

Mt Arthur Coal



Sustainable Communities Project

Summary of project findings and opportunities to address cumulative impacts through collaboration



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Purpose of this report

This report summarises the findings of BHP Billiton Mt Arthur Coal's Sustainable Communities Project. This project investigated cumulative social impacts associated with the expansion of coal mining in the Upper Hunter region. Through engagement with the community, it also identified opportunities to address these impacts through collaboration between the mining industry, government and non-government agencies.

Definition of areas

Upper Hunter region and study area: The area administered by the Muswellbrook, Singleton and Upper Hunter shire councils.

Regional NSW: The balance of the state outside metropolitan Sydney.

1. About the Sustainable Communities Project

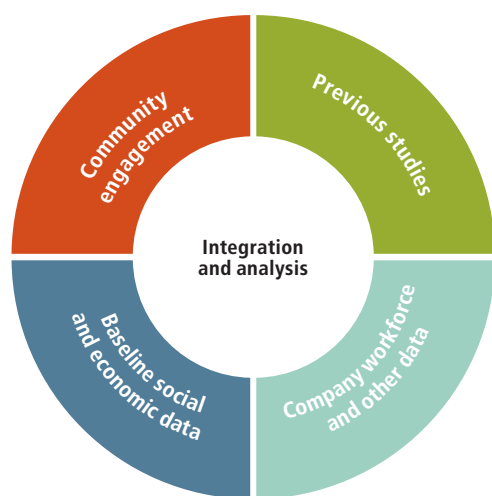
BHP Billiton Mt Arthur Coal is aware of growing community concerns about the impacts of coal mining in the Upper Hunter region. In response to these concerns, Mt Arthur Coal commenced the Sustainable Communities Project in October 2010 to understand the combined, or cumulative, impacts of coal mining on the community, economy and environment and address these impacts through collaboration between the mining industry and other stakeholders.

The Sustainable Communities Project covered the whole of the Upper Hunter region, including the Muswellbrook, Singleton and Upper Hunter shires, with a major focus on Muswellbrook where Mt Arthur Coal is located. A range of information sources were used as part of the project (shown in Figure 1), including:

- input from the community;
- previous research such as social impact assessments;
- existing, or baseline, information about social and economic conditions; and
- mining company information, such as proposed workforce expansion.

This information was integrated and analysed to predict likely future impacts and identify opportunities to respond to these impacts.

Figure 1: Information sources for the Sustainable Communities Project



1.1 Best-practice community engagement

Throughout the Sustainable Communities Project, Mt Arthur Coal used a best-practice community engagement process designed to encourage more active involvement and collaboration within the community, rather than just to share information.

A range of engagement activities were undertaken between October and December 2010 that attracted more than 650 participants from Muswellbrook and surrounding shires. These engagement activities included face to face interviews, an online survey, a community film and workshops with a broad range of community groups, including disadvantaged groups.

Throughout the consultation process, Mt Arthur Coal asked participants:

- What the impacts of coal mining were on their community?
- What it is like to live in Muswellbrook and the Upper Hunter region?
- What are the good things?
- What are the challenges?
- How could Mt Arthur Coal address the impacts of coal mining on their community?
- What are some opportunities for sustainable community and economic development?
- How would they like to be engaged by the mining industry?

A whole of community barbecue, held in December 2010, was attended by more than 300 people. Those at the community barbecue had the opportunity to hear all the ideas and priorities identified by the community during the earlier consultation, watch the community film and prioritise potential investment opportunities they felt were important to them. The barbecue also provided Mt Arthur Coal with the opportunity to test some of the findings emerging from the analysis of technical information against community perceptions.

1.2 How cumulative impacts were assessed

Cumulative impacts have multiple causes and contributors. There is also a range of other factors, such as economic trends, industry restructuring and government policy, that can influence social and economic conditions and contribute to cumulative impacts. Future workforce figures are also subject to change and difficult to accurately predict. As a result, cumulative impact assessment can be complex and relies on prediction, which can only estimate possible effects.

The cumulative impacts assessment for the Sustainable Communities Project has taken into account:

- the combined effects of the mining industry in the Upper Hunter region over the last 10 years;
- the likely effect of future planned mining in the Muswellbrook and Singleton shires.

Through this assessment, Mt Arthur Coal identified potential positive and negative impacts from mining in the Upper Hunter region, which are shown in Table 1.

1.3 Understanding quality of life impacts

Understanding the impact of mining on the community's social and economic wellbeing, or quality of life, was an integral part of the Sustainable Communities Project. By determining which quality of life indicators are important and understanding their relationship to cumulative impacts, the Sustainable Communities Project will assist mining companies to design programs to reduce mining impacts and enhance community development opportunities (see Figure 2).

Using community feedback, combined with previous industry consultation and research results, the following 11 quality of life indicators relevant to the Upper Hunter region were identified:

1. Community involvement and community life
2. Level of social disadvantage
3. Population health
4. Community perceptions of environmental impact
5. Housing affordability
6. Level of homelessness
7. Educational attainment
8. Wealth distribution
9. Employment access
10. Business growth
11. Industry diversification

More detail on each quality of life indicator is provided in Section 2.

Figure 2: How quality of life indicators work

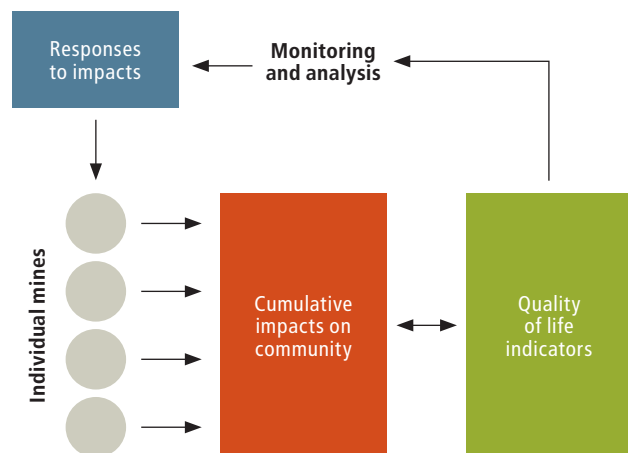


Table 1: Overview of potential cumulative impacts

Impact	Positive	Negative
Community concern about dust and health impacts		✓
Social cohesion		✓
Social infrastructure (service and facilities, including health)	✓	✓
Social disadvantage and vulnerability	✓	✓
Community concern for environment and landscape quality, sense of place and loss of good agricultural land		✓
Housing affordability and homelessness		✓
Access to employment and education	✓	✓
Local labour force drain from non-mining sector and decline of small business sector		✓
Economic diversification		✓
Increased wealth/inequity in wealth distribution	✓	✓
Community concern about road safety, traffic and mobility		✓

1. About the Sustainable Communities Project continued

1.4 What the community told us

Mt Arthur Coal would like to thank the many people and organisations who participated in the community engagement process for the Sustainable Communities Project. Their involvement provided us with:

- a strong understanding of community perspectives about the cumulative impacts of mining on aspects of community life and the environment;
- an understanding of community priorities for investment, both to address cumulative impacts and also for broader community development initiatives;
- the opportunity to develop Mt Arthur Coal's relationship with the community, including residents, community organisation representatives, local council and other mining companies.

The areas for investment identified by the community and the range of possible programs, projects and ideas prioritised in each area to address the cumulative impacts of mining are summarised below.

Health

- Continuation of the Upper Hunter Air Quality Monitoring Network.
- Improved health monitoring and meaningful dialogue with the community about potential health impacts to address community concerns in relation to air quality.
- Increased access to health (including mental health) services.
- Promotion of healthy worker practices addressing stress and driver fatigue.

Housing

- Providing support to the housing, homelessness and support services sectors to address access to affordable housing.
- Increase access to emergency housing and homelessness support services.
- Monitoring industry impacts on hotel, motel and caravan park accommodation to help inform future housing and accommodation planning in the housing, homelessness and support services sectors.

Planning and environment

- Improved coordination and leadership in regional planning to address regional issues.
- Local planning and environmental initiatives to address land use certainty, settlement planning and rural landscape rehabilitation and management.

Economic development

- Supporting business diversity and labour force retention.
- Development of small businesses and social enterprises (i.e. where the business reinvests profits back into the community for a social benefit).
- Increased local procurement by the mining sector.

Community capacity

- Town place making projects promoting town pride, community capacity and small business development.
- Community development programs and other activities promoting community pride and belonging.
- Strengthened ability to influence local outcomes.
- Increased community participation.
- Enhanced community services capacity.

Employment and training

- Increased opportunity for young people and Aboriginal people to train and achieve employment in mining and other industries.
- Initiatives to increase the capacity for vulnerable groups to participate in skills training and employment.

Aboriginal people

- Improved opportunities for Aboriginal employment and small business development.
- Improved access to mental health and other health and wellbeing services.
- Strengthened organisational capacity.

Social infrastructure

- Increasing opportunities for preschool and child care services, community facilities, cultural spaces and activities.
- More low cost activities for young people.

Access to information

- Improving access to information about the mining industry to support forward planning by other agencies in areas such as housing, business development, health care and other services.

Mt Arthur Coal is now responding to community feedback received on the priorities identified to prepare a Community Development Management Plan to guide our investment program over the next five years. Through this program, we plan to work alongside the community to help strengthen overall capacity to respond to local issues.

Recognising that cumulative impacts cannot be effectively addressed by any one organisation alone, Mt Arthur Coal is committed to working collaboratively with other stakeholders, including Muswellbrook Shire Council, community organisations, government, business and other mining companies, to effectively respond to the priority areas.

As part of this commitment, Mt Arthur Coal is also reviewing its own community investments program to identify more collaborative approaches, as well as supporting industry programs, such as the NSW Minerals Council's Upper Hunter Mining Dialogue¹.

¹ The Upper Hunter Mining Dialogue, through the NSW Minerals Council, brings together all of the region's coal producers to listen and better understand concerns as an industry and to establish a dialogue with the community about the role of mining, minimising the collective impact of mining in the Upper Hunter and on the region's future. For more information go to www.nswmin.com.au

2. Summary of project findings

This section of the report discusses existing or baseline conditions² for each of the quality of life indicators identified through the Sustainable Communities Project, including what the community and other research told us about these indicators. It also summarises the opportunities identified to address cumulative impacts through collaboration between the mining industry and other stakeholders.

2.1. Community involvement and community life

The Sustainable Communities Project found that there is a declining sense of belonging in the community as a result of changes in the social makeup of the towns and rural areas and the rural landscape.

What the community said

The community told us that more people living in Muswellbrook bring a range of benefits, but that some newcomers have difficulty integrating. Shiftwork impacts on many aspects of community life, for example volunteering, and there is a lack of things for young people to do. The community also reported a low level of town pride.

What the data shows

The research findings confirmed that the mining industry makes a positive contribution to jobs, community infrastructure and education. However, community trust in the mining industry is low, coupled with a declining confidence by the community in its ability to influence mining outcomes.

Muswellbrook also has marginally lower levels of volunteering (an indicator of community participation) at 19 per cent of the population, compared with Singleton at 20 per cent and regional NSW at 21 per cent, and lower levels than the Upper Hunter region at 24 per cent, as shown in Figure 3.

Historical trend

Although the investigation of cumulative impacts is not common practice, an exploratory study was undertaken from 2000 to 2008 into how to assess cumulative impacts, using Muswellbrook as a case study. This study reported evidence of decreased community confidence in its ability to influence outcomes against the collective influence of the local mining industry (Brereton, et al 2008:80).

Possible future impacts

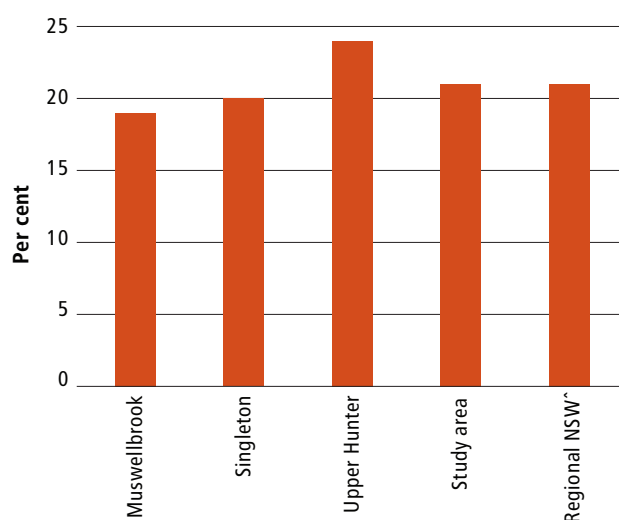
In the future, continued investment from mining companies in developing the community and its infrastructure is expected. Planned mining expansion is likely to continue to reduce trust unless community concerns are addressed.

Opportunities to address impacts through collaboration

The opportunities identified to address cumulative mining impacts on community involvement and community life collaboratively with other stakeholders include:

- strengthened ability in the community to influence local outcomes, increased community participation and enhanced community services capacity;
- improved health monitoring and meaningful dialogue with the community about potential health impacts to increase confidence in relation to these;
- enhanced rural landscape rehabilitation and management;
- community involvement in local and regional planning processes;
- increased opportunities for preschool and child care services, community facilities, cultural spaces and activities;
- more low cost activities for young people.

Figure 3: Voluntary work for an organisation or group (per cent of population)



Source: ABS Census, 2006. Historical data not available.
*Regional NSW figures calculated by subtracting Sydney Statistical Division from NSW.

² The timing of this project at the end of the Census period means that baseline reporting has had to use data from the 2006 Census. Notwithstanding, there is an alignment between the findings from the data and community feedback reported. BHP Billiton's commitment to three-yearly monitoring against the quality of life indicators will mean these findings can be monitored and updated against data from the 2011 Census.

2. Summary of project findings *continued*

2.2 Level of social disadvantage

The presence of vulnerable groups and exclusion in the community is indicated by the level of social disadvantage being experienced. Vulnerable people include those who are unemployed, live in poverty or are homeless, and people who are socially isolated because of age, disability, mental health, domestic violence or other reasons. Increased living costs, such as housing and food costs, and greater competition for services can increase the level of disadvantage felt.

What the community said

The community told us that they believe there is increased social division between the 'haves' and the 'have nots'. Disadvantaged groups experience fewer of the benefits of mining, including access to jobs and higher incomes, and more of the disadvantages, such as higher living costs. Many young people have limited opportunities for education and employment, coupled with limited transport and income.

What the data shows

The research findings confirmed that Muswellbrook had the highest level of reported domestic violence compared to Singleton and Upper Hunter, and which is also higher than NSW, although the rate has dropped since 2005 (see Figure 4).

There is also evidence of significant localised disadvantage. Figure 5 shows relative socio-economic disadvantage in the study area using an assessment index (the SEIFA Index³) that compares the socio-economic status of places across Australia. It shows that each shire in the Upper Hunter region has a significant representation of residents living in areas that are

among 20 per cent of the most socio-economically disadvantaged areas in Australia⁴. The terracotta column (Q1) reflects the 20 per cent most disadvantage areas, while the sandstone column (Q5) represents the 20 per cent most advantaged areas.

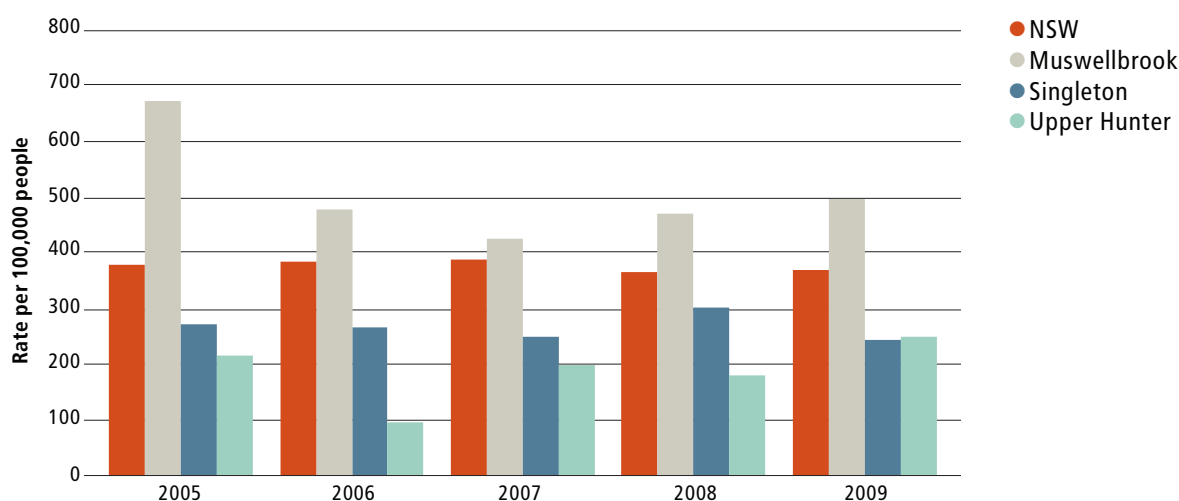
Around 17 per cent of Muswellbrook children younger than 15 years of age live in jobless households. Although rates of unemployment for young people and Aboriginal people in the study area are still higher than that for the general population in Australia and NSW, more young people and Aboriginal people have jobs when compared with the national average. The average income of Aboriginal people (median incomes for individuals) is also lower in Muswellbrook than in the other shires in the study area, but similar to that for NSW.

Historical trend

Muswellbrook has previously recorded a higher proportion of households earning more than \$1,500 per week compared to NSW and the Hunter Valley (Brereton et al, 2008). By contrast it performed worse in comparison to other local government areas in terms of the total wealth of households between 1991 and 2001 (Brereton et al, 2008). These findings confirm the community perceptions of a growing 'wealth divide'.

Although unemployment levels for Aboriginals and young people are higher than the national unemployment rate, the level of unemployment has declined for these groups in the Upper Hunter region since 2000. This decline has occurred at a faster rate in Muswellbrook than in the Singleton and Upper Hunter shires and for regional NSW. This may suggest that there are either increased opportunities for employment in the mining sector in Muswellbrook, that some people have left the area, or both.

Figure 4: Incident of domestic violence in Muswellbrook and Upper Hunter, 2005 to 2009

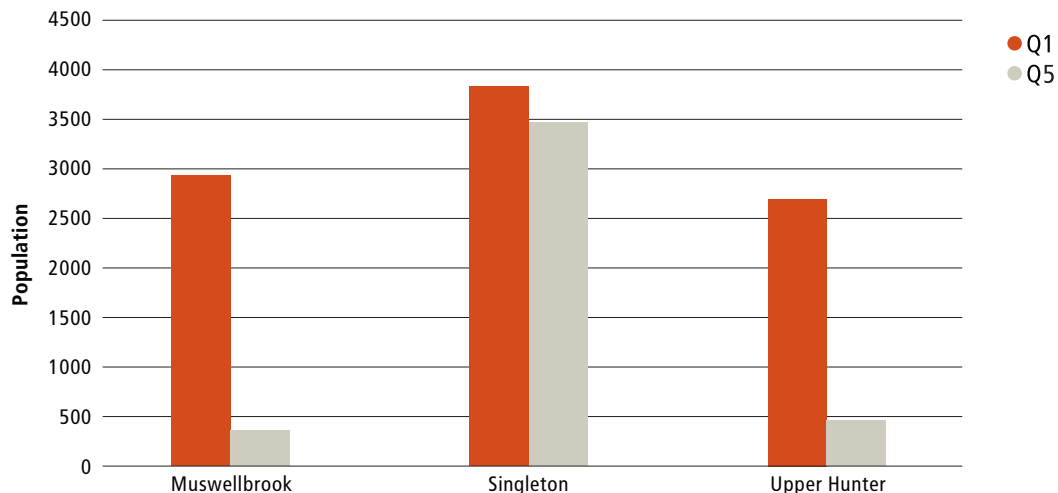


Source: NSW Department Justice and Attorney General, Bureau of Crime Statistics and Research, 2005.
*Data not available for regional NSW

³ Based on the Australian Bureau of Statistics Socio-Economic Indexes for Areas (SEIFA) which uses 'Quintiles' to rank data such as income, educational attainment, unemployment, and motor vehicle ownership into five equally sized groups to show the distribution of an attribute across the whole population. Q1 refers to Quintile 1, i.e. the bottom 20 per cent of the population, while Q5 refers to the top 20 per cent. The areas referred to in the text are Collectors Districts, which is the smallest data collection unit used by the ABS (prior to the 2011 Census).

⁴ The areas referred to are Collectors Districts, the smallest geographical area used by the Australian Bureau of Statistics prior to the 2011 Census to collect and record Census data.

Figure 5: Relative socio-economic disadvantage in the Upper Hunter Region, 2006 (population)



Source: ABS Census Data, 2006.

Possible future impacts

Growth in the industry means that employment opportunities for disadvantaged people have the potential to increase. Planned mining expansions can also be expected to add to disadvantage by increasing the wealth divide and increasing demand for health and support services.

Opportunities to address impacts through collaboration

The opportunities identified to address cumulative mining impacts on disadvantaged groups collaboratively with other stakeholders include:

- expansion of health and support services;
- initiatives to address access to affordable housing, emergency housing and housing support services for socially disadvantaged people and others who have difficulty accessing affordable housing;
- supporting business development and employment diversity;
- initiatives to increase the capacity for vulnerable groups to participate in skills training and employment;
- strengthened ability to influence local outcomes, increased community participation and enhanced services capacity.

2.3 Population health

There is growing community concern about the impacts of coal mining and power stations on the population's health, particularly through respiratory disease and cancer, and a call for greater transparency in environmental management and monitoring. In response to these concerns, the NSW Government together with the mining industry has established the Upper Hunter Air Quality Monitoring Network to monitor and report on air quality in the Upper Hunter region.

There are also a significant number of households and individuals in Muswellbrook experiencing socio-economic disadvantage and housing stress which can also link to health issues.

What the community said

The community told us they are concerned about the impacts of dust on health, the long wait for a doctor's appointment, limited access to mental health services and increased drug and alcohol abuse. There was also concern about the increased stress on families associated with the 12-hour shifts typically employed by the mining industry.

2. Summary of project findings continued

What the data shows

Muswellbrook and the Upper Hunter region have consistently poorer health outcomes than NSW, Sydney and regional NSW. While existing data indicates higher levels of respiratory illness to varying degrees of significance in the Upper Hunter region, further monitoring and investigation is required to address community concerns in relation to possible health impacts from air quality.

In 2006, Muswellbrook had the highest number of emergency presentations for asthma for people aged from 0 to 14 years, as shown in Figure 6. The whole of the Hunter region also had a slightly higher rate of presentation to a GP with asthma than wider non-metro NSW⁵.

A recent NSW Health study on respiratory and cardiovascular diseases and cancer among residents in the Hunter New England Area Health Service found that rates of children diagnosed with asthma in Hunter New England Area Health Services are higher at 39.8 per cent than Rural NSW at 33.2 per cent (NSW Health, 2010:136). The study also found that prescription rates for the whole of the Hunter region for asthma preventatives are also higher than the rest of non-metropolitan NSW (NSW Health, 2010b:10).

Muswellbrook and the combined Upper Hunter region have consistently poorer self-assessed health than regional NSW, Sydney and NSW, as shown in Figure 7. There are also high levels of psychological stress reported in Muswellbrook.

Historical trend

Previous studies reveal that concern about the health impacts of dust has ranked high in the community over a number of years (Coakes, 2009:97; Brereton et al, 2008:xix,xx).

Possible future impacts

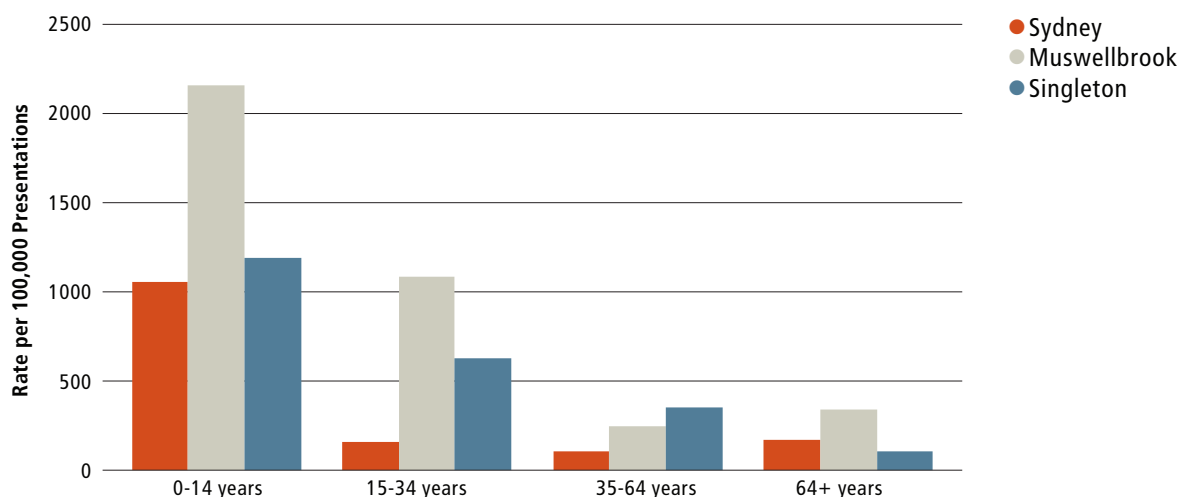
In the future it is likely that the expansion of mining will add further to community anxiety about air quality and health impacts, as well as increase demand for health services. Indirectly, greater housing shortage associated with population growth could also increase demand for mental health and drug and alcohol services arising from housing stress.

Opportunities to address impacts through collaboration

The opportunities identified to address cumulative mining impacts on the population's health collaboratively with other stakeholders include:

- continuation of the Upper Hunter Air Quality Monitoring Network;
- improved health monitoring and meaningful dialogue with the community about potential health impacts associated with dust;
- increased health (including mental health) services.

Figure 6: Emergency department presentations for asthma, 2007

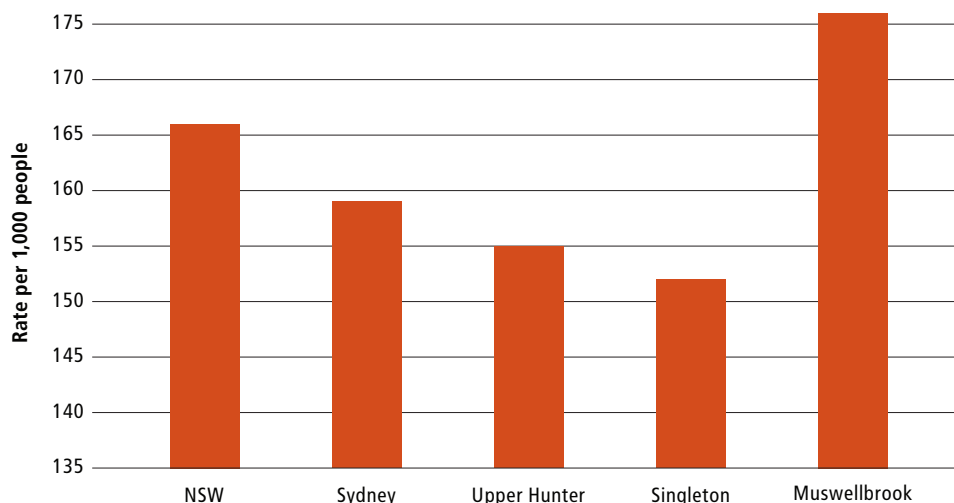


Source: NSW Health (2010) Respiratory and cardiovascular diseases and cancer among residents in the Hunter New England Area Health Service (Postcodes).

*Data not available for Upper Hunter Shire

⁵ This latter finding was not considered to be significant by NSW Health, as reported in NSW Health (2010) Analysis of Beach General practitioner encounter data to examine the potential health effects of the mining industry and other exposures in Singleton, Muswellbrook and Denman.

Figure 7: Fair or poor self-assessed health for NSW, Sydney and Upper Hunter region, 2004 to 2005



Source: Public Health Information Development Unit, Social Health Atlas of New South Wales (incl. ACT) Local Government Areas, 2010.

2.4 Community perceptions of environmental impact

Within the Upper Hunter region there is growing community concern about the cumulative impacts of mining on the environment, especially:

- visual impacts on the landscape;
- quality of air (dust);
- noise and vibration (blasting);
- quality and quantity of water in the Hunter River;
- loss of native vegetation;
- loss of good quality agricultural land (and the long-term impacts on food security).

What the community said

The community told us that they were particularly concerned about environmental impacts on their quality of life. Community concerns included increased dust and reduced air quality, reduced water quality and aquifers being breached by mining, loss of native vegetation, loss of good agricultural land, impact of rail movements through the centre of town, land and water salinity, water retention and visual amenity.

What the data shows

Consultation with landowners during the preparation of the social impact assessment for the Mt Arthur Coal Consolidation Project Environmental Assessment (Coakes, 2009), found:

- a lack of trust and need for greater transparency in environmental management, including emissions and monitoring;

- concern about environmental issues related to dust (prominent issue), blasting and vibration and visual amenity, water, noise, post-mining land use, flora and fauna.

Historical trend

Community interviews conducted in 2004 identified emotional distress associated with changes to the place where people live and the loss of their attachment, or sense of belonging, to places and people. There is a perceived relationship between the health of people, the health of the natural environment and how people relate to the place in which they live (Brereton et al 2007:12). Rapid change is also associated with stress.

Possible future impacts

Continued change has the potential to add further to community concerns about the loss of environmental quality and their sense of belonging.

Opportunities to address impacts through collaboration

The opportunities identified to address cumulative mining impacts on the environment collaboratively with other stakeholders include:

- improved health monitoring and meaningful dialogue with the community about potential health impacts associated with dust;
- local planning and environmental initiatives to address land use certainty, landscape management and catchment care;
- rural landscape rehabilitation and management, with a focus on water quality, visual amenity and habitat restoration, in consultation with the community.

2. Summary of project findings continued

2.5 Housing affordability

The Sustainable Communities Project identified that mining has contributed to the loss of housing affordability resulting in increased cost of living, higher levels of commuting, homelessness and difficulties for some services and businesses to attract staff.

What the community said

The community told us that workers on low to middle incomes, such as teachers, local government and non-government organisation workers, are finding it difficult to afford housing. Some disadvantaged people can also no longer access housing that is secure and affordable.

What the data shows

Australian Bureau of Statistic 2006 Census data (see Figure 8) shows that housing stress – where households spend more than a third of their income on housing – was more than two times higher amongst renters than home owners in the Upper Hunter region. Muswellbrook had the highest overall level of housing stress compared with Upper Hunter and Singleton shires.

Rental housing stress was highest in Muswellbrook and home purchaser housing stress was highest in the Upper Hunter Shire (see Figure 8). In 2010, median rents were highest in Singleton at \$340 per week, compared with \$265 per week in Muswellbrook and \$235 per week in the Upper Hunter⁶.

Historical trend

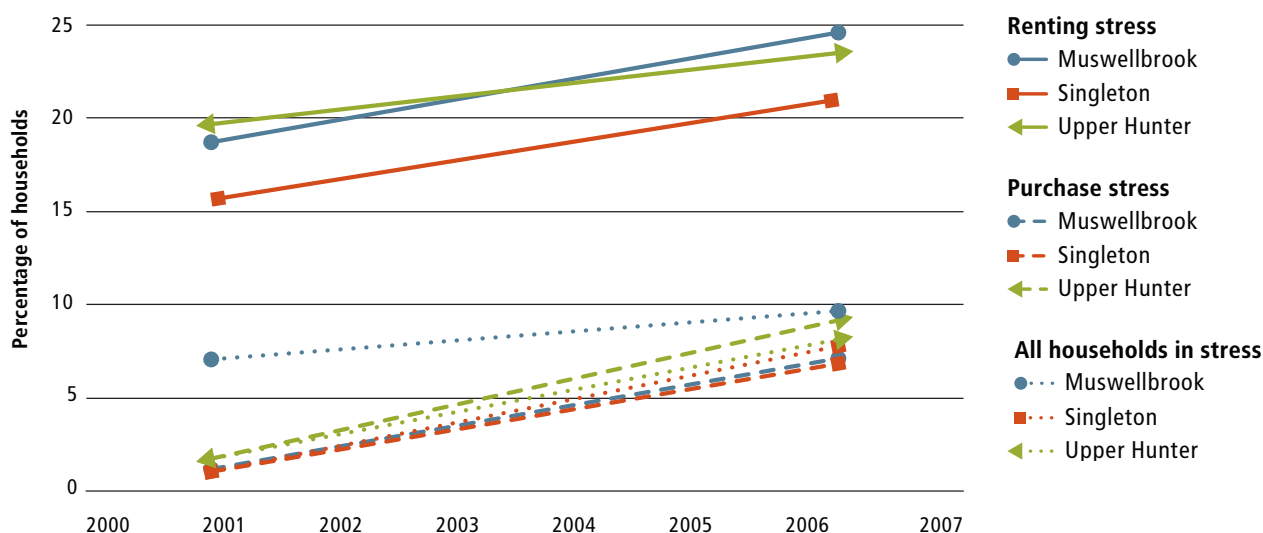
Since 1996, median rents in the Muswellbrook, Singleton and Upper Hunter shires have increased dramatically and ahead of the broader Hunter region, as shown in Figure 9. The data shows a 'surge' in the median weekly rents in all shires since 2001–2006, with the Upper Hunter Shire recording the highest percentage change in rent (95.8 per cent) compared to Muswellbrook (76.7 per cent) and Singleton (88.9 per cent). During the same period the rate of increase remained steady in the wider Hunter region (i.e. the area defined as the Hunter SD balance, including Gloucester, Great Lakes, Dungog, Muswellbrook, Singleton and Upper Hunter shires⁷).

The level of housing stress for both renter and purchaser households in all shires has also risen from 1996 to 2006. Rental housing stress has risen at a similar rate (six percentage points) in both Muswellbrook and Singleton, followed by the Upper Hunter shire at half this rate. Home purchase stress has accelerated in the Upper Hunter shire, increasing by nine percentage points, compared to increasing by six percentage points in both Muswellbrook and Singleton.

Possible future impacts

The findings of the Sustainable Communities Project suggest that planned mining expansions in the Upper Hunter region could add demand for approximately 1,340 additional dwellings by 2016.

Figure 8: Housing stress (renters and purchasers) in Muswellbrook, Singleton and Upper Hunter shires, 2001 to 2006

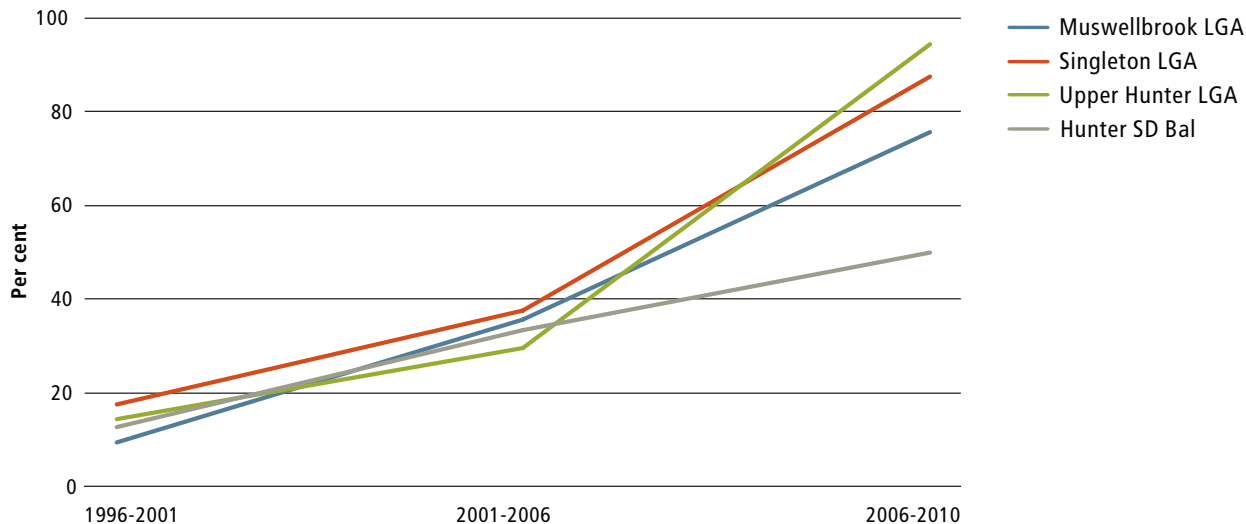


Source: 2006 Census of Population and Housing, ABS Custom Data.

⁶ NSW Department of Housing, Rent and Sales data for the June Quarter, 2010.

⁷ The Hunter SD balance is a statistical reporting area defined by the Australian Bureau of Statistics. Together with Newcastle Statistical Subdivisions, these two areas comprise the whole of the Hunter Valley Statistical Division which includes Cessnock, Dungog, Gloucester, Great Lakes, Lake Macquarie, Maitland, Muswellbrook, Newcastle, Port Stephens, Singleton and Upper Hunter shires.

Figure 9: Percentage change in median weekly rent, 1996 to 2010



Source: ABS Census Data, Time Series Profile, 2006-2010 data – NSW Department of Housing, Rent and Sales, June Quarter, 2010.

Opportunities to address impacts through collaboration

The opportunities identified to address cumulative mining impacts on housing affordability collaboratively with other stakeholders include:

- providing support to the housing, homelessness and support services sectors to address access to affordable housing, emergency housing and homelessness support services;
- monitoring industry impacts on hotel, motel and caravan park accommodation to help inform future housing and accommodation planning in the housing, homelessness and support services sectors.

2.6 Homelessness

Homelessness and the current high demand for services to support homeless people were identified as issues in Muswellbrook and Singleton. Homeless people in the Upper Hunter region include people with a mental illness; people with substance abuse issues; people experiencing family/ domestic violence; young people; Aboriginal people; and single and two parent families.

What the community said

Through the Sustainable Communities Project, local services told us about the high demand from homeless people, including being unable to provide direct services due to the demand for available beds. Much of the homelessness in the area is said to be 'hidden', meaning that homeless people are staying with others, for example 'couch surfing', until a place to stay becomes available.

What the data shows

Fewer people in Muswellbrook and Singleton live in boarding houses and government-supported accommodation, with the majority staying with friends and relatives and living in improvised dwellings. Increasing housing costs driven by low vacancy rates and high demand from an incoming workforce makes finding appropriate housing very difficult.

The Hunter Regional Homelessness Action Plan, an initiative of the NSW and Australian governments, identifies a number of strategies and actions aimed at preventing homelessness and supporting homeless people back into long-term housing. However, this plan has only a limited focus on the Upper Hunter region.

Historical trend

The Australian Bureau of Statistics 2006 Census identified 407 homeless people in the wider Hunter region (i.e. the area defined as the Hunter SD balance, including Gloucester, Great Lakes, Dungog, Muswellbrook, Singleton and Upper Hunter shires⁸). This area has a higher proportion of its homeless population sleeping rough and living in improvised dwellings than NSW or Australia overall.

In 2001, the level of homelessness in the same area was somewhat higher at 463 homeless people (Chamberlain and Mackenzie, 2004).

⁸ The Hunter SD balance is a statistical reporting area defined by the Australian Bureau of Statistics. Together with Newcastle Statistical Subdivisions, these two areas comprise the whole of the Hunter Valley Statistical Division which includes Cessnock, Dungog, Gloucester, Great Lakes, Lake Macquarie, Maitland, Muswellbrook, Newcastle, Port Stephens, Singleton and Upper Hunter shires.

2. Summary of project findings continued

Possible future impacts

There is the potential for an increase in homelessness in Muswellbrook and Singleton associated with increased housing costs. Indirectly this can be expected to increase demand for health and support services.

Opportunities to address impacts through collaboration

Potential opportunities to address the cumulative impacts of mining on homelessness collaboratively with other stakeholders include:

- providing support to the housing, homelessness and support services sectors to address access to affordable housing, emergency housing and homelessness support services;
- monitoring industry impacts on hotel, motel and caravan park accommodation.

2.7 Wealth distribution

The results of the Sustainable Communities Project suggest that the difference in the distribution of high and low incomes in the Upper Hunter region is increasing and contributing to social division.

What the community said

The community told us that they have a concern about the perceived level of income difference reducing social cohesion, as well as the increased cost of living driven by high mining incomes.

What the data shows

Compared with regional NSW, the Upper Hunter region has a higher proportion of people earning more than \$1,400 per week, and a lower proportion of people earning less than \$500 per week. There was no disproportionately high clustering of households in the lower income brackets.

Historical trend

Figure 10 shows that over the five years from 2001 to 2006, there has been a shift into higher income brackets (to the right of the graph). This data confirms community perceptions of a growing wealth divide. However, it is unclear if this is because low income households are shifting to higher incomes or leaving the region.

Possible future impacts

Based on recent trends, income differences can be expected to continue to grow with the expansion of mines in the Upper Hunter region. Relocation of low income earners to other areas may also be a feature.

Opportunities to address impacts through collaboration

Potential opportunities to address the cumulative impacts of mining on wealth distribution collaboratively with other stakeholders include increasing training and employment opportunities, including for young people and Aboriginal people to help them achieve employment in mining and other industries.

2.8 Educational attainment

Access to higher education is an important factor in accessing employment and higher earning potential. There is a concentration of certificate-level education in the Upper Hunter region which may limit access to higher earning potential in industries outside the mining sector.

What the community said

The community told us that the mobility of the population in Muswellbrook contributes to transience in local primary and secondary schools, and that there is a need for early intervention programs to enhance student retention rates. They also said that it is difficult to attract teaching staff to the area, in part because of housing costs.

Figure 10: Weekly household income distribution in the Upper Hunter region from 2001 to 2006

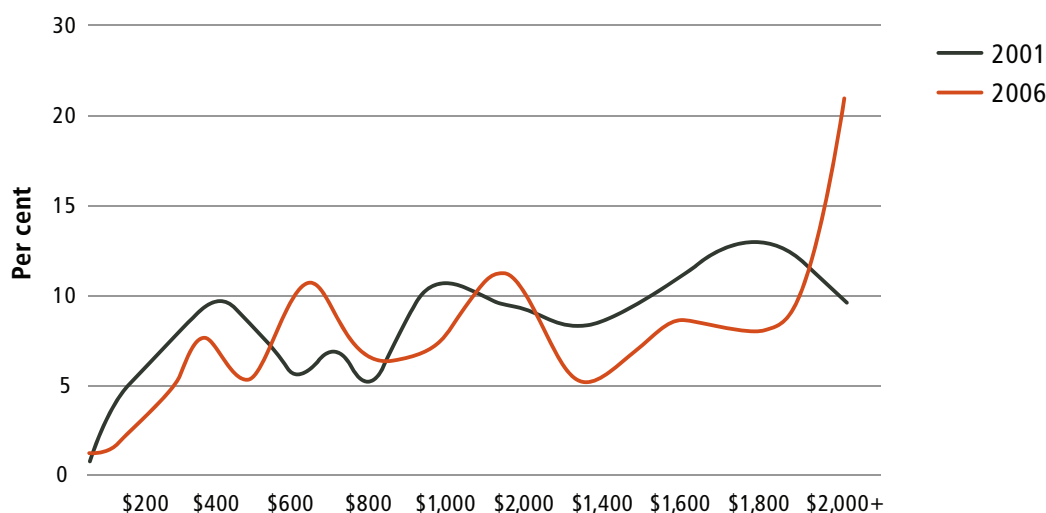
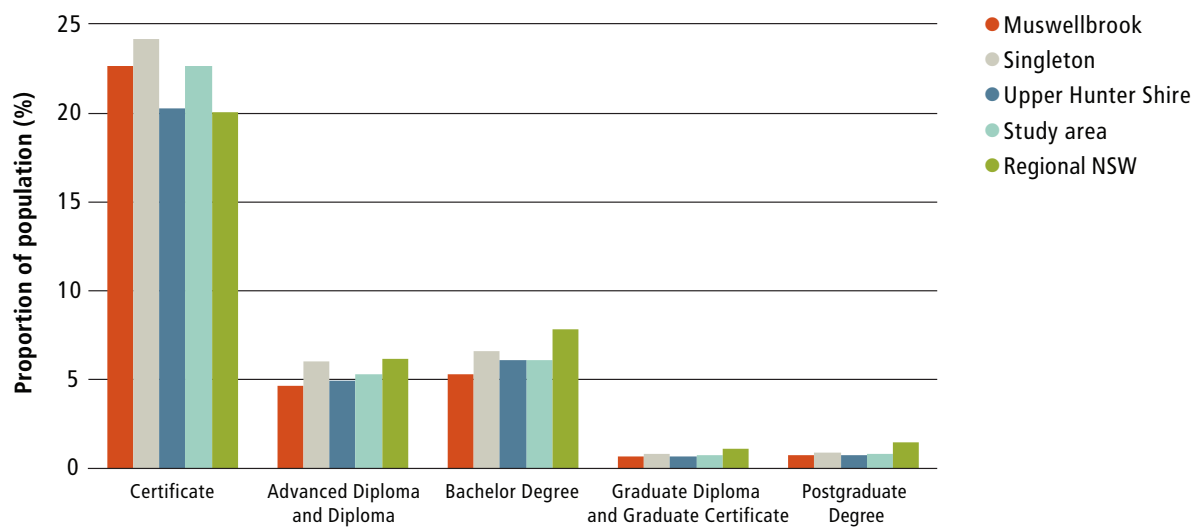


Figure 11: Highest qualification as a proportion of population, 2006



Source: ABS Census of Population and Housing, Time Series Profile 1996-2006.

There is also a need for more work experience programs, sponsorship of TAFE scholarships for local residents and increased opportunities for mining-based traineeships to increase local community access to jobs.

There are also concerns about limited opportunities for education for young people who have limited access to transport.

What the data shows

As shown in Figure 11, a greater proportion of residents in both Singleton and Muswellbrook have attained a certificate qualification as their highest qualification. In Singleton, a greater proportion of residents have attained a diploma, bachelor, graduate diploma or postgraduate degree in comparison to other shires in the Upper Hunter region. A smaller proportion of residents in the Upper Hunter region have attained a diploma qualification or higher, with attainment recorded at lower levels than in regional NSW.

Historical trend

Singleton has consistently had a higher proportion of residents with a tertiary qualification than the other shires, but less than regional NSW, while Muswellbrook and Upper Hunter shire have had a lower proportion than regional NSW.

The proportion of residents with a qualification has consistently grown across all areas from 1996 to 2006. There has been consistent growth in the proportion of residents in the Muswellbrook, Upper Hunter and Singleton shires attaining a certificate qualification, exceeding the trend for other regional NSW residents.

All three shires in the Upper Hunter region are below the NSW average (mean) for education and skill attainment, suggesting a relatively low level of educational attainment and a relatively high proportion of residents employed in low skilled jobs.

Based on Australian Bureau of Statistics' 2006 data, Muswellbrook is ranked as the seventh most disadvantaged of the 153 shires in NSW for education, and the community has substantial pockets of disadvantage⁹.

Possible future impacts

The lack of diverse training opportunities in the region may add to existing labour market shortages.

Opportunities to address impacts through collaboration

Potential opportunities to address the cumulative impacts of mining on education attainment collaboratively with other stakeholders include:

- sponsoring educational scholarships;
- initiatives to increase the capacity for vulnerable groups to participate in education and training.

2.9 Employment access

The findings of the Sustainable Communities Project suggest that a labour shortage in the local economy is making it difficult to fill job vacancies locally.

What the Community said

The community told us that the mining industry brought benefits to the local community by generating jobs for local people. However, local businesses are unable to compete with mining wages and face difficulties attracting staff.

What the data shows

In 2009, employment levels in all three shires in the Upper Hunter region were well above that of regional NSW. However, the low rate of unemployment suggests that there are labour shortages in the region.

⁹ Based on the Australian Bureau of Statistics Socio-Economic Indexes for Areas (SEIFA).

2. Summary of project findings continued

Historical trend

Over the 11 years from 1999 to 2010, all three shires in the Upper Hunter region have had a relatively volatile unemployment rate when compared with regional NSW, as shown in Figure 12. This will have been driven by either substantial fluctuation in the local population or in the population's willingness to seek employment.

The low unemployment rate implies a relatively low capacity to fill employment vacancies from the local workforce.

Although it has followed a similar downward trend, the unemployment rate in the Upper Hunter region has been substantially more volatile than regional NSW. The current low rates of unemployment indicate substantial labour shortages in the local economy, in particular in the Singleton and Upper Hunter shires.

Possible future impacts

Increased demand for workers associated with mining expansion is likely to place further strain on local labour supply, potentially drawing workers from other industry sectors and requiring the sourcing of workers from outside the study area. This will potentially increase the number of workers commuting from elsewhere in the wider Hunter Valley region and beyond.

Further reliance on mining for employment can be also expected in the local economy, with employment tied to the periodic expansion and contraction of mining activities.

Opportunities to address impacts through collaboration

Potential opportunities to address the cumulative impacts of mining on employment access collaboratively with other stakeholders include initiatives supporting labour force retention and economic diversity within the local economy.

2.10 Business growth

The number of newly established businesses provides an indication of the appeal of the local area for business attraction and retention. The findings of the Sustainable Communities Project suggest there has been a decline in the small business sector and overall business innovation. This could also be considered an indicator of the resilience of local industry to adapt to change.

What the community said

The community told us that many small business people have found it more beneficial to work for the mines than continue working in their own business.

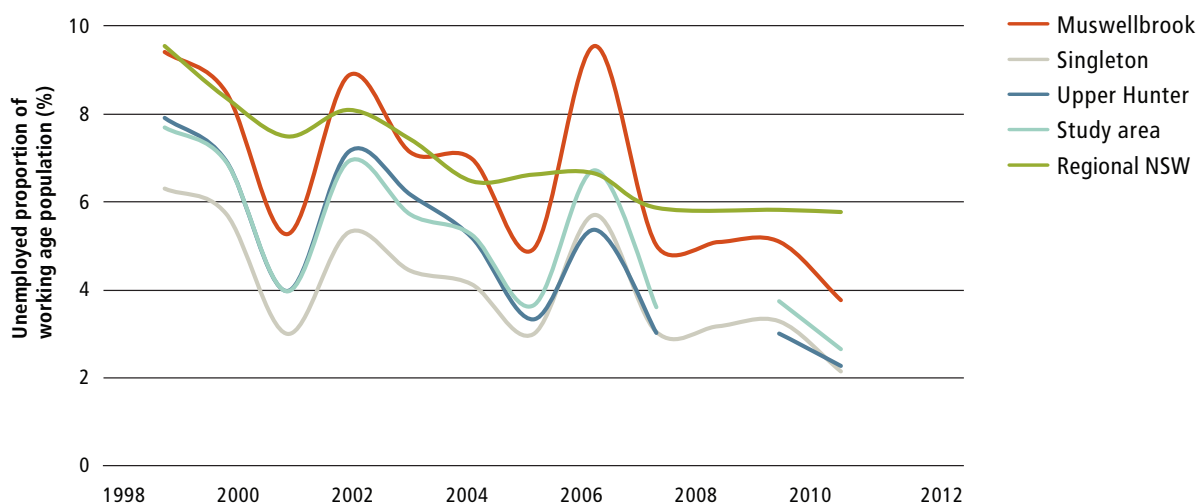
What the data shows

Between 2006 and 2010 there was a steady decline in the registration of new businesses in the Upper Hunter region, in particular small businesses, indicating a decline in the appeal of small business in the region. The trend of declining number of new business registrations is similar for the state of NSW. In particular, state wide the number of businesses with between 1 and 19 employees declined steadily between June 2006 and June 2009.

Possible future impacts

Further reduction of the critical mass (i.e. the volume of activity needed to support future growth) within industry sectors, such as tourism and viticulture, combined with constraints to investment attraction may result in further decreases in industry diversity in the Upper Hunter region.

Figure 12: Unemployment rates in the Upper Hunter region and regional NSW, 1999 to 2009



Source: DEEWL Small Area Labour Market Survey, 1999-2009. Data was not available for the Upper Hunter during 2009.

Opportunities to address impacts through collaboration

Potential opportunities to address the cumulative impacts of mining on business growth include:

- supporting business diversity, small business development and social enterprise development (i.e. businesses that reinvest profits back into the community for a social benefit);
- regional coordination and planning to promote land use certainty;
- local procurement of products and services by local industries.

2.11 Industry diversification

The diversity of the local economy is a key to its sustainability – the more diverse the range of industries and businesses, the greater the economy’s resilience to change. The Sustainable Communities Project found that while mining is a major contributor to the local economy, the lack of industry diversity may reduce the economy’s long-term resilience once mining ends. Agriculture, which has historical significance, is declining across the region.

What the community said

The community told us that uncertainty about the future location of mining activities is holding back investment in agricultural industries. Tourism has also declined because short-term accommodation, such as hotels, motels and caravan parks, is largely occupied by mining industry workers.

What the data shows

The mining industry is the predominant industry in the Upper Hunter region. The project’s findings suggest that the distribution of industry in the Upper Hunter region is substantially less diverse than in the Lower Hunter region. All three shires in the Upper Hunter are substantially less diverse in industry type than their Lower Hunter counterparts.

The agricultural industry has historical significance in the Upper Hunter region and is relatively specialised when compared with regional NSW. However, local employment in the agricultural industry is experiencing a substantial annual decline, which is consistent with declining levels of agricultural employment across NSW (down from 3.6 per cent of all employment in 1996 to 2.7 per cent in 2006). On the larger scale this is being driven by increasing automation and mechanisation of agriculture employment, as well as trends towards larger farms and greater efficiencies. Drought in various parts of the country has also played a role in declining agricultural employment.

Tourism associated industries, such as accommodation, cafes and restaurants and retail, have shown modest employment growth between 2001 and 2006. However, industry consultation has indicated that this has been driven by resource sector overnight stays rather than tourism growth.

Historical trend

Based on Australian Bureau of Statistics Census data, Muswellbrook and Singleton shires were ranked as the least diverse local government areas in the Hunter region in 2001 and 2006, as shown in Table 2. By contrast, the Upper Hunter Shire increased its relative diversity during the same period.

Table 2: Diversity index ranking, 2001 to 2006

2001	2006
Maitland	Maitland
Lake Macquarie	Lake Macquarie
Great Lakes	Great Lakes
Newcastle	Newcastle
Cessnock	Cessnock
Dungog	Gloucester
Gloucester	Upper Hunter
Port Stephens	Port Stephens
Upper Hunter	Dungog
Muswellbrook	Muswellbrook
Singleton	Singleton

Source: SGS utilising ABS Census, Journey to Work Data, 2001 and 2006

Possible future impacts

There is the potential for further loss of investment into agricultural industries, including viticulture, as well as a further decline in the vibrancy of the main street of Muswellbrook and in the region’s ability to attract small business.

Opportunities to address impacts through collaboration

Potential opportunities to address the cumulative impacts of mining on industry diversification include:

- regional coordination and planning to promote land use certainty;
- supporting business diversity and small business and social enterprise development;
- local procurement of products and services by mining companies.

3. Where to from here

Cumulative impacts cannot be effectively addressed by one organisation alone. Mt Arthur Coal is committed to sharing the research findings of the Sustainable Communities Project and collaborating with other partners, including the community, councils, government, mining companies and other stakeholders, to assist with developing strategies and investing in actions to address the cumulative impacts identified.

Following the Sustainable Communities Project, Mt Arthur Coal has revised its Community Investment Program to ensure that it addresses the quality of life indicators presented in this report, indicators that Mt Arthur Coal will continue to measure its performance against. The outcomes of the Sustainable Communities Project have also informed Mt Arthur Coal's ongoing community engagement program and schedule of engagement activities that will continue throughout the year.

Mt Arthur Coal is committed to the community in which it operates and will continue to engage local stakeholders through ongoing consultation, engagement and community participation activities. Opportunities for involvement will be communicated to the community as they occur.

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Thank you

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