve value for money
- e. encouraging awareness of tendering opportunities for rural and regional businesses

This submission provides some information on these terms that the RAI believes is important for the Committee's consideration, for regional areas particularly.

About the Regional Australia Institute

Independent and informed by both research and ongoing dialogue with the community, the RAI develops evidence-based policy and advocates for change to build a stronger economy and better quality of life in regional Australia – for the benefit of all Australians.

The RAI was specifically formed to help bridge the gap between knowledge, debate and decision-making on future pathways for regional Australia. It exists to ensure local, state and federal policy makers, researchers, business and members of the community have access to the information they need to make informed choices about the future of regional Australia.

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Executive summary

Defence is a significant economic player in many parts of regional Australia. In 2011, Defence employed between 2-3% of the total population of Townsville and Wagga Wagga – two relatively large regional Australian cities. In Katherine, a smaller and more isolated regional centre, Defence employees accounted for approximately 6% of the region's population.

Defence employment in these regions is linked with the presence of significant Defence training activities and facilities. However, such a presence has not guaranteed equal positive economic benefit for host communities in terms of Defence contract dollars earned by local businesses.

Despite having double the proportion of Defence employees as Townsville, businesses operating in Katherine received only 1% of the value of contracts received by their counterparts in Townsville for contracts starting between 2009 and 2013. Conversely, Defence contracts awarded to businesses in Katherine had the same total value (approximately \$10 million) as those in Wagga Wagga – despite Wagga Wagga being seven times larger than Katherine and being awarded 100 more contracts over the same five year period.

Policies to support local businesses to build up the networks and capabilities required to engage with Defence – to become 'Defence ready' – can be improved across all states and territories. Greater emphasis needs to be placed on rural and regional businesses specifically. Federal level facilitation and support is particularly needed, as many states are already active in this field but federal initiatives are lagging. Local government action is also required to help businesses in rural and regional communities do what they can to upskill where necessary. This will make them more competitive in Defence procurement. It will also make them more competitive for securing contracts in other sectors.

In reviewing the kinds of issues rural and regional communities face when trying to attract Defence dollars and maximise positive economic impacts generally, it is evident that service capacity, size, economic leakage, location and environment all play a role. The distribution of Defence employees is also important for assessing Defence impact.

Smaller regional centres may have fewer numbers of Defence employees and a more limited service capacity than regional cities. However, proportionally, the level of Defence employment may be greater and thus more acutely felt in these smaller centres. Some places host Defence jobs, while others are home to Defence employees who actually work in other places. The impacts of Defence employment are therefore spread across places that host facilities, as well as those that supply workers to facilities in other places. Recognition of this impact spread is important, especially when comparing communities with varying population size and remoteness.

A targeted national approach which strengthens local business engagement with Defence while acknowledging the uniqueness of rural and regional areas is essential. Such an approach will provide greater responsiveness to region-specific issues that may inhibit the ability for communities to attract Defence employees and win Defence contracts. It will therefore maximise the positive economic benefits from Defence training activities and facilities. A targeted approach will also help ensure that the potential of rural and regional communities to contribute to the Defence agenda is realised, and that the Defence presence is both valued and welcomed.

Recommendations

From the issues raised in this submission, the RAI recommends the following points for consideration or action by (or on behalf of) the Senate's Foreign Affairs, Defence and Trade References Committee:

1. Establish a Rural and Regional Procurement Policy, similar to the Indigenous Procurement Policy, to target rural and regional business engagement and growth.
2. Develop a national policy that focuses on more than just prime Defence contractors and has a clearer focus on SMEs in rural and regional communities.
3. Engage more with state and territory governments to: (i) identify rural and regional communities with a high Defence presence and establish a priority list of communities in need of greater state-based support mechanisms; (ii) establish targets for local business Defence contracts within these regions; and (iii) develop local businesses to become 'Defence ready'.
4. Consider both the *positive economic impacts* of Defence training activities and facilities (e.g. contribution to employment and contract dollars earned) and *the negative economic impacts* (e.g. costs associated with environmental contamination).
5. Build trust by ensuring communications with host communities are clear and consistent, and that they recognise the reality of contracting arrangements already in place rather than overstate the potential 'Defence impact'.
6. Understand the need to not treat all rural and regional communities as a homogenous entity; there will be different impacts of Defence training activities and facilities in different communities for different reasons.

Policies for engagement

Policies explicitly designed to improve the links between Defence and rural and regional businesses are essential for maximising the positive economic impact of Defence training activities and facilities on rural and regional communities. While states and territories are making efforts to support businesses to become 'Defence ready', there needs to be a greater focus on rural and regional businesses specifically. Leadership needs to come at the federal level to build on existing support mechanisms for small to medium enterprises (SMEs) to encourage rural and regional skills development and economic growth.

Federal support mechanisms

To accompany the *2016 Defence White Paper*, the Department of Defence published a Defence Industry Policy Statement (DIPS) aimed at improving business relationships with Defence. One of the key federal support mechanisms to come from the DIPS has been the establishment of the Centre for Defence Industry Capability (CDIC), reported to be 'a significant step in resetting the Defence and industry relationship, and driving jobs and growth across the country.'¹ The Centre aims to provide advice to businesses navigating the Defence marketplace and assist in identifying local business opportunities. Through the provision of business and upskilling services, the CDIC sought to improve business capability and establish a clearer point of contact for working with Defence.² The development of such a support organisation at the national level has been seen to particularly benefit SMEs, with specific SME advisory and facilitation services introduced by the Centre.³

In reflecting on SME engagement, the Defence Annual Report 2015/16 included a discussion of procurement initiatives put in place to support small business participation.⁴ Table 1 shows the actual participation of SME and Small Business in procurement for the Department of Defence and Defence Materiel Organisation for 2015/16.

Table 1. Defence procurement by business size, 2015/2016

Agency	Business Size	% by Value	% by Number
Department of Defence	SME	18	58
	Small	8	30
Defence Materiel Organisation	SME	15	57
	Small	5	27

Source: Department of Finance⁵

Note: Small businesses are a subset of SMEs

Overall, there has been recent emphasis at the federal level on the engagement between SMEs and Defence. But recent efforts to support SMEs through the CDIC have shown limited outreach to rural and regional businesses, demonstrating a limited understanding of the kinds of issues non-metropolitan businesses face in terms of acquiring Defence contracts. The absence of Defence engagement policies that target rural and regional businesses and communities specifically is a matter that needs to be addressed.

Indigenous Procurement Policy

A blueprint for procurement in rural and regional communities is the Indigenous Procurement Policy (IPP). The IPP focuses specifically on encouraging engagement with businesses in Indigenous communities to drive demand for goods and services and stimulate economic growth.⁶ As part of the IPP, Indigenous businesses have avoided costly tendering processes but have still had to demonstrate value for money. The IPP target for Defence contracts to be awarded to Indigenous businesses in 2015/16 was 70. So successful was the implementation of the IPP that this target was ultimately exceeded. More than 100 Defence contracts, valued at more than \$100 million, were awarded to Indigenous enterprises during 2015/16.⁷

Rural and regional businesses would benefit from a similarly directed policy with Defence specific targets. Like the IPP, adjustments can be made to give greater advantages to rural and regional businesses without compromising quality or incurring additional costs. Targets can be set for how many contracts should go to such businesses based on the location and expenditure of Defence facilities. It should also be made less costly for regional or rural businesses to tender for Defence contracts so as to encourage more businesses to do so.

State-based support mechanisms

As shown in Table 2, states and territories across Australia have developed various mechanisms to support rural and regional businesses. Together they reflect different levels of experience working with Defence, as well as the expertise and resources directed to this area of work.

Table 2. Defence engagement strategies of state and territory governments

Govt.	Defence strategy document	Supports skills development for businesses to become 'Defence ready'	Promotes business-Defence links for contracting / procurement purposes	Regional focus
Tas.	<i>Our Fair Share of Defence Strategy</i>	√√	√√	×
SA	<i>South Australia's Defence Strategy 2025</i>	√√	√√	×
ACT		×	√	×
Vic.	<i>Defence Technologies Sector Strategy</i>	√√	√	×
NSW	<i>NSW: The Strong, Smart and Connected strategy</i>	√	√	√√
NT	<i>Defence Strategy Northern Territory Beyond 2015</i>	√	√	×
Qld		×	√√	×
WA	<i>WA Defence Strategy 2016</i>	√√	√	√√

√√ = Yes; √ = Some effort to do so/unclear; × =no

The range of dedicated Defence strategies developed by various state and territory governments highlights a desire to create the right environment and capabilities for local businesses to work with Defence. The most active governments are also actively promoting links between businesses and Defence. This means that the Department of Defence or its prime contractors can draw on these existing links to identify opportunities presented by regional and rural businesses (see Appendix A for further information on these support mechanisms).

Issues in maximising Defence's positive economic impact in regional areas

Service capacity, size and economic leakage

For communities to attract large-scale Defence contracts there needs to be adequate local capacity; being physically near Defence training activities and facilities is not enough to ensure great monetary benefit.

Community size plays a considerable role in determining service capacity. Small communities are unlikely to be able to take advantage of 'big' Defence money in a 'big' way, simply because they do not have the manpower or capabilities required for large contracts. As Fiona Haslam McKenzie (one of the RAI's Research Fellows) notes:

Even where companies have a local procurement policy, smaller towns typically have insufficient capacity or levels of diversification to supply large-scale operations with anything beyond minor goods. In combination, lower business and employee expenditure leads to 'fly-over' effects (where businesses and companies source supplies outside the region), and 'hollow economy' effects, (where, despite significant economic activity in the region, funds flow from the region either immediately or shortly after they are incurred).⁸

These 'hollow economy' and 'fly-over' effects suggest that, as with Defence contract allocation, communities that are host to Defence training activities and facilities are not guaranteed to be the key beneficiaries of Defence wages.⁹ Food and other everyday items may be purchased locally from low population areas. However 'big ticket' items, such as appliances and furniture, are more likely to be sourced externally. The economic benefits brought by Defence employment can thus 'leak' into other regions.

Combined, the capacity of rural and regional communities to secure Defence contracts and supply Defence employees with goods and services that they want and need make political promises about the potential for economic benefit of a Defence presence hard to measure, let alone realise.

Communications from Defence tend to overstate the expected local impacts, and are sometimes contradictory. For example, Regional Development Australia (RDA) – Far North highlighted the inconsistency of assessments of 'Defence impact' in its 2016 *Port Augusta Economic Growth and Investment Strategy*. It showed that ministerial releases about the expansion of the Cultana Training Area in South Australia stated that the Defence facility expansion would contribute \$82.3 million to the surrounding Port Augusta and Whyalla regions. However, commentary from within the Department of Defence advised that the local economic benefit from the expansion would likely be limited because of strict procurement and logistical requirements that local businesses would find hard to meet.¹⁰ In summarising this inconsistency, RDA – Far North noted that 'there is a wealth of difference between an \$82.3 million investment [in Cultana], and a contract to source bread and milk from Port Augusta.'¹¹

Defence needs to provide clear and consistent communication about the likely economic impacts of Defence in rural and regional areas. This will help ensure that expectations of any

future developments are tempered in line with Defence's existing external contractual obligations and the capacity of local businesses to acquire and honour new Defence contracts. Clarity and consistency in communication is essential for Defence to maintain its 'social license to operate' in regions, and remain a welcome participant in the regional economy.

State and federal governments can encourage rural and regional communities to build up their capacity to become better engaged with Defence. They can maximise the incentives for national and international businesses to establish new facilities in rural and regional areas and upskill local residents to work in these facilities. Alternatively, governments can provide support to local businesses to build the required the facilities and skills for themselves.

To become 'Defence ready', local governments must also take responsibility. If communities are not reaching their goal for securing Defence contracts then councils need to assess what they can do to improve the capacity of local businesses, such as targeted skills training, to achieve this goal. The process of upskilling to become 'Defence ready' will likely have the flow on effect of making rural and regional businesses more competitive in tendering for work in other sectors.

Location

As with capacity, location-specific issues can inhibit the ability of rural and regional communities to attract Defence dollars. Take the Northern Territory for example. With such a vast land mass and relatively small population compared to other Australian states and territories, the NT is a key location for Defence training activities and facilities. According to former NT Chief Minister Adam Giles, the Territory's capacity to host multinational training exercises has been vital for improving Australian military's 'combat training and readiness' and providing a boost to NT businesses.¹² Speaking in response to the *2016 Defence White Paper*, Mr Giles said:

Military exercises can inject millions of dollars into the Territory economy as large volumes of fuel, supplies and support are required, while troops spend money in local shops, cafes, restaurants, tourist attractions and other businesses while on rest and recuperation.¹³

However, as the NT arm of the Australian Industry Defence Network has noted:

The Northern Territory workforce is highly mobile and seasonally effected causing a high rate of turnover in the local economy. This mobility affects the ability of local businesses to grow their permanent workforce and develop the quality, capability and skills to adequately support defence platforms in location. The costs of hiring, training and inducting employees can be prohibitive for short term tenures reducing a business' capability to meet local defence demand. Additional pressures are also felt from a current low unemployment rate and high workforce participation rate resulting in fewer suitable applicants for more available jobs decreasing the opportunity to grow a committed and skilled workforce.¹⁴

These peak period labour supply constraints mean that the local and regional spinoffs from periodic large scale training activities may be much smaller than they initially appear. Because rural and regional businesses may not be able to cope with the scale of peak labour periods, outside businesses may be contracted to do the work instead. To encourage local businesses to play more of an active role in Defence procurement, there needs to be greater cross-governmental facilitation. There also needs to be acknowledgment that not all SMEs will have an equal opportunity to tender for Defence contracts, especially those located in more remote and seasonally-affected areas.

Environment

Environmental issues present another obstacle for maximising the economic benefits of Defence in rural and regional communities more broadly. Concerns about the detrimental impact of Defence facilities on residential and farming lands have been raised across the country. This has followed announcements of contamination of local water supplies from decades-long use of firefighting foams on military grounds. Residents in Oakey in Queensland and Williamstown in New South Wales have been most vocal about the economic losses from environmental contamination to date, with class actions launched against the Department of Defence within both communities.¹⁵ Not only are health impacts from contamination causing anxiety, so are the economic impacts on housing, agriculture and fisheries. According to local media:

The Williamstown RAAF Base contamination scandal has devastated the area's property market, and the lives of the people who live there...Valuers are refusing to inspect properties because of occupational health and safety issues, loan offers have been withdrawn at the 11th hour, and banks are imposing restricted lending on properties within the contamination plume.¹⁶

Crops and animals grown on lands contaminated as a result of Defence activities have the potential to become more of a liability than a money-making source. Thus, the economic impact of Defence in such areas can become a decidedly negative one. Locals may even be driven out because they can't generate sufficient income from the land and surrounding waterways in the manner that they have become accustomed. With the Department's continued investigation of possible contamination from 18 different Defence facilities nationwide, consideration of the potential negative economic impacts of Defence – as well as negative health and wellbeing impacts – will demand greater scrutiny.¹⁷

Identifying the scale of Defence presence in rural and regional Australia

Central to understanding the impact of Defence training activities and facilities in rural and regional communities is knowing the scale of Defence employment (military and civil) in these communities. The relative distribution of Defence employees, and thus the potential impact of Defence in regions, varies according to the metric being used.

When viewed by absolute number, regional cities have been shown to attract more Defence employees (see Appendix B) than any other regional type. Indeed, in 2011, in terms of absolute numbers, regional cities comprised nine of the top 10 regional LGAs where Defence employees worked. These were Townsville (3,887), Port Stephens (2,942), Litchfield (2,710), Wagga Wagga (1,734), Shoalhaven (1,447), Wodonga (1,425) and Darwin (1,183). When viewed as a proportion of total population, the Defence presence in smaller regional centres becomes more pronounced. In 2011, three of the top 10 regional LGAs where the greatest proportion of Defence employees worked were Heartland Regions (Katherine: 5.48%, Exmouth: 3.38%, MacDonnell: 3.09%). Another three were Connected Lifestyle Areas (Queenscliffe: 4.74%, Palarang: 3.11%, Mitchell: 2.66%).

Because smaller regional centres have fewer people and a greater degree of isolation from the economic opportunities of metropolitan areas than regional cities do, the impact of Defence employment may be felt more acutely in these areas than in cities (see Appendix E for an explanation of regional types). Awareness of these relative differences is essential for identifying which communities have a 'major' Defence presence and how such communities may be impacted if such a presence were increased or taken away.

Another distinction to recognise is the difference in the distribution of Defence employees when viewed by Place of Work (POW) and Place of Usual Residence (PUR). Disparities in POW and PUR show that standard employment numbers alone do not provide a full gauge of the impact that Defence can have on rural and regional communities.

As Figure 1 illustrates in its mapping of Defence employees' POW in relation to their PUR, just because someone works for Defence in a particular area does not mean they are a resident who contributes living expenses to its local economy. In Figure 1, where there are lines connecting two separate locations, this indicates a distinct difference in Defence employee POW and PUR from the 2011 Census. The thicker the interconnecting line between any two points, the more people who lived and worked in the two different locations. Clearly, most Defence employees lived and worked on the east coast of Australia, with varying degrees of separation between POW and PUR. Some employees travelled right across the country, with Exmouth and Darwin being key locations in Western and Northern Australia respectively. Townsville was shown to be a key east coast Defence hub, with many connections to other regional areas as well as metropolitan areas. A closer snapshot of Townsville's connections is provided in Figure 2.

Appendix C delves into this issue of POW-PUR disparity in more detail, showing that the ranking of regional areas by Defence employees' POW is not the same as it is for their PUR. In terms of absolute numbers, the top 10 regions where Defence employees lived in 2011 were Townsville, Darwin, Queanbeyan, Shoalhaven, Port Stephens, Wagga Wagga, Palmerston, Wodonga, Newcastle, and Toowoomba. As a proportion of total population, the top 10 regions where Defence employees lived were Katherine, Palmerston, Litchfield, Queanbeyan, Wodonga, Palarang, Darwin, Townsville, Wagga Wagga, and Port Stephens.

In 2011, the top 10 regions where POW was greater than PUR (worker importing regions) were Litchfield, Port Stephens, Wagga Wagga, Wodonga, MacDonnell, Scenic Rim, Mitchell, Singleton, Queenscliffe, and Rockhampton (see Appendix D). The top 10 regions where PUR was greater than POW (worker exporting regions) were Queanbeyan, Palmerston, Newcastle, Darwin, Townsville, Maitland, Gold Coast, Lake Macquarie, Greater Geelong, and Yass Valley.

This latter group is especially important to consider when assessing the impact of Defence facilities across different communities, as certain places may have some Defence workers residing locally, but *none* working locally. This means that, even if Defence employees do not *work locally*, or there is not even a Defence facility located nearby, Defence can still have an impact on rural and regional communities simply by hiring people who *live locally*.

Another consideration is that just because a Defence employee lives in a particular area does not mean they live alone. What Defence employment numbers do not account for is the broader 'Defence community', which includes all employee dependents. These dependents are important to consider when assessing Defence impact, as they can dramatically increase the overall 'Defence presence' in a given area.¹⁸ However, employment numbers are a more readily available and so form the basis of the analysis in this submission.

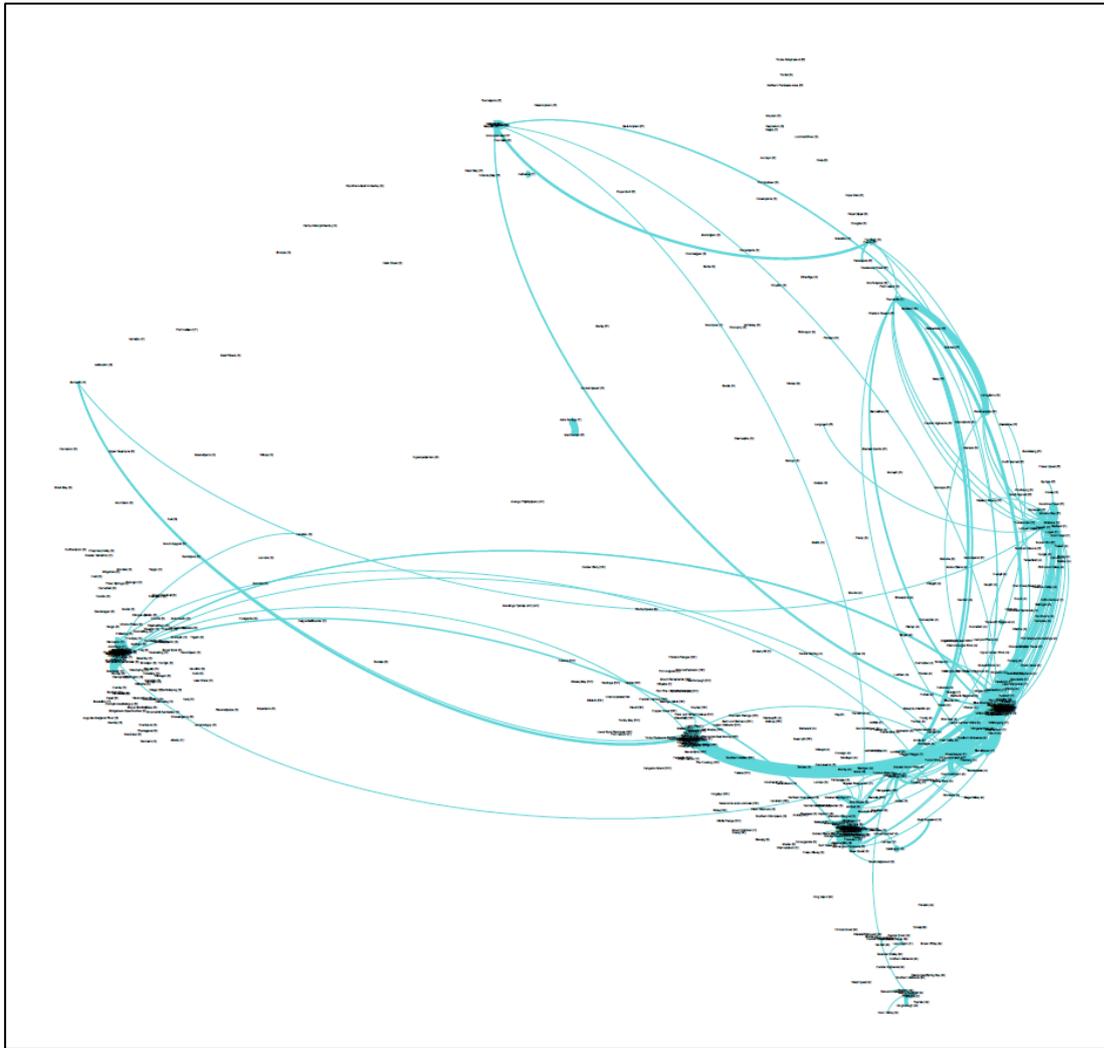


Figure 1. Comparison of Defence employees' POW and PUR across Australia

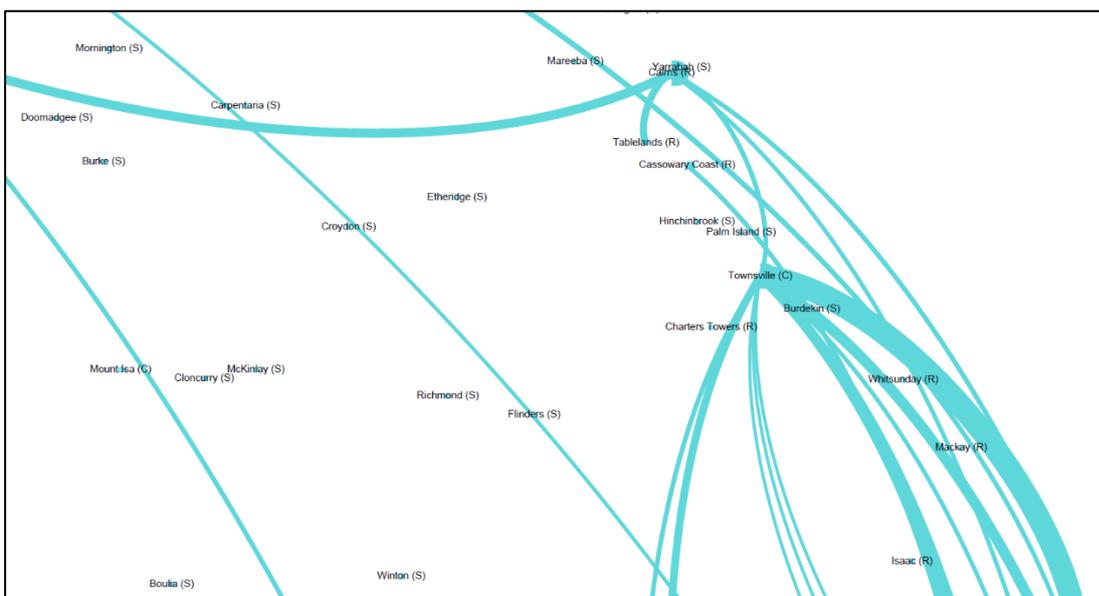


Figure 2. Comparison of Defence employees' POW and PUR in Townsville and surrounds

Regional case studies

A comparison of Census employment and AusTender data highlights the nuances of Defence presence in different regions. Katherine, Townsville and Wagga Wagga present good case studies for comparison, as they are each located in a different state and have a good balance of relatively large numbers of Defence employees and relatively little variation between POW and PUR (see Table 3). This even spread suggests that the Defence presence in these areas is relatively permanent and so may be more greatly felt than in other areas where there is greater disparity in POW and PUR and where the Defence presence is therefore more transient.

Table 3. Comparison of POW and PUR for select regional areas

LGA	Population	No. of Defence employees (POW)	POW % of population	No. of Defence employees (PUR)	PUR % of population	State	Regional type
Katherine	9,185	503	5.48%	524	5.70%	NT	Heartland Region
Townsville	174,460	3,887	2.23%	4,329	2.48%	Qld	Regional City
Wagga Wagga	59,459	1,734	2.92%	1,457	2.45%	NSW	Regional City

Source: 2011 Census of Population and Housing

Katherine (NT)

The relatively large proportion of Defence employees working and residing in Katherine is due to RAAF Base Tindal, located just 15km away. According to KPMG, RAAF Base Tindal directly employs around 10% of all Defence employees in the NT, contributing up to 1,200 jobs to the Katherine region (directly and indirectly) as well as \$132.3 million in turnover and \$73.4million in value add in the 2007/08 financial year.¹⁹ Aside from its local economic contribution, RAAF Base Tindal also prides itself on its social engagement and considers itself ‘very much part of the Katherine community.’²⁰

Townsville (Qld)

Queensland is the second largest employer of Defence personnel in the country, with around 27% of all of Australia’s Australian Defence Force (ADF) personnel situated in the State.²¹ Australia’s largest ADF base, RAAF Base Amberley, is located 8km southwest of Ipswich. Australia’s largest army base, Lavarack Barracks, is located in Townsville and is home to around 4,500 and 280 military and civilian personnel respectively.²² Alongside RAAF Townsville, Ross Island Barracks and nearby training areas, Lavarack Barracks contributes to Townsville’s claim of being ‘Australia’s leading defence city’, a title of which, according to the local council, the community has long been proud.²³

Wagga Wagga (NSW)

Wagga Wagga has been described as ‘the heart of military training in NSW’, positioned as a tri-service training base for the Australian Army, the Royal Australian Airforce and the Royal Australian Navy. Indeed, Blamey Barracks in Kapooka serves as the main training facility for new recruits to the Australian Army. It accommodates around 3,500 new army recruits each year in addition to 1,750 reservists.²⁴ A study by the Centre of Policy Studies at Monash University found that, in 2002, the defence services industry in the broader Murrumbidgee region – in which Wagga Wagga is located – contributed \$113 million (2.5% of total value add) to the region, and accounted for 1,500 (2.1%) of local jobs. Around half of these outputs and employment contributions were directly attributed to Blamey Barracks.²⁵

Comparison of regions

Historical AusTender data for Defence contracts starting between 2009 and 2013 (inclusive) provides an indication of the contribution Defence facilities in each LGA. Of the three regional areas highlighted, the number and dollar amount of contracts awarded to Townsville was the greatest, considerably larger than both Katherine and Wagga Wagga (see Table 4).

Table 4. Comparison of Defence contracts for select regional areas¹

LGA ²	Contracts		Procurement method			Agency	
	No.	Amount	Limited Tender	Open Tender	Prequalified Tender	DoD	DMO
Katherine	128	\$10,143,705.26	72	32	24	117	11
Townsville	2,463	\$989,573,491.81	1,421	743	297	1,886	577
Wagga Wagga	229	\$9,874,725.67	137	64	28	215	14

Source: AusTender CN CSV up to 19 September 2016, available from data.gov.au

¹ Contracts offered by Department of Defence (DoD) or Defence Materiel Organisation (DMO), starting 2009-2013 (inclusive)

² Contract data for LGA identified using postcodes, derived from Australia Post postcode list (March 2017), which includes PO boxes, and the ABS Australian Statistical Geography Standard LGA-postcode correspondences (catalogue no. 1270.0.55.006)

According to 2011 Census data, Katherine had far fewer Defence employees than Townsville did in terms of absolute numbers. However, proportionally, there were twice as many Defence employees in Katherine as in Townsville. Nonetheless, according to AusTender records two years either side of the 2011 Census, there were 98 times more Defence contract dollars awarded to Townsville than Katherine. This difference may be in large part due to Katherine's relatively small population size (19 times smaller than Townsville) and thus the capacity of its local business base. However, considering how Wagga Wagga compares with Katherine, difference in population is unlikely to entirely account for contract disparity. The population of Wagga Wagga in 2011 was nearly seven times the size of Katherine's. Nonetheless, both regions received around \$10 million in Defence contracts commencing over the same five year period. This was despite Wagga Wagga starting 100 more contracts than Katherine during this time.

Table 5. Defence presence comparison for select regional areas¹

LGA ²	Contract \$ ratio	Population ratio	POW ratio	% POW ratio	PUR ratio	% PUR ratio
Townsville:Katherine	98:1	19:1	8:1	0.5:1	8:1	0.5:1
Townsville:Wagga Wagga	100:1	3:1	2:1	1:1	3:1	1:1
Wagga Wagga:Katherine	1:1	6.5:1	3.5:1	0.5:1	3:1	0.5:1

¹ Rounded to the nearest 0.5

² Contract data for LGA identified using postcodes, derived from Australia Post postcode list (March 2017), which includes PO boxes, and the ABS Australian Statistical Geography Standard LGA-postcode correspondences (catalogue no. 1270.0.55.006)

Although some areas may far exceed others in terms of population, the numbers and proportion of workers can differ considerably. Contract dollars are not necessarily a reflection of an area's size, its relative share of Defence workers, or its significance to the national Defence agenda. As the comparison of Katherine to Wagga Wagga demonstrates, LGAs with relatively small populations can 'punch above their weight' in terms of engaging with Defence. Ultimately, the issues in attracting Defence dollars and maximising the positive economic impact of a Defence presence vary with each community.

Summary

All rural and regional areas are different, as are the businesses operating within them. Government support at all levels for local businesses to engage in Defence contracting is important. So is the need for every community wishing to increase its engagement with Defence to take up the challenge of becoming 'Defence ready'. To ensure that rural and regional communities reap the greatest benefit from a Defence presence, targeted strategies are needed to account for these differences.

Recommendation 1: *Establish a Rural and Regional Procurement Policy, similar to the Indigenous Procurement Policy, to target rural and regional business engagement and growth.*

States are currently more active than the Commonwealth in addressing the barriers faced by rural and regional SMEs in acquiring Defence contracts. More leadership is needed at the national level to ensure SMEs operating in rural and regional communities face less disadvantage in tendering for contracts at all levels.

Recommendation 2: *Develop a national policy that focuses on more than just prime Defence contractors and has a clearer focus on SMEs in rural and regional communities.*

Cross-government coordination can help ensure that local, state and federal governments are working together to understand the scale of Defence presence across different regions. It can also help facilitate businesses to upskill and secure a set number of contracts based on the location and expenditure of Defence facilities.

Recommendation 3: *Engage more with state and territory governments to: (i) identify rural and regional communities with a high Defence presence and establish a priority list of communities in need of greater state-based support mechanisms; (ii) establish targets for local business Defence contracts within these regions; and (iii) develop local businesses to become 'Defence ready'.*

In focusing on procurement and employment, one may assume that all economic impacts from Defence training activities and facilities are positive. However, recent developments in Oakey and Williamstown show that there is also the potential for negative environmental impacts to eventuate from Defence's presence over time which can, in turn, produce negative economic consequences.

Recommendation 4: *Consider both the positive economic impacts of Defence training activities and facilities (e.g. contribution to employment and contract dollars earned) and the negative economic impacts (e.g. costs associated with environmental contamination).*

In politics, it is easy to overstate the positive economic impact of Defence's presence by not factoring in the location and capacity of local businesses to secure large scale Defence contracts. Inconsistencies in impact messaging can weaken trust as well as the perceived value of Defence in host communities.

Recommendation 5: *Build trust by ensuring communications with host communities are clear and consistent, and that they recognise the reality of contracting arrangements already in place rather than overstate the potential 'Defence impact'.*

The impact of Defence employment is spread across where employees work and where they live; the places that 'host' Defence facilities and the people who work in them, and the places that 'supply' workers to facilities located elsewhere. Even in communities where the level of Defence employment is quite high for both Place of Work and Place of Usual Residence, as in Katherine, Townsville and Wagga Wagga, impacts of Defence employment can vary from region to region, as can the contracts won and dollars earned.

Recommendation 6: *Understand the need to not treat all rural and regional communities as a homogenous entity; there will be different impacts of Defence training activities and facilities in different communities for different reasons.*

Appendix A. Defence engagement strategies for each Australian state and territory

South Australia (SA)

South Australia has been actively involved Defence work, as showcased in *South Australia's Defence Strategy 2025*.²⁶ As well as being home to the CDIC, the State has established, and continued to direct resources to, the Defence Teaming Centre (DTC). The DTC assists South Australian businesses to enter the Defence industry, develop skills, and identify potential opportunities. Further government support has been directed at developing a 'Defence ready' workforce in the State through training, education and other Science, Technology, Engineering and Maths (STEM) programs.

Australian Capital Territory (ACT)

There is a high concentration of defence-related activities and organisations located within the ACT, such as federal departments, national security agencies, specialist defence industry suppliers, and education and research related organisations. The ACT does not have an official strategy to promote Defence, but has appointed a Defence Industry Advocate and Defence Industry Advisory Board to promote growth of ACT's defence and related industries.²⁷

Tasmania (Tas.)

While the Tasmanian Government may not have as much experience with Defence as other states, following the release of the 2016 Defence White Paper, and to encourage more Defence engagement with Tasmanian businesses, it released *Our Fair Share of Defence Strategy*.²⁸ Included in its approach to attract Defence dollars to Tasmania is support for local businesses to become 'Defence ready'; helping build specialist skills and establish an industry support service to assist in procurement and develop networks.

Victoria (Vic.)

As part of its Future Industries initiative, the Victorian Government recognised Defence as a priority growth industry sector and developed a Defence Technologies Sector Strategy to identify opportunities and get local businesses 'Defence ready' for local and global markets.²⁹ For Australia specifically, the Victorian Government has sought to develop greater awareness of the supply chain and help businesses obtain the necessary certifications for working with Defence. Additional support has also been identified as a necessary step for encouraging SMEs to develop the systems and reduce the cost and time required to become certified.

New South Wales (NSW)

The NSW Government released *The Strong, Smart and Connected* strategy in 2017 to support the defence sector as a driver for growth.³⁰ This involves enhancing local engagement with Defence and establishing a central coordinating body, Defence NSW. The need to sustain and develop Defence activities in regional areas specifically has also been identified as a priority. This includes developing initiatives for establishing regional networks, assisting SMEs to access local and global opportunities, and facilitating regional opportunities for Defence to invest in. The NSW Government aims to assist regional businesses to engage in future collaborations with prime contractors, SMEs and research institutions.

Northern Territory (NT)

The Northern Territory has a well-established relationship with the ADF and visiting foreign forces.³¹ The *Defence Strategy Northern Territory Beyond 2015* is the key strategic document for the Territory and focuses promoting a greater Defence presence and level of engagement.³² It promotes local capabilities for Defence contracts and encourages the development of supplier relationships that see prime contractors deliver flow on benefits to

SMEs. The Northern Territory also has various local industry groups, such as the Australian Defence and Industry Network – Northern Territory, supporting these objectives.

Queensland (Qld)

Defence Industries Queensland was established to support prime contractors to find Defence capabilities, assist companies to develop skills and connections, and expand the presence of the ADF in Queensland.³³ As one example of its achievements to date, Defence Industries Queensland collaborated with industry stakeholders, including the Industry Capability Network, to establish the Heavy Vehicle Network. This helped support more than 150 Queensland companies to access contracting opportunities in the construction and maintenance of ADF vehicles.³⁴

Western Australia (WA)

Despite the Western Australian Government releasing *WA Defence Strategy 2016*, the State does not have a defence sector advocate or a minister with a dedicated Defence portfolio.³⁵ Moreover, even though an industry council has been established under the Chamber of Commerce and Industry WA, the Chamber has limited experience and connections with Defence.³⁶ Even with these constraints, through the defence sector round of State Government's Industry Facilitation and Support Program (IFSP), funds have been directed to both metropolitan and regional businesses to help improve their capabilities for securing future Defence work.³⁷

Appendix B. Top 25 regional LGAs for Defence employees' Place of Work (POW)

Ordered by number of Defence employees whose POW is in each LGA							
LGA	Population	No. of Defence employees (POW)	POW % of population	No. of Defence employees (PUR)	PUR % of population	State	Regional type
Townsville	174,460	3,887	2.23%	4,329	2.48%	Qld	Regional City
Port Stephens	64,808	2,942	4.54%	1,581	2.44%	NSW	Regional City
Litchfield	18,994	2,710	14.27%	918	4.83%	NT	Regional City
Wagga Wagga	59,459	1,734	2.92%	1,457	2.45%	NSW	Regional City
Shoalhaven	92,812	1,447	1.56%	1,583	1.71%	NSW	Regional City
Wodonga	35,518	1,425	4.01%	1,161	3.27%	Vic.	Regional City
Darwin	72,929	1,183	1.62%	2,049	2.81%	NT	Regional City
Mitchell	34,637	920	2.66%	795	2.30%	Vic.	Connected Lifestyle Area
Toowoomba	151,189	905	0.60%	949	0.63%	Qld	Regional City
Cairns	156,170	750	0.48%	864	0.55%	Qld	Regional City
Katherine	9,185	503	5.48%	524	5.70%	NT	Heartland Region
Wellington	41,441	495	1.19%	480	1.16%	Vic.	Industry & Service Hub
Palerang	14,351	447	3.11%	407	2.84%	NSW	Connected Lifestyle Area
Singleton	22,695	421	1.86%	321	1.41%	NSW	Industry & Service Hub
Scenic Rim	36,457	294	0.81%	127	0.35%	Qld	Connected Lifestyle Area
MacDonnell	5,832	180	3.09%	3	0.05%	NT	Heartland Region
Greater Bendigo	100,617	176	0.17%	232	0.23%	Vic.	Regional City
Rockhampton	109,337	147	0.13%	66	0.06%	Qld	Regional City
Queenscliffe	2,998	142	4.74%	44	1.47%	Vic.	Connected Lifestyle Area
Newcastle	148,534	132	0.09%	1,003	0.68%	NSW	Regional City
Hobart	48,706	124	0.25%	60	0.12%	Tas.	Regional City
Tamworth regional	56,291	124	0.22%	123	0.22%	NSW	Regional City
Wollongong	192,419	105	0.05%	214	0.11%	NSW	Regional City
Exmouth	2,393	81	3.38%	23	0.96%	WA	Heartland Region
Glenorchy	44,655	73	0.16%	53	0.12%	Tas.	Regional City
Ordered by POW as a proportion of population							
LGA	Population	No. of Defence employees (POW)	POW % of population	No. of Defence employees (PUR)	PUR % of population	State	Regional type
Litchfield	18,994	2,710	14.27%	918	4.83%	NT	Regional City
Katherine	9,185	503	5.48%	524	5.70%	NT	Heartland Region
Queenscliffe	2,998	142	4.74%	44	1.47%	VIC	Connected Lifestyle Area
Port Stephens	64,808	2,942	4.54%	1,581	2.44%	NSW	Regional City
Wodonga	35,518	1,425	4.01%	1,161	3.27%	VIC	Regional City
Exmouth	2,393	81	3.38%	23	0.96%	WA	Heartland Region
Palerang	14,351	447	3.11%	407	2.84%	NSW	Connected Lifestyle Area
MacDonnell	5,832	180	3.09%	3	0.05%	NT	Heartland Region
Wagga Wagga	59,459	1,734	2.92%	1,457	2.45%	NSW	Regional City
Mitchell	34,637	920	2.66%	795	2.30%	VIC	Connected Lifestyle Area
Townsville	174,460	3,887	2.23%	4,329	2.48%	Qld	Regional City
Singleton	22,695	421	1.86%	321	1.41%	NSW	Industry & Service Hub
Barcoo	352	6	1.70%	0	0.00%	Qld	Heartland Region
Darwin	72,929	1,183	1.62%	2,049	2.81%	NT	Regional City
Shoalhaven	92,812	1,447	1.56%	1,583	1.71%	NSW	Regional City
Wellington	41,441	495	1.19%	480	1.16%	VIC	Industry & Service Hub
Wakefield	6,660	54	0.81%	31	0.47%	SA	Connected Lifestyle Area
Scenic Rim	36,457	294	0.81%	127	0.35%	Qld	Connected Lifestyle Area
Toowoomba	151,189	905	0.60%	949	0.63%	Qld	Regional City
Cooma-Monaro	9,773	57	0.58%	91	0.93%	NSW	Heartland Region
Laverton	1,226	7	0.57%	0	0.00%	WA	Heartland Region
Cairns	156,170	750	0.48%	864	0.55%	Qld	Regional City
Strathbogie	9,485	42	0.44%	42	0.44%	VIC	Heartland Region
Torres	3,259	10	0.31%	7	0.21%	Qld	Heartland Region
Dorset	6,828	19	0.28%	14	0.21%	Tas.	Heartland Region

Source: 2011 Census of Population and Housing

Appendix C. Top 25 regional LGAs for Defence employees' Place of Usual Residence (PUR)

Ordered by number of Defence employees whose PUR is in each LGA							
LGA	Population	No. of Defence employees (POW)	POW % of population	No. of Defence employees (PUR)	PUR % of population	State	Regional type
Townsville	174,460	3,887	2.23%	4,329	2.48%	Qld	Regional City
Darwin	72,929	1,183	1.62%	2,049	2.81%	NT	Regional City
Queanbeyan	37,994	69	0.18%	1,627	4.28%	NSW	Connected Lifestyle Area
Shoalhaven	92,812	1,447	1.56%	1,583	1.71%	NSW	Regional City
Port Stephens	64,808	2,942	4.54%	1,581	2.44%	NSW	Regional City
Wagga Wagga	59,459	1,734	2.92%	1,457	2.45%	NSW	Regional City
Palmerston	27,705	34	0.12%	1,438	5.19%	NT	Regional City
Wodonga	35,518	1,425	4.01%	1,161	3.27%	Vic.	Regional City
Newcastle	148,534	132	0.09%	1,003	0.68%	NSW	Regional City
Toowoomba	151,189	905	0.60%	949	0.63%	Qld	Regional City
Litchfield	18,994	2,710	14.27%	918	4.83%	NT	Regional City
Cairns	156,170	750	0.48%	864	0.55%	Qld	Regional City
Mitchell	34,637	920	2.66%	795	2.30%	Vic.	Connected Lifestyle Area
Katherine	9,185	503	5.48%	524	5.70%	NT	Heartland Region
Wellington	41,441	495	1.19%	480	1.16%	Vic.	Industry & Service Hub
Palerang	14,351	447	3.11%	407	2.84%	NSW	Connected Lifestyle Area
Maitland	67,479	6	0.01%	398	0.59%	NSW	Regional City
Gold Coast	494,502	28	0.01%	336	0.07%	Qld	Regional City
Singleton	22,695	421	1.86%	321	1.41%	NSW	Industry & Service Hub
Greater Geelong	210,873	45	0.02%	290	0.14%	Vic.	Regional City
Lake Macquarie	189,005	7	0.00%	255	0.13%	NSW	Regional City
Greater Bendigo	100,617	176	0.17%	232	0.23%	Vic.	Regional City
Yass Valley	15,020	0	0.00%	215	1.43%	NSW	Connected Lifestyle Area
Wollongong	192,419	105	0.05%	214	0.11%	NSW	Regional City
Alice Springs	25,187	16	0.06%	211	0.84%	NT	Industry & Service Hub
Ordered by PUR as a proportion of population							
LGA	Population	No. of Defence employees (POW)	POW % of population	No. of Defence employees (PUR)	PUR % of population	State	Regional type
Katherine	9,185	503	5.48%	524	5.70%	NT	Heartland Region
Palmerston	27,705	34	0.12%	1,438	5.19%	NT	Regional City
Litchfield	18,994	2,710	14.27%	918	4.83%	NT	Regional City
Queanbeyan	37,994	69	0.18%	1,627	4.28%	NSW	Connected Lifestyle Area
Wodonga	35,518	1,425	4.01%	1,161	3.27%	Vic.	Regional City
Palerang	14,351	447	3.11%	407	2.84%	NSW	Connected Lifestyle Area
Darwin	72,929	1,183	1.62%	2,049	2.81%	NT	Regional City
Townsville	174,460	3,887	2.23%	4,329	2.48%	Qld	Regional City
Wagga Wagga	59,459	1,734	2.92%	1,457	2.45%	NSW	Regional City
Port Stephens	64,808	2,942	4.54%	1,581	2.44%	NSW	Regional City
Mitchell	34,637	920	2.66%	795	2.30%	Vic.	Connected Lifestyle Area
Shoalhaven	92,812	1,447	1.56%	1,583	1.71%	NSW	Regional City
Queenscliffe	2,998	142	4.74%	44	1.47%	Vic.	Connected Lifestyle Area
Yass Valley	15,020	0	0.00%	215	1.43%	NSW	Connected Lifestyle Area
Singleton	22,695	421	1.86%	321	1.41%	NSW	Industry & Service Hub
Wellington	41,441	495	1.19%	480	1.16%	Vic.	Industry & Service Hub
Light	13,783	0	0.00%	142	1.03%	SA	Connected Lifestyle Area
Gawler	20,537	0	0.00%	199	0.97%	SA	Connected Lifestyle Area
Exmouth	2,393	81	3.38%	23	0.96%	WA	Heartland Region
Cooma-Monaro	9,773	57	0.58%	91	0.93%	NSW	Heartland Region
Alice Springs	25,187	16	0.06%	211	0.84%	NT	Industry & Service Hub
Wagait	370	0	0.00%	3	0.81%	NT	Heartland Region
Newcastle	148,534	132	0.09%	1,003	0.68%	NSW	Regional City
Lockhart	2,996	0	0.00%	19	0.63%	NSW	Heartland Region
Toowoomba	151,189	905	0.60%	949	0.63%	Qld	Regional City

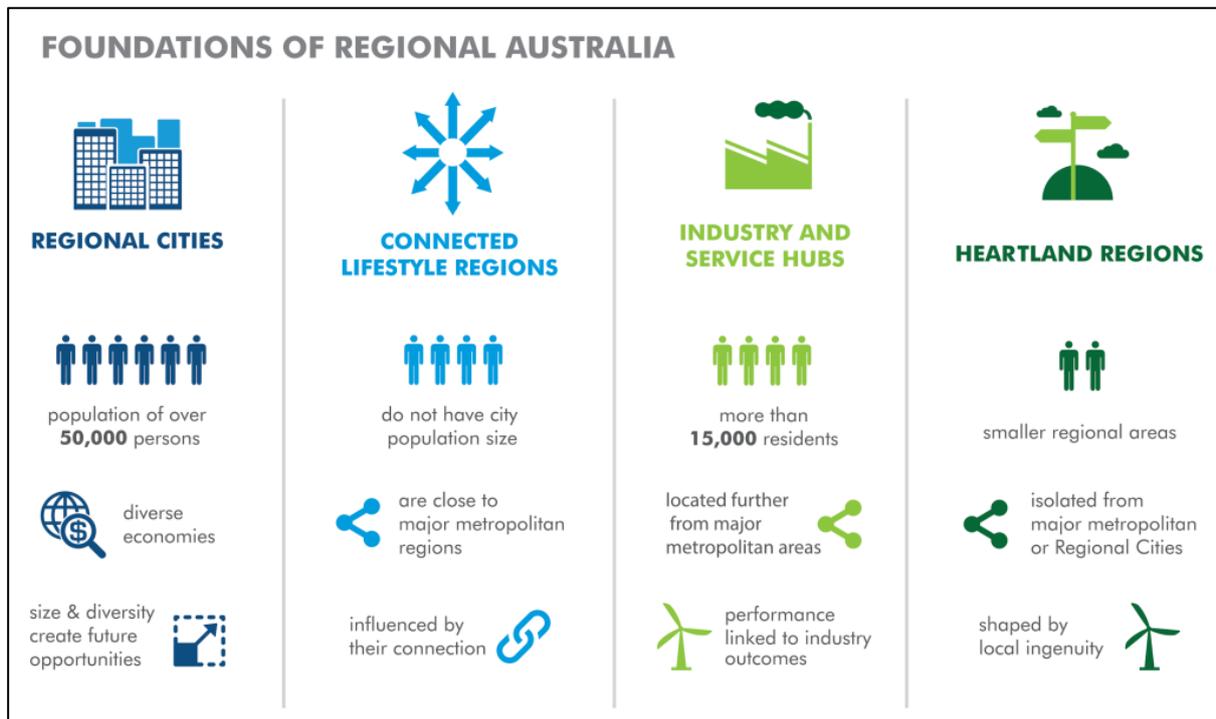
Source: 2011 Census of Population and Housing

Appendix D. Top 25 regional LGAs with greatest disparity in POW and PUR

Ordered by POW less PUR (worker importing regions)						
LGA	Population	No. of Defence employees (POW)	No. of Defence employees (PUR)	POW less PUR	State	Regional type
Litchfield	18,994	2,710	918	1,792	NT	Regional City
Port Stephens	64,808	2,942	1,581	1,361	NSW	Regional City
Wagga Wagga	59,459	1,734	1,457	277	NSW	Regional City
Wodonga	35,518	1,425	1,161	264	Vic.	Regional City
MacDonnell	5,832	180	3	177	NT	Heartland Region
Scenic Rim	36,457	294	127	167	Qld	Connected Lifestyle Area
Mitchell	34,637	920	795	125	Vic	Connected Lifestyle Area
Singleton	22,695	421	321	100	NSW	Industry & Service Hub
Queenscliffe	2,998	142	44	98	Vic.	Connected Lifestyle Area
Rockhampton	109,337	147	66	81	Qld	Regional City
Hobart	48,706	124	60	64	Tas.	Regional City
Exmouth	2,393	81	23	58	WA	Heartland Region
Palerang	14,351	447	407	40	NSW	Connected Lifestyle Area
Wakefield	6,660	54	31	23	SA	Connected Lifestyle Area
Glenorchy	44,655	73	53	20	Tas.	Regional City
Wellington	41,441	495	480	15	Vic.	Industry & Service Hub
Laverton	1,226	7	0	7	WA	Heartland Region
Longreach	4,187	7	0	7	Qld	Heartland Region
Lithgow	20,162	14	8	6	NSW	Connected Lifestyle Area
Barcoo	352	6	0	6	Qld	Heartland Region
Dorset	6,828	19	14	5	Tas.	Heartland Region
Victoria-Daly	5,922	8	3	5	NT	Heartland Region
Torres	3,259	10	7	3	Qld	Heartland Region
Lismore	42,764	30	27	3	NSW	Regional City
Isaac	22,587	3	0	3	Qld	Heartland Region
Ordered by PUR less POW (worker exporting regions)						
LGA	Population	No. of Defence employees (POW)	No. of Defence employees (PUR)	PUR less POW	State	Regional type
Queanbeyan	37,994	69	1,627	1,558	NSW	Connected Lifestyle Area
Palmerston	27,705	34	1,438	1,404	NT	Regional City
Newcastle	148,534	132	1,003	871	NSW	Regional City
Darwin	72,929	1,183	2,049	866	NT	Regional City
Townsville	174,460	3,887	4,329	442	Qld	Regional City
Maitland	67,479	6	398	392	NSW	Regional City
Gold Coast	494,502	28	336	308	Qld	Regional City
Lake Macquarie	189,005	7	255	248	NSW	Regional City
Greater Geelong	210,873	45	290	245	Vic.	Regional City
Yass Valley	15,020	0	215	215	NSW	Connected Lifestyle Area
Gawler	20,537	0	199	199	SA	Connected Lifestyle Area
Alice Springs	25,187	16	211	195	NT	Industry & Service Hub
Albury	47,808	14	175	161	NSW	Regional City
Light	13,783	0	142	142	SA	Connected Lifestyle Area
Gosford	162,439	6	143	137	NSW	Regional City
Shoalhaven	92,812	1,447	1,583	136	NSW	Regional City
Sunshine Coast	306,909	23	154	131	Qld	Regional City
Cairns	156,170	750	864	114	Qld	Regional City
Wollongong	192,419	105	214	109	NSW	Regional City
Kiama	19,985	0	95	95	NSW	Connected Lifestyle Area
Wyong	149,745	4	99	95	NSW	Regional City
Shellharbour	63,604	3	90	87	NSW	Regional City
Barossa	22,167	0	79	79	SA	Connected Lifestyle Area
Lockyer Valley	34,956	0	73	73	Qld	Connected Lifestyle Area
Mandurah	69,903	24	90	66	WA	Regional City

Source: 2011 Census of Population and Housing

Appendix E. Different regional types explained



Endnotes

- ¹ Australian Defence Business Review (2016). *Centre for Defence Industry Capability opens in Adelaide*. Available at: <http://adbr.com.au/centre-for-defence-industry-capability-opens-in-adelaide/>
- ² KPMG (2016). *Defence and Industry relationship fundamentally redesigned*. Available at: <https://home.kpmg.com/au/en/home/media/press-releases/2016/02/defence-industry-relationship-redesigned.html>
- ³ Department of Industry, Innovation and Science (2017). *Advice and Grants*. Available at: <https://www.business.gov.au/centre-for-defence-industry-capability/advice-and-grants>
- ⁴ Department of Defence (2016). *Chapter 8 - Asset management, purchasing and capital investment*. Available at: <http://www.defence.gov.au/annualreports/15-16/Chapters/chapter-8.asp>
- ⁵ Department of Finance (2016). *Statistics on Australian Government Procurement Contracts*. Available at: <https://www.finance.gov.au/procurement/statistics-on-commonwealth-purchasing-contracts/>
- ⁶ Department of the Prime Minister and Cabinet (2017). *Indigenous Procurement Policy (IPP)*. Available at: <http://www.dpmc.gov.au/indigenous-affairs/economic-development/indigenous-procurement-policy-ipp>
- ⁷ Department of Defence (2016). *Chapter 8 - Asset management, purchasing and capital investment*. Available at: <http://www.defence.gov.au/annualreports/15-16/Chapters/chapter-8.asp>
- ⁸ Haslam McKenzie, F.M. and Hoath, A. (2014). The socio-economic impact of mine industry community labour force on source communities, *Resources Policy*, p.47.
- ⁹ *Ibid.*, p.50.
- ¹⁰ Department of Defence (2016). *Cultana Training Area Expansion Project*. Available at: <http://www.defence.gov.au/id/cultana/faqs.asp#3>
- ¹¹ Regional Development Australia – Far North (2016). *Port Augusta Economic Growth and Investment Strategy*, p.39. Available at: http://www.rdafn.com.au/literature_215972/Port_Augusta_EGIS
- ¹² Shields, W. (2016) Defence White Paper: NT economy set for massive boost on the back of spending to match Asia's growing military presence, *ABC News*. Available at: <http://www.abc.net.au/news/2016-02-25/nt-economy-set-for-massive-boost-on-back-of-defence-spending/7199816>
- ¹³ *Ibid.*
- ¹⁴ Australian Industry Defence Network – Northern Territory submission – 2015 Defence White Paper, p3. Available at: <http://www.defence.gov.au/whitepaper/docs/194-AustralianIndustry&DefenceNetworkNT.pdf>
- ¹⁵ Gregory, K. (2016). RAAF Williamtown: Hundreds of NSW residents launch class action over groundwater contamination, *ABC News*. Available at: <http://www.abc.net.au/news/2016-11-03/hundreds-launch-class-action-over-williamtown-raaf-contamination/7991142>; Katherine Gregory (2017). Oakey residents given final clearance for class action against Department of Defence, *ABC News*. Available at: <http://www.abc.net.au/news/2017-03-17/oakey-class-action-set-to-commence/8365386>
- ¹⁶ McGowan, M. and Fellner, C. (2016). The foam and the fury in Williamtown over PFOS and PFOA RAAF base contamination, *Newcastle Herald*. Available at: <http://www.theherald.com.au/williamtown/>
- ¹⁷ Chang, C. (2016). The places in Australia where you can't drink the water, *News.com.au* Available at: <http://www.news.com.au/technology/environment/the-places-in-australia-where-you-cant-drink-the-water/news-story/e4eb54914663bc0dc49db3accf0980a7>
- ¹⁸ Welters, R. (2013). *The Australian Defence Organisation and Tropical Australia: Its Socio-Economic Impact in Cairns, Darwin and Townsville*. Cairns: James Cook University.
- ¹⁹ KPMG (2010). *Economic Report into the Major Defence Bases in the Northern Territory – Summary Report*. Available at <http://www.defence.gov.au/id/Master/docs/Economic/KPMGEcontechDefenceNTFinalReport.pdf>
- ²⁰ Official RAAF Base Tindal description available at: <https://www.airforce.gov.au/Bases/Northern-Territory/RAAF-Base-Tindal/?RAAF-hHBYVzFK6EsZl++TilTQwfB6YNnQZ/Lc>
- ²¹ Business Queensland (2016). *Investing in Queensland's defence industry*. Accessed 1 April 2017 from <https://www.business.qld.gov.au/industries/invest/defence-industry>
- ²² Official Lavarack Barracks description available at: <http://www.defence.gov.au/id/Master/docs/NCRP/QLD/0229LavarackBarracksQLD.pdf>
- ²³ Townsville City Submission - 2015 Defence White Paper, p.2. Available at: <http://www.defence.gov.au/whitepaper/docs/245-CityOfTownsville.pdf>

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- ²⁴ Ryder, T. (2010). Military presence makes investment sense, *The Australian*. Available at: <http://www.theaustralian.com.au/archive/business-old/military-presence-makes-investment-sense/news-story/f94f59d9b277a8ca08bc7d3b904ae899>
- ²⁵ Centre of Policy Studies (2003). *Defence Estate Project: Regional Economic Costs and Benefits of Selected Australian Defence Force Bases*. Clayton: Monash University, p.11.
- ²⁶ Government of South Australia (2015). *South Australia's Defence Strategy 2025*, Defence SA. Available at: http://www.defencesa.com/upload/brochures/Defence_Strategy_2025.pdf
- ²⁷ ACT Government (2017). *Defence Advocacy*, Defence ACT. Available at: <http://www.cmd.act.gov.au/defence/defence-advocacy2>
- ²⁸ Matthew Groom (2016). Tasmanian Government Media Release: *Getting our fair share of defence spending*. Available at: http://www.premier.tas.gov.au/releases/getting_our_fair_share_of_defence_spending
- ²⁹ Victorian Government (2016). *Defence Technologies Sector Strategy*. Available at: https://www.business.vic.gov.au/_data/assets/pdf_file/0008/1275479/9778-DEDJTR-IT-VFI-International-Defence-strategy-WEB.pdf
- ³⁰ NSW Government (2017). *New strategy to grow the defence industry across NSW*. Available at: <https://www.nsw.gov.au/news-and-events/news/new-strategy-to-grow-the-defence-industry-across-nsw/>
- ³¹ Giles, A. (2016). Northern Territory Government Media Release: *Defence Strategy highlights the Northern Territory's advantages*. Available at: <http://newsroom.nt.gov.au/mediaRelease/18430>
- ³² Northern Territory Government (2016). *Defence Strategy Northern Territory Beyond 2015: Expanding our role and capability in defence and national security*. Available at: https://nt.gov.au/_data/assets/pdf_file/0010/274519/defence-strategy-northern-territory-beyond-2015.pdf
- ³³ Queensland Government (2017). *Defence Industries Queensland*, Department of State Development. Available at: <https://www.statedevelopment.qld.gov.au/defence-industries-queensland/economic-development/defence-industries-queensland.html>
- ³⁴ Queensland Government (2015). *Land capabilities*, Department of State Development. Available at: <http://www.defenceindustries.qld.gov.au/defence-industries/land/capabilities.html>
- ³⁵ O'Connor, A. (2017). Shipbuilder says WA left short on Defence work after Government 'dropped the ball', ABC News. Available at: <http://www.abc.net.au/news/2017-02-24/wa-shipbuilders-defence-work-concerns/8302312>
- ³⁶ The West Australian (2016). *Western Defence: WA poised for military contracts*. *West Business Publications*. Available at: <http://civmec.com.au/wp-content/uploads/2016/11/Western-Defence-FEature-November-2016.pdf>
- ³⁷ Government of Western Australia (2016). *Media Statement: Facilitating a competitive WA defence supply sector*. Available at: <https://www.mediastatements.wa.gov.au/Pages/Barnett/2016/05/Facilitating-a-competitive-WA-defence-supply-sector.aspx>