

Upper Hunter Economic Diversification Project

Report 2 of 3: Directions and Opportunities Report



Buchan Consulting

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Executive Summary

This Directions and Opportunities Report is the second report prepared as part of *the Upper Hunter Economic Diversification Project*. The report examines future directions and opportunities for the region and for each of the six Local Government Areas. The findings outlined are based on an analysis and assessment of current industries in the region, their future development profile and potential new opportunities.

A. Regional Economy

The regional economy and industry analysis and the industry and community consultations highlight both the differences in the LGAs that make up the Upper Hunter Region and the medium and longer term economic development challenges that the individual LGAs face, in terms of developing sustainable local economies. The areas differ in terms of population size, industry mix and current trends in population and industry growth.

The following are the key sectors that are driving the local economies of each of the LGAs. It shows that the specialisation that exists in each of the areas and the dominance of a few sectors. This includes the mining driven areas of Singleton and Muswellbrook; the equine and agribusiness region of Upper Hunter; the equine and agribusiness region of Upper Hunter; the agribusiness regions of Dungog and Gloucester and the population growth and tourism driven region of Great Lakes.

Major Current Economic Drivers (Key Sectors)

	Cluster 1			Cluster 2		Cluster 3
Major Drivers Rank	Singleton	Muswellbrook	Upper Hunter	Dungog	Gloucester	Great Lakes
1	Coal Mining	Coal Mining	Equine	Agribusiness-beef, dairy	Agribusiness-beef, dairy	Population Services – retail/services
2	Mining Support	Power generation	Agribusiness-beef, dairy, crops, food processing	Population Services – retail/services	Population Services – retail/services	Tourism
3	Power generation	Mining Support	Population Services – retail/service	Tourism	Health & Aged Care	Health & Aged Care
4	Population Services – retail/services	Equine	Tourism	Education	Tourism	Building and construction
5	Agribusiness – beef, dairy	Wine	Education		Education	Education
6	Defence	Agribusiness – beef, dairy			Coal Mining	Agribusiness – aquaculture, fishing, beef, timber
7	Wine	Population Services – retail/services				
8	Tourism	Tourism				
9	Education	Education				

Source: Buchan Consulting analysis based on ABS Census 2006 data, industry of employment of residents and jobs located in the LGA.

Chapter 2 examines recent economic trends in the Upper Hunter Region, and highlighted the differential performance in the LGAs. The major regional growth factor has been mining activity and this has driven jobs growth in mining operations and support services. Those areas experiencing population growth have seen increases in activity and jobs in population related services (eg. retail, health, education, and other services). Agribusiness activity has been impacted by continued consolidation and price/cost squeezes experienced by producers. Skill shortages and competition for employees with the mining sector have impacted on a range of industries in the

region. The smaller LGAs have experienced limited employment growth, or in the case of Dungog, a major decline in local jobs.

Some of the decline in local jobs has been driven by the regional consolidation of government and private services and the trend for larger industries to be attracted to the major centres (which can offer transport access, related support industries and services and a larger skilled workforce).

A major issue is that the industry specialisation in each of the LGAs tends to be narrow, which creates vulnerabilities, with cyclical and structural changes in the sectors. In the case of the mining regions, there are substantial support industries that are servicing mining (that will be affected as mining winds down in specific areas).

At the same time there has been substantial change in employment locations, particularly with the strong industry and services growth in Newcastle and other areas of the Lower Hunter, and the major expansion in mining in the Upper Hunter. The regional linkages between the Upper Hunter and the Lower Hunter are becoming more important. In response to these trends, employees are now operating in a broader regional labour market, with increasing commuting to employment opportunities.

While there is a need to strengthen local economies, regional linkages between areas will become increasingly important over longer term horizons. These growing inter-linkages also suggest a need for broader economic strategies and programs that operate at a regional level, rather than at an individual LGA level.

B. Strategy Context

The following are major issues for the future which shape the context for the diversification strategy.

Industry Issues

There are major industry issues in the region:

- Structure of industry - a reliance on a narrow industry base with the major sectors linked to local resources nexus (mining and agribusiness). Outside of the mining sector, most businesses are small, with 75% employing less than 10 persons.
- Ongoing pressures of a dual speed economy - growth in mining and its impacts on other sectors and communities.
- Competing land use and resource issues. Growth of existing key sectors (agribusiness) and diversification options are dependent on maintaining critical mass in key sectors (eg. equine, wine etc.).
- Future horizon of coal mining and the pattern and levels of employment over the next 15-25 years. There will be a number of jobs to replace over this horizon (although mobile workforces are covering most of the current rapid growth). This issue is focused on the populations of Singleton, Muswellbrook and in Upper Hunter LGA. The other LGAs have more limited links to the mining sector. Over time there is potential for cyclical variations in demand levels. New coal technologies will reduce emissions and extend market horizons.

Population and Jobs

Population and jobs growth are linked:

- Increasing integration of regional labour markets, with Upper Hunter residents travelling to jobs in the Lower Hunter and adjacent areas; and residents from the Lower Hunter commuting to jobs in the Upper Hunter. The nexus between job location and residence is weakening.
- Recognition of the link between jobs and future population growth. Growth in area populations is dependent on the availability of local jobs or ready access to jobs within commutable distances.
- Opportunities to increase area populations to provide threshold demand levels for local services. The Upper Hunter will benefit from the strong growth in the Lower Hunter as some residents look for rural lifestyles with accessibility to jobs (in the Lower Hunter). There is a need to offer both town living and rural lifestyle blocks.
- Ageing of the population and a need to develop accommodation and services for seniors.
- The importance of place in attracting population and visitors to a town.

Environment

Environmental issues are important for the region:

- Environmental management issues, including impacts of climate change on regions and impacts of proposed carbon taxes on the mining and power generations sectors.
- Availability of water to service growing populations and industries.
- Maintenance of land for agribusiness and maintaining buffers.

Competitive Position

The Upper Hunter Region has a number of advantages:

- Strategically, the Upper Hunter Region has a number of major advantages including: access to a major port, national road and rail networks, well located industrial land; a growing population; workforce skills; access to a major regional airport; a significant defence presence; access to a large regional market and proximity to the Sydney market.
- Improvements in regional highways are having impacts: the mid north coast is a major growth area and the Pacific Highway developments are improving access. The extension of the F3 to Branxton and improvements to the New England Highway are making the Upper Hunter Region more accessible as an industry location.
- From an industry attraction perspective the Upper Hunter is competing with other locations including the Lower Hunter, Mid North Coast, Central Coast, Western New South Wales (Dubbo, Tamworth, and Parkes etc.).

Future Development

Future development and diversification involves:

- Building on areas of clear competitive strengths in the region - eg equine industry, mining support/engineering, power generation, renewables, tourism, agribusiness.
- A key focus for the strategy is on building on advantages through a supply chain approach that captures value adding and support activities.
- Encouraging innovation – there is major potential for innovation in the region, including: low-emissions coal initiatives; clean energy technologies; agribusiness (eg. wine, cattle, equine, intensive horticulture, and new crops (eg. industrial hemp)); and renewables. Much of this innovation involves the development and strengthening of industry/university linkages.
- The increasing skill levels in most sectors and the need to deliver vocational education and training in the region and to develop stronger business involvement in skills development.
- Investing in key infrastructure, to support growth in communities and in industries.

The strategy identifies regionally linked opportunities and specific opportunities in each LGA.

Infrastructure

Infrastructure development is critical for future diversification:

- Improvements in key strategic infrastructure including: roads, rail, water, sewer, industrial land, town centres and broadband. A regional approach is required to planning and funding of this infrastructure.
- Development of broadband enables persons in professional occupations to telecommute or to work irrespective of where they are located. This is an issue for some locations such as Great Lakes, Upper Hunter LGA and parts of Dungog and Gloucester. The NBN rollout and its timing is a major issue for the region.
- Development of industrial estates to provide for specialist industry requirements and for light industrial activities.

C. A Diversification Strategy

The future development of the region requires the generation of sustainable jobs, which are based on both building on current advantages and creating new areas of advantage. A key issue is taking a regional approach, as there will continue to be interrelationships between the LGAs and between the Upper Hunter Region and the Lower Hunter Region. These interrelationships relate to: industry supply chains; regional markets for businesses; and the operation of regional labour markets. This strengthening and diversification of the Upper Hunter Region has a number of components:

- Increasing local populations to build ongoing critical mass for service industries and associated jobs.
- Building on specific industry strengths and local advantages and leveraging these as a foundation for future industry diversification and growth.
- Developing new areas of industry that are based on emerging opportunities (eg. logistics based on improved highway access).
- Developing knowledge intensive activities. This includes the development of renewable energy support activities; education and training activities; and research and development

A major feature is taking a regional cluster and industry cluster approach, which involves recognition of areas of specialisation in each of the LGAs that make up the Upper Hunter Region. In pursuing economic diversification in the Upper Hunter, there will be a need for strategic regional policy and industry policy support from the New South Wales Government.

The following table summarises the economic development opportunities and detail on each LGA is contained in the following sections.

Opportunities Summary – Upper Hunter Region

Regional Cluster 1			Regional Cluster 2		Regional Cluster 3
Singleton	Muswellbrook	Upper Hunter	Dungog	Gloucester	Great Lakes
Medium Term	Medium Term	Medium Term	Medium Term	Medium Term	Medium Term
Mining support Mining services Power Generation and support Tourism Logistics hub Engineering training centre Government services Business services	Mining Mining support and services Power generation and support Equine industry growth and development. Tourism Wine industry development Professional and technical services Cultural and creative industries (visual art and music) 1 Business services Government services 2	Equine industry growth and development. Tourism Renewable energy and support , education and research Services to mining industry Professional services	Agriculture revitalisation Intensive agriculture and development of an agribusiness park Agribusiness education and training (regional role) – extend Tocal College programs into Dungog Film sector – development of a residential film school, capitalising on film festival Tourism – market segment development Aged care	Agribusiness revitalisation Intensive agriculture and development using Gloucester Growers Cluster Wine sector Mining and gas support – engineering services Tourism : market segment development – short breaks - adventure, nature based, agri-tourism Retail revitalisation <Potential for regional partnering with Dungog on tourism and agriculture> Health and Aged care	Forster Tuncurry Crown Harbour Project Health services - extend and develop broader health and wellbeing focus Aged care Small business development and incubator Agriculture revitalisation – existing sectors and intensive agriculture Tourism: continue market segment development - active tourism/lifestyle, adventure sports, water based; eco-tourism and nature-based tourism. Building and construction – environmental focus Small business development and incubator Professional and technical services Government services
Long Term	Long Term	Long Term	Long Term	Long Term	Long Term
Engineering Agribusiness – intensive horticulture, wine , beef Food processing Renewable energy and support Aged care	Renewable energy and support Engineering Education and training Use of mining sites Aged care	Agriculture revitalization -Intensive horticulture Food processing expansion	Renewables - part of Hunter Renewable Energy Precinct : some limited opportunities for wind and solar generation Professional and technical services	Power generation (small gas fired plant) Industrial Park Professional and technical services	Light industrial – develop businesses in industrial area Environmental services (Centre of Excellence– in sustainability - research and training) Tourism training centre

D. Implementation

The strategy has both short term/medium term requirements and longer term horizons.

- The Short Term/Medium Term focus is on addressing the current impacts of the mining boom on industry and communities. The current major pressures of the mining sector boom in the region are on accommodation and regional workforces. There is a need for a planned approach to address these issues, through: development of a mining regions accommodation plan (examining demand and supply options); and developing an Upper Hunter Regional Industry Workforce Plan - this would assess demand and supply issues over a 5 year horizon and would focus on recruitment, retention and skills development across the mining sector and other key sectors in the region.
- The long term horizon involves: identifying and acting on long term sustainable economic development opportunities for the Upper Hunter Region, which are based on competitive advantages of the region and the LGAs; replacement of mining jobs as industry location and activity levels change; and encouraging population growth to underpin the development of local service activities.
- There are some additional information requirements and this covers: a technical study of intensive agriculture; and a technical and business study of the use of rehabilitated mining sites.

1 Muswellbrook has the Muswellbrook Regional Arts Centre and the Upper Hunter Conservatorium of Music.

2 Muswellbrook is the Upper Hunter Regional centre for Police, Correctional Services, Hospital, Roads and Traffic Authority, and TAFE.

- Regional strategy: development of an Upper Hunter Regional Strategy, which is equivalent to the Lower Hunter Strategy as a basis for planning decisions.
- Infrastructure: - develop an Upper Hunter Region Infrastructure Plan, which would set priorities for strategic infrastructure development across the region.
- Regional Funding: Mining royalties - consideration be given to the development of a *royalties for regions* program to fund key infrastructure requirements in mining related regions. This program could be along the lines of that being proposed by the Association of Mining Related Councils and could draw on aspects of the WA model.³ The WA model includes funding for mining project related infrastructure; community infrastructure to service larger regional populations; and funding for medium/long term economic diversification projects.

Regional Approach: This report identifies the future growth prospects for the Upper Hunter Region and for the individual LGAs. The report identifies the key sectors where action is required and the horizons for acting on sector development initiatives. While action is required by each Council on economic development, because of the inter-relationships between areas and sectors, there are benefits from a region-wide and regional cluster approach. There are distinct current industry clusters in the region, and these reflect the pattern of industry specialisations: Mining and Mining Support - Singleton, Muswellbrook; Wine - Singleton, Muswellbrook, Upper Hunter LGA (and Gloucester Great Lakes); Equine - Upper Hunter LGA, Muswellbrook; Power Generation - Muswellbrook, Singleton; Renewables - Upper Hunter LGA, Singleton; Nature based and adventure tourism - Dungog, Gloucester, Upper Hunter LGA, Great Lakes; Coastal tourism - Great Lakes

Industry clusters: the sub regional specialisations and locational clustering of industries provide the foundation for cooperation on economic development and diversification. This includes developing operational industry clusters, involving key businesses and industry organisations (chambers and specialist associations – eg equine sector, wine sector).

The key industry clusters that should be developed would include: Agribusiness cluster - cooperation between Gloucester, Dungog and Great Lakes; Renewable Energy cluster - Upper Hunter LGA, Singleton, Muswellbrook, Dungog and Great Lakes; Mining and Mining Support - Singleton, Muswellbrook, Upper Hunter; Tourism clusters: (Cluster 1 Dungog, Gloucester, Great Lakes; Cluster 2 Singleton, Muswellbrook, Upper Hunter LGA); Wine - Singleton, Muswellbrook, Upper Hunter LGA; and Equine cluster - Upper Hunter LGA, Muswellbrook

This clustering reflects the way businesses see the world (as industries and regions rather than LGAs); and the inter-linkages that exist between businesses and markets. This regional cooperation would enable: a more strategic and integrated approach to industry development issues; better use of Council economic development resources; coordination in business attraction; and access to NSW Government and Australian Government industry programs and small business programs. In the case of tourism, this would involve cooperation in market intelligence and research; product development; and marketing.

Centres of Excellence: the regional specialisations provide the potential to develop centres of excellence in education and training. These centres are focused in one LGA but would service skills development across the region.

Strategic Projects: there are a number of strategic projects identified or proposed in this report, which will shape the future of the region and these include: Renewable Energy Projects eg. Kyoto Park) and the RE Precincts; Forster Tuncurry Harbour development; regional extension of the agribusiness diversification projects; Power sector - future investment in generating capacity and technologies; and housing development in the region.

Partnerships: Partnerships should be a focus of the sector development and diversification projects. These partnerships would involve: LGA Councils, industry associations and chambers, NSW government agencies, key businesses in each sector. Mining companies are strongly supportive of their local communities and involved in funding a range of programs and initiatives.

³ Royalties for Regions Proposal, Association of Mining Related Councils, November 2010

The provision of support for industry development and diversification initiatives should be explored with the companies.

The next steps in the project involve the preparation of the detailed Upper Hunter Economic Diversification Strategy Report.⁴ This report will draw on the analysis contained in the first two reports that have been prepared and on other analysis.

⁴ Upper Hunter Economic Diversification Project, Report 3: Strategy Report Buchan Consulting June 2011.

1 Introduction

This Directions and Opportunities Report is the second report prepared as part of the *Upper Hunter Economic Diversification Project*.⁵

It should be noted that: the views expressed; the directions and opportunities outlined; and the draft recommendations contained in this report are those of the consultants and do not necessarily represent the views of the NSW Government and its agencies or those of the participating Councils.

The project was commissioned by the New South Wales Government and the six Councils (in the Upper Hunter Region Singleton, Muswellbrook, Upper Hunter, Dungog, Gloucester, Great Lakes). The focus of the project is on examining the future of the region and the emerging industry and employment opportunities over, medium and longer term horizons.

This report examines future directions and opportunities for the region and for each of the LGAs. The findings outlined are based on an analysis and assessment of current industries in the region, their future development profile and potential opportunities. The region is large covering a total of almost 25,000 km² and had a population of 103,483 in 2009.

The report recognises that while there are some common industries across the LGAs, each LGA differs in terms of population size, growth profile, the relative scale of specific sectors and the importance of specific economic drivers. The LGAs are grouped into 3 clusters: Cluster 1: mining influenced LGAs of Singleton and Muswellbrook and the adjacent Upper Hunter LGA (agribusiness focus but impacted by mining); Cluster 2: the inland rural areas of Dungog LGA and Gloucester Shire; and Cluster 3: the coastal economy of Great Lakes LGA (and its rural hinterland). While Great Lakes has been included in this study, it traditionally is not regarded as part of the Upper Hunter Region and is grouped with coastal regions.⁶ However from a statistical perspective it is part of the Balance of the Hunter - Statistical Sub Division of the Hunter.⁷

Opportunities may be amended following comments on this report by Councils and Government Agencies. The final recommended opportunities and strategies are contained in Report 3.⁸

5 Upper Hunter Economic Diversification Project, Report 1: Upper Hunter Regional Economy and Industry Report, Buchan Consulting January 2011.

6 Great Lakes is included in the NSW Department of Planning's Mid North Coast Regional Strategy 2006 and is part of the mid north coast tourism zone.

7 This Statistical Subdivision covers the Local Government Areas (LGA) of Dungog, Gloucester, Great lakes, Upper Hunter, Singleton and Muswellbrook, and comprises an area of 24,982 km² (86% of the Hunter Region's land mass.)

8 Upper Hunter Economic Diversification Project, Report 3: Strategy Report Buchan Consulting June 2011.



Source: NSW Department of Transport Website

2 Economic Development in the Upper Hunter

2.1 Economic Development in the Region

2.1.1 Current Assessment

The regional economy and industry analysis and the industry and community consultations highlight both the differences in the LGAs that make up the Upper Hunter Region and the medium and longer term economic development challenges that the individual LGAs face, in terms of developing sustainable local economies. The LGAs differ in terms of population size, industry mix and current trends in population and industry growth.

The largest (and fastest growing) LGA is Great Lakes (with 35,487 persons or 34% of the regional population in 2009). In the period between 1996 and 2006, the population of the Upper Hunter Region (including Great Lakes) increased by 10% or 9100 (from 91,000 to 100,000), with almost 90% of this growth concentrated in two LGAs- Great Lakes (5500 or 60%) and Singleton (2700 or 30%). The period between 2006 and 2009 has seen some stronger population growth emerge in the LGAs of Muswellbrook and Upper Hunter.

There are different dynamics at play in each of the LGAs. Population growth in Great Lakes is being mainly driven by sea change moves to the coast for retirement and lifestyle change. Singleton has the second largest population in the region and is experiencing growth, which has largely been associated with the expansion of jobs in mining in the Upper Hunter Region. Recent growth in the 2006-2009 period in Muswellbrook is largely due to similar factors. In the case of the Upper Hunter LGA, recent growth can be attributed to the continued expansion of the equine industry and some mining employees choosing to live in the area. In the smaller rural LGAs, population growth has been slower, due to industry restructuring in the agriculture and timber sectors and the loss of local jobs.

The mining intensive LGAs of Muswellbrook and Singleton are experiencing some stresses and strains associated with the ongoing growth in mining and mining support activities. The pressures are reflected in: housing prices; rental costs; housing availability; critical skill shortages; problems in recruitment for non-mining industries; cost pressure on the community (who do not work in mining); and regional infrastructure not keeping up. Industrial estates need to expand to secure mining support industries and other industrial activity.

There are major local concerns in several LGAs about competing land uses and the impact of continued expansion of the mining sector on agribusiness and tourism in the region. Population is growing in these areas (particularly Singleton), and most of the growth in local jobs is due to the expansion in mining. The full benefits of the growth in employment are not being felt in terms of the development of these communities, due to the significant number of workers who drive into the area, from the Lower Hunter and from other areas.

In terms of strategy, Singleton has a stronger industrial focus in terms of maximising the benefits gained through retaining and attracting mining support industries. The town centres in both LGAs are seen as requiring revitalisation.

Upper Hunter LGA has experienced significant growth in the equine sector and some emerging population growth as a result of persons working in the mining sector moving into the area to live, and some movement of persons (including families) seeking lifestyle changes. There is a major emphasis on developing the tourism sector, green energy and continued growth in the equine sector.

The rural LGAs with smaller populations, Dungog and Gloucester, have generally experienced flat conditions. There have been some losses in jobs from industry restructuring, the impact of current price and cost pressures on traditional agribusiness and the decline of the timber industry in the region. Population growth has been limited with the main increases coming from retirees moving into the areas. However there are also some indications of families making lifestyle changes and moving into the areas. In the case of Dungog LGA this growth is occurring in those parts of the LGA that allow commuting to jobs in the Lower Hunter. Both Dungog and Gloucester want to

develop new areas of agri-business and to develop their tourism sectors (by developing the product offer and through targeting specific market segments). While infrastructure needs to be improved, the LGAs are not experiencing the same growth strains as the mining areas.

The coastal LGA of Great Lakes is the largest LGA in terms of population. Like many coastal areas it is experiencing continued population growth due to attractiveness of the region as a retirement and lifestyle location. The area is also a major regional coastal tourism destination. As a result of these two key drivers, the area has a number of characteristics: much lower workforce participation rates; relatively low incomes; higher levels of part-time employment and is reliance on a narrow band of industries, including tourism and services, (eg. health and aged care, retail and other population services). There are major concerns about the long term sustainability of this structure of the economy, and the Council has a strategic focus on developing other industries to strengthen the local economy.

Table 1. Key Features of the Upper Hunter Region LGAs

Cluster 1	Key Features	
	Mining Areas	
Singleton	Major centre for mining and mining support Defence base Agribusiness Workforce participation rate high Higher average incomes - due to mining wages	Low unemployment Significant number of families with children Growth in housing More jobs than employed residents Significant commute into region to mining jobs – from the Lower Hunter and adjacent LGAs Experiencing pressures of mining expansion – housing, skills, costs, congestion
Muswellbrook	Major centre for mining and now mining support Agribusiness Workforce participation rate high Higher average incomes - due to mining wages	Low unemployment Significant number of families with children More jobs than employed residents Significant commute into region to mining jobs – from the Lower Hunter and adjacent LGAs Experiencing pressures of mining expansion – housing, skills, costs, congestion
	Agribusiness	
Upper Hunter LGA	Major centre for equine industry Agribusiness is major activity (eg. beef, crops) Workforce participation rate is high Some mining exploration occurring	Low unemployment Manufacturing - food processing Workforce participation rate is high Increase in mining employees living in the LGA
	Cluster 2	
	Rural Areas	
Dungog	Agribusiness and local services are the major activities Emerging tourism sector	Slow population growth Ageing population Declining local jobs High level of commuting to employment in Lower Hunter Region
Gloucester	Agribusiness and local services are the major activities Emerging tourism sector Some mining & gas activity	Slow population growth Ageing population High level of employment self containment.
	Cluster 3	
	Coastal Centre and Villages	
Great Lakes	Population services and tourism are major activities Fishing & aquaculture is a key sector. Agribusiness located in inland areas. Largest population in the region and fastest growing population. Growth driven by retirement living and lifestyle living.	Ageing population (one of oldest populations in NSW) Highest percentage of persons on age pension (20%) Lower average incomes – pensions and lower paid services jobs (incl. part time and casual jobs) Some commuting to jobs in other LGAs – Greater Taree, Newcastle and Port Stephens

Source: Buchan Consulting Analysis 2010/11

2.1.2 Economic Drivers

The following are the key sectors that are driving the local economies of each of the LGAs. The table shows the specialisation that exists in each of the LGAs and the dominance of a few sectors. This includes the mining driven areas of Singleton and Muswellbrook; the equine and agribusiness region of Upper Hunter; the agribusiness regions of Dungog and Gloucester and the population and tourism driven region of Great Lakes.

While the data used is from the 2006 Census, current industry analysis and consultations indicates that these relativities have not changed, even though employment numbers in a sector have changed (with some increases and some declines). For example, there has been major growth in mining and mining support activities in Muswellbrook and Singleton in the period to 2010.

Table 2. Major Current Economic Drivers (Key Sectors)

	Cluster 1			Cluster 2		Cluster 3
Major Drivers Rank	Singleton	Muswellbrook	Upper Hunter	Dungog	Gloucester	Great Lakes
1	Coal Mining	Coal Mining	Equine	Agribusiness-beef, dairy	Agribusiness-beef, dairy	Population Services – retail/services
2	Mining Support	Power generation	Agribusiness-beef, dairy, crops, food processing	Population Services – retail/services	Population Services – retail/services	Tourism
3	Power generation	Mining Support	Population Services – retail/service	Tourism	Health & Aged Care	Health & Aged Care
4	Population Services – retail/services	Equine	Tourism	Education	Tourism	Building and construction
5	Agribusiness – beef, dairy	Wine	Education		Education	Education
6	Defence	Agribusiness – beef, dairy			Coal Mining	Agribusiness – aquaculture, fishing, beef, timber
7	Wine	Population Services – retail/services				
8	Tourism	Tourism				
9	Education	Education				

Source: Buchan Consulting analysis based on ABS Census 2006 data, industry of employment of residents and jobs located in the Shire.

The following table shows the key sectors that residents of the Upper Hunter are employed in.

Table 3. Employed Residents Major Sectors of Employment 2006

Summary Table	Singleton		Muswellbrook		Upper Hunter LGA		Dungog		Gloucester		Great Lakes		Total – Upper Hunter Region	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Agribusiness														
Agribusiness (included forestry & fishing)	824	8.0	939	14.0	1729	27.9	599	17.3	446	23.7	815	7.7	5039	13.2
Tourism														
Tourism	716	6.9	461	6.9	394	6.4	224	6.5	136	7.3	785	7.4	2717	7.1
Energy														
Mining Direct	2177	21.1	1151	17.1	455	7.3	82	2.4	90	4.8	80	0.8	3955	10.4
Electricity	265	2.6	320	4.8	122	2.0	3	0.1	0	0.0	45	0.4	783	2.1
Services														
Health	359	3.5	264	3.9	260	4.2	182	5.3	152	8.1	682	6.4	1872	4.9
Aged Care	226	2.2	105	1.6	194	3.1	135	3.9	39	2.1	502	4.7	1198	3.1
Education	519	5.0	370	5.5	372	6.0	264	7.6	117	6.2	682	6.4	2300	6.0
Retail	1010	9.8	680	10.1	594	9.6	324	9.4	182	9.7	1475	13.9	4198	11.0
All Employed Residents	10316		6723		6195		3460		1879		10619		38134	

Source: Buchan Consulting Estimates based on ABS Census 2006 Resident Population Data

The following table is from the *RDA Hunter 2009 Infrastructure Review* and is based on Council identification of current and emerging economic drivers in their area.⁹

Table 4. LGA Economic Drivers – RDA Hunter

Sub-group 1			Sub-group 2		
Upper Hunter Shire	Muswellbrook Shire	Singleton Shire	Gloucester Shire	Dungog Shire	Great Lakes
Tourism lifestyle (E)	Tourism and lifestyle (E)	Tourism and lifestyle (M)	Tourism and lifestyle (M)	Tourism and Lifestyle (E)	Tourism and lifestyle (M)
Agribusiness (M)	Agriculture (M)	Agriculture (M)	Agriculture (M)	Agriculture (M)	Aquaculture/ Agriculture (M)
Aged Care (E)	Aged Care (E)	Aged care (E)		Ageing population (E)	Aged care (M)
Coal mining support industries (E)	Coal Mining Support Industries (M)	Coal mining support industry (M)	Coal Mining support services (E)		
Coal mining (underground operation). (E)	Coal Mining (M)	Coal mining (M)	Coal mining (M)		
Climate Change related development (E)		Climate change related development (E)		Climate Change related development (E)	
	Education (E)		Education (M)	Education (M)	Education (E)
	Power Generation (M)	Power and Energy (M)			
Wine (E)	Wine (M)	Wine/viticulture (M)	Wine (E)	Wine (E)	
Equine (M)	Equine (M)				
			Retail and services (M)		Retail and services (M)
Land availability and Supply (E)		Defence (M)		Timber (M)	Green economy / environmental management (E)

Source: Upper Hunter Infrastructure Project Summary Report October 2009, Regional Development Australia – Hunter P8 Note: Emerging (E), Mature (M). Colours indicate common drivers

⁹ Upper Hunter Infrastructure Project Summary Report October 2009, Regional Development Australia – Hunter P8

2.1.3 Key Economic Development Issues

Report 1 outlined the major issues in each of the LGAs.¹⁰ To summarise there were a number of common themes that emerged in the review of each of the areas and their economic base. These include: a need to ensure greater diversification in the local economy; the impacts of a fast growing mining sector on other industries and the community; concerns about the long term future beyond mining activity; concerns in relation to competing land use and encroachment into key agribusiness zones; maintaining the environment; a need to develop larger resident communities; the state of regional infrastructure, especially roads; the need to develop industrial infrastructure (including employment lands); and the pressures on local government in terms of its capacity to provide the infrastructure that is required in a growing region. These issues were generally recognised by businesses and other stakeholders.

A common response across most of the LGAs (those with mining activity or in proximity to it), in terms of being able to fund future infrastructure requirements and economic development initiatives, related to these communities being able to access a share of mining royalties to provide the necessary funds to develop infrastructure and to improve the communities.

From a local strategy perspective, there are LGA economic strategies in place of varying degrees of comprehensiveness, and based on varying levels of regional analysis. Upper Hunter LGA, Dungog, Gloucester, and Great Lakes have had detailed studies undertaken as part of planning processes, to underpin economic development or in relation to impact assessments of major projects (eg. Tillegra Dam). Most of these strategies focus on local area development (LGA level or town level) and often do not take account of the broader regional linkages (eg. with the Upper Hunter Region and the Lower Hunter Region).¹¹

From an overall region perspective, there was a desire by the businesses that were consulted for clear regional strategies to develop sustainable industries in each of the LGAs (and the taking of a broader regional approach). There was also a concern that the New South Government had not developed a long term planning strategy for the Upper Hunter Region, similar to those strategies that were developed for the Lower Hunter, Mid North Coast and the Central Coast.

2.2 Assessment of the Region

Most of the Councils have at different times undertaken SWOT assessments of their LGAs. These tend to be focused on identification of LGA specific issues, and in most case the inter-linkages with other parts of the broader Upper Hunter Region or linkages with the Lower Hunter are not taken into account. Industries, businesses and even employees do not make such distinctions and are operating in markets that extend across local government boundaries. Similarly tourism boundaries are also fluid as tourists visit regions and attractions rather than individual LGAs. A recent study for the Hunter Development Corporation has undertaken assessments of the Hunter Region, the Upper Hunter and the Lower Hunter.¹²

10 Report 1: Upper Hunter Regional Economy and Industry Report (Draft), Buchan Consulting January 2011.

11 Upper Hunter Shire Draft Economic Development and Tourism Strategic Plan 2010 (September 2010), Council Economic Development & Tourism Committee; Dungog Land Use Strategy March 2010, Worley Parsons; Economic Development Strategy for Gloucester Local Government Area, Report 3: Economic Development Strategy, Buchan Consulting, December 2010; Forster-Tuncurry Employment Land Implementation Strategy November 2009, Hill PDA.

12 *Hunter Region Employment Lands, Market and Context Review*, Report for HDC, ADW Johnson, November 2010 P32-33 (Lower Hunter comprised LGA's of Singleton, Muswellbrook, Upper Hunter, Dungog, Gloucester and Great Lakes.)

Taking a broader helicopter view, the Upper Hunter Region has a number of major strengths but also has a number of constraints.

Table 5. SWOT Assessment Upper Hunter Region 2010

SWOT: Upper Hunter Region	
Strengths	Opportunities
<p>Geographic diversity supporting agribusiness and tourism</p> <p>Significant resource base – coal and a growing sector</p> <p>Major industry sector - power generation with future investment.</p> <p>Emerging renewable energy developments in the region</p> <p>Significant supporting industrial base for the resources and energy sectors</p> <p>Agribusiness assets – climate, water, land, and existing industry</p> <p>Growing industry clusters – equine industry, wine sector</p> <p>Environment and lifestyle attractions of the area (both inland and coastal)</p> <p>Accessible to Newcastle as the regional capital and the broader Hunter Region</p> <p>Accessible to Sydney market</p> <p>Regional transport infrastructure (major highways, rail, port access) and associated improvements.</p> <p>Regional airport access – Newcastle, Taree</p>	<p>Future growth in Gunnedah Basin – mining support activity</p> <p>Mining employment - increased local recruitment to mining due to OHS issues (travel)</p> <p>Economic diversification opportunities.</p> <p>-Renewable energy development</p> <p>-Developing the tourism sector</p> <p>-Opportunities created by transport improvements – rail upgrades and Muswellbrook to Gunnedah and Muswellbrook to Ulan); and road improvements Pacific Highway, New England Highway.</p> <p>- Building on industry specialisations</p> <p>- Agribusiness consolidation and new sectors developing</p> <p>Potential for population growth and residential development in the LGAs (eg. Great Lakes, Singleton, Muswellbrook, Upper Hunter LGA) and in adjacent areas (e.g. Huntlee.)</p>
Weaknesses	Threats
<p>Population densities are low.</p> <p>Access to higher level services at local level (travel distances)</p> <p>Aging of population in most LGAs.</p> <p>Loss of younger persons for education and employment.</p> <p>General reliance on relatively narrow range of economic drivers in the region.</p> <p>Narrow industry base at LGA level, including the services sector.</p> <p>Competing land use issues in mining areas, affecting current industries and diversification opportunities</p> <p>Major pressures of a mining boom on communities and other industries in the region.</p> <p>-Skill shortages and competition for labour</p> <p>-Shifting workforces between mining projects</p> <p>-Cost pressures</p> <p>-Housing market impacts</p> <p>Large commuting workforces from the Lower Hunter Region</p> <p>Continuing market pressures on traditional agribusiness</p> <p>Infrastructure gaps – local roads in smaller LGAs, sewer, water etc</p> <p>Perceived isolation of the area as an industry location.</p> <p>Industrial areas need to be developed</p> <p>Education and skill levels are lower than other regions</p>	<p>Outside of large industry sectors of mining and the power industry, the industry structure is similar to other rural regions.</p> <p>Mining activity is crowding out other sectors due to competing land use</p> <p>Population growth in parts of the region is slowing</p> <p>Future water availability for agribusiness</p> <p>Competition from other areas for industry activity (eg. Lower Hunter; and large inland centres- Dubbo, Parkes etc).</p>

Source: Buchan Consulting Analysis and *Hunter Region Employment Lands, Market and Context Review*, Report for HDC, ADW Johnson, November 2010 P32-33

2.3 Future Factors

Looking over a 15-20 year period there are a number of issues that will impact on the region and its industries.

A major issue is that the industry specialisation in each of the LGAs tends to be narrow, which creates vulnerabilities with cyclical and structural changes in the sectors. In the case of the mining regions, there are substantial support industries that are servicing mining (that will be affected as mining winds down in specific areas in the longer term).

At the same time there has been substantial change in employment locations, particularly with the strong industry and services growth in Newcastle and other areas of the Lower Hunter and the major expansion in mining in the Upper Hunter. The regional linkages between the Upper Hunter and Lower Hunter are becoming more important.

In response to these trends, employees are now operating in a broader regional labour market, with increasing commuting to employment opportunities. In some cases this is a result of: employees following the opportunities in their sector or individuals being recruited into an expanding sector (eg. mining workers); lifestyle choices (a rural lifestyle while continuing to work in an industry or profession).

In other cases this is due to a decline in local jobs or a narrow range of skilled jobs being available in the LGA that they are resident in. Some of the decline in local jobs has been driven by the regional consolidation of government and private services and the trend for larger industries to be attracted to the major centres (which can offer transport access, related support industries and services and a larger skilled workforce pool).

While there is a need to strengthen local economies, regional linkages between areas will continue to become increasingly important over longer term horizons. These growing inter-linkages also suggest a need for broader economic strategies and programs that operate at a regional level, rather than at an individual LGA level.

The following table summarises some of the key issues impacting on the future of the region.

Table 6. Major Future Issues – Upper Hunter Region

Issue	
Population & Housing	
Demographic	All areas have ageing populations – particularly Great Lakes and Gloucester. There are declining populations in the younger age groups. There is a need to increase population of the region and the individual LGAs. Sustainable jobs will be important for attracting a more diverse population to the region. Larger populations will drive service industries in the region A strong emphasis will remain on environment and local amenity with the continued attraction of “sea changers” and “tree changers”
Housing	Potential for changes in population location patterns as a result of higher transport costs (peak oil issues) and the shifting location of jobs. More diverse housing needs, including housing options for older age groups with access to services (increased densities in town centres). Increasing urban development pressures on land (including rural residential) in areas with transport accessibility, available services (eg. Singleton) or access to employment in the larger centres of the Lower Hunter (eg. Dungog).
Industry	
Coal	Continuing coal mining activity in some areas over an extended period. Rehabilitated areas becoming available – future uses need assessment. Decline in mining activity in areas as mines reach the end of their life. Balance between the coal industry and agribusiness in the region. Operations of other industries in a two speed resources economy.
Electricity generation	Upper Hunter continues as a major energy hub, with generation comprising a combination of: coal fired, gas fired, thermal-(base load); and development of renewables (wind and solar).
Agribusiness	Development of intensive agriculture and consolidation in traditional sectors of agriculture.
Tourism	Opportunities for growth in the sector but requires development of product and infrastructure and improved regional marketing.
Industrial Activities	Tendency for larger operations to cluster in major centres with good transport access and workforce availability. Areas of Upper Hunter in competition with Lower Hunter. Light industrial activities/services are linked to local population and markets. Potential to develop specialisations in centres within the Upper Hunter.
Employment	
Employment	Future changes in job locations due to industry change.
	Changing accessibility with F3 extensions (eg Branxton) impacting on business locations and future opportunities.
	Continued pattern of regional commuting to major employment centres (major industry and employment hubs).
	Likely that many key services will continue to be regionalised and concentrated in larger population centres.
	Continued growth in home based employment (facilitated by broadband) with professionals moving to areas for lifestyle changes but still operating in their broader markets.
	Continued skill shortages in higher skill areas and for professionals in the region. Development of regional education and training responses to develop employment skills.
Environment	
	Climate change impacts on the region and issues in relation to climate variability and longer term water security issues.
	Maintaining the environment for key sectors of agribusiness and tourism.
	Competing land use – mining and agribusiness and the availability of productive land for agribusiness.
Transport	
Transport	Transport is a major issue for the future of the region. Improved accessibility is a strategic issue for most regions. There is a need for improved public transport linkages between Upper Hunter and the Lower Hunter. Road infrastructure is a major issue – major highway upgrades, but poor secondary roads. Rail improvements required (for coal and other freight movements).
Infrastructure	
	Action on infrastructure gaps needed to support an increase in population
	Action will be required on industry and transport infrastructure to support industry growth, diversification and future employment.
Skills and Education	
Skills	Future diversification of the region requires higher skill levels in all industry sectors. A need to lift skills as the region on average has lower education and skill levels, than Lower Hunter and other regions.
Education	Regional access to VET and higher education will continue to be major issues. There is a need to develop regional delivery and specialist training centres. Stronger integration of education and training with local businesses will be needed to develop skills and industry opportunities.

Source: Buchan Consulting Analysis 2010/11

3 Directions for the Upper Hunter

3.1 Overview

Chapter 2 examined recent economic trends in the Upper Hunter Region, and highlighted differential performance in the LGAs. The major regional growth factor has been mining activity and this has driven jobs growth in mining operations and support services. Those areas experiencing population growth have seen increases in activity and jobs in population related services (e.g. retail, health, education, other services). Agribusiness activity has been affected by continued consolidation and price/cost squeezes experienced by producers. Skill shortages and competition for employees with the mining sector have impacted on a range of industries in the region. The smaller LGAs have experienced limited employment growth, or in the case of Dungog, a major decline in local jobs.

Table 7. Major Current Economic Drivers (Key Sectors)

Major Drivers Rank	Cluster 1			Cluster 2		Cluster 3
	Singleton	Muswellbrook	Upper Hunter	Dungog	Gloucester	Great Lakes
1	Coal Mining	Coal Mining	Equine	Agribusiness-beef, dairy	Agribusiness-beef, dairy	Population Services – retail/services
2	Mining Support	Power generation	Agribusiness-beef, dairy, crops, food processing	Population Services – retail/services	Population Services – retail/services	Tourism
3	Power generation	Mining Support	Population Services – retail/service	Tourism	Health & Aged Care	Health & Aged Care
4	Population Services – retail/services	Equine	Tourism	Education	Tourism	Building and construction
5	Agribusiness – beef, dairy	Wine	Education		Education	Education
6	Defence	Agribusiness – beef, dairy			Coal Mining	Agribusiness – aquaculture, fishing, beef, timber
7	Wine	Population Services – retail/services				
8	Tourism	Tourism				
9	Education	Education				

Source: Buchan Consulting analysis based on ABS Census 2006 data, industry of employment of residents and jobs located in the LGA.

Each of the LGA Councils is pursuing economic development strategies of various currency and levels of comprehensiveness.¹³ While there are differences in elements of the strategies, there are several common themes and these are: a need to maintain and increase the resident population in their area; concerns about a weakening of traditional agribusiness activities; concerns about future jobs and their sustainability; a recognition of the need to strengthen existing industries, to undertake some diversification and to develop new activities; and a major need to revitalise the main town centres as service centres. There are concerns about constraints including: the major pressures created by a mining boom in the main mining areas, which include competing land and resource use; major skill shortages, the creation of a two speed economy, and local cost pressures on the housing market and on local cost of living; and major economic and community infrastructure issues, which impact on future development prospects (eg. roads, town infrastructure, sewer and water, serviced industrial land).

¹³ The most recent are those developed for Gloucester, Upper Hunter Shire and Singleton and each of these cover demographic, area, resources and industry development issues.

Only two of the LGAs have completed new LEPs (Gloucester and Muswellbrook) with others currently being in development. All of the plans that are currently in operation make provision for industry growth (rural and industrial) and the development of a variety of housing options (from lifestyle blocks, increased densities and seniors housing in town centres).¹⁴ The planning studies conducted as part of the research and analysis for the development of new LEPs, highlight all of these issues.

3.2 Horizons and Directions

3.2.1 Strategic Directions

The future development of the region requires the generation of sustainable jobs, which are based on both building on current advantages and creating new areas of advantage.

There are several horizons in an economic diversification strategy: Horizon 1: 1-5 years- where the economic structure and regional advantages are largely fixed and current planned infrastructure and development projects are largely underway and will deliver some benefits; Horizon 2: 6-15 years - where it is possible to significantly reshape the local economy, create new areas of strategic advantage, shape new industries, develop new infrastructure, and increase populations; and Horizon 3: beyond 15 years - where threshold levels of activity for continued growth in new industries are reached and they move from being emerging sectors.

While the diversification strategy is for the period out to 2031, an immediate focus needs to be on the next 5 years and actions that can be taken to deal with immediate economic issues in the region and to develop jobs, which build on current industries or create foundations for growth of emerging industries in region and the LGAs. Some of these actions include acting on skills issues, creating a positive environment for investment; encouraging innovation and small business development. Much of these more immediate actions are linked to leveraging current industries, developing new areas and addressing major regional constraints. Environmental issues will be major considerations in shaping future patterns of living and working in the region.

There are several factors that will be important for the success of the strategy and these include: targeting programs to specific industry sectors; and this could piloting new innovative programs in the Upper Hunter; taking a regional clustering approach in key industry sectors (including tourism and agribusiness); and regional cooperation on workforce planning, skills development and business attraction.

The *Diversification Strategy* recognises that there are infrastructure and planning requirements for future jobs growth, including revitalisation of the town centres, the provision of commercial space (for business services) and the further development industrial areas and employment zones in the region. This will require a clear understanding of the particular requirements of the targeted types of employment (eg. provision of larger lots, location requirements). It will also require a responsive local planning system that can deliver these requirements in an environment where the Upper Hunter Region will be competing with other locations for investment and jobs.

In pursuing economic diversification opportunities in the Upper Hunter, there will be a need for strategic regional planning, industry policy support, and infrastructure funding from the New South Wales Government.

A major issue is taking a regional approach, as there will continue to be interrelationships between the LGAs and between the Upper Hunter Region and the Lower Hunter Region. These

¹⁴ *Dungog Local Environmental Plan 2006, new LEP being developed; Gloucester Local Environmental Plan (GLEP) 2010; Great Lakes Local Environmental Plan (GLLEP) 1996 development of new LEP commenced; Singleton Local Environmental Plan 1996, development of new LEP commenced; Muswellbrook Local Environmental Plan (MLEP) 2009; Upper Hunter Shire three plans from previous Shires (Merriwa LEP 1992, Murrurundi LEP 1993, and Scone LEP 1986) development of new LEP commenced.*

interrelationships relate to: industry supply chains; regional markets for businesses; and the operation of regional labour markets.

The strengthening and diversification of the Upper Hunter Region has a number of components:

- Increasing the population in and around the main town centres in each LGA, to increase services demand. Facilitating growth in those employment areas that are linked to regional population growth, and this includes developing workforce skills and ensuring that employment lands are available.
- Building on the current industries that are driven by resource advantages of the region. These include: electricity generation, mining support, renewal of traditional regional agribusiness, equine industries, and tourism.
- Developing new areas including: intensive agriculture; and renewable energy and support activities.
- Creating new areas of advantage in knowledge based activities associated with agribusiness (research, education and training); tourism (education and training); environmental services, and renewable energy (support services, education and training, research); and mining support (education and training).
- A key feature is taking a regional cluster and industry cluster approach, which involves recognition of areas of specialisation in each of the LGAs that make up the Upper Hunter Region.

3.2.2 Future Opportunities

3.2.3 Key Sectors

A major part of the strengthening the regional economy for the future is a focus on sectors with growth potential and ensuring that the development requirements for each sector are met (eg. skills, industrial sites, and infrastructure).

The major long term challenge is to ensure that diversification processes begin early rather than waiting for mining activity to slow and this is because:

- Achievement of critical mass in new activities will take time to develop.
- There is a need for planning and infrastructure decisions to take account of land, resource and infrastructure needs of these emerging sectors.
- There is a need for action on current pressures and constraints generated by a mining boom (eg. workforce skills, housing and accommodation, infrastructure etc.).

The following summarises opportunities in several categories: population driven growth; building on current industries and advantages; developing new areas; creating new knowledge based activities; and potential attraction targets. In broad terms there is no single sector or narrow band of sectors that will deliver future jobs in the Upper Hunter Region.

The diversification strategy has several elements: targeting development in key sectors; implementing regional industry cluster initiatives; and taking action at both a regional and local level. The regional approach is likely to deliver greater returns as it is built on recognition of clear areas of advantage and specialisation across the region.

- Category 1: Facilitating future jobs growth in those sectors that will be driven by population growth in the region/LGA. This includes broadening the markets of existing SMEs to link them to growth in the broader Hunter Region. These services include: retail and other services, health, aged care, and education and training.
- Category 2: Building on current areas of regional advantage through an integrated supply chain approach to deliver sustainable businesses and jobs. (Priorities are electricity generation, mining support, renewal of regional agribusiness, equine industries and tourism).
- Category 3: Developing new areas including: renewable energy and support activities; and logistics (based on improved road access and rail).
- Category 4: Developing new areas of industry specialisation, which provide the opportunity for increase in knowledge industry jobs. This includes knowledge based activities associated with agribusiness (research, education and training); tourism (education and training); environmental services, and renewable energy (support services, education and training, research); mining support (education and training). With the extent of green fields development and new housing (particularly in the coastal region of Great Lakes), there is an opportunity to apply new environmental systems and green technologies within new housing and facilities.
- Category 5: Attraction targets: covering government services and business services.

The sectors identified have a number of characteristics, and these include: providing direct jobs and some indirect jobs through cluster and supply chain relationships; generally having a higher knowledge and skills requirement; and being sustainable in the longer term in a changing environment. The pattern of development will vary between the LGAs based on their location, population, resource base, industry structures, and infrastructure.

While a successful strategy will maintain and increase the number of local jobs, there will be a continued increase in commuting to jobs between adjacent LGAs and into the Lower Hunter, due to the operation of regional product and service markets and regional labour markets and location preferences of residents.

The identification of these opportunities by local government area is outlined in the next section.¹⁵

¹⁵ The final listing of opportunities and strategies is in *Upper Hunter Economic Diversification Project, Report 3: Strategy Report* Buchan Consulting June 2011.

Table 8. Opportunities Classification for Upper Hunter Region 2010-2031

Category 1: Population/Market Driven	Category 2: Building on Current Industries	Category 3: Developing New Areas	Category 4: Creating New Advantages – Knowledge Based	Category 5: Other Attraction Targets
These sectors will be driven by local and regional population growth.	These are based on sustainable advantages linked to current industries. Priorities for action are: power generation, mining support, renewal of traditional regional agribusiness, equine industries, wine and tourism.	This is based on new and emerging sectors including: renewable energy and support activities; logistics (based on improved road access and rail); and new agribusiness (eg. new crops, products and market channels).	These are based on activities with higher knowledge content. Includes knowledge based activities associated with key sectors eg. agribusiness (research, education and training); tourism (education and training); environmental services, and renewable energy (support services, education and training, research); mining support (education and training); building and construction new environmental systems green technologies.	These sectors will deliver service jobs and need to be targets for attraction, in several LGAs.
Retail: food retail and specialty retail Hospitality: cafes and restaurants	Mining support: development as centre of industry excellence; servicing of broader markets.	Renewable Energy Cluster: generation facilities, support industries, technical services, research, training.	Education: expanded sectoral delivery of VET, including health, agribusiness, mining support, tourism in specialist regional training centres). Development of higher education delivery in regional centres	Business Services: back office functions, support centres.
Health and Community Services: health services, aged care, community support services.	Power generation: upgrades and new technologies, support services.	Logistics: distribution centres, intermodal hubs, warehousing and storage, and road transport services, education and training.	Building and construction: housing design, modular components, green building construction, engineering.	Government: government agencies – regional head quarters, administrative offices, regional service centres.
Education: from early learning to VET and some higher education delivery	Equine industries: thoroughbred sector, vet services, technical services, support services, education and training, research	Intensive agribusiness: development of specialist food production through intensive horticulture (market gardens, glass house production). New crops and products (eg. industrial hemp). Support activities, education and research.	Environmental services cluster: environmental R&D, water management, sustainable energy; architecture, urban planning.	
Construction: housing, industrial and commercial and building trades.	Regional agribusiness: beef, dairy, cropping. Strengthening through consolidation and new market channels.		Business services: business services, technical services, professional services.	
Business and professional services: financial, legal, employment, technical services.	Wine sector; maintenance of sector and improve links to wine tourism.			
	Tourism: (short break market), conferences, eco-tourism, sports tourism, adventure tourism, nature based. Accommodation, hospitality, cultural services, and retail.			

3.2.4 Key Development Themes

The key themes for the Upper Hunter Region are a regional economy that is sustainable, integrated (regional clusters, industry clusters and supply chain linkages) and innovative.

Knowledge and industry innovation will be important foundations for the long term strengthening of the Upper Hunter Region, and for developing new areas of advantage and new sustainable businesses and jobs. The longer term horizon allows for the building of new areas of competitive advantage and specialisation. There are important infrastructure elements that are required to underpin this future and this includes: improvements in roads; revitalisation of town centres; development of industrial lands; and development of housing.

There are a number of features of a diversified economy.

- A regional economy with economically and environmentally sustainable industries and employment structures (including more high skill local jobs and larger enterprises). It will be maximising the number of skilled jobs through building on current industries; and developing key industry clusters and encouraging new activities. It will remain as an important power generation area, through the new technologies in base load generation and the development of renewables.
- The region will be connected with improved transport links and telecommunications. It will have a stronger external focus, with a greater number of businesses servicing broader regional and national markets (and some global markets).
- Innovation - there would be more research and development and innovation in local businesses, industry clusters and in local industry research centres. There would be increased regional delivery of education and training for key sectors.
- From a social perspective, major inroads would be made into reducing unemployment; workforce participation would be increased; and skill levels would be developed.
- The region would maintain its key environmental assets (both coastal and inland) and be recognised for best practice in resources management, rehabilitation and in urban planning and design.
- There would be a stronger regional integration of economic development and planning processes and infrastructure delivery, to ensure that region can capture and develop new opportunities that are generated by population growth and by industry diversification. Funding would take account of the specific situation of mining regions and the linkage of infrastructure needs to the potential for industry diversification.
- There would be strong partnerships (industry, government and community) and an industry cluster approach, which is focused on diversification and growth.

The region has opportunities to shape future development in ways, which are sustainable from an economic, environmental and community perspective, and that take account of the changes that are being created by climate change and the necessary environmental policy responses.

4 Future Opportunities

4.1 Overview

The following table summarises the economic development opportunities and diversification opportunities in each area. Further detail on each LGA is contained in the following sections.

Table 9. Opportunities Summary – Upper Hunter LGAs

Regional Cluster 1			Regional Cluster 2		Regional Cluster 3
Singleton	Muswellbrook	Upper Hunter	Dungog	Gloucester	Great Lakes
Medium Term	Medium Term	Medium Term	Medium Term	Medium Term	Medium Term
Mining support Mining services Power Generation and support Tourism Logistics hub Engineering training centre Government services Business services	Mining Mining support and services Power generation and support Equine industry growth and development. Tourism Wine industry development Professional and technical services Cultural and creative industries (visual art and music) ¹⁶ Business services Government services ¹⁷	Equine industry growth and development. Tourism Renewable energy and support, education and research Services to mining industry Professional services	Agriculture revitalisation Intensive agriculture and development of an agribusiness park Agribusiness education and training (regional role) – extend Tocal College programs into Dungog Film sector – development of a residential film school, capitalising on film festival Tourism – market segment development Aged care	Agribusiness revitalisation Intensive agriculture and development using Gloucester Growers Cluster Wine sector Mining and gas support – engineering services Tourism : market segment development – short breaks - adventure, nature based, agri-tourism Retail revitalisation <Potential for regional partnering with Dungog on tourism and agriculture> Health and Aged care	Forster Tuncurry Crown Harbour Project Health services - extend and develop broader health and wellbeing focus Aged care Small business development and incubator Agriculture revitalisation – existing sectors and intensive agriculture Tourism: continue market segment development - active tourism/lifestyle, adventure sports, water based; eco-tourism and nature-based tourism. Building and construction – environmental focus Small business development and incubator Professional and technical services Government services
Long Term	Long Term	Long Term	Long Term	Long Term	Long Term
Engineering Agribusiness – intensive horticulture, wine, beef Food processing Renewable energy and support Aged care	Renewable energy and support Engineering Education and training Use of mining sites Aged care	Agriculture revitalization -Intensive horticulture Food processing expansion	Renewables - part of Hunter Renewable Energy Precinct : some limited opportunities for wind and solar generation Professional and technical services	Power generation (small gas fired plant) Industrial Park Professional and technical services	Light industrial – develop businesses in industrial area Environmental services (Centre of Excellence– in sustainability - research and training) Tourism training centre

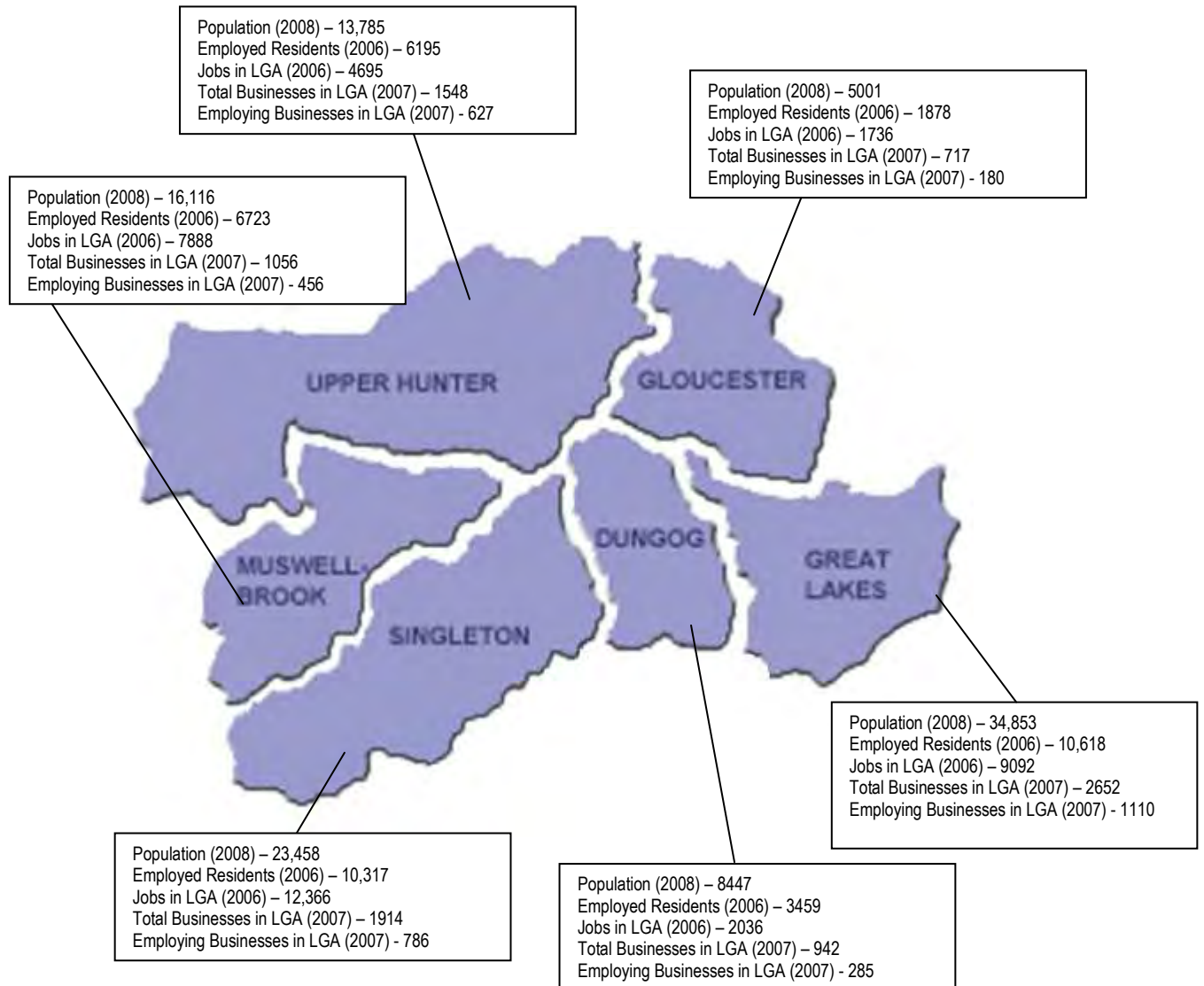
¹⁶ Muswellbrook has the Muswellbrook Regional Arts Centre and the Upper Hunter Conservatorium of Music.

¹⁷ Muswellbrook is the Upper Hunter Regional centre for Police, Correctional Services, Hospital, Roads and Traffic Authority, and TAFE.

4.2 Context for the Region and Diversification

4.2.1 Regional Characteristics

The individual LGAs differ in terms of their population size, industry mix and size, current economic situation and future drivers of activity. The following map provides an overview of the region in terms of population, businesses, jobs in each LGA and employed residents. The LGAs differ in terms of population size and trends, industry structure and performance of the economy.



The region had a population of 103,483 in 2009. An analysis of the regional economy shows that the LGAs can be clustered into sub-regions.

- Cluster 1: Mining influenced areas of Singleton and Muswellbrook and the adjacent Upper Hunter LGA (agribusiness focus).
- Cluster 2: The inland rural areas of Dungog and Gloucester Shire.
- Cluster 3: The coastal economy of Great Lakes (and its rural hinterland).

There are different dynamics at play in each of the areas.

- Population growth in Great Lakes is being mainly driven by sea change moves to the coast for retirement and lifestyle change.
- Singleton has the second largest population in the region and is experiencing growth, which has largely been associated with the expansion of mining in the region. Recent growth in the 2006-2009 period in Muswellbrook is largely due to similar factors.
- In the case of the Upper Hunter LGA, recent growth can be attributed to the continued expansion of the equine industry and some mining employees choosing to live in the area.
- In the smaller rural areas, population growth has been slower, due to industry restructuring in the agribusiness sector and some loss of local jobs.

4.2.2 Industry and Regional Issues

The following are major issues for the future which shape the context for the diversification strategy.

Industry Issues

There are major industry issues in the region:

- Structure of industry – a reliance on a narrow industry base with the major sectors linked to local resources nexus (mining and agribusiness). Outside of the mining sector, most businesses are small, with 75% employing less than 10 persons.
- Ongoing pressures of a dual speed economy -growth in mining and its impacts on other sectors and communities.
- Competing land use and resource issues. Growth of existing key sectors (agribusiness) and diversification options are dependent on maintaining critical mass in key sectors (eg. equine, wine etc.).
- The future horizon of coal mining and the pattern and levels of employment over the next 20-25 years. There will be a number of jobs to replace over this horizon (although mobile workforces are covering the current rapid growth). This issue is focused on the populations of Singleton, Muswellbrook and Upper Hunter LGA. The other LGAs have more limited links to the mining sector. Over time there is potential for cyclical variations in demand levels. At the same time new coal technologies will reduce emissions and extend market horizons.

Population and Jobs

There is a nexus between population and jobs:

- Increasing integration of regional labour markets with workers Upper Hunter residents travelling to jobs in the Lower Hunter and adjacent areas; and residents from the Lower Hunter commuting to jobs in the Upper Hunter. The nexus between job location and residence is weakening.
- Recognition of the link between jobs and population growth: balanced growth in area populations is dependent on the availability of local jobs or ready access to jobs within commutable distances.
- Opportunities to increase area populations to provide threshold demand levels for local services: the Upper Hunter will benefit from the strong growth in the Lower Hunter as some residents look for rural lifestyles with accessibility to jobs (in the Lower Hunter). There is a need to offer both town living and rural lifestyle blocks.
- An ageing of the population: and a need to develop accommodation and services for seniors.
- The importance of place in attracting both population and visitors to a town.

Environment

Environmental issues are important for the region:

- Environmental management issues, including impacts of climate change on regions, and the impacts of the proposed carbon tax on mining and power generations sectors.
- Availability of water to service growing populations and industries.
- Maintenance of land for agribusiness and maintaining buffers

Competitive Position

The Upper Hunter Region has a number of advantages:

- Strategically the overall Upper Hunter Region has a number of major advantages including: access to a major port, national road and rail networks, well located industrial land; a growing population; workforce skills; access to a major regional airport; a significant defence presence; access to a large regional market and proximity to the Sydney market.
- Improvements in regional highways are having impacts: the mid north coast is a major growth area and the Pacific Highway developments are improving access. The extension of the F3 to Branxton and improvements to the New England Highway are making the Upper Hunter Region more accessible as an industry location.
- From an industry attraction perspective the Upper Hunter is competing with other locations including the Lower Hunter, Mid North Coast, Central Coast, Western New South Wales (Dubbo, Tamworth, and Parkes etc.).

Future Development

Future development and diversification involves a focused approach:

- Building on areas of clear competitive strengths in the region – eg equine industry, mining support/engineering, power generation, renewables, tourism, and agribusiness.
- A key focus for the strategy is on building on advantages through a supply chain approach that captures value adding and support activities.
- Encouraging innovation - there is major potential for innovation in the region including: low-emissions coal initiatives; clean energy technologies; agribusiness (eg. wine, cattle, equine, intensive horticulture, and new crops (eg. industrial hemp)); and renewable. Much if this involves the development of industry/university linkages.
- The increasing skill levels in most sectors and the need to deliver vocational education and training in the region and to develop stronger business involvement in skills development.
- The strategy identifies regionally-linked opportunities and also specific opportunities in individual LGAs.
- Investing in key infrastructure, to support future growth in communities and in industries.

Infrastructure

Infrastructure development is critical for future diversification:

- Improvements in strategic infrastructure including roads, rail, water, sewer, industrial land, town centres and broadband. A regional approach is required to planning and funding of this infrastructure.
- Development of broadband enables persons in professional occupations to telecommute or to work irrespective of where they are located. This is an issue for some locations such as Great Lakes, Upper Hunter LGA and parts of Dungog and Gloucester. The NBN rollout and its timing is a strategic development issue for the region.
- Development of industrial estates to provide for specialist industry requirements and for light industrial activities.

4.3

4.4 Future Opportunities by LGA

This report analyses the future growth prospects for the Upper Hunter Region and for the individual LGAs. There are a number of elements to future growth and diversification:

- Increasing local populations to build ongoing critical mass for service industries and associated jobs.
- Building on specific industry strengths and local advantages and leveraging these as a foundation for future industry diversification and growth.
- Developing new areas of industry that are based on emerging opportunities (eg. logistics based on improved highway access).
- Developing knowledge intensive activities. This includes the development of renewable energy support activities; education and training activities; and research and development.

The sectors and the horizons for action are identified.

While action is required by each LGA Council on economic development, because of the inter-relationships between areas and sectors, there are benefits from a region wide and regional cluster approach. This issue is discussed further in Section 6.

In the following tables, opportunities are: identified by LGA; grouped into industry clusters; classified by category (Category 1: Population / Market Driven; Category 2: Building on Current Industries; Category 3: Developing New Areas; Category 4: Creating New Advantages – Knowledge Based; Category 5: Attraction Targets); and ranked as priorities for economic development in each LGA (Priorities 1-3). The horizons for development are identified in the sections that outline opportunities in individual LGAs.

The final listing of opportunities and strategies is in Upper Hunter Economic Diversification Project, Report 3: Strategy Report Buchan Consulting June 2011.

Table 10. Future Opportunities by LGA

Upper Hunter Region	Future Opportunities Clusters	Regional Cluster 1			Regional Cluster 2		Regional Cluster 3
		Singleton	Muswellbrook	Upper Hunter	Dungog	Gloucester	Great Lakes
Category 1: Population / Regional Market Driven							
Population & Housing	Category 1						
Population growth	Need for population growth for services growth and strengthened town centres	Growth (stronger)	Growth (stronger)	Growth	Slow growth	Slow growth	Continuing strong growth
Population growth	Residential growth - associated with mining employees	1	1	1			
Lifestyle living	Attract population - lifestyle blocks and precincts	1	1	1	1	1	1
Housing land	Develop additional housing land/ affordable housing (families)	1	1	1	2	2	1
Seniors	Category 1						
Seniors living	Seniors housing and facilities	2	2	2	1	1	1
Supporting an ageing population	Aged care facilities and services in LGA	2	2	2	1	1	1
Town Centre	Category 1						
Revitalisation	Main town centres	1	1	1	1	1	1
	Retail and services			2		1	
Health	Category 1	1	1	1	1	1	1
Health services	Maintain/develop local services	1	1	1	1	1	1
	Extend specialist services					1	1
Category 2: Building on Current Industries							
Mining and Support	Category 2:						
Mining	Expansion of existing mines	1	1				
Mining support industries	Extend mining support activities and markets	1	1	3		3	
Centre of Excellence	Develop as a centre of excellence in mining support	1					
Rehabilitated sites	Assess future mining site use – regional technical/business assessment (eg. waste – clean fill)	1	1			3	

Table 10 Future Opportunities by LGA (continued)

Upper Hunter Region	Future Opportunities Clusters	Cluster 1			Cluster 2		Cluster 3
		Singleton	Muswellbrook	Upper Hunter	Dungog	Gloucester	Great Lakes
Power Generation	Category 2						
Generators	Investment in capacity.		1				
	Clean coal technologies		1				
	Coal seam gas developments		1				
Power generation	Small gas fired power station					1	
Support industries	Continuation of support - contractors	1	1				
Agribusiness	Category 2						
Wine/viticulture	Maintain sector and critical mass/develop sector						
Existing agribusiness	Maintain/consolidate beef, dairy, cropping	1		1	1	1	2
Vegetable/fruit production	Develop intensive agriculture	2		2	1	1	
Food processing	Develop food processing operations	2		1			
Equine Sector	Expand activity and support		1	1			
Fishing and Aquaculture	Maintain and develop the sector Extend tourism links						1
New crops and products	New crops and products, building on Crops for Hunter Project (eg. industrial hemp)	1	1	1			
Tourism	Category 2						
Sector	Maintain and develop sector	2	2	1	2	1	1
Wine/food/agritourism	Extend wine tourism	1	1	1	3	1	
Adventure/nature based				1	1	1	
Equine related			1	1			
Ecotourism							1
Wellness market				2		3	1
Conference market				2			2
Infrastructure	Accommodation development						
Category 3: Developing New Areas							
Industry	Category 3:						
Engineering <diversify>	Build on engineering base – mining, power, construction Engineering capability – support, fabrication, construction engineering, technical services	1	1				
Logistics Centre or Intermodal Transport Hub	Develop as a logistics hub – road/rail access.	1				3	2
Building and construction	Extension of markets and green design/construction/services	2	2				1
Light industrial	Expansion to service regional industry and population	1	1	1	1	1	1

Table 10 Future Opportunities by LGA (continued)

Upper Hunter Region	Future Opportunities Clusters	Cluster 1			Cluster 2		Cluster 3
		Singleton	Muswellbrook	Upper Hunter	Dungog	Gloucester	Great Lakes
Category 4: Creating New Advantages - Knowledge Based							
Renewables	Category 4:						
Renewables	Solar, wind, geothermal and support activities	1	2	1	1		
Services	Category 4	0	0	1	1		1
Professional and technical services	Attraction of professionals for lifestyle changes	1	1	1	1		1
Environmental services	Development of support services			1			1
Education and Training	Category 4						
Education centre	Extended delivery of TAFE	1	1				1
	Local delivery of higher education	2					2
	Film Education				1		
Specialist Training Centres							
Equine Sector	Extend programs and delivery			1			
Agribusiness	Extend Tocal College programs				1		
Health	Nursing and allied health training delivery					1	1
Tourism	Develop regional training centre - tourism and hospitality						1
Engineering. and mining support	Develop regional delivery	1					
Research and Development	Category 4						
Renewables	Research and development			2			
Environmental management	Coastal environments						2
Equine	Expanded research activity/centre			1			
Energy	Capitalising on opportunities from the Smart Grid Smart City project		1	1			
Category 5: Attraction Targets							
Governments Services	Administrative offices, regional service centres	2	1				1
Business services	Back office functions, support centres	1	1				1

4.5 Singleton LGA

4.5.1 Overview

Singleton is the second largest LGA in terms of population size. Singleton is a major centre for mining and mining support activity and for power generation in the Upper Hunter. Other key sectors include engineering, defence, agribusiness (beef cattle, dairy and wine/viticulture) and population services. The LGA has a strong industrial heritage because of the dominance of regional jobs in mining, power generation and in industries that are linked to these two major sectors.

Population growth has been relatively strong over the last decade and this has been largely associated with the continued expansion of mining and related jobs in the region. A major focus of planning has been on quality housing estates and community facilities to provide for industrial employees, working in jobs in the LGA and in the adjacent LGAs of Muswellbrook, Maitland or Cessnock.

Mining and associated support activities dominate the jobs in the LGA (direct employment in mining accounts for 31% of all jobs) and a significant number of residents are employed in the electricity generation sector. Coal mining activity is driven by the strong continued demand from export markets.¹⁸ Two of Australia's largest coal-fired power stations, Liddell and Bayswater, are located on the border of the Singleton and Muswellbrook LGAs, and the Redbank Power Station is located in Singleton LGA. A pilot plant at Liddell is also trialling new solar thermal technology. This energy combination has meant a major engineering specialisation in the LGA, in terms of the mix of businesses and the occupations of residents (tradespersons and professional engineers).

Defence is a major activity with the Singleton Infantry Centre employing around 300 permanent staff. The rural component of the local economy still remains significant and covers cattle and dairy sectors some market gardening and citrus growing and mushrooms, and viticulture.¹⁹

The LGA has been affected by the mining boom, particularly over the last five years. These impacts have been reflected in: skill shortages; turnover and recruitment difficulties in other lower wage sectors; pressures on the housing market (prices and rents); rising costs and infrastructure issues.

The area is well serviced with industrial estates, with several areas of employment lands being developed by private developers.²⁰ There is potential for future development with the extension of the F3, which will open up access and create opportunities for expanded transport and logistics activities. Singleton being adjacent to the Lower Hunter also provides access to markets and jobs of the larger and fast growing LGAs of Cessnock and Maitland.

The mix of industrial skills, location, population growth and agribusiness provides opportunities for future diversification.

¹⁸ Economic Strategy Singleton - "A progressive community of excellence and sustainability". 2010 Singleton Shire Council

¹⁹ Hunter Investment Prospectus 2009 HEDC P90

²⁰ These are Hunter Land and Buildev, who both specialise in the development of industrial estates and business parks.

4.5.2 Future Opportunities

Singleton LGA – Overview Opportunities

Mining support
 Power Generation and support
 Engineering
 Agribusiness – horticulture, wine, beef, new crops
 Tourism
 Logistics hub
 Renewable energy and support
 Engineering training centre
 Government services
 Business services

The following tables outline the future opportunities in the region.

Singleton LGA	Opportunities - Priorities
Category 1: Population / Market Driven	<p>Population: Continued population growth will drive services demand in the LGA. Its strategic location provides continued opportunities for persons working in adjacent LGAs. There is potential to develop more lifestyle housing developments.</p> <p>Population growth is necessary to underpin town centre revitalisation and other services</p> <p>Seniors: Relative to other locations in the region, the LGA has younger population structure (families with children). In the medium term there is requirement to extend housing and age care facilities and services.</p>
Category 2: Building on Current Industries	<p>Mining and mining support – these sectors have a horizon of 15 -20 years. Singleton because of the scale of support industries can develop as a centre of excellence for broader mining markets.</p> <p>Power generation: the sector will continue to remain a major source of employment with investment in capacity and in other technologies (coal seam gas, clean coal) and renewables</p> <p>Agribusiness: remains important to the region, with the potential for revitalisation across existing sectors (beef, wine); and the extension of more intensive horticulture and new crops and products (eg. industrial hemp).</p> <p>Food processing: given location, accessibility and the future development of agribusiness there is the potential to develop a food processing operation.</p> <p>Tourism: maintain and develop the sector, covering short breaks, wine tourism and events.</p>
Category 3: Developing New Areas	<p>Major opportunities relate to: the development of engineering capability to service other (non-mining) sectors; development of a logistics hub; extension of building and construction; and development of new areas of light industrial activities servicing regional markets.</p>
Category 4: Creating New Advantages - Knowledge Based	<p>Developing more knowledge intensive activities is a priority for the future. Relative to other areas of the Lower Hunter, Singleton is underrepresented in these activities. Opportunities include: further development of renewables (eg. solar) and associated industry support and research and development; development of engineering R&D; extension of regional delivery of education (VET and Higher Education) and the development of an engineering training centre; and the development of professional and technical services.</p>
Category 5: Attraction Targets	<p>Two areas of business attraction targets are: business back office functions and support centres; and government regional service offices.</p>

Table 11. Future Opportunities - Singleton LGA

Singleton LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	
Category 1: Population / Regional Market Driven						
Population & Housing	Category 1					1
Population growth	Need for population growth for services growth and strengthened town centres					Continuing strong growth
Population growth	Residential growth - associated with mining employees					1
Lifestyle living	Attract population - lifestyle blocks and precincts (eg. Golf Course Estate)					1
Housing land	Develop additional housing land/ affordable housing (families)					1
Seniors	Category 1					2
Seniors living	Seniors housing and facilities					2
Supporting an ageing population	Aged care facilities and services in LGA					2
Town Centre	Category 1					
Revitalisation	Main town centres					1
	Retail and services					1
Health	Category 1					1
Health services	Maintain/develop local services					1
	Extend specialist services					
Category 2: Building on Current Industries						
Mining and Support	Category 2:					1
Mining	Expansion of existing mines					1
Mining support industries	Extend mining support activities and markets (eg. Hunter, Gunnedah and Queensland, international).					1
Centre of Excellence	Develop as a centre of excellence in mining support					1
Rehabilitated sites	Assess future mining site use – regional technical/business assessment (eg. waste – clean fill)					1

Future Opportunities - Singleton LGA (continued)

Singleton LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	Singleton
Power Generation	Category 2					1
Generators	Investment in capacity.					
	Clean coal technologies					
	Coal seam gas developments					
Support industries	Continuation of support - contractors					1
Agribusiness	Category 2					2
Wine/viticulture	Maintain sector and critical mass/develop sector					1
Existing agribusiness	Maintain/consolidate Beef, dairy, horticulture					1
New crops and products	Building on Crops for Hunter Project (eg. industrial hemp)					1
Vegetable/fruit production	Develop intensive agriculture					2
	Trials					
	Commercial Production					
Food processing	Develop food processing operations					2
Tourism	Category 2					1
Sector	Maintain and develop sector – short breaks					2
Wine/food/agritourism	Extend wine tourism					1
Infrastructure	Accommodation development					
Category 3: Developing New Areas						
Industry	Category 3:					
Engineering <diversify>	Build on engineering base – mining, power, construction Engineering capability – support, fabrication, construction engineering, technical services					1
Logistics Centre or Intermodal Transport Hub	Develop as a logistics hub – road/rail access and F3 extension					1
Building and construction	Extension of markets					2
Light industrial	Expansion to service regional industry and population					1

Future Opportunities - Singleton LGA (continued)

Singleton LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	Singleton
Category 4: Creating New Advantages - Knowledge Based						
Renewables	Category 4:					
Renewables	Solar, wind, geothermal and support activities					1
Services	Category 4					
Professional and technical services	Attraction of professionals for lifestyle changes					1
Education and Training	Category 4					1
Education centre	Extended delivery of TAFE					1
	Local delivery of higher education					2
Specialist Training Centres						
Engineering and mining support	Develop regional delivery					1
Research and Development	Category 4					
Engineering and mining support	Research and development					1
Category 5: Attraction Targets						2
Governments Services	Administrative offices, regional service centres					2
Business services	Back office functions, support centres					1

4.5.3 Supporting Infrastructure

Realising these opportunities requires a combination of: infrastructure improvements (road, rail overpass, industrial areas, town centre, broadband) and associated funding; government decisions on planning issues and location of local services delivery; and coordinated industry activity on economic development.

Many of these infrastructure needs are beyond the capacity of Councils to fund, and action is needed on mining royalties, to fund strategic regional infrastructure.

4.6 Muswellbrook LGA

4.6.1 Overview

Muswellbrook had a population of 16,391 in 2009 (ABS), with the town of Muswellbrook (10,500) being the major centre, and Denman the second centre with a population of around 1500 people. The area has an agribusiness sector (beef, dairy, wine), including an expanding equine sector.

The industrialisation of the LGA has been driven by the energy sector. Muswellbrook is the main centre for New South Wales' power generation capacity. The area has also become a major centre of Upper Hunter coal mining with the major expansion of mines over the last decade (and an acceleration in the last 5 years). There are businesses supporting both the coal sector and the power sector located in Muswellbrook. In 2006 the mining sector accounted for almost 20% of the jobs in the region, and this had increased further with the growth in the sector that has occurred in the period since.

While mining is now the largest industry of employment of local residents, there are major concerns in relation to the impacts of continued mining expansion. This includes: competing land use and impacts on other industries (equine, viticulture and other agribusiness); impacts on housing costs and availability; wage cost pressures on other industry sectors; other cost pressures on the community and low income households; environmental impacts and pressures; effects on tourism; and the impacts on local infrastructure. These issues are seen as critical factors affecting the regional economy and its future prospects. There are concerns that Muswellbrook is now at the centre of a *two speed economy*. The cumulative impact of mining on infrastructure and the town centre (eg. traffic and congestion) and the limited capacity of local government to fund necessary infrastructure is also a concern.

Looking to the long term future, there are major concerns regarding mining being a finite industry and the need to find a future for the area beyond coal sector. This also relates to the narrow economic base within the LGA and the need to maintain and grow other sectors such as agribusiness. Underlying these issues is population growth, the ageing of the resident population, persons exiting agriculture, and young people leaving the area for education and employment.

Relative to the other areas in the Upper Hunter Region, agribusiness in Muswellbrook is subject to more constraints on future development due to the scale of operational mining expansion and the extent of land acquisition for exploration leases.

4.6.2 Future Opportunities

Muswellbrook LGA – Overview Opportunities

Power generation and support
Renewable energy and support
Equine industry growth and development
Services to mining industry
Engineering
Education and training
Tourism
Professional and technical services
Government services
Use of mining sites

The following tables outline the future opportunities in the region.

Muswellbrook LGA	Opportunities - Priorities
Category 1: Population / Market Driven	<p>Population: Continued population growth is required to drive services demand in the LGA. Proposed housing development required to provide affordable housing.</p> <p>Seniors: Compared with other locations in the Upper Hunter, the LGA has younger population structure (families with children). In the medium term there are requirements to extend seniors housing and age care facilities and services.</p> <p>Town centre: need for revitalisation and development of services, including health services.</p>
Category 2: Building on Current Industries	<p>Mining and mining support – these sectors have a current horizon of 15 -20 years, with shifts in employment levels over this period. There is a need to maximise number of employees who reside in the area. Muswellbrook has potential to extend its support activities, providing industrial land requirements and infrastructure can be resolved.</p> <p>Mine site rehabilitation there is a need for a regional technical and business assessment of future uses.</p> <p>Power generation: the sector will continue to remain a major source of employment with future investment in capacity and in other technologies (coal seam gas, clean coal) and growth of renewables. There is potential to expand support activities (engineering, technical services, maintenance).</p> <p>Agribusiness: remains important to the region, however it is under pressure due to mining expansion (land use and water). Key sectors are the expansion of the equine sector in Muswellbrook and Upper Hunter LGA; and maintenance and development of the wine sector. Beef will undergo change with continued consolidation into larger holdings. Investigate new crops and products (eg. Crops for Hunter - industrial hemp).</p> <p>Potential for more intensive agriculture may be limited due to availability of alluvial land (outside of mining leases). Intensive agriculture needs to be the subject of an Upper Hunter Region wide technical study.</p> <p>Forestry - assess potential for forestry development on rehabilitated land (including carbon credits).</p> <p>Tourism: maintain and develop sector based on short breaks and events and wine sector and equine industry. Development requirements include a need for resort style accommodation, improved skills and sub regional integration (regional trails).</p>
Category 3: Developing New Areas	<p>Future opportunities relate to: the development of engineering capability to service other (non-mining) sectors; and development of light industrial activities servicing regional markets.</p>
Category 4: Creating New Advantages - Knowledge Based	<p>Developing more knowledge intensive activities is a priority for the future. Relative to other areas in the Lower Hunter, Muswellbrook is underrepresented in these activities.</p> <p>Opportunities include: development of professional and technical services servicing regional markets; power industry research and development; renewables and extension of regional delivery of education (VET) utilising the mining training centre.</p>
Category 5: Attraction Targets	<p>Two areas of business attraction targets are: business back office functions and support centres; and government regional service offices.</p>

Table 12. Future Opportunities – Muswellbrook LGA

Muswellbrook LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	Muswellbrook
Category 1: Population / Regional Market Driven						
Population & Housing	Category 1					1
Population growth	Need for population growth for services growth and strengthened town centres for projected growth in population					Growth
Population growth	Residential growth - associated with mining employees					1
Housing land	Develop proposed additional housing land/ affordable housing (attraction of families)					1
Seniors	Category 1					2
Seniors living	Seniors housing and facilities in town centres					2
Supporting an ageing population	Develop aged care facilities and services in LGA in line with demand					2
Town Centre	Category 1					
Revitalisation	Muswellbrook town centre					1
	Improve retail and services					1
Health	Category 1					1
Health services	Maintain and develop local services					1
Category 2: Building on Current Industries						
Mining and Support	Category 2:					1
Mining	Expansion of existing mines and associated employment. Encourage more local employees					1
Mining support industries Covers engineering, fabrication, construction services, technical services	Extend mining support activities and markets Some expansion in mining support activities. Opportunity to extend markets as mines moves north- west (Gunnedah) or to service Queensland. .Requires industrial sites.					1
Rehabilitated sites	Assess future mining site use – regional technical/business assessment of uses (eg. land fill and waste treatment, carbon offsets tree planting)					1

Future Opportunities – Muswellbrook LGA (continued)

Muswellbrook LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	Muswellbrook
Power Generation	Category 2					1
Generators	Investment in capacity.					1
	Clean coal technologies					1
	Coal seam gas developments					1
Support industries	Continuation of support industries to power sector. Strong engineering base supporting the mining and power sector					1
Agribusiness	Category 2					1
	Major pressures on available productive land due to extension of mining leases and operating mines					
Equine Sector	Key sector - expand activity and support industries					1
	Ensure that buffers are maintained					1
	Maintain and develop the sector < Muswellbrook & Upper Hunter LGA>					1
	Expand support services					1
Wine/viticulture	Need to maintain sector and critical mass/develop sector Ensure buffers are maintained Maintain and develop sector Improve wine tourism					1
New crops and products	Building on Crops for Hunter Project (eg. industrial hemp)					1
Beef	Maintain and develop the sector including consolidation					2
Intensive Agriculture <major constraints>	More intensive agriculture requires alluvial land and access to water. A constraint due to 70% of land is owned by mining companies on the Hunter River flats between Muswellbrook and Denman.					2
Forestry	Assess potential for forestry development on rehabilitated land.(including carbon credits)					2
Tourism	Category 2					1
Sector	Maintain and develop sector LGA Tourism focused on Denman – wine and equine sector					2
Wine/food/agritourism	Extend wine tourism.					1
Equine	Develop equine related tourism					1
Regional integration	Greater regional integration of tourism (eg. Upper Hunter trails).					1
Skills	Need to improve skills and training in sector					2
Accommodation	Constraints -pressures on motel accommodation due to mining.					
	Resort style accommodation needed					1

Future Opportunities – Muswellbrook LGA (continued)

Muswellbrook LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	Muswellbrook
Category 3: Developing New Areas						
Industry	Category 3:					
Engineering <diversify>	Build on engineering base – mining, power, construction Engineering capability – support, fabrication, construction engineering, technical services					1
Light industrial	Expansion to service regional industry and population					1
Renewable Energy	Development of renewable energy					2
Category 4: Creating New Advantages - Knowledge Based						
Services	Category 4					
Professional and technical services	Attraction of professionals for lifestyle changes					1
Education and Training	Category 4					1
Education and Training						
Specialist Training Centre	Specialist TAFE mining centre located in Muswellbrook					
	Extend range of programs at the centre to related industry activity.					1
Research and Development	Category 4					
Power industry	Research and development					1
Attraction	Category 5: Attraction Targets					1
Governments Services	Administrative offices, regional service centres					1
Business services	Back office functions, support centres					1

4.6.3 Supporting Infrastructure

Realising these opportunities requires a combination of: infrastructure improvements (road improvements - including a bypass, sewerage of industrial estates, development of industrial areas, town centre revitalisation, and broadband) and associated funding; government decisions on planning issues and location of local services delivery; and coordinated industry activity on economic development.

Water is an issue in relation to the long term availability for rural and industrial uses due to issues in relation to competing uses and over allocation.

Infrastructure needs are beyond the capacity of Councils to fund, with some action needed on mining royalties, to fund strategic regional infrastructure.

4.7 Upper Hunter LGA

4.7.1 Overview

In broad terms the LGA is a rural area with productive agricultural land, available water supplies, and a strong national/international reputation of the equine industry. It is also becoming a centre for renewable energy, with the large scale investment in the Kyoto Energy Park.

Upper Hunter LGA has a specialisation in agribusiness and is seen as the national centre of the equine industry (*Horse Capital of Australia*). The population has been growing over the last decade and this has been largely associated with the expansion in the equine sector; expansion of mining and related jobs in the Muswellbrook area; and persons making lifestyle changes. While some population projections show a stable population over the longer term, recent indicators from the Council show an increase in growth. The area offers potential for continued growth, particularly around Scone.

Environment and rural lifestyle are major assets of the area. The area has a quality natural environment with access to national parks and lakes and rivers and a scenic rural environment.

The area has experienced growth in agribusiness. The local economy relies on agriculture (beef, grains and sheep), meat processing, the equine industry and tourism, retail and services. The equine industry includes thoroughbred studs, horse events and infrastructure, including an equine research centre and a TAFE campus specialising in rural and equine studies.

Agribusiness accounts for around 26% of jobs in the LGA and covers equine industry, beef cattle, sheep and some crops. A major meat processing facility (Primo) is located in Scone, and this is the major manufacturing activity. Reflecting the scale of agribusiness, the LGA accounts for 35% of agribusiness jobs in the Upper Hunter Region. Other key sectors are in-person services (eg. retail, education and health) and professional services.

Significant growth is occurring in the equine sector, although the industry has major concerns about competing land use and the extension of mining into areas adjacent to horse operations (in the Upper Hunter Region – Muswellbrook and around the Scone area).

The LGA is a designated Renewables Precinct, and has a major renewables project (Kyoto Energy Park). The recent report "*Clean Energy Jobs in Regional NSW: A Roadmap for the Upper Hunter, January 2011*", covering the Upper Hunter, Dungog and Warrumbungle LGAs, estimates 250 permanent jobs could be supported across the LGAs by 2030 if there is large-scale, accelerated development of the precinct's wind resource, and a maximum of 550 construction jobs created and peaking in 2015-16 and in 2023-26.²¹

While not a mining area, like Muswellbrook and Singleton, the LGA has experienced some of the pressures with skill shortages in other sectors due to recruitment of existing trained employees to the mining sector and the high wages paid relative to other sectors. There are also issues in relation to coal trains through the town and cumulative time delays at the rail crossing.

Like other regional areas there is a loss of younger persons to capital cities and regional cities for post school education and employment.

An Economic Development and Tourism Strategic Plan 2010 (ED&TSP 2010) has been developed by Upper Hunter LGA Council. The focus is on: building on the current reputation that Scone and the Upper Hunter enjoys as the "Horse Capital of Australia"; and capitalising on the potential for green industries (energy park and support industries) and the natural environment, highly productive agricultural and clean air and plentiful water.²²

21 Clean Energy Jobs in Regional NSW: A Roadmap for the Upper Hunter, The Climate Institute, 27 January 2011, Funded by NSW Department of Environment, Climate Change and Water, Ernst & Young, P1.

22 Draft Economic Development & Tourism Strategic Plan - Revised 8 September 2010, Upper Hunter Shire Council P4

Future long term growth in the area is likely to be based around: further development of the equine sector; other agribusiness, including processing: renewable energy; tourism; and population services. The potential for the development of services to mining has been identified due to: the location in proximity to the new mining developments in the Gunnedah Basin and the Muswellbrook mines; and road and rail access. The area has affordable land for commercial, industrial and residential uses. Access will also improve with the extension of the F3.

4.7.2 Future Opportunities

<p>Upper Hunter LGA – Overview Opportunities Build on strengths in equine and emerging renewables sector. Equine industry growth and development. Renewable energy and support, education and research Services to mining industry Tourism Agribusiness revitalisation Intensive horticulture Food processing expansion Professional services</p>
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The following tables outline the future opportunities in the region.

Upper Hunter LGA	Opportunities - Priorities
Category 1: Population/Market Driven	<p>Population: Continued population growth will drive services demand in the LGA. Its strategic location provides continued opportunities for persons working in jobs in adjacent LGAs. There is potential to develop more lifestyle housing developments. Population growth is necessary to underpin the future growth of Scone and the services sector and needs to be based on development affordable housing options. Seniors: The age structure indicates an ageing population. This requires the development of seniors housing and continued development of aged care facilities in line with emerging demand levels.</p>
Category 2: Building on Current Industries	<p>Equine: strengthening of equine industry, via expansion of research and development, education, service industries and exports. Agribusiness: remains important to the region, with the potential for revitalisation across existing sectors (beef, wine, crops); and the development of more intensive horticulture. Investigate new crops and products (eg. Crops for Hunter - industrial hemp). Food processing: is one of the largest employers and there is potential for further development and expansion, and the potential to attract other businesses. Tourism: this is a major area for potential growth in short breaks market, built around equine sector, nature/adventure tourism, and wellness. Some infrastructure needs – accommodation and conference facilities.</p>
Category 3: Developing New Areas	<p>Major opportunities relate to: development of some mining support activities; and development of new areas of light industrial activities servicing regional markets.</p>
Category 4: Creating New Advantages - Knowledge Based	<p>Developing more knowledge intensive activities is a priority for the future. Renewable energy: Upper Hunter LGA has major advantages in renewable energy (Kyoto Energy Park and is a designated Renewables Precinct). Opportunities to develop support activities and services and as a regional research, education & training hub for the sector. Other areas include the development of professional and technical services (business, agribusiness, and renewables) through persons being attracted for lifestyle and regional market opportunities. Education: extend equine industry education and training. Research: extend equine industry research and development and develop renewables research.</p>
Category 5: Attraction Targets	<p>Two areas of business attraction targets are: business back office functions and support centres; and government regional service offices.</p>

Table 13. Future Opportunities – Upper Hunter LGA

Upper Hunter LGA	Future Opportunities Clusters	Horizon	5	10	15	20	Priority
							Upper Hunter
Category 1: Population / Regional Market Driven							
Population & Housing	Category 1						1
Population growth Potential for further growth	Need for population growth for services growth and strengthened town centre						Growth
Population growth	Residential growth - associated with mining employees						1
Lifestyle living	Attract population - lifestyle blocks and precincts						1
Housing land	Develop additional housing land/ affordable housing (families)						1
Seniors	Category 1						2
Seniors living	Seniors housing and facilities, services						2
Supporting an ageing population	Aged care facilities and services in LGA						2
Town Centre	Category 1						
Revitalisation	Town centres						1
	Retail and services						2
Health	Category 1						1
Health services	Maintain/develop local services						1

Future Opportunities - Upper Hunter LGA (continued)

Upper Hunter LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	Upper Hunter
Category 2: Building on Current Industries						
Agribusiness	Category 2					1
Equine Industry Major sector and national competitive advantage	Strengthening of Equine Industry –research and education , service industries, exports					1
	Maintain buffers to preserve sector.					
	Develop regional cluster with Muswellbrook					
Wine/viticulture	Maintain sector and critical mass/develop sector					1
Existing agribusiness	Maintain/consolidate Beef, dairy, cropping					1
New crops and products	Building on Crops for Hunter Project (eg. industrial hemp)					1
Develop intensive agriculture	Develop intensive horticulture/food production.					2
	Growing Trials					2
	Commercial Production					2
Food processing	Further development of meat processing (vertical integration)					1
	Attract other processing operations					1
Tourism	Category 2					1
Expand sector	Taking a targeted approach in developing product , brand and infrastructure					1
Market focus	Short breaks market linked to national parks, lake, agritourism, and equine sector.					
Wine/food/agritourism	Extend wine tourism					1
Adventure/nature based	Develop					1
Equine related	Develop					1
Wellness market	Develop					2
Conference market	Facilities and marketing					2
Infrastructure	Accommodation development					1
	Tourism Education and Training					
Category 3: Developing New Areas						
Industry	Category 3:					
Mining support industries	Development of mining related service industries due to central location between Hunter and Gunnedah. Based on affordability and road rail access.					2
Light industrial	Expansion to service regional industry and population					1

Future Opportunities - Upper Hunter LGA (continued)

Upper Hunter LGA	Future Opportunities Clusters	Horizon	5	10	15	20	Priority
Category 4: Creating New Advantages - Knowledge Based							
Renewables	Category 4:						1
Developing sector: solar, wind, geothermal and support activities	Kyoto Energy Park						1
	Renewables Precinct developments (wind)						1
	Develop support industries						1
	Develop a regional research , education & training hub						1
Services	Category 4						1
Professional and technical services	Professional services delivery to regional and national markets – lifestyle changers						1
Environmental services	Development of support services						1
Education and Training	Category 4						1
Education centre	Extended delivery of TAFE						
	Local delivery of higher education						
Specialist Training Centres							
Equine Sector	Extend programs and delivery						1
Research and Development	Category 4						
Renewables	Research and development						2
Equine	Expanded research activity/centre						1

4.7.3 Supporting Infrastructure

Realising these opportunities requires a combination of: infrastructure improvements (road, rail overpass, industrial areas, town centre, water, broadband, Scone airport improvements) and associated funding; government decisions on planning and location of local services delivery; and coordinated industry activity on economic development. Water is an issue in relation to the long term availability for rural and industrial uses. Regional infrastructure needs are beyond the capacity of Councils to fund.

4.8 Dungog LGA

4.8.1 Overview

Dungog has a more traditional industry structure, which has been driven by agribusiness - beef, dairy and timber and servicing of these industries and the local resident population. The restructuring of these agribusiness sectors has led to a major fall in the number of local jobs.

Dungog is a rural LGA with a population of over 8000 persons. Dungog township is the major centre with a population of 2098 and the area has several other villages.²³

In 2006 the LGA had a total of 2039 jobs, with 22% of these being in agribusiness and almost half of the jobs being in-person services (which are servicing the local population in the LGA).

An analysis of data between 2001 and 2006 shows that the LGA had a decline in jobs of 532. A major concern was that these falls in employment were spread across most sectors of employment, including agribusiness, local in-person services and professional services. Since then there has been a further reduction in timber industry jobs and little jobs growth in other sectors.

Dungog offers lifestyle benefits, and the more recent pattern has been for residents to access jobs in growth areas in locations in the Lower Hunter and this pattern will continue. However from a local economy perspective there is a need: to build population to support local town economy and services; to diversify and develop new areas of agribusiness; and to develop the tourism sector. Dungog LGA is also included as part of the *Hunter Renewable Energy Precinct*, with some possibilities for wind energy.

Major issues affecting the region and its future are: an ageing population; loss of some services (eg. health, education) due to centralisation; structural change in agriculture and forestry; water availability issues; limited public transport access; and the mismatch between current housing types and future requirements.

There has been a steady decline in agribusiness jobs and some small increases in population services and tourism related jobs. The LGA is very much a small business economy with most businesses being owner operated or employing less than four people. The larger businesses are concentrated in health and community services, tourism (accommodation, cafes and restaurants), education and property and business services. Despite the sectoral changes agribusiness remains the major area of employment.

The recent situational analysis observed that: *"The community is in transition from a detached rural community to an economy that is more integrated with regional growth."*²⁴

The development of the Tillegra Dam would have offered substantial tourism development benefits. In the absence of the dam there is a need to refocus tourism development and to deal with the major constraint of accommodation. There are opportunities to build this sector in the short breaks market, including nature based tourism, adventure tourism and agri-tourism.

From a population perspective, there will be a continuing trend for residents to choose the Dungog lifestyle, but have their employment (particularly for professionals, technical workers, health workers and tradespersons) in the Lower Hunter. This pattern will maintain the LGAs population over the medium term. With an ageing population, there are opportunities to create seniors living housing options in the Dungog Township. In overall terms, a growing population is important in maintaining local service jobs.

23 Tillegra Dam Situational Analysis, Planning Workshop Australia August 2008 P12

24 Dungog LGA Situation Analysis September 2008, planning workshop Australia P4

4.8.2 Future Opportunities

From a diversification perspective, the future for Dungog will involve: maintaining productive agriculture and associated support activities; developing more intensive farming options (e.g. food growing operations); and developing the short break tourism market (nature based, adventure and agritourism).

<p>Dungog LGA – Overview Opportunities Agribusiness revitalisation Intensive agriculture and development of an agribusiness park Tourism – market segment development Renewables - part of <i>Hunter Renewable Energy Precinct</i> – wind and potential for solar generation, smaller scale projects. Agribusiness education and training (regional role) – extend Tocal College programs Professional and technical services Aged care Partnering with Gloucester – tourism and agribusiness development</p>
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The following tables outline the future opportunities in the region. .

Dungog LGA	Opportunities - Priorities
Category 1: Population / Market Driven	<p>Population: Population growth is needed to drive services demand in the LGA. The area is attracting persons who work in adjacent LGAs (eg. working in Thornton, Tomago, Maitland, Williamtown) but want a rural lifestyle. This pattern needs to continue, with development of lifestyle blocks and affordable housing options.</p> <p>Seniors: The LGA has an ageing population and limited care facilities. There is a need to develop seniors housing and aged care facilities.</p> <p>Dungog town centre – need to revitalise and continue its role as the service centre.</p>
Category 2: Building on Current Industries	<p>Beef: remains important to the region, with the potential for revitalisation across the existing beef sector, through consolidation.</p> <p>Intensive agriculture: development of more intensive horticulture, including development of an <i>agribusiness park</i> for trial development of crops. Diversification activities could be in partnership with the Gloucester LGA (Gloucester Growers Cluster).</p> <p>Equine: encourage expansion of the sector.</p> <p>Food processing: extension of poultry industry supply chain.</p> <p>Tourism: this sector has potential for growth in short breaks market, built around, nature/adventure tourism; eco-tourism and agri-tourism (food and wine). There are major infrastructure needs in terms of accommodation and development of infrastructure in national park areas. There are benefits from a taking a sub-regional marketing approach (eg. regional visitor trails and links with Gloucester).</p>
Category 3: Developing New Areas	<p>There is potential to light industrial activities servicing local and regional markets. This will require the development of industrial areas.</p>
Category 4: Creating New Advantages - Knowledge Based	<p>Developing more knowledge intensive activities is a priority for the future for all regions.</p> <p>Renewables: development as part of the <i>Hunter Renewable Energy Precinct</i> – wind and potential for solar generation.</p> <p>Business and technical services: development of professional and technical services (business, agribusiness, environmental) through persons attracted to Dungog for lifestyle changes and for broader regional market opportunities.</p> <p>Education: expansion of Tocal College – agribusiness education and training for the Upper Hunter Region.</p>

Table 14. Future Opportunities -Dungog LGA

Dungog LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	Dungog
Category 1: Population / Regional Market Driven						
Population & Housing	Category 1					1
Population growth	Need for population growth for services growth and strengthened town centre. Area attracting persons who work in adjacent locations (eg. working in Thornton, Tomago, Maitland, Williamstown)					Slow growth
Lifestyle living	Attract population - lifestyle living with jobs in areas of Lower Hunter)					1
Housing land	Rezone additional housing land for - rural residential Develop additional housing land/ affordable housing (families)					1
Seniors	Category 1					1
Seniors living	Seniors housing and facilities, services in town centre					1
Supporting an ageing population	Develop aged care facilities and services .					1
Town Centre	Category 1					
Revitalisation	Improve centres/villages - Dungog as major service centre					1
	Improve retail mix, services & cafes/restaurants					
Health	Category 1					1
Health services	Maintain/develop local services					1

Future Opportunities - Dungog LGA (continued)

Dungog LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	Dungog
Category 2: Building on Current Industries						
Agribusiness	Category 2					1
Beef	Maintain and develop the sector including consolidation					1
Agricultural diversification	Develop intensive agriculture					1
	Partnership with Gloucester Growers Cluster					1
	Trials – develop an Agribusiness Park					1
	Commercial Operations					1
Equine Sector	Stud thoroughbred activity is expanding – support growth					1
Food processing	Extension of poultry processing-supply chain					2
Tourism	Category 2					1
Sector	Maintain and develop sector – short breaks					2
Wine/food/agritourism	Extend wine tourism					3
Adventure/nature based	Focus on nature based tourism and access to Tops					1
Eco-tourism	Maintain sector					2
Film Festival	Develop on film festival – extend activities and events					1
Greater sub- regional integration of tourism	Develop regional visitor trails to extend product offer					1
Infrastructure - tourism	Accommodation development Improve accommodation availability for visitor market – motel and caravan park					1
	National Parks/State Forests – need for investment in tourist facilities					1
Category 3: Developing New Areas						
Industry	Category 3:					
Light industrial	Expansion to service regional industry and population					1

Future Opportunities –Dungog LGA (continued)

Dungog LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	Dungog
Category 4: Creating New Advantages - Knowledge Based						
Renewables	Category 4:					1
Renewables	Development as part of the Hunter Renewable Energy Precinct – wind and potential for solar. <Small scale development.>					1
Services	Category 4					1
Professional and technical services	Attraction of professionals for lifestyle changes					1
Environmental services	Development of support services					2
Education and Training	Category 4					1
Specialist Training Centres						
Agribusiness	Expansion of Tocal College programs to Dungog - agribusiness education & training for the Upper Hunter Region					1
Film school	Develop residential film school					1

4.8.3 Supporting Infrastructure

Key infrastructure needs for Dungog are: road improvements; development of an industrial estate; and new tourist accommodation. Expansion of nature based tourism requires development of facilities in the National Park areas. For a rural area like Dungog, a broader regional approach is needed to industry sector development (in agribusiness and tourism), which could involve partnering with Gloucester Shire on some economic development initiatives.

Realising these opportunities requires a combination of: infrastructure improvements and associated funding; government decisions on planning issues and location of local services delivery; and coordinated industry activity on economic development.

Overall infrastructure needs are beyond the capacity of individual Councils to fund. Funding is needed for strategic regional infrastructure to support diversification and industry development.

4.9 Gloucester Shire

4.9.1 Overview

As a regional economy, Gloucester maintains a specialisation in agribusiness (mainly beef and dairy) and services for the Shire population. There has been growth in the mining and gas sector, associated with some extension of coal mining and with coal seam gas. The region has a growing tourism sector that is focused on nature and adventure tourism and access to the Barrington Tops.

Gloucester is one of the smallest economies in the Upper Hunter Region. In 2006 there were 1737 jobs in the Shire, with agribusiness accounting for almost 20% of jobs and manufacturing 8% of jobs. Over 45% jobs are servicing the local population with retail and health services being the major areas of local employment. Compared with other Shires in the Upper Hunter Gloucester has a significant local health sector due to the presence of the Gloucester Hospital.

The population is experiencing slow growth and is ageing (it has one of the oldest population structures in the Hunter Region). Employment levels have largely been stable in recent years, with a decline in persons employed in beef and dairy, being offset by some growth in services employment.

Future economic development strategies for the Shire are focused on diversifying agribusiness, developing tourism and strengthening light industrial activities and the service sector. There are also opportunities related to the Stratford Industrial Estate and mining support, gas and power generation. The Shire has been active on economic development initiatives in relation to agribusiness diversification, through the establishment of an industry cluster (Gloucester Growers Cluster). New investment in the retail sector will contribute to a revitalisation of the town centre.²⁵

A constraint to agribusiness development is the take up of land with mining leases.

²⁵ Economic Development Strategy for Gloucester Local Government Area, Report 3: Economic Development Strategy, Buchan Consulting, December 2010.

4.9.2 Future Opportunities

Gloucester Shire – Overview Opportunities

Agribusiness revitalisation
 Intensive agriculture and development utilising Gloucester Growers Cluster
 Wine sector
 Tourism: market segment development – short breaks - adventure, nature based, agritourism
 Power generation (small gas fired plant)
 Mining and gas support – engineering services
 Professional and technical services
 Health and Aged care
 Retail revitalisation
 Potential for regional partnering with Dungog on tourism and agribusiness

The following tables outline the future opportunities in the region.

Gloucester Shire	Opportunities - Priorities
Category 1: Population / Market Driven	Population: Population growth is needed to drive services demand and a health Gloucester town centre. A major component of current growth is lifestyle changers and retirees. Broader growth is required through lifestyle blocks, town precincts and affordable housing. Seniors: The Shire has an ageing population and there is a need to develop seniors housing in Gloucester town and maintain and expand aged care facilities and services. Gloucester town centre – need to revitalise and expand it as the service centre and a visitor destination.
Category 2: Building on Current Industries	Mining support industries: Extend mining support activities (Stratford) Beef: remains important to the region, with the potential for revitalisation across existing beef sector, through consolidation. Consolidation has occurred in dairy. Intensive agriculture: development of intensive horticulture (food products) and channels to market Wine/viticulture: Encourage sector development through links to Growers Cluster and regional tourism. Tourism: this sector has potential for growth in short breaks market, built around, nature/adventure tourism; and agri-tourism (food and wine) and the wellness market. There are major infrastructure needs in terms of accommodation and development of a Multipurpose Gateway Centre. There are benefits from a taking a sub-regional marketing approach (eg. regional visitor trails and links with Dungog).
Category 3: Developing New Areas	Engineering : support activities to the mining and gas plant (Stratford) Power generation: development of a small gas fired power station Logistics: small Logistics Centre or Intermodal Transport Hub Light industrial - expansion to service regional industry and population, and provide support services to agribusiness.

Table 15. Future Opportunities –Gloucester Shire

Gloucester Shire	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	Gloucester
Category 1: Population / Regional Market Driven						
Population & Housing	Category 1					1
Population growth	Need for population growth for services growth and a strengthened Gloucester town centre					Slow growth
Lifestyle living	Attract population - lifestyle blocks and town precincts					1
Housing land	Develop additional housing land/ affordable housing (families)					1
Seniors	Category 1					1
Seniors living	Develop housing options in Gloucester Town Centre					1
Supporting an ageing population	Maintain and develop age care Facilities and services					1
Town Centre	Category 1					
Revitalisation	Revitalisation of Gloucester Town Centre					1
	Improves retail and services					1
Health	Category 1					1
Health services	Hospital and health services - Maintain and develop services					1
Category 2: Building on Current Industries						
Mining and Support	Category 2:					3
Mining support industries	Extend mining support activities (Stratford)					1
Rehabilitated sites	Assess future mining site use – regional technical/business assessment (eg. waste – clean fill)					3

Future Opportunities –Gloucester Shire (Continued)

Gloucester Shire	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	Gloucester
Agribusiness	Category 2					1
Beef and dairy	Maintain and develop through consolidation					1
Diversification – Intensive agriculture	Development of intensive horticulture (food products)					1
	Trials					
	Commercial operations					
Growers cluster	Diversification, trials, market development and agritourism Partner with Dungog					1
Wine/viticulture	Encourage sector development through links to Growers Cluster and regional tourism					2
Tourism	Category 2					1
Sector	Maintain and develop sector Targeted market development – short breaks and events					1
Wine/food/agritourism	Develop agritourism					1
Adventure/nature based	Continue to develop the market					1
Wellness market	Encourage in resort					3
Infrastructure	Multipurpose Gateway Centre					1
	Accommodation development					1
Category 3: Developing New Areas						
Industry	Category 3:					
Engineering <diversify>	Support to mining and gas plant (Stratford)					1
Power generation	Small gas fired power station					1
Small Logistics Centre or Intermodal Transport Hub	Develop as a logistics hub – road/rail access					3
Light industrial	Expansion to service regional industry and population Support services to agribusiness					1
Category 4: Creating New Advantages - Knowledge Based						
Education and Training	Category 4					1
Skills	Extended local delivery of VET programs					2

4.9.3 Supporting Infrastructure

Key infrastructure needs for Gloucester are: road improvements; development of the Stratford Industrial Park; new tourist accommodation; town centre development; and a Multipurpose Gateway Centre. There is potential for a regional approach to industry sector development (in agribusiness and tourism), through partnering with Dungog LGA.

Realising these opportunities requires a combination of: infrastructure improvements and associated funding; government decisions on planning issues and location of local services delivery; and coordinated industry activity on economic development.

A regional approach will be required to funding strategic regional infrastructure.

4.10 Great Lakes LGA

4.10.1 Overview

The Great Lakes LGA extends along the Mid North Coast, and is 200 kms north of Sydney and 70 kms north of Newcastle. The main population centres are Forster/Tuncurry in the north and Tea Gardens/Hawks Nest in the south and the smaller inland villages of Stroud, Nahiack and Bulahdelah. As a coastal location it has developed as both a retirement location and as a tourism centre, and this is reflected in the structure of the regional economy.

The LGA has experienced strong population growth and this growth is projected to continue. Most of this growth has been driven by retirement and lifestyle living. The area has the oldest age structure in the Upper Hunter Region. From a regional planning perspective, Great Lakes is included in the *NSW Government's Mid-North Coast Regional Strategy 2008*, and is identified as a coastal area that will continue to experience population growth.²⁶ The regional strategy defines Forster - Tuncurry as a major town and Bulahdelah and Tea Gardens/Hawks are defined as towns. Stroud and Nahiack are defined as inland villages and all other centres (Green Point, Pacific Palms, Smiths Lake, Coomba Park) are defined as coastal villages.²⁷ Recent studies project continue growth, particularly in the major centre of Forster-Tuncurry.²⁸

Compared with the rest of the Upper Hunter Region, Great Lakes has a much older population; lower workforce participation rates; and a much higher incidence of part-time service industry employment. There is a relative narrow based of employment (agribusiness in the inland areas, services and tourism). Unemployment levels remain high in the area. The area lacks the broader mix of local job opportunities to enable the attraction of more families with children. From an economic development perspective there are major concerns about these demographics and a recognised need to broaden the business base of the region.

The pattern of growth has made the area a lifestyle region and has generated significant growth in population services and in tourism. The dominant sectors of economic activity are education, health and community services, the retail trade, accommodation, cafes and restaurants, agriculture, fisheries and construction. In 2006, there were over 9000 jobs in the LGA, with in-person services accounting for 60% of jobs (mainly retail -16%, accommodation and food services -13% and health 12%). Agribusiness only accounted for 486 jobs or 5% of jobs, with manufacturing accounting for 6%. Due to the continued strong population growth and housing development - construction was one of the larger sectors, accounting for 864 jobs (10% of jobs).²⁹ Knowledge and business services accounted for 1068 jobs (12%).

Tourism is one of the largest sectors, with Great Lakes having almost one million visitors for a value of around \$243 million each year. Primary production is focused in beef cattle, fishing and oyster production, and wine. There has been some growth in specialist food products sold via local retail, farm gate sales and restaurants.

Forster - Tuncurry is the major centre of services and employment and accounted for almost 5800 jobs or 64% of all jobs in the LGA. In the twin towns, the major employment sectors were: retail trade (1038 jobs or 19% of jobs); accommodation and food services (704 or 12% of jobs); health care and social assistance (885 or 13% of jobs); construction (416 or 7% of jobs); education and training (437 or 7% of jobs); and public administration and safety (380 or 6% of jobs).

²⁶ The strategy covers the eight local government areas of Clarence Valley, Coffs Harbour, Port Macquarie-Hastings, Greater Taree and Great Lakes.

²⁷ Forster - Tuncurry Employment Land Implementation Strategy Hill PDA November 2009 P61

²⁸ The employment lands study indicates that Foster - Tuncurry population is projected to increase from 18,372 in 2006 to 26,500 in 2031, Forster - Tuncurry Employment Land Implementation Strategy Hill PDA November 2009P11

²⁹ Of the 10% of jobs in construction, between 1% and 2% was estimated to be civil and road construction during 2006 with an increase in numbers would be expected due to the upgrade work on the Pacific Highway since that time.

Future opportunities are based around building on current industries, combined with a diversification to create a broader based local economy.

4.10.2 Future Opportunities

The following tables outline the future opportunities in the region.

Great Lakes LGA – Overview Opportunities
Forster Tuncurry Crown Harbour Project
Health services - extend and develop broader health and wellbeing focus
Agribusiness revitalisation – existing sectors and intensive agriculture
Tourism: continue market segment development - active tourism/lifestyle, National Parks, adventure sports, water based; eco-tourism and nature-based tourism.
Building and construction – environmental focus (i.e. energy efficient buildings)
Light industrial – develop businesses in industrial area
Small business development and incubator
Environmental services
Tourism training centre
Extended education and training delivery
Professional and technical services
Government services

Great Lakes LGA	Opportunities - Priorities
Category 1: Population / Market Driven	<p>Population: Population growth needs to be broader based to develop a more diversified local economy.</p> <p>Key issue is development of a combination of lifestyle blocks and affordable housing options (families).</p> <p>Seniors: Continue seniors' housing development around service precincts and town centres; and further develop aged care facilities in line with predicted demand.</p> <p>Forster Tuncurry Crown Harbour Project: Strategic harbour and waterfront project providing a range of recreational, commercial retail and tourism related experiences/facilities. There is a need to develop investor interest.</p> <p>Health services: extend services and develop a broader health and wellbeing focus, with synergies between health, wellbeing, natural therapies and lifestyle.</p>
Category 2: Building on Current Industries	<p>Commercial Fishing and Aquaculture: Maintain and develop the sectors. Develop direct to market channels.</p> <p>Beef: maintain the sector and encourage consolidation, and develop new market channels to improve yields.</p> <p>Wine: encourage sector development through link to regional tourism and agritourism.</p> <p>Diversification – Explore potential for intensive horticulture (food) production, through links with Gloucester Growers Cluster</p> <p>Tourism: a major sector. There is a need to continue to broaden market to deal with seasonality and yield issues. Continue to develop activities, experiences and packages within market segments and the events program. Additional marketing support needed for the sector.</p> <p>Segments for continued development include: active tourism/lifestyle, National Parks, adventure sports, water based; eco-tourism and nature-based tourism (eg. eco-tours, wildlife and whale watching); develop wellness market segment, with links to health; and conferences.</p>
Category 3: Developing New Areas	<p>Logistics/transport hub: distribution facility to make use of the Pacific Highway extension.</p> <p>Building and construction: extension of markets and green design/construction/services.</p> <p>Light industrial: Build on engineering/light industrial/marine – servicing regional industry (agriculture, aquaculture, and marine sectors) and a growing population. Requires development of industrial land and business attraction.</p> <p>Small business: encourage growth in small businesses (home based and in commercial centres).</p> <p>Development support programs including advice, training and a business incubator.</p>

Great Lakes LGA	Opportunities - Priorities
Category 4: Creating New Advantages - Knowledge Based	<p>Developing more knowledge intensive activities is a priority for the future for all regions.</p> <p>Professional and technical services: attraction of professionals servicing – local, regional and broader national markets (lifestyle changers)</p> <p>Environmental services: development of environmental support services and research.</p> <p>Education and training: improve and expand local delivery of vocational training (learning centre and online).</p> <p>Develop a Regional Campus – shared facilities (for Higher Education, VET, and ACE) – health, environment, tourism, trades.</p> <p>Tourism: develop a regional centre of excellence in tourism training (tourism and hospitality).</p> <p>Health: expand local delivery of nursing and allied health training.</p> <p>Research: develop research centre in environmental management and sustainability.</p>
Category 5: Attraction Targets	<p>Government services: attract administrative offices, regional service centres</p> <p>Business services: attract support centres and back office functions.</p>

Table 16. Future Opportunities –Great Lakes LGA

Great Lakes LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	
Sustainability	Focus on sustainability in all dimensions: economic, social, environmental. Employment growth is needed to attract broader population and retain younger persons in region.					
Category 1: Population / Regional Market Driven						
Population & Housing	Category 1					1
Population growth	Need for broader population growth for a sustainable economy and strengthened services					Continuing strong growth
Lifestyle living	Attract population - lifestyle blocks and precincts					1
Housing land	Develop additional housing land/ affordable housing (families)					1
Seniors	Category 1					1
Seniors living	Continue seniors housing development around service precincts and town centres					1
Aged care: link services to growing demand and requirements	Further develop aged care facilities and services (including home services) in line with predicted demand.					1
Town Centre	Category 1					
Precincts	Improvement in retail and commercial centres in the town centres					1
Forster Tuncurry Crown Harbour Project	Strategic Harbour and waterfront project providing a range of recreational, commercial retail and tourism related experiences/facilities. Need to engage developers on the project.					1
Population services	Continued growth in retail and population services drive by continued growth. Particularly in Forster Tuncurry.					1

Future Opportunities –Great Lakes LGA (continued)

Great Lakes LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	
Category 1: Population / Regional Market Driven						
Health	Category 1					1
Health services	Build on strength in health services Develop medical technology, medical imaging and radiography					1
	Develop health and wellbeing focus, with synergies between health, wellbeing, natural therapies and lifestyle.					1
Category 2: Building on Current Industries						
Agribusiness	Category 2					1
Commercial Fishing and Aquaculture	Maintain and develop the sectors. Develop direct to market channels					1
Beef	Maintain the sector and encourage consolidation. Develop new market channels to improve yields					2
Wine	Encourage sector development through link to regional tourism					1
Diversification – more intensive agriculture	Explore potential for intensive horticulture (food) production, through links with Gloucester Growers Cluster					2
Poultry	Maintain and develop sector. Extend product range (free range eggs and turkeys). Develop new market channels including direct to market.					1

Future Opportunities –Great Lakes LGA (continued)

Great Lakes LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	
Tourism	Category 2					1
Tourism is a key sector – now and in the future	Continue to develop activities, experiences and packages within targeted market segments. Secure more active business involvement. Develop improved facilities.					
Need to continue to broaden market to deal with seasonality and yield issues.	Need to continue to broaden market to deal with seasonality and yield issues. Continue to develop activities, experiences and packages within market segments and events program. Marketing – additional marketing support for the sector					1
Aquaculture	Encourage links between aquaculture and tourism (eg restaurant and oyster bar)					
Active tourism	Continue to develop sector around active tourism /lifestyle National Parks, adventure sports, water sports.					1
Ecotourism	Continue to develop nature-based tourism (eg. eco-tours, wildlife and whale watching).					1
Wellness market	Develop wellness market segment, with links to health					1
Conference market	Develop conference facilities					2
Accommodation	Upgrades of accommodation					1
Industry	Category 2					
Building and construction	Extension of markets and green design/construction/services					1
Light industrial	Build on engineering/light industrial/marine – servicing regional industry (agriculture, aquaculture, and marine sectors) and growing population. Requires development of industrial land and business attraction					1
Small business	Encourage growth in small businesses (home based and in commercial centres)					1
	Extend business support services for new businesses and business start-ups Establish a business incubator					1
Category 3: Developing New Areas						
Industry	Category 3:					
Logistics Centre	Logistics/transport hub – distribution facility to make use of the Pacific Highway extension. Requires development of industrial land					2

Future Opportunities –Great Lakes LGA (continued)

Great Lakes LGA	Future Opportunities Clusters	Horizon				Priority
		5	10	15	20	
Category 4: Creating New Advantages - Knowledge Based						
Services	Category 4					1
Professional and technical services	Continue to actively attract professionals servicing – local, regional and broader national markets (lifestyle changers)					1
Environmental services	Development of environmental support services					1
Education and Training	Category 4					1
Training	Improve and expand local delivery of vocational training (learning centre and online). Greater collaboration between business and training organisations					1
Regional delivery	Develop a Regional Campus – shared facilities (for Higher Education, VET, ACE) – health, environment, tourism, trades.					2
Specialist Training Centres						
Tourism	Develop a regional centre of excellence in tourism training (tourism and hospitality)					1
Health	Nursing and allied health training delivery					1
Research and Development	Category 4					
Environmental management	Develop research centre in environmental management and sustainability.					2
Category 5: Attraction Targets		Attraction				1
Governments Services	Administrative offices, regional service centres					1
Business services	Back office functions, support centres					1

4.10.3 Supporting Infrastructure

Key infrastructure needs for Great Lakes are: the Forster Tuncurry Crown Harbour Project, development of industrial estates and development of a small business incubator.

Realising these opportunities requires a combination of: infrastructure improvements (road improvements, development of industrial areas, town centre revitalisation, broadband) and associated funding; government decisions on planning issues and location of local services delivery; and coordinated industry activity on economic development.

Overall infrastructure needs are beyond the capacity of Councils to fund and a regional approach is needed for strategic infrastructure to support diversification and industry development.

5 Development Requirements

5.1 Infrastructure

There are a number of requirements to support economic development and diversification, with infrastructure development being a key issue for the region.

In 2009 an extensive review was undertaken of infrastructure requirements and priorities in each of the six LGAs in the Upper Hunter. The *Upper Hunter Infrastructure Project* was an initiative of the former *Hunter Economic Development Corporation (HEDC)* now *Regional Development Australia - Hunter (RDA-Hunter)*.³⁰

Table 17. Council Infrastructure Priorities 2009

Priority	Sub-group 1			Sub-group 2		
	Upper Hunter LGA	Muswellbrook LGA	Singleton LGA	Gloucester LGA	Dungog LGA	Great Lakes LGA
1	Water supply from Glenbawn Dam to Scone	Muswellbrook Bypass	Gowrie Gates underpass	Barrington Township Sewage and water upgrade	Regional Road Network (Dungog LGA Access Routes)	Maintenance of existing infrastructure-bridges
2	Rail overpass New England Highway in Scone	Sewering of industrial estate	Streetscape of Singleton CBD	Funding for road improvements for various project. (local roads are 60% unsealed)	Common Rd Industrial Estate Infrastructure	Rehabilitation and sealing of roads- Regional Roads, urban and rural roads
3	Water supply to Murrurundi and Aberdeen	Sub Regional Waste facility	Upper Hunter Environmental Health Study	Visitors Information Centre Gloucester	Bridges (Replacements)	Memorial Drive/Little Street boardwalk and foreshore cycleway
4	Upgrade Airstrip at Scone Airport	Sewer relocation Muswellbrook township	Sewer Infrastructure provided at Mt Thorley Industrial Estate	Upgrade of amenities at sporting field complex (toilet and shower blocks etc) located in the District Park of Gloucester Township	Sewage of Villages in the LGA. Eg Paterson.	Forster Civic Precinct project
5	Main Road 62 to allow heavy vehicle B Double access	Water Treatment and pipeline at Aberdeen	Commercial Gas reticulation provided to Industrial	Gloucester reservoir, water supply lines and associated infrastructure	Sports Fields Clarence Town	Sand dredging of Wallis Lake, Myall River and Forster Keys.
6	Heavy vehicle bypass around Scone (western side) Medium to Long term 10-20 years	Rail Realignment and identification of suitable corridor for a rail freight and coal bypass	Planning of Singleton Bypass ie. identify a corridor	Sealing of Scone Rd over Barrington Tops	Tourism related infrastructure (3 projects)	Sporting facilities - various projects
7	Scone Medical Practice extensions		Water alliance	Completion of sealing of Bundook Road		Extension of cycleways and footpaths network
8						Maintenance of existing public infrastructure -halls
9						Taree Airport upgrade

Source: Upper Hunter Infrastructure Project Summary Report October 2009, Regional Development Australia – Hunter P8

These issues were largely confirmed in discussions with Councils in late 2010 as part of this diversification project. In addition a number of other issues were identified in relation to development of housing land and industrial land.³¹ The following table provides a brief overview of requirements related to economic development for each of the LGAs.

³⁰ Upper Hunter Infrastructure Project Summary Report October 2009, Regional Development Australia – Hunter

³¹ Overview of Land Use Planning Issues in Upper Hunter Shire, Working Paper for UH Diversification Project, TCG Planning December 2010

Table 18. Overview of Development Requirements – Upper Hunter Region

Regional Cluster 1			Regional Cluster 2		Regional Cluster 3
Singleton	Muswellbrook	Upper Hunter	Dungog	Gloucester	Great Lakes
Development requirements: road; rail overpass; industrial areas development; town centre revitalisation.	Development requirements: road improvements – including bypass; sewer to industrial estates; development of industrial areas; town centre revitalisation; water.	Development requirements: road improvements; rail overpass; industrial areas; town centre development; water; broadband; Scone airport improvements.	Development requirements: road improvements; development of an industrial estate; new tourist accommodation; broadband.	Development requirements: road improvements; development of the Stratford Industrial Park; new tourist accommodation; town centre development; and a Multipurpose Gateway Centre; broadband.	Development requirements: Forster Tuncurry Crown Harbour Project; development of industrial estates ; small business incubator; road improvements; town centre revitalisation; and broadband

Source: Buchan Consulting Consultations October/November 2010

5.2 Industrial Land and Housing

A more detailed discussion of development requirements covering industrial land, housing development will be included in Report 3: Strategy Report.³² Some of the key planning issues have been identified in the *planning issues report* prepared as part of this project.³³ Major requirements relate to:

- Development of industrial areas for specialised uses (eg. mining support) and for light industry.
- Development of town centre housing that is suitable for an ageing population.
- Development of new housing areas for a growing population (eg. Singleton and Muswellbrook).

³² Upper Hunter Economic Diversification Project, Report 3: Strategy Report Buchan Consulting June 2011.

³³ Overview of Land Use Planning Issues in Upper Hunter Shire, Working Paper for UH Diversification Project, TCG Planning December 2010

6 Implementing the Strategy

6.1 Overview

Section 4 has outlined the elements of the diversification strategy and actions at a LGA level. It also highlights the need for integrated regional cluster approach and an industry cluster approach.

The strategy has both short term/medium term requirements and longer term horizons. However action on the longer term also requires actions now to develop the foundations for sustainable activities and jobs.

Long term: the long term involves: identifying and acting on long term sustainable economic development opportunities for the Upper Hunter Region, which are based on competitive advantages of the region and the LGAs; replacement of mining jobs as industry location and activity changes; and encouraging population growth to underpin the development of local service activities.

Short term: the short /medium term focus is on addressing the current impacts of the mining boom on industry and communities.

The following are some recommendations in relation to implementing the diversification strategy. Further detail on the strategy and its implementation will be included in the *Economic Diversification Strategy Report*.³⁴

6.2 Some Key Recommendations

6.2.1 Short and Medium Term – Dealing with Growth Pressures

The current major pressures of the mining sector boom in the region are on accommodation and regional workforces. There is a need for a planned approach to address these issues.

- Accommodation - due to the pressure of the mining sector on housing markets in Singleton and Muswellbrook, there is a need for the development of a mining regions accommodation plan. This would examine future demand with the expansion of mining activity and supply options, including mining accommodation and rental housing. The plan should be a jointly developed with the mining companies.
- Workforce - the growth of the mining sector is impacting on skill availability in the region, across a number of sectors. There is a need for improved regional workforce planning to ensure that the labour market and training system can deal with these regional and industry workforce requirements. An *Upper Hunter Regional Industry Workforce Plan* should be developed – this would assess demand and supply issues over a 5 year horizon and would focus on recruitment, retention and skills development across the mining sector and other key sectors in the region.³⁵ This planning approach has been implemented in Victoria by Skills Victoria with the development of *Regional Workforce Development Strategies* covering key industries (eg power generation, food processing, civil construction, transport and logistics) in major regional areas (eg. Eastern Gippsland, Latrobe Valley, Ballarat Region).

³⁴ Upper Hunter Economic Diversification Project, Report 3: Strategy Report Buchan Consulting June 2011.

³⁵ The Workforce Plan for Great Lakes will support the Mid North Coast Regional Plan.

6.2.2 Information Requirements

There are a number of areas of where information is required – this covers agribusiness and use of rehabilitated mining sites.

- *Agribusiness review* - there is a need for a technical review of the future potential of agribusiness in the Upper Hunter Region. This would include a technical assessment of locations that would be suitable for more intensive agriculture. There is a major gap as many of the studies of rural industries in the Upper Hunter were produced almost a decade ago and since then there has been a major extension of mining activity.
- *Future use of mining sites review* - there is a lack of agreement on the potential uses of rehabilitated mining sites. As part of long term planning, there is a need for a technical and business review to produce some clarity on this issue.

6.2.3 Regional Planning

- Prepare an *Upper Hunter Regional Strategy*, which is equivalent to the Lower Hunter Strategy. Such a strategy would develop a common vision of the future of the region and address long term planning and development in an integrated way. This would include developing a new set of population projections for the region.

6.2.4 Infrastructure Development

- *Upper Hunter Region Infrastructure Plan* -there is a need for a plan because of the impacts of the current mining expansion, the inter-linkages between areas in the region, and the importance of infrastructure improvements to future area development, industry growth and diversification. The plan would set priorities for infrastructure development across the region and identify priorities.
- *Mining royalties* - consideration should be given to the development of a royalties for regions program to fund key infrastructure requirements in mining related regions. This program could be along the lines of that being proposed by the Association of Mining Related Councils and could draw on aspects of the WA model.³⁶ The WA model includes funding for mining project related infrastructure; community infrastructure to service larger regional populations; and funding for medium and long term economic diversification projects.

6.3 Diversification Strategy Implementation

6.3.1 A Regional Approach

This report identifies the future growth prospects for the Upper Hunter Region and for the individual LGAs. There are a number of components to future growth and diversification: increasing local populations to build ongoing critical mass for service industries and associated jobs; building on specific industry strengths and local advantages and leveraging these as a foundation for future industry diversification and growth; developing new areas of industry that are based on emerging opportunities (eg. logistics based on improved highway access); and developing knowledge intensive activities (this includes the development of renewable energy support activities; education and training activities; and research and development).

The report identifies the key sectors where action is required and the horizons for acting on sector development initiatives. While action is required by each Council on economic development, because of the inter-relationships between areas and sectors there are benefits from a region wide and regional cluster approach. There are distinct regional current industry clusters in the region, and these reflect the pattern of industry specialisations.

- Mining and Mining Support - Singleton, Muswellbrook
- Wine - Singleton, Muswellbrook, Upper Hunter LGA (and Gloucester Great Lakes)
- Equine - Upper Hunter LGA, Muswellbrook

³⁶ Royalties for Regions Proposal, Association of Mining Related Councils, November 2010

- Power Generation - Muswellbrook, Singleton
- Renewables - Upper Hunter LGA, Singleton
- Nature based and adventure tourism - Dungog, Gloucester, Upper Hunter LGA
- Coastal tourism - Great Lakes
- Other agribusiness - is distributed across the Upper Hunter Region with some differences in scale of particular sectors.

6.3.2 Industry/Regional Clusters

Industry clusters - the sub regional specialisations and locational clustering of industries provide the foundation for sub regional cooperation on economic development and diversification. This includes developing operational industry clusters involving key businesses and industry organisations (chambers and specialist associations – eg. equine sector, wine sector).

The key industry clusters that should be developed would include:

- Agribusiness cluster - build cooperation between Gloucester, Dungog and Great Lakes. Continue cooperation between Upper Hunter, Singleton and Muswellbrook LGAs.
- Renewable Energy cluster - Upper Hunter LGA, Singleton, Muswellbrook and Dungog.
- Mining and Mining Support - Singleton, Muswellbrook, Upper Hunter.
- Tourism clusters: Cluster 1 Upper Hunter LGA; Dungog, Gloucester, Great Lakes; Cluster 2 Singleton, Muswellbrook.
- Wine - Singleton, Muswellbrook, Upper Hunter LGA.
- Equine cluster - Upper Hunter LGA, Muswellbrook, Singleton.

This clustering reflects the way businesses see the world - as industries, regions, and markets (rather than as local government areas) and the inter-linkages that exist between businesses and markets.

This regional cooperation would enable: a more strategic and integrated approach to industry development issues; better use of Council economic development resources; coordination in business attraction; and access to NSW Government and Australian Government industry programs and small business programs. In the case of tourism, this would involve cooperation in product development and marketing.

6.3.3 Centres of Excellence

Centres of excellence: the regional specialisations provide the potential to develop centres of excellence in education and training. These centres are focused in one LGA but would be servicing the region and these could include:

- Equine - Upper Hunter LGA
- Regional tourism - Great Lakes
- Mining Support/Engineering - Singleton
- Power Generation/Support - Muswellbrook
- Mining - Muswellbrook (existing centre)
- Renewables - Upper Hunter LGA
- Agribusiness - Dungog (based on extension of activities of Tocal College)
- Sustainable environments research – Great Lakes.

6.3.4 Strategic Projects

Strategic Projects: there are a number of strategic projects identified or proposed in this report, which will shape the future of the region and these include:

- Renewable Energy Projects (eg. Kyoto Park) and the RE Precincts.
- Forster Tuncurry Harbour development.
- Regional extension of the agribusiness diversification project.
- Industry education and training centres.
- Power sector - future investment in generating capacity and technologies.
- Housing development in the region.

6.3.5 Partnerships

Partnerships should be a focus of the sector development and diversification projects. These partnerships would involve: Councils, industry associations and chambers, New South Wales government agencies, and key businesses in each sector.

Mining companies are strongly supportive of their local communities and involved in funding a range of programs and initiatives. The provision of support for industry development and diversification initiatives should be explored with these companies.

7 Next Steps

The next steps in the project involve the preparation of the detailed *Upper Hunter Economic Diversification Strategy Report*. The report will provide more detail on opportunities, development requirements and recommendations for action.

The strategy report will draw on the information contained in this report, the industry information in Report 1 and on additional analysis that has been conducted as part of this review.³⁷

³⁷ Report 1: Upper Hunter Regional Economy and Industry Report (Draft), Buchan Consulting January 2011

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