WESTERN RESEARCH INSTITUTE LTD

SOCIO-ECONOMIC PROFILE AND OPPORTUNITIES

Blayney 2020 Masterplan

Prepared for Place Design Group

5th August 2015

Disclaimer

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15011 Blayney 2020 Masterplan/
Reports

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Acknowledgements

WRI would like to acknowledge the assistance of Blayney Shire Council and the interview participants for their contribution to this study.

Photo source: Carcoar National Trust Village, Australiantraveller.com

EXECUTIVE SUMMARY

Blayney Shire Council seeks to develop strategies to enhance the economic viability, growth and marketability of the Blayney Shire, including the re-vitalisation of the Blayney township CBD. The output from this will be a Masterplan (Blayney 2020 Masterplan) that identifies key initiatives to improve the overall liveability and competitive position of Blayney Shire.

Place Design Group was engaged to lead a consortium of expert consultants to undertake a study on behalf of Blayney Shire Council. The Western Research Institute (WRI) formed part of this consortium with the role of undertaking socio-economic profiling of the Blayney Local Government Area (Blayney LGA) and identifying and quantifying economic opportunities.

The Blayney Socio-economic Profile & Opportunities report provides a comprehensive profile of socio-economic characteristics of the Blayney LGA and identifies economic opportunities in four key industry sectors, including indicative modelling on the potential economic impact of these opportunities.

METHODOLOGY

WRI developed a methodology to identify and model a range of economic opportunities on the Blayney region, utilising the following research techniques:

- Review of relevant local and regional plans and strategies as well as any other relevant studies focussing on the Blayney / Central West region.
- Constructing a socio-economic profile for the Blayney LGA
- Identifying key industry sectors for the Blayney region
- Undertaking interviews with local businesses from key sectors
- Modelling economic opportunities identified through industry interviews

WRI analysed a range of relevant data to identify the importance of different industry sectors to the Blayney economy and to understand the key sectors driving the economy. A scoring methodology was applied to this data to identify key industry sectors within Blayney. This allowed WRI to target important industries for interviews and further analysis.

The key sectors/clusters identified for interviews, analysis and modelling in the Blayney economy include:

- Tourism
- Food & Beverage Manufacturing cluster
- Agriculture
- Manufacturing

Economic modelling was undertaken for opportunities in these sectors and has been reported as the sum of:

- Initial impacts: defined as the value of the immediate changes in the Blayney LGA economy.
- Flow-on impacts: defined as the value of changes in the regional economy in the course of an additional round of spending after the initial impact occurred.

OPPORTUNITIES

Tourism Opportunities

Blayney has a range of tourism businesses and sites, including historical buildings, function centres, accommodation, farmers markets and other public events. Interviews in this sector show a promising and growing industry that could flourish with assistance.

The following economic opportunities for the Blayney Tourism sector have been identified in industry interviews:

- Industry coordination to provide a better integrated tourism offering
- Growing event based tourism
- Marketing local tourism offerings

An opportunity was identified to establish an annual cricket tournament event, with the following estimated economic impact:

- $161,000 in additional output
- $57,000 in additional value added
- $32,000 in additional household income
- 1 additional FTE

Food & Beverage Manufacturing Cluster Opportunities

The Blayney region has a collection of businesses based on the manufacture, transport, storage and wholesale of food products, which make up a substantial part of the local economy. One opportunity was identified in industry interviews for the Food & Beverage Manufacturing Cluster:

- High-level food manufacture value adding

Whilst no specific data was provided on the potential economic impact of a high-level food manufacture value adding business, the economic impact of a proxy firm opening in Blayney illustrates the impact of increased employment in the sector. Scenarios of employing 10 and 19 new FTEs in the Food & Beverage Manufacturing sector have been modelled to provide a range estimate of impacts in the order of:

- $14.5 to $27.4 million in output
- $4.3 to $8.2 million in value added
- $2.4 to $4.6 million in household income
- 38 to 71 FTEs (in total, including initial and flow-ons)

EXECUTIVE SUMMARY

Agriculture Opportunities

The Blayney region has a strong agricultural component to its economy, including the production of beef, lamb, wool and lucerne. Livestock, including beef production, appears to play a predominant role within the Blayney Agricultural sector.

Opportunities for the Blayney Agriculture sector include:

- Favourable beef market conditions
- Increasing farm productivity
- Asian beef exports
- Marketing local beef
- Utilisation of technology

An opportunity was identified through industry interviews for the development of a vertically integrated beef cattle supply chain, encompassing and managing beef production, quarantine and transport to China. The economic impacts of this opportunity were estimated at:

- $24.0 million in additional output
- $6.2 million in additional value added
- $2.4 million in additional household income
- 73 additional FTEs (in total, including initial and flow-ons)

Manufacturing Opportunities

The manufacturing sector plays an important role in the Blayney economy. Operating in regional and interstate markets, Blayney manufacturers interviewed as part of this research reported strong operations and good market conditions.

Opportunities for the Blayney Manufacturing sector are as follows:

- Addressing skills shortages
- Increased automation of metal product fabrication and manufacturing processes
- Expansion of the range of products produced and the markets they are sold to.

An opportunity to develop and manufacture an automated pallet storage system was identified in the Manufacturing sector which would diversify the range of products being manufactured locally, and provide access into a different market. The potential economic impact of the operations supporting this new product was estimated at:

- $4.7 million in additional output
- $1.4 million in additional value added
- $0.9 million in additional household income
- 16 additional FTEs (in total, including initial and flow-ons)

RECOMMENDATIONS

WRI has identified a number of recommendations that would assist Blayney businesses to develop the opportunities highlighted in this report and strengthen Blayney's economy.

For a number of reasons, these recommendations principally relate to the Tourism and Agriculture sectors. Firstly, the Manufacturing sector and the Food & Beverage Manufacturing Cluster are reliant on external markets and are less dependent on local factors. With less dependence on the local economy, there is less capacity to assist these businesses at the local level. In contrast, the Tourism and Agriculture sector interviews highlighted a range of local issues.

Furthermore, industry interviews provided differing levels of detail on the potential opportunities and barriers facing each industry. Interviews in the Tourism and Agriculture sectors provided greater detail and insights than those obtained in interviews with the Manufacturing sector and the Food & Beverage Manufacturing Cluster.

Tourism

- Develop Blayney's main street to become an attractive dining and shopping precinct.
- Engage with tourism businesses to develop tourism plan for the region, including mapping local tourism services, understanding infrastructure needs and developing a list of actions needed to provide an engaging and attractive visitor experience in each town.
- Better coordinate Blayney region tourism offerings. This could involve reducing the number of organisational committees, facilitating better engagement between tourism businesses and understanding and communicating emerging trends/needs in the sector.
- Utilise Blayney 2020 vision and local identity ideas to further develop a Blayney tourism brand. This would allow local tourism businesses to leverage off this branding to better market their businesses.
- Facilitate local tourism businesses to undertake group marketing of their town/region. This will allow local businesses to profit from better coordinated tourism services and a well-crafted tourism 'experience'.
- Provide assistance for organisers of new events. This could include assisting with insurance coverage and other administrative issues such as applications and related paperwork. Knowledge and assistance to access relevant government tourism funding may also be useful.
- Run a 'get involved' program to attract people to be more involved in events and business coordination activities.

Agriculture

- Facilitate export and trade information for parties interested in developing export relationships. This could involve seminars and workshops from trade or professional bodies.
- Investigate beef production partnerships to supply large-scale export agreements.
- Utilise Blayney 2020 vision and identity ideas to form the basis of a local or regional brand. This would allow local producers to leverage off this branding to create demand for their products.
- Re-examine policies relating to the subdivision of agricultural land. Retaining more broad-scale farming businesses may assist declining farm productivity issues.
- Assist small agricultural producers to access information to improve pasture and livestock management and increase productivity.
- Better internet and communications infrastructure to support agricultural businesses. Whilst this issue was raised in an agricultural context, better communication services will assist all businesses.
- Engage with CTLX and stock transport companies to better understand road and transport issues, such as problem

routes, high mass vehicle and road train access issues.

Food & Beverage Manufacturing

- Facilitate export and trade information for parties interested in developing export relationships. This could involve seminars and workshops from trade or professional bodies.
- Noting the difficulties in developing greenfield industrial sites, potential Food & Beverage Manufacturing businesses may be attracted to the region by assistance measures, including tax or rate rebates, service fee reductions and/or development assistance.

Manufacturing

- Work with businesses to identify skills shortages and consider measures that could assist businesses to close these gaps.

INTRODUCTION

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The Blayney Socio-economc Profile & Opportunities report develops a comprehensive profile of socio-economic characteristics for the Blayney LGA and identifies economic opportunities in four key industry sectors, including indicative modelling on the potential economic impact of a number of these opportunities.

METHODOLOGY

WRI developed a methodology to identify and model a range of economic opportunities on the Blayney region, utilising the following research techniques:

- Review of relevant local and regional plans and strategies as well as any other relevant studies focussing on the Blayney / Central West region.
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- Modelling economic opportunities identified through industry interviews

Blayney socio-economic profile

WRI developed a comprehensive profile of socio-economic characteristics for the Blayney LGA. Further information on data sources is available in the Appendices.

Key industry sector selection

WRI analysed a range of relevant data to identify the importance of different industry sectors to the Blayney economy and to understand the key sectors driving the economy. A scoring methodology was applied to this data to identify key industry sectors within Blayney. This allowed WRI to target important industries for interviews and further analysis.

Industry sector scores were assigned based on the following analysis:

- Shift-Share analysis, which considers an industry's employment growth strength and identifies local competitive advantage;
- Location quotients, which considers an industry's employment density at the local level, compared to the density at the regional, state and national level;
- Economic contribution to the regional economy in terms of value added and full time employment;
- Multiplier effects and linkages to other sectors, which considers the relative impact of a sector and how these impacts are felt through the local economy;

- National productivity growth, which recognises industries that achieve good to moderate growth in multifactor productivity;
- Industry projections, based on Central West SA4 level employment projections provided by the Department of Employment;
- Diversification opportunities, which examines linkages to key contributing sectors in the regional economies or sectors that experienced strong growth;
- Local champions, which considered input from Blayney Shire Council to understand if an industry has a local proponent who is likely to provide meaningful support for the development of that industry.

Note: Further information on key industry selection methodology is available in the Appendices.

Once the short list of relevant industries had been developed, WRI workshopped this information with Councillors and officers of Blayney Shire Council to understand local insights into the relative strength and opportunities for these sectors.

This process resulted in the following sectors being highlighted as key sectors in the local economy:

- Hospitality
- Arts & Recreation
- Food & Beverage Manufacturing
- Transport & Storage
- Wholesale
- Agriculture
- Non-metallic Mineral Manufacturing
- Fabricated Metal manufacturing

To reflect the industry clusters in Blayney, these sectors are discussed in the report under four broad sector names. Table 1 provides information on the industry sectors contained under each title.

Table 1. Industry Sector Names

Sector Name	Industries Included
Tourism	Hospitality Arts & Recreation
Food & Beverage Manufacturing cluster	Food & Beverage Manufacturing Transport & Storage Wholesale
Agriculture	Agriculture
Manufacturing	Non-metallic Mineral Manufacturing Fabricated Metal Manufacturing

Industry interviews

Drawing on the identified sectors, a list of potential businesses was developed in conjunction with Blayney Shire Council, for interview. Twelve interviews were undertaken in total, comprising:

- Three interviews in the Agriculture sector
- Four interviews in the Food & Beverage Manufacturing cluster
- Three interviews in the Tourism sector
- Two interviews in the Manufacturing sector

Interviews with businesses in these sectors sought to understand current operations, examine viable business opportunities for the future and highlight any barriers to developing these opportunities.

Where opportunities were identified, businesses were asked if they were able to share estimates of the future potential impact of these opportunities. Estimates were requested in terms of potential Full Time Equivalent jobs (FTEs) and impact on revenues. Where sufficient data was provided, indicative modelling was undertaken to understand the potential future impacts of these operations.

All interviewees consented to be identified in the report and for the information and data they provided to be discussed and modelled.

Opportunity modelling

Utilising data gained from industry interviews, sectoral opportunities in the Blayney region were modelled using economic impact analysis. Economic impact analysis was conducted using 2013/14 Input-Output models of the Blayney LGA economy. Input-output analysis provides a detailed picture of the structure of a regional economy at a point in time and can be used to estimate the contribution or impact of a particular sector of the economy including initial and flow-on effects. Further information on input-output analysis techniques is contained in the Appendices.

Input-Output model

WRI used two alternative methods for economic impact analysis – final demand and industry significance analysis:

- The final demand impact analysis calculates the impacts (measured by output, value added, household income and employment) across all sectors in response to changes in industry final demands.
- Industry significance analysis models the changes in output, value added, household income and employment that would occur if the industry were removed from the local economy.

Economic impacts have been reported as the sum of:

- Initial impacts: defined as the value of the immediate changes in the Blayney LGA economy.
- Flow-on impacts: defined as the value of changes in the regional economy in the course of an additional round of spending after the initial impact occurred.

Relevant economic impacts have been reported in terms of:

- Output: the value of goods and services that are produced within an establishment that become available for use outside that establishment, plus any goods and services produced for the organisation's own final use. Output is equal to total revenue plus any internal consumption.

- Value added: the amount by which the value of an article is increased at each step of its production, exclusive of its initial cost.

  Value added is equal to gross output minus intermediate inputs and is equivalent to the contribution to gross regional product (GRP - the local equivalent of gross domestic product). That is, value added is the difference between the costs of production (excluding the compensation of employees, gross operating surplus, taxes and imports) and the value of sales turnover. Value added sums the value added components of production through the supply chain, while initial expenditure includes multiple counting of expenditure through the supply chain. Value added is the most reliable measure of the actual value of production. It is the equivalent measure used in the National Accounts to calculate Gross Domestic Product.

- Income: measuring the benefit received by regional households from economic activity. It typically refers to compensation of employees but can also include income in return for productive activity such as the gross mixed income of unincorporated enterprises, gross operating surplus on dwellings owned by persons, and property income receivable and transfers receivable such as social assistance benefits and non-life insurance claims.
- Full-time equivalent employment: a measure of the workload of an employed person in a given location that makes workloads comparable across different types of employment (part-time, full time and casual).

Photo source: Millthorpevillage.com.au

BLAYNEY SOCIO-ECONOMIC PROFILE

Population

- Population as at the 2011 Census was 6,985.

Gross Regional Product as at 2013/14

- The Gross Regional Product (GRP) of Blayney in 2013/14 was estimated at $369 million.

Key sectors in 2013/14:

- Other Mining (26% of value added and 21% of FTE employment)
- Agriculture (10% of value added and 25% of FTE employment)
- Food & Beverage Manufacturing (9% of value added and 10% of FTE employment)

Top earning occupations in 2011:

- Machinery Operators & Drivers ; and
- Professionals.

Unemployment:

- Unemployment rate of 5.3% (December 2014)
- Youth unemployment rate of 11.9% (2011 Census)
- Indigenous unemployment rate of 23.6% (2011 Census)

ECONOMY

The GRP for Blayney in 2013/14 was estimated at $369 million.

Key sectors in 2013/14

- Other Mining (26% of value added and 21% of FTE employment)
- Agriculture (10% of value added and 25% of FTE employment)
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Changes in sectoral employment between 2006 and 2011

The most significant changes were experienced:

- in Other Mining, where employment increased by 17 percentage points;
- in Agriculture, where employment decreased by 9 percentage points; and
- Food & Beverage Manufacturing, where employment decreased by 3 percentage points.

Based on an analysis of industries at the subdivision (2-digit industry) level, the top employment sectors in 2011 were:

- Metal Ore Mining (17% of employment);
- Agriculture (14%);
- Food Product Manufacturing (9%);
- Preschool & School Education (7%); and
- Construction Services (5%).

Key Shift Share results between 2006 and 2011

Based on an analysis of industries at the subdivision level, strong local factors for employment growth were experienced in the following key sectors:

- Metal Ore Mining
- Heavy & Civil Engineering Construction
- Administrative Services

Further detail about the Shift Share methodology applied can be found in the appendices.

Figure 1. Key contributors - sectors

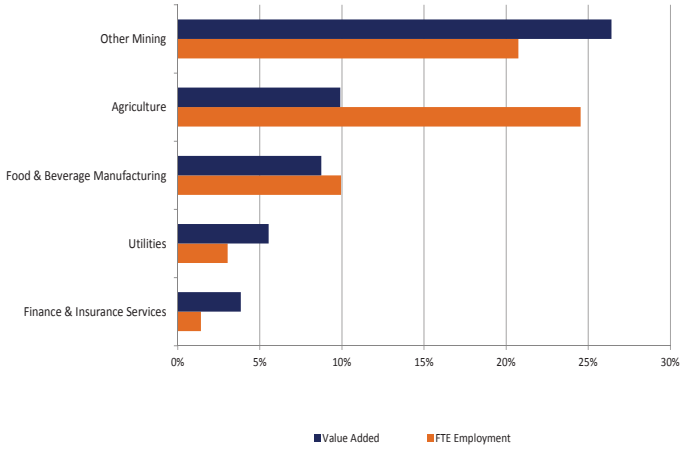


Figure 2. Changes in employment for top 5 sectors

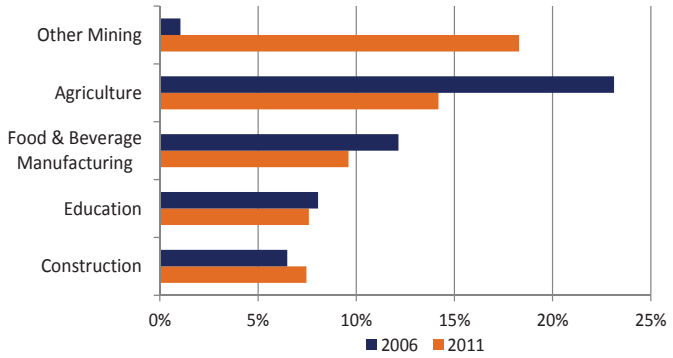


Table 2. Key shift share results

Industry	Growth
Type I – Outperforming in high growth industry	
Metal Ore Mining	2867%
Heavy & Civil Engineering Construction	475%
Administrative Services	136%
Residential Care Services	87%
Type IV – Outperforming in low growth industry	
Non-Metallic Mineral Product Manufacturing	92%
Repair & Maintenance	82%
Basic Material Wholesaling	77%
Type II – Underperforming in high growth industry	
Medical & Other Health Services	-29%
Food & Beverage Services	-13%
Type III - Underperforming in low growth industry	
Agriculture	-21%
Road Transport	-14%
Public Administration	-14%

Table 3. Average income by occupation

Occupation	2006	2011	% Change
Managers	$37,351	$51,305	37%
Professionals	$52,429	$68,895	31%
Technicians & Trades Workers	$40,486	$64,556	59%
Community & Personal Service Workers	$29,782	$34,627	16%
Clerical & Administrative Workers	$32,547	$44,535	37%
Sales Workers	$25,844	$29,818	15%
Machinery Operators & Drivers	$38,435	$69,887	82%
Labourers	$29,669	$41,147	39%

Table 4. Employment mapping

Occupation	Blayney LGA	Adjacent LGAs	Other LGAs
Machine & Stationary Plant Operators	69	144	14
Automotive & Engineering Trades Workers	63	93	6
Specialist Managers	47	69	0
Education Professionals	56	54	3
Engineering, ICT & Science Technicians	23	54	0
Factory Process Workers	35	49	5
Design, Engineering, Science & Transport Professionals	20	50	3
Road & Rail Drivers	44	43	8
Electrotechnology & Telecommunications Trades Workers	32	43	3
Construction & Mining Labourers	30	22	3

Average income by occupation

In 2011, the top earning occupations were Machinery Operators & Drivers and Professionals. The largest increases in incomes between 2006 and 2011 were reported for those working as:

- Machinery Operators & Drivers;
- Technicians & Trade Workers; and
- Labourers.

Employment mapping by occupation

Employment mapping was conducted to highlight local skills shortages, as evidenced by industries employing from 'Nearby' (with an adjacent border) and 'Other' (not directly adjacent to) LGAs. Table 3 ranks industries with the highest combined number of staff employed from 'Nearby' and 'Other' LGAs.

As at the 2011 Census, the most common occupations in Blayney where staff were sourced from 'Other' LGAs were:

- Machine & Stationary Plant Operators;
- Road & Rail Drivers; and
- Automotive & Engineering Trades Workers.

Count of businesses

ABS Count of Australian Businesses data, including Entries and Exits between June 2011 and June 2014 show that, during this period, there has been a net loss of 9 businesses. Significant changes in the count of businesses include:

- Wholesale Trade (Increase 58%, to 19 businesses);
- Health Care & Social Assistance (Increase 39%, to 18 businesses);
- Mining (Decline 25%, to 3 businesses); and
- Agriculture, Forestry & Fishing (Decline 3.5%, to 362 businesses).

LABOUR FORCE CHARACTERISTICS

Key employment data

Commonwealth Department of Employment Small Area Labour Market data for the December quarter 2014 reported:

- A labour force of 3,760 persons
- An unemployment rate of 5.3%

The unemployment trend since December 2010 is shown in Figure 3 opposite. The unemployment rate in Blayney has tracked lower than both the Central West region and the rest of NSW since late 2010. From March 2013 to March 2014 the unemployment rate has steadily increased for Blayney, however, since March 2014 the unemployment rate declined slightly.

At the 2011 census, Blayney reported

- A youth labour force of 464 persons, with the youth unemployment rate at 11.9%, which is slightly higher than that for the Central West region (11.5%).
- An Indigenous labour force of 55 persons, with the Indigenous unemployment rate at 23.6%, which is higher than that for the Central West region (17.3%).

Educational profile

School education

As at the 2011 Census, the highest year of school education completed amongst residents of Blayney was most commonly:

- Year 10 or equivalent (27%)
- Year 12 or equivalent (25%)

29 % not stated or not applicable

The level of completion at Year 10 level or equivalent is higher than that reported for the Central West region (26%) and for the Rest of NSW (26%).

Post school qualifications

As at the 2011 Census, the highest post school qualification completed was most commonly:

- Certificate III or IV (15%)
- Bachelor Degree (6%)
- The level of completion of Certificate III or IV is equivalent to that reported for the Central West region and for the Rest of NSW (15%).

Figure 3. Recent unemployment trend

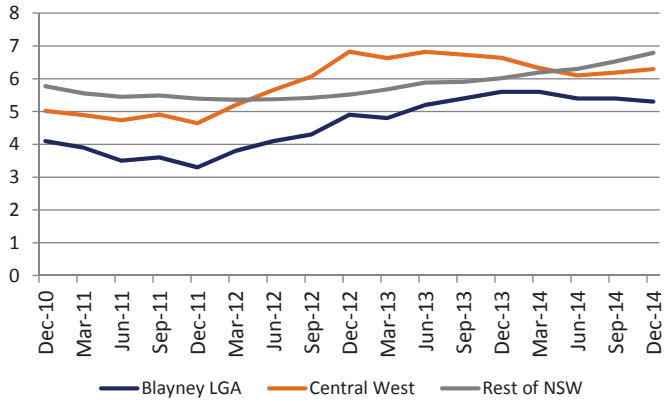


Figure 4. Highest year of school completed

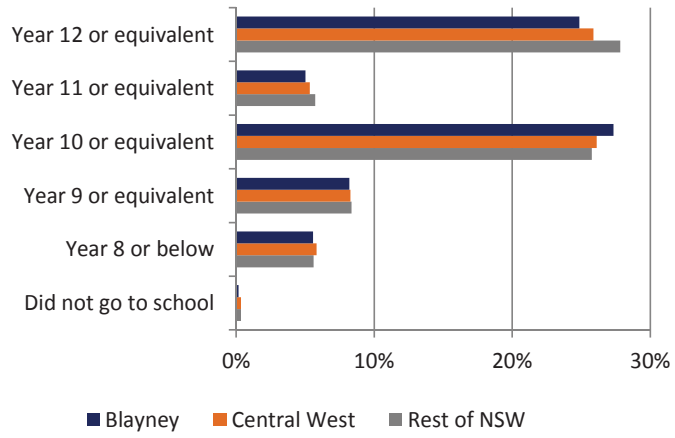


Figure 5. Post school qualifications

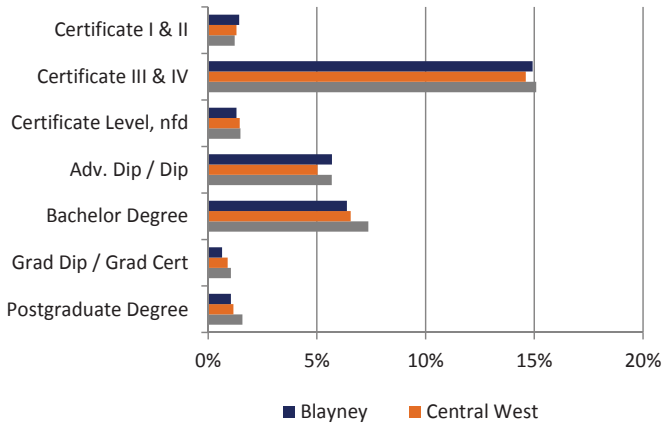


Table 5. Current study patterns (Census 2011)

	Blayney LGA	Central West	Rest of NSW
Attending University			
15-24 years	7.3%	10.8%	12.5%
25 years and over	1.9%	1.7%	2.0%
Attending other tertiary (TAFE)			
15-24 years	7.0%	8.9%	9.0%
25 years and over	1.9%	2.1%	2.0%

Results are as a proportion of the total population for the age bracket.

Figure 6. Age structure

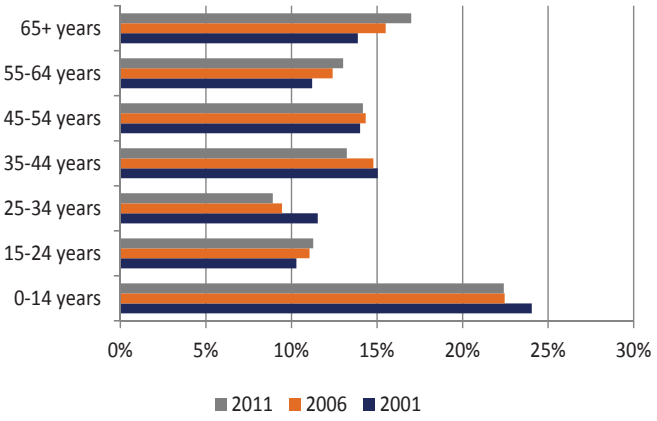


Table 6. Age dependency ratios (Census 2011)

	Blayney LGA	Central West	Rest of NSW
Child	0.37	0.34	0.31
Aged	0.28	0.27	0.29
Total	0.65	0.61	0.60

Note: The child dependency ratio is an indication of the number of children (aged under 15) in a region supported by the working age population (15-64 years).

The aged dependency ratio is an indication of the number of aged people (aged over 64 years) in a region supported by the working age population (15-64 years).

Growth in qualifications

Between 2006 and 2011, those holding:

- Postgraduate qualifications increased by 28% (to 73 people);
- Bachelor Degree qualifications increased by 27% (to 446 people);
- Advanced Diploma and Diploma qualifications increased by 26% (to 398 people); and
- Certificate level III and IV qualifications increased by 24% (to 1,042 people).

Current study patterns

- The rate of attendance at university in 2011 for 15-24 year olds (7.3%) was lower than that for the Central West region and for the Rest of NSW. However, the rate of attendance at university for 25 years and over (1.9%) was higher than that for the Central West region but slightly lower than the Rest of NSW.
- The rate for 15-24 year olds (7.0%) and those aged 25 years and over (1.9%) attending other tertiary institutes is lower than that for the Central West region and the Rest of NSW.

AGE AND POPULATION

The population as at 2011 Census was 6,985.

Age profile

- As at the 2011 Census, children aged 0-14 years (22%) comprised the largest proportion of the population (compared to 21% for the Central West region).
- The next largest age group was those aged 65 years and over (17% of the population, compared to 17% for the Central West region).
- Between 2001 and 2011 there was a 3 percentage point drop in those aged 25-34 years and a corresponding gain in the 65 years and over bracket.

Age dependency

- As at the 2011 Census, the Blayney Total Dependency Ratio (0.65) was higher than that for the Central West region (0.61) and the Rest of NSW (0.6).

Indigenous population

In 2011, Aboriginal and Torres Strait Islander people made up 2.9% of the population, compared to 2.4% of the population in 2006. This was lower than that of the Central West region (5.3% in 2011).

Population projections

- The population of Blayney is projected to increase by 7.6% between 2011 and 2031, while its working age population is projected to decrease by 2.3% in the same period.
- The share of working age population in the total population of the region is projected to fall from 61% to 55%.

HOUSEHOLD DATA

Personal income

- As at the 2011 Census, the median personal income in Blayney ($27,716) was higher than the median personal income in the Rest of NSW but lower than that for NSW.
- Between 2006 and 2011, median personal income in Blayney grew by 36%.

Household income

- As at the 2011 Census, the median household income in Blayney ($56,784) was lower than the median household income across NSW, but higher than that for the Rest of NSW.
- Between 2006 and 2011, median household income grew by 27%.

Figure 7. Population projections

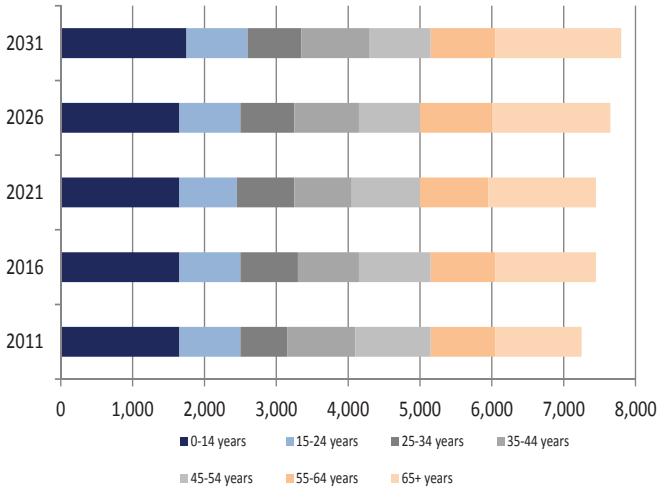


Figure 8. Personal income

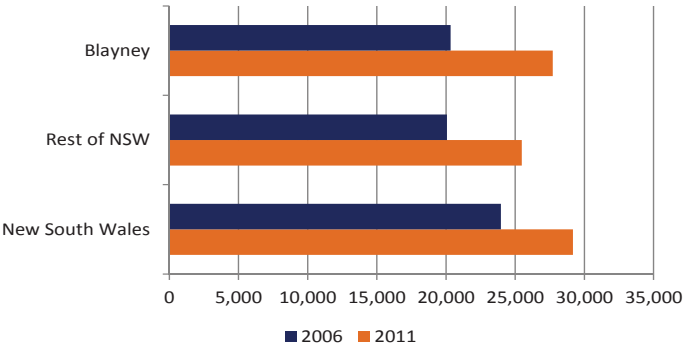


Figure 9. Household Income

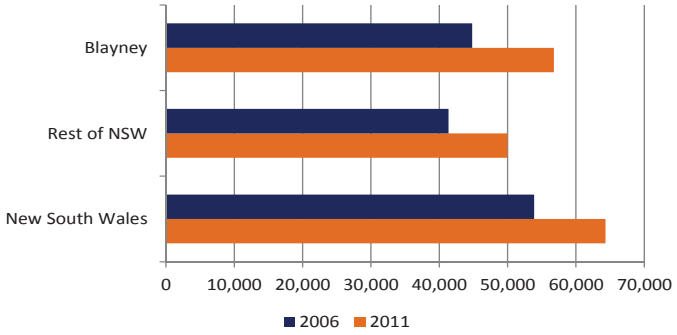


Figure 10. Median weekly rental as percentage of median household weekly taxable income

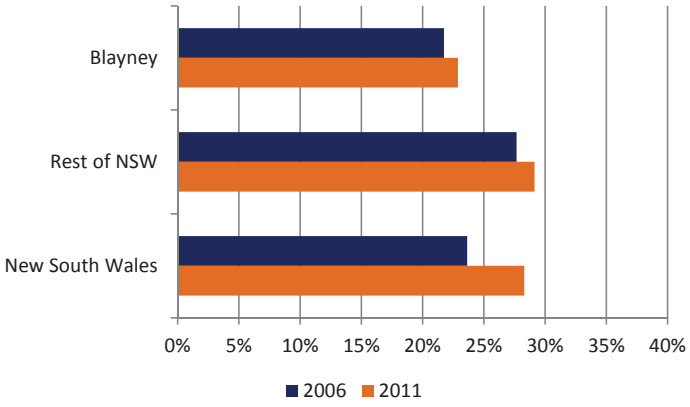


Figure 11. Ratio of median house price to median household taxable income

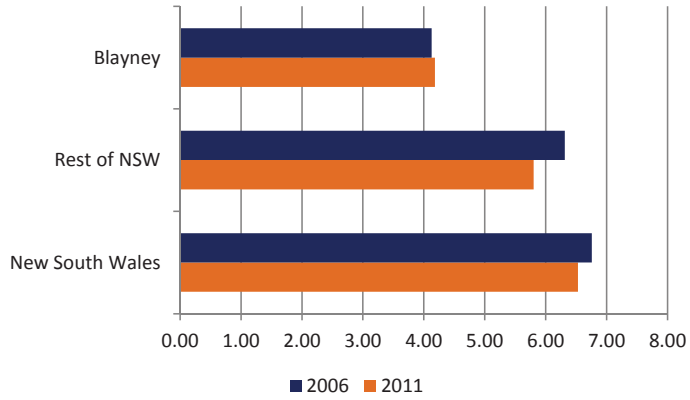
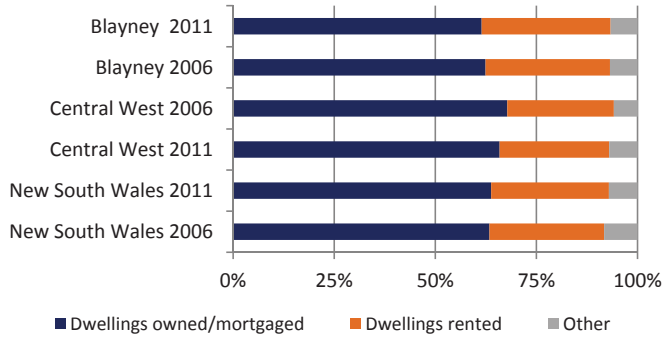


Figure 12. Home ownership vs. rental



HOUSING

Housing affordability

The affordability of housing was examined using a ratio of median house prices divided by median taxable income, and median weekly rents as a percentage of average weekly taxable income.

- Figure 10 highlights that in 2011, median weekly rents in Blayney were more affordable compared to the Rest of NSW and NSW. However, rental affordability has deteriorated since 2006.
- The affordability of home ownership in Blayney has remained relatively stable since 2006. Blayney remains more affordable than the Rest of NSW and NSW.

Home ownership vs. rental

- The proportion of owner-occupied dwellings in Blayney as at 2011 (72%) was higher than the Central West region (66%) and NSW (64%).
- The proportion of owner-occupied dwellings declined only marginally between 2006 and 2011 (74% to 72%).
- The proportion of rental dwellings was relatively stable between 2006 (22%) and 2011 (23%).

VALUE OF CONSTRUCTION

Table 6 shows that:

- The total value of construction has grown rapidly (144%) over the 2012-13 and 2013-14 period.
- Non-residential construction has risen by more than 100% over this period, whereas residential construction has grown 51%.
- Whilst non-residential construction has grown at a greater rate, the value of residential construction is substantially larger than for non-residential.

Table 7. Value of construction

	Residential $000	Non-residential $000	Total
2012-13	4,914	200	5,114
2013-14	7,413	5,063	12,476
% Change	50.9	2,431.7	144.0

CRIME STATISTICS

The top reported offences in Blayney in 2014 were:

- Malicious damage to property;
- Steal from motor vehicle; and
- Break & enter dwelling.

The top ten offences along with the percentage change in these offences between 2010 and 2014 are shown in Table 7 below. Crime rates are reported in terms of the rate per 100,000 head of population.

Table 8. Top 10 offence categories

	Blayney LGA			Central West			NSW		
	2010	2014	% Change	2010	2014	% Change	2010	2014	% Change
Malicious damage to property	980	709	-28%	1918	1433	-25%	1282	918	-28%
Steal from motor vehicle	336	409	22%	808	737	-9%	627	576	-8%
Break and enter dwelling	266	368	38%	745	797	7%	577	458	-21%
Assault - domestic violence related	182	355	95%	509	575	13%	366	392	7%
Breach Apprehended Violence Order	84	232	176%	260	292	13%	171	180	5%
Possession and/or use of cannabis	42	205	387%	253	333	32%	264	335	27%
Prohibited and regulated weapons offences	84	205	144%	157	256	63%	109	157	44%
Assault - non-domestic violence related	378	191	-49%	773	587	-24%	558	425	-24%
Steal from dwelling	336	191	-43%	475	499	5%	293	301	3%
Harassment, threatening behaviour and private nuisance	238	177	-25%	567	627	11%	407	398	-2%

Photo source: Visitnsw.com

OPPORTUNITIES & RECOMMENDATIONS

INDUSTRY SECTOR OPPORTUNITIES

WRI undertook 12 interviews with businesses operating in the Blayney region to understand the opportunities that they saw as being viable to grow their businesses in the future. More specifically, interviews sought to understand current operations, examine viable business opportunities for the future and highlight any barriers to developing these opportunities.

Where opportunities were identified, businesses were asked if they were able to share estimates of the future potential impact of these opportunities. Estimates were requested in terms of potential Full Time Equivalent jobs (FTEs) and impact on revenues. Where sufficient data was provided, indicative modelling was undertaken to understand the potential future impacts of these operations.

Tourism opportunities

Blayney has a range of tourism businesses and sites, including historical buildings, function centres, accommodation, farmers markets and other public events. Interviews in this sector show a promising and growing industry that could flourish with assistance.

Three interviews were undertaken with Blayney region businesses in the Tourism sector:

- Andrew Baulsch – Founder and Director of the Carcoar Running Festival;
- Phil Cramm – Owner/manager of the Stoke House B&B; and
- David Somervaille – Co-owner of Athol Gardens

Industry coordination

A strong theme coming from interviews in the Tourism sector was that Blayney region tourism offerings were highly interconnected. This interdependence comes from visitor demand for an 'experience', rather than simply attending an event, or accessing a bed.

Interviewees illustrated the interdependence of tourism offerings and with the local economy:

- It was advised that events, functions and tourism offerings were crucial to attracting external visitors.
- Accommodation providers relied on these offerings being held in the region and an attractive hospitality scene to cater for people staying in local accommodation.
- Event holders advised that without attractive food and accommodation services, people who attend events will often pack up and leave at the close of an event, rather than stay longer and patronise local businesses.
- Café/restaurant owners advised that they look to regular events and tourism attractions to attract customers to their venues.
- Function and event organisers have links with other local businesses that they promote, such as florists, hairdressers, caterers and celebrants.
- It was also identified that these businesses often relied on and shared the same staff, with certain individuals identified as working across a number of businesses.

Whilst it appears that Blayney has had success in organising events and functions that attract visitors to the region, interviews suggested that many organisations are acting independently in the region, to the detriment of the industry. It was identified that a lack of coordination between various tourism providers can impact on the quality of a visitor's stay, the length of their stay and the extent that they purchase goods and services in the local economy.

For example, interviews highlighted a need for greater consistency of opening hours for food outlets and tourism sites in the region. It was reported that visitors have complained about these services being closed and that many visitors have simply left as a result. It must be assumed that these and other businesses have lost sales due to being closed.

Interviewees noted that better organisation between these business could be achieved through formal and informal linkages. One interviewee cited the Millthorpe village association as an effective model for businesses to assist local development and coordination, which could be replicated in other towns, such as Carcoar. Interestingly, Carcoar was noted in a number of interviews as having yet-to-be-unlocked tourism potential, and that the town could use assistance to organise and coordinate a better tourism offering.

Another suggestion was for local tourism businesses to attend a 'tradies breakfast' to discuss issues and barriers to developing tourism trade. It was also highlighted that Council had played an important role in the facilitation of the Blayney Farmers Markets, but successfully left the organisers to manage the event.

Growing events

Various organisers in the Blayney region currently run a number of successful events, which draw large numbers of visitors and add substantially to the local economy. Blayney region events include the Carcoar Running Festival, the Blayney Farmers Markets and the Bathurst to Blayney cycling event. Tourism operators in the region see event based tourism as a big opportunity to attract more visitors to the region.

Cricket event

An interview with the Carcoar Running Festival Director, Andrew Baulsch, highlighted interest in developing another sport based event in the form of a 2020 cricket tournament, with potential for attendance by celebrity cricket players and coaching sessions. Indicative estimates suggest that between participants and attendees, up to 1,000 people could attend the tournament. Based on Mr Baulsch's experience in running current events, up to 75 percent of these attendees could be from outside the region.

Modelling undertaken for this opportunity estimates the impact of expenditures made by visitors to the Blayney region, using Tourism Research Australia visitor data on average tourist expenditures. Based on the assumption of 750 new visitors that could be attracted from outside the region, indicative impacts of the increased visitation on Blayney's economy are estimated at an additional:

- $161,000 in output
- $57,000 in value added
- $32,000 in household income
- 1 FTE (in total, including initial and flow-ons)

Note: the modelling performed does not account for any operational expenditure. It is based purely on visitor expenditures. Further information on input-output analysis techniques are contained in the Appendices.

As modelling results suggest, individual events can have a considerable impact on local tourism expenditure. If Blayney was to develop a suite of events throughout the year, it could provide significant economic benefits for the region and assist other tourism businesses. Furthermore, if events were scheduled in colder months, it could help counter the seasonal nature of tourism.

OPPORTUNITIES & RECOMMENDATIONS

Marketing

All tourism interviews mentioned the importance of marketing to the success of the local tourism industry. The simple message coming from these interviews was that successful events and tourism offerings need appropriate marketing, which suggests that an emphasis on marketing provides an opportunity to grow visitors to the region.

It was suggested that local tourism businesses should share advertising to promote local towns/region. However, some businesses were hesitant about doing this, seeing other local businesses as competitors. One interviewee argued that neighbouring businesses were not in competition, rather towns and regions were in competition with each other. Therefore, it was in the best interest of local businesses to work and advertise together to attract more visitors.

One interviewee discussed advertising they had undertaken in specific markets. This operator had experienced success by targeting advertising into the Australian Capital Territory, Sydney and the Blue Mountains, with a number of function bookings coming from these advertisements. This may provide an insight into market opportunities for future tourism advertising, or at least suggest that targeting advertising in specific regions may produce greater results than other regions.

Finally, marketing was discussed across a number of different media. Operators highlighted the growing importance of social media, including Facebook and Google Plus, but also mentioned recent advertising campaigns in print and television media. One operator indicated that word of mouth was still an important factor for their business. A further, specific suggestion was put forward that enhanced local signage would also assist local tourism businesses, particularly in and around Carcoar.

Issues

A number of issues were highlighted that are impacting on specific aspects of the Blayney region tourism industry:

- The development of wineries and olive oil producers in the region are a positive for the local tourism industry.
- Whilst growing events was highlighted as a positive step towards growing the local tourism industry, it was noted that the amount of paperwork and groundwork to get an event up and running was difficult.
- The cost of insuring events was found to be very high, particularly for new events. It was suggested that if Council could assist with some form of general events insurance coverage, this could support the organisation of new events.
- The development of the Blayney main street into an attractive destination for dining and shopping is impacted by the level of heavy traffic passing through. One view was that this kind of development cannot happen whilst heavy traffic is accessing the main street.
- The single ATM service in Carcoar is unavailable outside of office hours. Limited ATM access impacts on the ability of visitors to obtain cash to spend on local goods and services.
- The Blayney food and wine scene is developing in small towns, but Blayney is being left behind and has only one café.

Food & Beverage Manufacturing cluster opportunities

The Blayney region has a collection of businesses based on the manufacture, transport, storage and wholesale of food products, which make up a substantial part of the local economy. There are also current proposals before Council for the development of a goat abattoir that would add to the productive capacity of this sector.

Interviews were undertaken with four businesses that span this collection of industries:

- George Tanos – Owner/Director of Sealink and other associated businesses
- Karl Nealon – Factory Manager at Nestle Purina Blayney
- Rob Perkins – Owner/Director at Robanco
- Darell Nixon – Director at Nixon's Transport

High-level food manufacture value adding

The principle opportunity highlighted for this sector was for the development of high-level value adding in the food manufacturing sector. High-level value adding refers to the complicated transformation of food products, including activities such as cooking, flavouring, packaging and branding of basic food products. An example of this already being undertaken in the region is the packaged wet pet food produced in the local Nestle Purina plant.

Noting that low-level value adding is already commonplace, it was suggested that high-level value adding was seen as viable, given the strategic location of Blayney; close to raw inputs, markets, transportation and infrastructure. This strategic location is enhanced by the local network effect of related manufacturing, logistics, storage and wholesale businesses already operating in the region. These businesses could potentially provide local operating synergies relating to skills, goods and services.

One interviewee suggested that value added beef products is an obvious opportunity, utilising techniques such as par-cooking, prepared meals and long-life packaging. It was also suggested that local grains could be value added. An example of one Australian company successfully producing value added pork products is BE Campbell, a Sydney based meat wholesaler, with operations in regional NSW.

A further suggestion was that local food product manufacturing businesses should focus on export markets. It was expected that domestic markets will grow, but the best growth prospects will come from international markets. Australian or local branding was viewed by some interviewees as an important and positive factor in export sales.

Two more important but unrelated observations were made in interviews, which provide relevant feedback on the prospective growth of the food manufacturing sector. Firstly, it was suggested by one interviewee that, given the complexity of establishing large operations, niche manufacturers were much more likely to develop in the region. The second observation was that growth in the transport sector in the Blayney region was dependant on growth in the food manufacturing sector. On this basis, targeted assistance to niche food manufacturers could likely have wider economic impacts for the region.

High-level food manufacture value adding

Whilst high-level food manufacture value adding was highlighted in interviews as being an opportunity for the Blayney region, no data was provided on specific opportunities. However, the potential impact of introducing such an operation can be modelled in the Blayney economy.

ABS data highlights that the majority of food manufacturing businesses in New South Wales employ between 1 and 19 employees[1]. Modelling the impact of two employment scenarios (10 and 19 FTEs) illustrates the impact of a small and midsize food manufacturing business.

Modelled on the Blayney LGA economy, the impact of employing 10 and 19 new FTEs in the Food & Beverage Manufacturing sector are estimated at an additional:

- $14.5 to $27.4 million in output
- $4.3 to $8.2 million in value added
- $2.4 to $4.6 million in household income
- 38 to 71 FTEs (in total, including initial and flow-ons)

Note: Modelling is indicative only and is based purely on an expansion in FTEs.

1 Australian Bureau of Statistics, Release No. 8165.0, Counts of Australian Businesses, including Entries and Exits. Accessed 22 June 2015

Agriculture opportunities

The Blayney region has a strong agricultural component to its economy, including the production of beef, lamb, wool and lucerne. Livestock, including beef production, appears to play a predominant role within the Blayney Agricultural sector.

Interviews undertaken in this sector were focussed on businesses involved in breeding beef cattle and livestock sales. Interviews were conducted with:

- George King – Managing Director of Whitney Pastoral Company
- Ross Wills – Partner in RI & TI Wills
- Nathan Morris – Operations Manager at Central Tablelands Livestock Exchange (CTLX)

Favourable beef market conditions

Interview feedback suggested that for the first time in 60 years, the demand for beef has exceeded supply. This was attributed to the rise of demand for beef and other red meats from Asian nations. The view was put forward that strong demand for red meats is expected into the future.

Given the current strength of the beef market, Blayney's beef production industry places the region in a favourable position. Feedback found that Blayney offered good local conditions for beef cattle production, including regular rainfall and good soils. This suggests that increasing local beef production provides a realistic and achievable opportunity for the Blayney region.

Increasing productivity

One interviewee raised an interesting point that applies to the future beef production capacity of the region. A trend was identified of farms being subdivided into smaller lots, often bought by hobby farmers and absentee owners, with much fewer owners deriving all of their income from farm operations. This trend was accompanied by a reduced level of pasture and livestock management knowledge in the farming industry, flowing through into less productive operations. As a result, it was felt that the productive capacity of the land was much greater than currently being utilised. An anecdote was provided by an interviewee who had taken over the management of an absentee neighbour's property and beef production operation in a partnership arrangement. With a professional knowledge of pasture management and beef cattle production applied to these operations, the profit derived from this property was quadrupled.

If better pasture and stock management principles were applied to a greater number of currently underutilised properties, there is significant potential to increase agricultural productivity, leading to increased revenue flowing into the Blayney region.

Asian beef exports

Interviews with beef cattle producers highlighted a significant interest in developing an export trade relationship with China and other Asian countries. It was noted that developing these relationships and properly executing export plans were potentially lucrative, but quite difficult to successfully manage.

In addition, it was suggested that the standard for beef cattle sales (trucking cattle to sale yards) was not the only or best way of selling cattle for beef producers. This method was seen to be too exposed to the vagaries of local markets (which do not guarantee a reasonable economic return) and was too exposed to the pressures put on the market by major local beef processors.

Rather, developing direct export relationships with China was seen as a way to scale production and sell into a developing market with potentially huge demand for Australian beef. It appears that there are different models under which this export could be developed. For example, one interviewee talked of developing a live cattle trade, whereas another interviewee was focussed on the development of a contract price model (rather than market price).

Both beef producers, however, discussed the difficulty in implementing these strategies, indicating that most producers were not practiced or well equipped to develop trade relationships. Indeed, most beef producers were seen as not understanding trade issues, such as developing export markets or free trade agreements. A further difficulty was identified in establishing and building relationships with suitably qualified trade partners. One interviewee mentioned that previous attempts at this had been unsuccessful.

A final and further issue identified in developing Asian markets for Australian beef was the issue of managing supply once a trade relationship had been established. With the potential market in China and other Asian nations so large, managing a consistent supply of beef to fulfil contracts was seen as potentially problematic. Many local beef producers work on a very small scale relative to the potential markets represented in China and other Asian markets. Developing trade relationships in these countries may pose a risk in that local producers may not always be able to supply sufficient quantities to fulfil large contracts. Given the vagaries of Australian weather and conditions, there may be times when the supply of cattle could vary significantly. One interviewee suggested that failing to supply agreed amounts of beef could potentially damage trade relationships.

Beef cattle exports to china

Export of live beef cattle to China was identified a significant opportunity.

This opportunity related to a potential annual 60,000 live cattle export operation, as part of a vertical supply chain encompassing and managing beef production, quarantine and transport to China. This operation would supply to a joint venture partner in China who would manage the butchering, distribution and marketing operations in China. It was estimated that, should the opportunity be recognised, significant economic impacts would flow from the trade, including up to 30 full time equivalent jobs (FTE).

Modelled on the Blayney LGA economy, the impact of the 30 FTEs employed in cattle operations are estimated at an additional:

- $24.0 million in output
- $6.2 million in value added
- $2.4 million in household income
- 73 FTEs (in total, including initial and flow-ons)

Note: Modelling is indicative only and is based purely on an expansion in FTEs. No further operational data was supplied for modelling.

Marketing

The view was put forward that Australia is a high cost beef producer and is unable to compete in the international market on price. However, Australian beef and other produce has an international reputation as clean, green and premium. This reputation was seen as the critical marketing point of difference for Australian producers. One interviewee went so far as to suggest that all export sales hang on the marketing of this differentiation.

There appears to be a strong backing for taking advantage of Australia's reputation for clean, green and quality produce, to develop branding for Australian beef products at local, regional or national levels. That is to say, to develop brands based on local, regional or national identities. For instance, one interviewee discussed the development of 'cool climate beef', similar to branding techniques used for Australian wines.

Building a local 'Blayney' brand, or a brand based on a regional identity, could potentially add to the future economic opportunities for Blayney based beef cattle producers.

Utilisation of technology

The use of technology was seen to be beneficial in a number of ways, suggesting that increased infrastructure and greater use of technology provide an opportunity for the Agricultural sector. The quality and speed of internet connections for businesses was mentioned as being very poor. Poor internet connectivity is impacting business' ability to access services and markets, and undertake many activities businesses in metropolitan areas take for granted.

With better internet connectivity, agricultural businesses will be able to engage more technology to assist business operations and reach wider markets. For example, many livestock sale yard operations and associated activities are currently undertaken on paper based and manual systems. With better internet services, many of these systems could be automated or streamlined, and markets could be enhanced through better and quicker information, such as live streamed footage of animals, paperless transfer systems, electronic ear tags, automated gates and other animal management aides. It has been suggested that these systems could increase both operational efficiencies and potentially the volume of animals sold by 10 percent, respectively.

A further issue was identified in the uptake of technology in the Agricultural sector, that finding appropriately skilled agricultural workers who understood technology could be problematic. Noting that finding staff with good animal handling skills was sometimes difficult, finding such staff that could also successfully integrate technology into these operations was considerably more difficult.

Issues

A number of transport issues were raised:

- Good quality road networks were noted as important for efficient animal transport operations. This could include road train access to the CTLX site.
- The road between Blayney and Crookwell was highlighted as a particularly difficult road to move stock over. Many other local roads could be upgraded to assist efficient stock movements.
- The red tape for one interviewee to gain road access to his property was cited as being overly difficult and bureaucratic.

Financial issues were also mentioned as an issue for the sector. It was felt that finance was difficult to secure for agricultural businesses without a long history with a bank. A corollary to this was that farm debts built up over recent difficult years for farmers is hampering the whole industry and preventing expansion.

Manufacturing opportunities

The manufacturing sector plays an important role in the Blayney economy. Operating in regional and interstate markets, Blayney manufacturers interviewed as part of this research reported strong operations and good market conditions. In both cases it was advised that current work and opportunities were more than they were capable of undertaking. Industry interviews were undertaken with:

- Ian Reeks – Director of ICR Engineering
- Max Osborne – Owner/Director of Midwest Concrete

Where possible, this report has not identified individual interviewee comments and observations. Given that only two interviews were undertaken in the Manufacturing sector, and considering that the issues and opportunities highlighted by each business are unique to their individual operations, identifying interviewees is unavoidable in this instance. WRI has obtained the consent of these participants to be identified in this study.

Addressing skills shortages

An issue raised in interviews in the Manufacturing and the Food & Beverage Manufacturing sectors was that there are shortages of specific skills in Blayney. Whereas the Food & Beverage Manufacturing sector has a shortage of engineers, food technologists and butchers, the interview with ICR Engineering uncovered extreme shortages of skilled metal workers, including fabricators, welders and sheet metal workers.

Based on the interview with ICR Engineering, the business appears to be very busy, reportedly refusing considerable amounts of work due to an overload of current projects and too few staff. The business could reportedly have used approximately 100 metal workers over recent years, had the staff been available. This shortage is still being felt today.

Given that skills shortages have been reported across at least two sectors, it appears that there is a potential opportunity to develop the local economy and assist local employment by helping businesses to recruit appropriately skilled workers.

Automation

An interesting opportunity also identified in the interview with ICR Engineering related to increased automation of metal product fabrication and manufacturing processes. This particular company utilises computer aided design software and advanced automated metal fabrication machinery to provide engineered metal products.

Increased automation provides a number of advantages for this business. It was indicated that the business has had considerable difficulties finding, recruiting and retaining appropriately skilled metal fabrication staff (discussed above). Automated manufacturing processes allowed the business to grow its operations despite staffing availability issues.

Further and important benefits of automation were found to be an increase in precision, productivity and lowering of input costs, particularly staff costs. The consistency and quality of automation machinery supported the business to produce quality products ‘time and time again’.

Discussing the success of this business, it was ventured that success in the industry comes down to two variables; quality and price. It was alluded to that the automation capacity installed in this business allowed it to successfully outcompete other metal fabrication businesses for work, because they had higher overheads – potentially relating to unproductive staff. This suggests that automation is providing this business with a strong competitive advantage, which may be witnessed by the company’s excess workload.

Market and product diversification

The final opportunity identified in this sector was for a diversification of markets and products. Both businesses interviewed operate in regional and/or interstate markets, and both were considering new opportunities that expanded the range of products that they sold and/or the markets in which they operated.

Midwest Concrete, a leading manufacturer of stock troughs was considering expanding into the manufacture of concrete civil products, such as drainage pits, headwalls, septic tanks, collection wells. Whilst currently manufactured products are sold in interstate markets, it was believed that civil products would be more focussed on the Central West and surrounding regions.

The company was also considering becoming a distributor for the imported float valves utilised in the stock trough business. Given the portability of this product, becoming a distributor would presumably take these operations into a national market.

Similarly, ICR Engineering identified a couple of potential products and markets it could enter to expand business. Having previous experience in manufacturing ute bodies and associated products, the company identified its re-entry into this market as a potential opportunity. No information was gathered as to the size of this potential market.

Another opportunity was identified for the development and manufacture of a fully automated pallet racking (storage) system. It was suggested that there are no good current storage systems available on the market and potentially huge demand. It was suggested that if this opportunity were to be realised, it could have considerable impact on revenue and the number of people employed by the business.

By focussing on new markets or products, local manufacturers appear to be in a favourable position to create new business and grow the local economy.

Pallet racking system

Using the ICR Engineering pallet racking opportunity as an example of market and product diversification, it can be seen that manufacturing product diversification could provide a significant economic boost to the local economy. Based on an estimated additional $1.5 million in revenue and employing a further 10 FTEs, the estimated economic impact of this opportunity is estimated at an additional:

- $4.7 million in output
- $1.4 million in value added
- $0.9 million in household income
- 16 FTEs (in total, including initial and flow-ons)

Note: The modelling undertaken is indicative only and has been based purely on the data supplied relating to FTEs and an estimate of revenue.

RECOMMENDATIONS

WRI has identified a number of recommendations that would assist Blayney businesses to develop the opportunities highlighted in this report and strengthen Blayney's economy.

For a number of reasons, these recommendations principally relate to the Tourism and Agriculture sectors. Firstly, the Manufacturing sector and the Food & Beverage Manufacturing Cluster are reliant on external markets and are less dependent on local factors. With less dependence on the local economy, there is less capacity to assist these businesses at the local level. In contrast, the Tourism and Agriculture sector interviews highlighted a range of local issues.

Furthermore, industry interviews provided differing levels of detail on the potential opportunities and barriers facing each industry. Interviews in the Tourism and Agriculture sectors provided greater detail and insights than those obtained in interviews with the Manufacturing sector and the Food & Beverage Manufacturing Cluster.

Tourism

- Develop Blayney's main street to become an attractive dining and shopping precinct.
- Engage with tourism businesses to develop a tourism plan for the region, including mapping local tourism services, understanding infrastructure needs and developing a list of actions needed to provide an engaging and attractive visitor experience in each town.
- Better coordinate Blayney region tourism offerings. This could involve reducing the number of organisational committees, facilitating better engagement between tourism businesses and understanding and communicating emerging trends/needs in the sector.
- Utilise Blayney 2020 vision and identity ideas to further develop a Blayney tourism brand. This would allow local tourism businesses to leverage this branding to better market their businesses.
- Facilitate local tourism businesses to undertake group marketing of their town/region. This will allow local businesses to profit from better coordinated tourism services and a well-crafted tourism 'experience'.
- Provide assistance for organisers of new events. This could include assisting with insurance coverage and other administrative issues such as applications and related paperwork. Knowledge and assistance to access relevant government tourism funding may also be useful.
- Run a 'get involved' program to attract people to be more involved in events and business coordination activities.

Agriculture

- Investigate beef production partnerships to supply large-scale export agreements.
- Facilitate export and trade information for parties interested in developing export relationships. This could involve seminars and workshops from trade or professional bodies.
- Utilise Blayney 2020 vision and identity ideas to form the basis of a local or regional brand. This would allow local producers to leverage this branding to create demand for their products.
- Re-examine policies relating to the subdivision of agricultural land. Retaining more broad-scale farming businesses may assist declining farm productivity issues.
- Assist small agricultural producers to access information to improve pasture and livestock management and increase productivity.
- Better internet and communications infrastructure to support agricultural businesses. Whilst this issue was raised in an agricultural context, better communication services will assist all businesses.
- Engage with CTLX and stock transport companies to better understand road and transport issues, such as problem

routes, high mass vehicle and road train access issues.

Food & Beverage Manufacturing

- Facilitate export and trade information for parties interested in developing export relationships. This could involve seminars and workshops from trade or professional bodies.
- Noting the difficulties in developing greenfield industrial sites, potential Food & Beverage Manufacturing businesses may be attracted to the region by assistance measures, including tax or rate rebates, service fee reductions and/or development assistance.

Manufacturing

- Work with businesses to identify skills shortages and consider measures that could assist businesses to close these gaps.

APPENDICES

APPENDIX 1: SOCIO-ECONOMIC PROFILE DATA SOURCES

WRI has used the following sources of information in constructing the LGA profile:

- Gross Regional Product – extracted from Input-Output table for Blayney LGA
- Key contributing sectors (Figure 1) – employment and value added data from Input-Output tables for Blayney LGA
- Changes in sectoral employment (Figure 2) – ABS Census of Population and Housing 2006 and 2011, Place of employment
- Key shift-share results & industries' employment growth (Table 1) – Calculations are based on ABS Census of Population and Housing 2006 and 2011, Place of employment
- Average income by occupation (Table 2) – ABS Census of Population and Housing 2006 and 2011
- Employment mapping (Table 3) – ABS Census of Population and Housing 2011
- Count of businesses – ABS Count of Australian Business Data June 2011 – June 2014, Catalogue No. 8165.0
- Recent unemployment trend (Figure 3) at Local Government Area- Department of Employment, December 2010 – December 2014
- Educational profile, highest year of school completed (Figure 4) – ABS Census of Population 2011
- Post-school qualifications (Figure 5) – ABS Census of Population and Housing 2011
- Growth in qualifications - ABS Census of Population and Housing 2006 and 2011
- Current study patterns (Table 4) – ABS Census of Population and Housing 2011
- Population - ABS Census of Population and Housing 2011
- Age structure (Figure 6) – ABS Census of Population and Housing 2001, 2006 and 2011
- Age dependency ratios (Table 5) – ABS Census of Population and Housing 2011
- Indigenous population – ABS National Regional Profile 2006 and 2011
- Population projections (Figure 7) – NSW Government, Department of Planning and Environment. New South Wales State and Local Government Area Population Projections: 2014 Final
- Personal and household income (Figures 8 and 9) – ABS Census of Population and Housing 2006 and 2011, Quickstats;
- Housing affordability (median weekly rental as percentage of median household weekly taxable income & ratio of median house price to median household taxable income), Figures 10 and 11 – NSW Government, Family & Community Services, Housing NSW. Rent and Sales Reports (September 2006, September 2011)
- Home ownership versus rental (Figure 12) – ABS Census of Population and Housing 2006 and 2011, Time Series DataPack, Catalogue no. 2069.0.30.003
- Value of construction (Table 6) – ABS, Building Approvals, Catalogue no. 8731.0, 2012-13 & 2013-14
- Crime statistics (top 10 offence categories), Table 7 – NSW Bureau of Crime Statistics & Research (BOCSAR), NSW Recorder Crime Statistics, 2010-2014

APPENDIX 2: INDUSTRY SECTOR SCORING METHODOLOGY

A scoring methodology was employed to identify key industry sectors within Blayney. The scores were assigned in the following areas:

- Shift-Share analysis and employment growth strength;
- Location quotients;
- Economic contribution to the regional economy;
- Multiplier effects and linkages to other sectors;
- National productivity growth;
- Industry Projections;
- Diversification opportunities; and
- Local champions.

Shift-Share analysis and employment growth strength

Analysis of employment growth at the state and Blayney regional levels was undertaken by means of shift-share analysis. A shift-share analysis:

- Separates employment growth between the state economy, industry mix and local components; and
- Identifies industries that have grown at a faster or slower rate than state and industry averages.

Shift-share analysis was performed to determine the relative strengths of the regional economy for Blayney LGA, based on the past and current employment growth performance of the respective regions.

The shift-share analysis has been conducted by place of employment and is based on the industry sub-division level code. Specifically, industries at the two digit ANZSIC code were examined (i.e. 105 industries for each region).

The shift-share analysis divided the change in industry employment in the respective regions into three components:

- State economy. The share of local job growth attributable to growth of the state economy;
- Industry mix. The share of local job growth that can be attributed to the region's mix of industries; and
- Local component. The share of local job growth that describes the extent to which factors unique to the local area have caused growth or decline in regional employment of an industrial group.

The shift-share analysis resulted in the classification of the industries into four major types, which would allow identification of key industries for further analysis:

- Type I. Local firms outperforming in a high growth industry;
- Type II. Local firms underperforming in a high growth industry;
- Type III. Local firms underperforming in a low growth industry; and
- Type IV. Local firms outperforming in a low growth industry.

The shift-share analysis was conducted between the 2006 and 2011 Census periods.

APPENDICES

Analysing key sectors

For the purpose of selection of key sectors, WRI examined the local components for relevant industries in the region. A positive local component for an industry indicates that firms from that industry Blayney performed better than the combined state average in that industry, in terms of employment growth.

WRI examined the changes in employment local component for 105 industries in the region, as well as absolute changes in employment between 2006 and 2011. If the change in local component was positive and greater or equal to 15 (i.e. 15 persons), a score of one was given; in all other cases (negative local component or positive but smaller than 15), a zero score was assigned.

In terms of the 5 year employment growth rate, for the sectors that grew by more than 50% or grew by less than 50%, but substantially in absolute terms (e.g. added more jobs than any other industry), a score of one was given, otherwise a zero score was assigned.

Location quotients

Location quotients is a way of quantifying how "concentrated" an industry is in a region compared to a larger geographic region. Concentration refers the percentage of the working population employed in that industry.

WRI determined the concentration of each industry in Blayney by calculating the ratio between the industry's FTE employment and the total FTE employment in Blayney. This relationship was then compared to the industry's relationship at the Central West, New South Wales and Australian levels.

Sector scoring

Industry sectors where the concentration of employment is higher for Blayney than the comparison regions were scored one, otherwise a zero score was assigned.

Economic contribution to the regional economy

WRI examined the contribution of industries in terms of value added and full time employment. The industry data was obtained from Blayney's Input-Output table. The top 10 industries with the highest value added and full time employment (as a percentage of the total in the LGA) were selected and assigned a score of one. All other industries with a smaller relative contribution were given a score of zero.

Multiplier effects and linkages to other sectors

Multipliers measure the relationship between the direct and indirect contributions of each industry in a respective region and indicate the relative magnitude of the flow-on effects of each industry compared to the direct effect of that industry (i.e. a multiplier of 1.5 indicates that for every $1 of direct impact there will be $0.50 in flow-on effects). Multiplier effects are evident when the structural interdependencies in the regional economy and linkages across industries are examined.

A sector is considered to be a key sector if its multipliers are greater than the average multipliers across industries, and the multiplier effects are spread over a large number of industries. WRI examined multipliers for major economic variables: value added and full time employment. For the purpose of multiplier calculation and key sector identification, two sets of scoring were assigned as follows:

- For value added, if the industry had above average multipliers, a score of one was given; for below average multipliers a zero score was given.
- For FTE employment, if the industry had a multiplier above 3, a score of 1 was given; for below 3 a zero score was given.

In addition to value added and FTE employment multipliers, two types of linkages were examined – linkages to upstream industries (i.e. industries that supply inputs to industry in question) and to downstream industries (i.e. industries to which the industry in question sells its output). If the industry was a key sector relative to both upstream and downstream industries (i.e. had strong and well spread linkages to both of them), a score of two was given. If the industry was key sector relative to only upstream or downstream industries, a score of one was given. If the strength and spread of linkages were small, a score of zero was given.

National productivity growth

Annually the ABS releases multifactor productivity estimates, indexes of real GDP per combined unit of labour and capital (Cat No. 5260.0). [1]WRI calculated the growth in productivity for 16 industries between 2009/10 and 2013/14. The industries that reported moderate to good growth (above 1.01) over this period were given a score of one, otherwise a score of zero was assigned.

Industry projections

WRI sourced employment projection data from the Department of Employment for Central West SA4 region. This industry projection data was used to calculate the expected industry employment growth rate between November 2013 and November 2018. For the industries where absolute growth in employment was greater than 500 people or the percentage growth rate was greater than 8 percent, a score of one was given, otherwise a score of zero was assigned. As growth rates were only available for the top level mining and manufacturing sectors, these were applied consistently across the sub sectors.

Diversification opportunities

The detection of diversification opportunities involved the assessment of whether the sectors are linked to the key contributing sectors in the regional economies or sectors that experienced strong growth. Also, consideration was given as to whether the development of these sectors and their associated sectors will generate strong synergistic benefits in the regional economies. For identified sectors a score of one was assigned.

Local champions

WRI considered input from Blayney Shire Council to understand if an industry had a local proponent that was likely to provide meaningful support for the development of that industry. For identified sectors a score of one was assigned.

Selection of key sectors

The ultimate selection of key sectors for further consideration was based on the highest scores given to industries. Key sectors were selected based on consultation with Blayney Shire Council.

1 The factors have been derived by dividing chain volume estimates of market sector GDP by a combined measure of hours worked and capital services.

APPENDIX: 3 INPUT-OUTPUT MODELLING

Input-output analysis was used in this study to determine the economic impact of opportunities within Blayney LGA. Input-output analysis provides a detailed picture of the structure of a regional economy at a point in time and can be used to estimate the contribution or impact of a particular sector of the economy including initial and flow-on effects.

Economic impact analysis has been conducted using input-output models constructed for Blayney Shire LGA.

Construction of the input-output table

The input-output table for this project were extracted from the Australian Bureau of Statistics (ABS) 2009/10 national input-output table using the Generation of Regional Input-Output Tables (GRIT) technique. The national table was used as a base from which to develop a table to represent New South Wales and subsequently the study regions using detailed data from:

- 2011 Census;
- 2013/14 National State Accounts (ABS Cat No 5220.0);
- Australian Demographic Statistics (ABS Cat No 3101.0);
- Quarterly data on employment by industry sector (ABS cat. no. 6291.0.55.003); and
- Australian Industry data (ABS Cat No 8155.0).

The GRIT technique derives regional input-output tables from the national input-output table using location quotients and superior data[2] at various stages in the construction of the tables. The GRIT procedure was developed by Associate Professor Guy West and Professor Rod Jensen of the University of Queensland and is the most widely used method of constructing regional input-output tables in Australia.[3]

GRIT uses a series of non-survey steps to produce a prototype regional table from the national table, but provides the opportunity at various stages for the insertion of superior data. The system is "variable interference" in that the analyst is able to determine the extent to which they interfere with the mechanical processes by introducing primary or other superior data.

The GRIT system is designed to produce regional tables that are:

- Consistent in accounting terms with each other and with the national table;
- Capable of calculations to a reasonable degree of holistic accuracy; and
- Capable of being updated with minimum effort as new data becomes available.

The GRIT technique is basically a hybrid method of deriving state and regional input-output tables from the national input-output table while at the same time allowing for the insertion of superior data at various stages in the construction of the tables.

Marginal Coefficients

One of the main limitations of input-output tables is the assumption of linear coefficients. To address this problem and the associated problem of overestimation, the input-output analysis undertaken incorporates the marginal coefficients model which attempts to overcome the limitations of traditional input-output analysis by removing the assumption of linear coefficients for the household sector. As is well documented in literature, the household sector is the dominant component of multiplier effects in an input-output table so using marginal income coefficients for the household sector only provides a more accurate estimate of the multiplier effects and provides results closer to those of a computable general equilibrium (CGE) model. This provides a more

2 In this context, "superior" refers to regionally specific data.
3 Miller, R. E., Blair, P. D. Input-Output Analysis: Foundations and Extensions. New York, Cambridge University Press, pp 373-374.

accurate estimate of the significance of impacts associated with the potential opportunities in Blayney, than would be possible with traditional input-output analysis.

The impacts are measured in terms of industry value added, gross regional product, household income and full-time equivalent jobs. All impacts are measured in either dollar terms or full-time equivalent employment terms.

Note: In calculating the economic impact of the opportunities it should be noted that the Australian Bureau of Statistics applies a confidentiality technique to its Census data tables. The technique involves small random adjustments to the data which help prevent the disclosure of any identifiable data.

Impact Analysis

Input-output analysis is used to estimate the contribution or impact of a particular sector of the economy, or activity within the economy, including flow-on effects. Impacts are measured using either the Industry Significance or Final Demand methods. Data is allocated to WRI's 32 sector model and converted to basic prices under both approaches.

Industry Significance

Input-output tables are frequently used to provide estimates of the significance of a particular industry or organisation in terms of its contribution to the economy. This is done by examining the effects of the organisation shutting down and ceasing all economic activities.

This method provides an estimate of the level of economic activity that can be attributed to that particular organisation. The Industry Significance approach was used to model opportunities in the Food & Beverage Manufacturing Cluster, the Agriculture sector and the Manufacturing sector, using potential FTE employment and revenue estimates as a proxy to model the economic impacts of a given project.

Final Demand

The Final Demand impact analysis calculates the impacts across all sectors in response to changes in industry final demands. The Final Demand approach was used to model the expenditure by non-local visitors to the cricket tournament. This model utilised Tourism Research Australia data from the Regional Tourism Profile for Central NSW 2012/13, relating to average tourism expenditure, which was inflated by CPI to 2014 dollars in order to match the Input-Output table.

The non-local visitors to Blayney were categorised as either day trip visitors or domestic overnight visitors. This was achieved by utilising the domestic visitor proportions from the Regional Tourism Profile for Central NSW 2012/13.

Of the potential 750 non-local visitors to the event, 421 were classified as Day Trip Visitors to Blayney whilst the remaining 329 visitors were classified as Domestic Overnight Visitors. It was further assumed that Domestic Overnight Visitors stay in Blayney for two nights. The expenditure profiles relating to these visitor categories were used to estimate the impact of a potential 750 visitors to the region for the purpose of attending the cricket tournament.

WESTERN RESEARCH INSTITUTE

WRI is a regional development research organisation located in Bathurst, New South Wales. WRI holds a wealth of knowledge on employment, business development and investment issues affecting regional Australia. It has worked with Commonwealth, State and Local Governments and industry groups on numerous investment and development programs in regional areas. WRI has strong credentials in business and commercial market consulting and applied economic modelling including input-output analysis, shift-share, agribusiness and regional socio-economic surveys and analysis.

Ms Danielle Ranshaw – Chief Executive Officer

BEc&Fin NSW

Danielle's experience in project management in the information technology sector combined with qualifications in economics and finance provides a solid background for WRI projects. With skills in systems design and development, Danielle has been able to extend WRI's capability in developing robust and increasingly complex systems to support research fieldwork. Additionally, Danielle has extensive experience in business process analysis, performance planning and review, report writing and project planning.

Ms Rebecca Hood - Research Officer

BBus (Fin/Acc) With Distinction CSU

After working in the Financial Services Industry for several years coupled with a degree in Finance and Accounting from Charles Sturt University, Rebecca brings strong skills in finance, economics, business and accounting to WRI projects. Rebecca's experience in the finance field and her high level understanding of current market knowledge gives Rebecca a solid understanding of the financial needs of regional and rural Australia. In her role as Research Officer, Rebecca has worked on a wide range of projects covering many aspects of regional economic development including; economic and social impacts of mining and mine related developments, manufacturing operations, sporting events, not for profit social housing and aged care. Rebecca plays a key role in performing high level and varied economic impact (input-output) modelling and also has strong skills in benefit-cost analysis, human capital modelling, survey questionnaire development and the preparation of socio-economic profiles.

Mr Alistair Maclennan – Senior Research Officer

BA Political Economy, First Class Honours (UNE)

Having served in a variety of parliamentary, public service and private sector roles, Alistair brings a wealth of research experience to WRI. Alistair has well developed skills in data analysis, economics and business, and has a wide understanding of government. In addition, Alistair also has experience in policy development in the energy sector, where he engaged with industry, government agencies and NGOs to inform policy. Alistair's experience in engaging with clients, stakeholders and the public assists WRI to fully understand its client's needs and provide tailored research.

Ms Erin Wise – Senior Research Officer

BBus Marketing, BBus Honours Class 1 (CSU)

Erin is a passionate market researcher with over 10 years' experience in the industry. Erin joins WRI after gaining a wealth of experience in brand strategy and development, and understanding consumer sentiment from her previous role as a Research Director at Pollinate. She is a skilled quantitative researcher with background in brand tracking, consumer segmentation, advertising testing and evaluation. Erin is proficient in multivariate data analysis techniques, project management, presenting and is dedicated to ensuring her clients solve their research problems.

Erin is currently a member of the Australian Marketing and Social Research Society and has been certified by the society as a Qualified Practicing Market Researcher (QPMR).

Ms Dale Curran – Executive Officer

BA ANU

Dale is responsible for all administrative processes at WRI including executive support, finance, management of the board of Directors and maintenance of policies. She has worked in a variety of roles at WRI, including Fieldwork Supervisor and Research Assistant, and has worked on several community and business surveys. Dale's skills and experience in data collection contribute to WRI's projects, bringing strong skills in data collection, particularly questionnaire development, data entry and telephone and face to face interviewing techniques. In addition to her administrative role, Dale has oversight of marketing, PR and communications activities, and brings a high level of skill to the design of WRI's reports.

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