25 May 2015

By email: ipnrc@parliament.qld.gov.au

Research Director
Infrastructure, Planning and Natural Resources Committee
Parliament House
George Street
Brisbane Qld 4000

Queensland Parliamentary Inquiry into fly-in, fly-out and other long distance commuting work practices in regional Queensland.

Dear Sir/Madam

The Queensland Resources Council (QRC) welcomes the opportunity to provide this submission to the Queensland Parliamentary Inquiry into fly-in, fly-out and other long distance commuting work practices in regional Queensland.

As the peak representative body for the commercial developers of Queensland’s minerals and energy resources for the past 24 years, the QRC is well equipped to provide the Inquiry with professionally researched information to assist its deliberations.

Our submission notes the important contribution that the resources sector makes to the Queensland economy, providing not only its primary source of export income but a fundamental role in shaping the development of regional Queensland through economic growth, high paying jobs and supporting regional infrastructure, new services and investment.

Fundamental to this and future success in an increasingly competitive environment is the resources sector’s global competitiveness. A key component of that goal is the availability of highly skilled labour.

For the best part of a decade, Queensland enjoyed unprecedented resources sector investment, during which QRC members contested for scarce skilled labour with other states, especially Western Australia. Over that period, Queensland resources sector employment tripled.
As the skills base from ‘traditional’ resource communities was the first to be exhausted, Queensland companies recruited necessary additional construction and operational labour from other parts of Queensland and Australia using long distance commuting (LDC) arrangements.

Today, the peak phase of that activity is over and the number of LDC employees is continuing to fall below its peak.

Nonetheless, QRC submits that flexible workforce arrangements are essential to secure the resources sector’s long-term future and that the sourcing of labour should continue to be determined on a case by case basis by factors such as a project’s proximity to local towns, the availability of skilled labour and the competition for that labour.

The majority of resources sector operations in Queensland employ a mix of residential and LDC workers and will continue to do so. The political focus on ‘100% FIFO’ is a distraction as only the most remote mines employ workforces under such an arrangement. Two Bowen Basin coal mines claimed as 100% FIFO, also support local employment and economic participation.

QRC members are strongly of the view that in the interests of extending their sector’s benefits to more Queenslanders, local consultation and cooperative engagement over long distance commuting is a superior option for the state than a regulatory approach. Such an approach could not only threaten the economic viability of current projects but act as a deterrent to future resources investment in Queensland.

I commend this submission to you and look forward to assisting the committee in your deliberations.

If you require further information or assistance, please contact QRC’s Director Community, Skills and Safety Policy Ms Judy Bertram (judyb@qrc.org.au or telephone 3295 9560).

Yours sincerely

Michael Roche
Chief Executive
Submission to the Queensland Parliamentary Committee of Inquiry into fly-in, fly-out and other long distance commuting work practices in regional Queensland

25 May 2015
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QUEENSLAND RESOURCES COUNCIL MEMBERS, MAY 2015 45
Background to the QRC

The Queensland Resources Council (QRC) is the peak representative body for the commercial developers of Queensland’s minerals and energy resources.

With voluntary membership of more than 250 businesses with interests in the sustainable development of minerals and energy resources in Queensland, the QRC represents all the state’s coal producers, more than 90 percent of its metals production, the major developers of Queensland’s coal seam gas (CSG) for domestic use and export (LNG) and a large number of minerals and energy explorers.

Previously the Queensland Mining Council (1991-2003), the QRC ended 2014 with confirmation that the industries it represents were responsible directly and indirectly for 442,000 full-time jobs in Queensland. The economic analysis to support this is provided later in this document.

The QRC appreciates that the critical importance of the resources sector to the Queensland and Australian economies is well understood by state and federal governments.

The sector’s expansion over the past decade is unprecedented and even though many industries are adjusting to a current global oversupply of many minerals and energy commodities, the resources sector in Queensland continues to generate significant jobs, economic activity and royalties for the state. The medium to long term demand fundamentals for these commodities remains strong.

Crucial to growing and sharing the resources sector’s considerable contribution to Queensland is a stable regulatory environment and a productive workforce based on an adequate supply of skilled labour.

Purpose of this submission

This submission represents QRC’s input to the Inquiry being undertaken by the Infrastructure, Planning and Natural Resources Committee of the Queensland Parliament into fly-in, fly-out and other long distance commuting work practices in regional Queensland. The Legislative Assembly has requested the committee:

1. Inquire into and report on fly-in, fly-out (FIFO) and other long distance commuting work practices in regional Queensland.

2. That, in undertaking this inquiry, the committee should consider the following issues:

   a. The health impacts on workers and their families from long-distance commuting, particularly mental health impacts, and the provision of health services in mining communities;
   
   b. The effects on families of rostering practices in mines using FIFO workforces;
c. The extent and projected growth in FIFO work practices by region and industry;

d. The costs and/or benefits and structural incentives and disincentives, including tax settings, for companies choosing a FIFO workforce;

e. The effect of a 100% non-resident FIFO workforce on established communities; including community wellbeing, the price of housing and availability, and access to services and infrastructure;

f. The quality of housing provided in accommodation villages for FIFO workforces;

g. Strategies to optimise the FIFO experience for employees and their families, communities and industry;

h. The commuting practices for FIFO workforces, including the amount of time spent travelling, the methods of transportation, and adequacy of compensation paid for commuting travel times;

i. The effectiveness of current responses to impacts of FIFO workforces of the Commonwealth, State and Local Governments; and

j. Any other related matter.

For the purpose of this submission all forms of workforce commuting, including fly-in, fly-out (FIFO), drive-in, drive-out (DIDO) and bus-in, bus-out (BIBO), will be referred to as long-distance commuting (LDC) unless the context is relevant only to a single type of commuting arrangement.
1. Executive Summary

OVERVIEW

This submission’s focus is the inquiry’s Terms of Reference and specifically the resources sector’s critical need to attract and retain the services of the most talented employees in a rapidly evolving and competitive business environment in what has become known as the ‘Asian Century’.

Minerals and energy production is a cornerstone of the Queensland economy, providing its primary source of export income.

The sector has and continues to play a fundamental role in shaping Queensland’s regional future by contributing to economic growth, creating high-paying jobs, and supporting regional infrastructure, new services and investment. Strong and sustainable resource communities are vital to the resources sector as they help to attract and retain workers to live locally. Importantly the majority of resources sector workers continue to live in resource communities or in nearby regions with many LDCs living in regional centres such as Mackay, Rockhampton, Yeppoon, Cairns, Townsville and Toowoomba.

The extent of the resources sector’s economic contribution to regional Queensland is demonstrated by the fact that 57 of the state’s 78 Local Government Areas received more than $2 million in direct spending in 2013-14.

A significant resources sector investment phase is winding down in Queensland following an unprecedented period of peak construction and operational activity. During a period of less than 10 years, employment in the sector tripled. At the same time, the resources sector was also experiencing strong growth in other states and territories, particularly in Western Australia.

This concurrent demand for skilled labour placed unsustainable pressure on the Australian labour market.

This was evident immediately in ‘traditional’ Queensland resource communities (e.g. Emerald, Moranbah, Mount Isa) where effective zero unemployment became the norm and resources companies were unable to recruit essential skilled labour locally.

Resources companies – pressured by the prospect of losing important Queensland markets to overseas competitors – responded by sourcing additional skilled labour necessary to respond to workforce demands, from other parts of Queensland, interstate and, for some highly specialised roles, from overseas.

Long distance commuting (LDC) in the resources sector is not exclusively a product of ‘boom times’ but a working fact of life.

The ability to offer choice between residential and non-residential options is essential if the resources sector is to respond to the changing demographics of society and to enable workers to choose the accommodation arrangement that best suits themselves and their families.
By restricting access to workers who prefer the LDC option, you restrict the company’s ability to attract and retain quality people, as well as their ability to create a diverse and inclusive workplace for current and future projects.

LDC is also not unique to the resources sector. According to the 2011 Census (conducted during the investment boom) 2.1 percent of all Australian workers were LDC and of those, 21 percent were mining industry workers. In other words, LDC mining workers account for only 0.44 percent of the nation’s workforce.

While most in demand for construction, expansion and maintenance projects, LDC is essential for a range of operations across Queensland. While traditionally deemed confined to remote locations, a large number of resources sector employees choose to commute from coastal regions to live on or near their workplaces. This trend is most evident in the Bowen and Surat Basins where workers commute from coastal regions.

If more workers are to be attracted to live in resources communities, they need to know that they are not being asked to sacrifice the level of government services and infrastructure taken for granted in more populous parts of Queensland.

The extent to which LDC is utilised by the resources sector has and always will be managed on a case by case basis determined by factors including proximity to local towns, the availability of skilled labour and the competition for that labour. In this context there is no role for government to mandate workforce arrangements such as percentage restrictions on use of LDC workers. In any case legislative and regulatory processes already exist to ensure benefits of the sector to host communities are enhanced and impacts are mitigated or managed.

Like other trade-exposed industries, resources developers must have flexible workforce arrangements if they are to remain responsive, productive and globally competitive. There is little in the way of brand loyalty attached to commodities, and if buyers cannot meet their needs in Queensland, they will go elsewhere. The risk for Queensland is that they never return.

Today in the face of fiercely competitive conditions for supply of most resource commodities and the transition from short-term construction to long-term production, resources industries are focused on reducing costs, improving productivity and restoring their global competitiveness. The ability to use flexible practices to attract high quality labour in sufficient numbers will be an essential part of this focus.

While the QRC recognizes that the ALP, LNP and KAP in Queensland have each expressed opposition to so-called ‘100 per cent FIFO mining operations’, this very concept is a misnomer. Except perhaps for the most remote of mines, resources projects in Queensland will continue to employ a mix of residential and LDC workers. Even in the case of the two coal mines in the Bowen Basin that were sanctioned back in 2011 to employ a fully FIFO operational workforce, in practice those mines are large employers of local workers and contractors.

QRC members are strongly of the view that in the interests of extending their sector’s benefits to more Queenslanders, local consultation and cooperative engagement over long distance commuting is a superior option for the state than a regulatory approach. Such an approach could not only threaten the economic viability of current projects but act as a deterrent to future resources investment in Queensland.
SUMMARY OF RESPONSES TO THE INQUIRY’S TERMS OF REFERENCE

a) The health impacts on workers and their families from long-distance commuting, particularly mental health impacts, and the provision of health services in mining communities;

- Research shows the health impacts and particularly mental health impacts on LDC workers and their families is no worse than for the general population or residential mining employees.
- One in five Australians will experience symptoms of a mental health disorder during a 12 month period owing to the complex interaction of biological, psychological, social and societal factors.
- While LDC does not cause mental health problems, it can expose vulnerable workers to risk factors. This is why many QRC member companies have strategies and services in place to promote mental health, remove stigmas around help-seeking behaviour, and provide services such as on-site occupational health nurses and employee assistance programs 24/7.
- Many resources companies also put significant effort into managing fatigue and providing sleep, health and nutrition options that encourage a healthy lifestyle.
- One of the advantages of commuting reported by LDC workers is improved quality and quantity of sleep and healthier lifestyles. LDC and residential mine workers have similar work schedules to those of workers in other 24/7 industries, such as healthcare and transport. Mining represents only 7 percent of all shift workers in Australia.

b) The effects on families of rostering practices in mines using FIFO workforces;

- The resources sector provides a breadth of residential and non-residential options to attract and retain an adequate number of skilled workers. There is no ‘one-size fits all’ solution to workforce arrangements that works best across all resources, communities, workforces and companies.
- During the operational phase of resources projects in Queensland, rosters differ considerably although even-time rosters (e.g. seven days on, seven days off or four on, four off) and lifestyle rosters (4 on 5 off, 5 on, 4 off) are the most common. Rosters of LDC and residential employees are often the same or similar.
- LDC is a choice many employees make in preference to relocating as it minimises disruption to family living arrangements including children’s schooling and their partner’s employment.
- Research indicates FIFO workers and their partners are within the norms for healthy functioning on the scales of measures of psychological wellbeing, relationship satisfaction and perceptions of family function.
- Choice between residential and non-residential options is essential if the resources sector is to respond to changing demographics, attract and retain quality people as well as build a diverse and inclusive workplace.
c) **The extent and projected growth in FIFO work practices by region and industry;**

- The majority of resources sector workers are resident either in or near resource communities.
- The extent to which LDC arrangements are used in resources sector operations in Queensland varies on a case by case basis and overtime depending on factors such as:
  - the location of the resources operation including proximity to local towns and communities
  - the phase of the operation i.e. construction vs operation
  - the availability of skilled labour (ability to recruit locally, competition for labour, types of skills being sought)
  - willingness of prospective workers to reside in local towns
  - local infrastructure and services e.g. education and health services
  - activity levels across the resources sector (global demand, competition, cost, commodity prices)
  - life cycle of the mine
  - safety considerations, especially fatigue management
  - economic/commercial considerations.

- Resources companies must be flexible in order to remain both productive and competitive. A crucial aspect of this flexibility is the ability to offer choice in workforce arrangements.
- Research shows the majority of regional Queensland to Bowen Basin LDCs travel from homes on the outskirts of Mackay or Rockhampton. Other LDC source communities to the Bowen Basin include Cairns, Emerald and the broader Bowen Basin region.
- Mines with larger proportions of LDC workers are frequently in more remote areas where there are no nearby communities or where demand for skilled labour outweighs local supply.
- Any attempt by government to mandate what companies do in terms of their workforce including any move to eliminate LDC altogether or prescribe artificial percentages, could potentially limit necessary flexibility and responsiveness and as a result stifle productivity and competitiveness of the resources sector in this state.

**d) The costs and/or benefits and structural incentives and disincentives, including tax settings, for companies choosing a FIFO workforce;**

- Tax concessions and incentives do not drive companies toward LDC workforce arrangements over residential. There are no significant tax incentives to promote a LDC workforce over a residential workforce.
- Structural incentives and disincentives in tax play only a small role in workforce decision-making. Other factors such as the availability of necessary skills have a greater impact on the decision to have a LDC workforce.
- Any changes to the existing tax settings (e.g. FBT exemptions) will not make a difference to businesses choosing LDC over a residential workforce. It will simply make it harder and costlier for companies to operate, and discourage labour mobility.
e) The effect of a 100% non-resident FIFO workforce on established communities; including community wellbeing, the price of housing and availability, and access to services and infrastructure;

- QRC is contributing to a separate Queensland Government panel review into 100% FIFO operations near resources communities in Queensland.
- There are very few resources sector operations in Queensland with a 100% FIFO workforce and in the majority of cases, these arrangements are in place because the operation is remote and there is either no nearby community or an insufficient skills base from which to draw locally and the workforce is often sourced from regional centres.
- Two 100% FIFO operations near Moranbah were approved by the state government at a time of effective full employment in the Bowen Basin and surrounding regions rendering LDC the only viable option. The FIFO workforce for these two operations represents around 10% of the company’s employees in the Bowen Basin, where most of its workers live. Even at those two mines, in any one month some 1000 local contractors provide on-site services.
- Investment decisions and operational arrangements for these two 100% FIFO mines were made on the basis of the approvals given by the government of the day.

f) The quality of housing provided in accommodation villages for FIFO workforces

- Resource companies recognise the importance of providing high quality accommodation villages to attract and retain employees, and surveys of worker satisfaction with their accommodation are undertaken regularly.
- There are various state and local government policies and procedures that guide the construction and operation of quality accommodation facilities.
- Certification to ISO 22000 – the International Standard for Food Safety Management – is not uncommon in accommodation village kitchen and mess facilities providing a level of food safety guarantee beyond those in many public dining facilities.
- Camps often provide the opportunity for residents to improve their well-being with access to nutrition information, exercise equipment, lifestyle coordinators and personal trainers.
- The operation of accommodation villages within mining communities helps to offset the ‘boom and bust’ mining cycle, especially how it can impact the local housing market.

g) Strategies to optimise the FIFO experience for employees and their families, communities and industry;

- In recognition that LDC can be challenging for some employees QRC, with input from member companies, released a guidance document in 2014 to assist existing and prospective employees better understand and adapt to LDC.
- Resources companies use a range of strategies both before and during employment to provide additional support for LDC employees, their families and communities, including strategies to:
  - ensure prospective employees and their families understand the potential impacts on personal and family life of long-distance commuting
  - encourage networking and support for families
  - guide management of family relationships
• access to confidential counselling support
• maintain awareness of importance of mental wellbeing and detecting signs of stresses on your colleagues
• assist local communities such as local buy programs.

h) The commuting practices for FIFO workforces, including the amount of time spent travelling, the methods of transportation, and adequacy of compensation paid for commuting travel times;

• Commuting practices and the duration of travel vary across the resources sector and depend on site-specific factors such as the resource location, transport infrastructure and condition and, above all, safety considerations.
• Jobs in the resources sector are highly sought and well paid with good employment conditions including attractive rosters. ABS data shows wages in the resources sector are consistently higher than wages paid across all industries.
• Prospective workers apply for and ultimately accept positions in the full knowledge of employment conditions including where the position is located and the likely commuting travel times and arrangements.

i) The effectiveness of current responses to impacts of FIFO workforces of the Commonwealth, State and Local Governments; and

• The Queensland Government’s Social Impact Assessment Guideline and the broader Environmental Impact Statement process contain methodologies to assess the impacts and benefits of major projects workforce arrangements.
• The resources sector has delivered jobs and economic benefits to resources communities and Queensland more broadly, within this existing legislative framework.
• Current processes are rigorous and there is nothing to be gained by introducing further regulations. Changes to the government landscape in which resources sector projects operate - whether taxation, royalties, environmental or social policies - have the potential to create uncertainty and ultimately, sovereign risk.
• Changes must not be made to conditions set in EIS approvals retrospectively as these are binding arrangements upon which Final Investment Decisions have been made and upon which operational arrangements are based.

j) Any other related matter.

Importance of infrastructure and services

• Resources companies recognise the importance of working with governments and other stakeholders to support the liveability of the regional communities in which they operate.
• The appeal of resources communities as places to live and raise families is greatly influenced by the level and standard of social services and infrastructure available.
• Government’s obligations are to provide base levels of service in these areas that are equivalent to other communities of comparable size.
• Spending on social infrastructure in resources communities should be seen as a form of reinvestment of taxes and royalties into maintaining the productive potential of the state’s minerals and energy resources regions.
· Allocation of sufficient funds by government to improve the level and standard of social services and infrastructure is essential if resources communities are to become more liveable, sustainable, and as a result, more attractive to people to live locally.
· Governments must encourage diversification of regional economies, especially those heavily reliant on single industries like resources, if these communities are to be sustainable and resilient.

**Technology**

· Technology has the capacity to change the nature of work and jobs in the resources sector including the skills required to undertake that work and where that work is performed.
· Regulating LDC has the potential to drive those technological innovations to accelerate transformation of the sector, with potential impacts on the workforce.
2. Overview of Queensland’s Resources Sector

THE CURRENT STATE OF PLAY

Queensland’s diversified minerals and energy sector has been a foundation stone of the Queensland economy since statehood. Based on primary data provided to QRC by almost 50 member companies in 2013-14 (representing approximately 95 percent of all value of production), $7 billion was paid in wages to 44,000 full-time workers and these operations purchased $31 billion worth of goods and services from 17,000 Queensland businesses.

The resources sector’s $38 billion direct economic contribution is calculated to have generated an additional $40 billion in flow on effects and supported an indirect workforce of almost 400,000 employees. This equates to one in every four dollars of Queensland’s Gross Regional Product and one in every five Queensland jobs.

Queensland reaps the benefit of a diversified resources sector, which produces a range of commodities. This diversity is critically important given the cyclical nature of the resources market. This diversity means that there are many resource regions in Queensland. These include the Surat and Bowen coal basins in Southern and Central Queensland; the Darling Downs region where the majority of downstream and upstream gas operations are located; and the North and North West of the state, which host many of its minerals operations.

This broad spread of activity translates to an equally significant spread of economic benefit in the form of jobs, local business purchases, community investment and local government revenue across most of Queensland. Almost three quarters of the state’s local government areas received direct economic contributions above $2 million in the last financial year.

Queensland’s resources sector is capital intensive, rather than labour intensive, but jobs in the industry are highly skilled and highly paid. As a regional sector, the spending and employment in regional Queensland by the resources sector is a major contributor to local economies with large flow-on effects. Table 1 below illustrates the number of direct employees (as provided by QRC members) (by residential postcode not workplace) and average wages in 2013-14. The resources activity also supports additional indirect employees and the total employment contribution is calculated as a percentage of all employment in each LGA.

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1 https://www.qrc.org.au/_dbase_upl/Economic%20Impact%20of%20Resources%20Sector%20on%20Queensland%20Economy%202013-14.pdf (see appendix 1 for list of participating companies)
Table 1: Resources sector direct employment and average wages by LGA, 2013-14

<table>
<thead>
<tr>
<th>LGA</th>
<th>Direct full time employees</th>
<th>Associated salaries</th>
<th>Average wage per employee</th>
<th>Indirect full time employees</th>
<th>% of total employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brisbane</td>
<td>6,797</td>
<td>$993,200,000</td>
<td>$146,127.59</td>
<td>164,750.0</td>
<td>27.7%</td>
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<tr>
<td>Mackay</td>
<td>4,153</td>
<td>$543,000,000</td>
<td>$130,745.71</td>
<td>24,053.9</td>
<td>41.3%</td>
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<tr>
<td>Isaac</td>
<td>3,926</td>
<td>$586,300,000</td>
<td>$149,345.36</td>
<td>5,533.6</td>
<td>62.0%</td>
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<tr>
<td>Gladstone</td>
<td>3,623</td>
<td>$408,500,000</td>
<td>$112,742.53</td>
<td>5,369.4</td>
<td>51.6%</td>
</tr>
<tr>
<td>Central Highlands</td>
<td>3,254</td>
<td>$458,100,000</td>
<td>$140,776.25</td>
<td>7,568.8</td>
<td>61.0%</td>
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<tr>
<td>Mount Isa</td>
<td>3,218</td>
<td>$422,600,000</td>
<td>$131,344.21</td>
<td>3,960.9</td>
<td>51.6%</td>
</tr>
<tr>
<td>Townsville</td>
<td>2,952</td>
<td>$322,700,000</td>
<td>$131,147.05</td>
<td>10,749.7</td>
<td>14.5%</td>
</tr>
<tr>
<td>Rockhampton</td>
<td>1,410</td>
<td>$177,600,000</td>
<td>$125,957.45</td>
<td>6,582.4</td>
<td>20.4%</td>
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<tr>
<td>Moreton Bay</td>
<td>1,237</td>
<td>$162,600,000</td>
<td>$131,447.05</td>
<td>6,201.3</td>
<td>3.8%</td>
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<tr>
<td>Whitsunday</td>
<td>1,134</td>
<td>$145,700,000</td>
<td>$128,505.91</td>
<td>2,849.9</td>
<td>20.9%</td>
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<td>Banana</td>
<td>1,070</td>
<td>$144,200,000</td>
<td>$134,778.95</td>
<td>3,460.4</td>
<td>55.9%</td>
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<td>Gold Coast</td>
<td>1,064</td>
<td>$117,900,000</td>
<td>$110,766.63</td>
<td>3,599.2</td>
<td>1.7%</td>
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<td>Sunshine Coast</td>
<td>1,041</td>
<td>$125,500,000</td>
<td>$120,534.00</td>
<td>3,985.9</td>
<td>3.7%</td>
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<tr>
<td>Livingstone</td>
<td>994</td>
<td>$135,400,000</td>
<td>$136,272.14</td>
<td>2,727.7</td>
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<td>Western Downs</td>
<td>840</td>
<td>$84,600,000</td>
<td>$100,678.33</td>
<td>10,713.6</td>
<td>64.5%</td>
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<td>Weipa</td>
<td>686</td>
<td>$51,000,000</td>
<td>$74,344.02</td>
<td>610.6</td>
<td>50.2%</td>
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<td>Bundaberg</td>
<td>675</td>
<td>$78,100,000</td>
<td>$115,772.31</td>
<td>1,295.5</td>
<td>5.2%</td>
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</table>

Source: QRC

The current cyclical downturn of the resources sector is severe and recovery is likely to be a slow process for some commodities. Some uncompetitive mines have already been forced to close and resources jobs have been lost. QRC notes mid-2014 ABC media reports that estimated more than 8,000 jobs had been lost statewide since the start of the downturn in late 2013, including in the Bowen Basin, Mackay, Townsville and Brisbane. The current focus across industry is on reducing costs and improving productivity in order to recover global competitiveness. As part of this drive for competitiveness, companies must retain flexibility and responsiveness in their workforce arrangements.

EMPLOYMENT IN MINING REGIONS

In the 10 years to the end of 2013-14, employment in the mining\(^3\) industry in Queensland more than tripled, growing from 24,200 workers in 2004-05 to 78,100 in 2013-14 (See Figure 1). Employment growth in mining was notably stronger than across all industries in Queensland, with employment in all industries growing by close to 22 percent over the same period.

\(^3\)‘Mining industry’ as defined by the ABS includes: coal, oil and gas, metal ore, non-metallic mineral mining and quarrying, exploration and mining support services.
Over the 10 years to 2013-14, the strongest employment growth in mining occurred from 2009-10 to 2010-11, with employment increasing by 28 percent. However, since 2010-11 employment in the mining industry has increased at a reduced rate and has actually been declining since the end of 2013.

Employment levels in December 2013 reflect the peak level of resources sector operational activity in Queensland in response to historically high levels of demand and prices paid for Queensland’s commodities.

It was also over this period that a range of major resources sector projects were being constructed (e.g. LNG plants, Caval Ridge and Daunia coal mines and port projects at Wiggins Island in Gladstone and expansion of the Hay Point Coal Terminal, south of Mackay) which contributed to the unprecedented demand for skilled labour. Queensland resource projects were also competing for skilled workers with projects in Western Australia, the Northern Territory and Papua New Guinea.

As the construction workforce associated with mining projects is generally larger than operational mining workforces, the peak levels of construction and operational activity exacerbated issues such as supply and demand for skilled labour in resource regions and placed strain on housing and rental markets in resource communities.

**UNEMPLOYMENT IN RESOURCE REGIONS**

Unemployment in resource regions is consistently well below the Queensland average. As illustrated in Figure 2, while the unemployment rate has continued to rise in Queensland since 2006, three out of the four resources sector regions have experienced reductions in the unemployment rate. Even during the global financial crisis, when unemployment rose across
the state (and nationally) the Bowen, Surat and Galilee Basins saw either a decreased or a stable unemployment rate.

Table 2 below shows the beneficial impact of resource activity on resource regions and communities.

Table 2: A comparison of unemployment rates in QLD resource regions and communities 2001 – Dec Qtr 2014

<table>
<thead>
<tr>
<th>Town/region</th>
<th>2001</th>
<th>2006</th>
<th>2011</th>
<th>Dec Qtr 2014*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Queensland</td>
<td>8.2</td>
<td>4.7</td>
<td>6.1</td>
<td>6.4</td>
</tr>
<tr>
<td>Brisbane N/S/E/W (SA4)</td>
<td>6.9</td>
<td>3.9</td>
<td>5.2</td>
<td>5.0</td>
</tr>
<tr>
<td>Bowen Basin Resource Region</td>
<td>4.3</td>
<td>2.1</td>
<td>2.2</td>
<td>3.0</td>
</tr>
<tr>
<td>Surat Basin Resource Region</td>
<td>5.9</td>
<td>3.6</td>
<td>3.1</td>
<td>2.8</td>
</tr>
<tr>
<td>Galilee Basin Resource Region</td>
<td>2.5</td>
<td>3.1</td>
<td>2.7</td>
<td>1.5</td>
</tr>
<tr>
<td>North West Resource Region</td>
<td>6.1</td>
<td>3.7</td>
<td>4.2</td>
<td>3.4</td>
</tr>
<tr>
<td>Mackay (SA3)</td>
<td>8.9</td>
<td>3.9</td>
<td>3.8</td>
<td>5.3</td>
</tr>
<tr>
<td>Moranbah (SA2)</td>
<td>4.2</td>
<td>1.7</td>
<td>2</td>
<td>1.8</td>
</tr>
<tr>
<td>Roma and Roma Region (SA2s)</td>
<td>4</td>
<td>2.5</td>
<td>2.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Chinchilla (SA2)</td>
<td>7.6</td>
<td>3.2</td>
<td>2.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Cairns North and South (SA3)</td>
<td>8</td>
<td>4.3</td>
<td>6.1</td>
<td>7.3</td>
</tr>
<tr>
<td>Toowoomba (SA3)</td>
<td>7.3</td>
<td>4.6</td>
<td>5.1</td>
<td>4.3</td>
</tr>
</tbody>
</table>

*based on a 4 quarter smoothed series. Source: Australian Government Department of Employment, Small Area Labour Markets Australia, various editions and Queensland Treasury estimates.
LABOUR SUPPLY AND COMMUTING – AN IMPERATIVE

Over this period of peak construction and operational activity there were significant shortages of skilled labour as well as strong competition for that labour. At one point in 2011, QRC’s own monitoring recorded over 3600 Queensland resources sector vacancies on one popular jobs website, the majority of which were for skilled labour. Even when a resources sector operation was near a resource town, the demand for workers significantly outweighed supply. As a result, attracting skilled workers from other parts of Queensland and Australia was essential to meet the operating needs of the industry.

Strategies to attract workers to these areas through LDC arrangements including fly in, fly out (FIFO), bus in, bus out (BIBO) and drive in, drive out (DIDO) or to attract people to live locally, became important. Companies responded by building well-equipped worker accommodation villages to house commuting workers and offering generous remuneration packages. Attractive rosters and commuter bases in close proximity to major towns or regional cities also made commuting arrangements attractive.

A study of workforce accommodation arrangements undertaken by URS on behalf of QRC in late 2011 demonstrated the importance of offering choice between residential and non-residential arrangements if the resources sector is to staff current and future projects. The survey of 2275 workers demonstrated a large proportion of workers who would not have taken the job unless their preferred (residential or non-residential) accommodation arrangement was available.

In many respects the growth of the commuting workforce and the construction of accommodation villages served as a release valve to reduce the impact on housing and rental markets in resource towns.

It must also be recognised that FIFO and BIBO commuting arrangements are in part driven by the responsibility of employers to keep workers safe especially through the management of fatigue. In some instances even workers who live locally are required to live in accommodation villages while they are on shift as a safety measure to eliminate lengthy daily commutes.

LABOUR SUPPLY AND AVAILABILITY OF SKILLED LABOUR

While the resources sector employs a significant number of local residents, when demand for appropriately skilled workers exceeds local supply, the sector has to recruit from outside resource communities.

The inability to retain or attract sufficient numbers of highly skilled workers to reside in rural and remote areas is not a problem unique to the resources sector. The lack of medical specialists, other health professionals and the ability to retain teachers and police have been long standing problems in remote and regional Queensland.

Apparent school retention data (Yrs 10-12) in Queensland shows metropolitan areas have a higher rate of retention through to Year 12 than other regions. The lower number in ‘remote’

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4 URS, 2011
is partially due to students having to leave remote areas in order to undertake Years 11 and 12 if not offered locally.

The Year 12 outcomes data shows that even among Year 12 completers, those in metropolitan areas are more likely to have achieved a Queensland Certificate of Education or Queensland Certificate of Individual Achievement, though the differences between the regions are now much less than they were a couple of years ago.

An examination of post-school qualification Census data (Table 3) demonstrates the lower levels of educational attainment in regional and remote parts of Queensland. In part this reflects the reduced access to education facilities including vocational education and training providers and universities. The training system has been unable to respond to commercial realities and project timelines and industry has had to respond through the development of innovative training solutions over this period.

Since 2006, the resources sector and government have partnered to deliver science, technology engineering and mathematics (STEM) programs to better position young people for resources sector careers through the Queensland Minerals and Energy Academy (QMEA). Now operating in 34 schools, QMEA has good coverage of resource regions including Central Queensland. While this is the largest industry-education partnership of its kind in Australia, it is targeted primarily at encouraging and preparing young people to enter the industry, and especially those who live in resource regions.

However, there is potential for more to be done expanding the QMEA model more broadly into regional and remote areas of Queensland.

**Table 3: Employed Persons, Occupation Major-Group by Qualification level by Region (SA4), Queensland Census 2011, Place of Usual Residence**

<table>
<thead>
<tr>
<th>Region - SA4</th>
<th>Bachelor degree or above</th>
<th>Advanced Diploma and Diploma Level</th>
<th>Certificate III or IV</th>
<th>Certificate I or II</th>
<th>Certificate Level, not further defined</th>
<th>Level of education not stated or inadequately described</th>
<th>No non-school qualification</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Greater Brisbane*</td>
<td>27%</td>
<td>10%</td>
<td>19%</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
<td>36%</td>
<td>100%</td>
</tr>
<tr>
<td>Cairns</td>
<td>17%</td>
<td>11%</td>
<td>25%</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
<td>41%</td>
<td>100%</td>
</tr>
<tr>
<td>Darling Downs</td>
<td>12%</td>
<td>7%</td>
<td>22%</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
<td>51%</td>
<td>100%</td>
</tr>
<tr>
<td>Fitzroy</td>
<td>14%</td>
<td>11%</td>
<td>23%</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
<td>40%</td>
<td>100%</td>
</tr>
<tr>
<td>Gold Coast</td>
<td>19%</td>
<td>7%</td>
<td>26%</td>
<td>2%</td>
<td>1%</td>
<td>4%</td>
<td>46%</td>
<td>100%</td>
</tr>
<tr>
<td>Mackay</td>
<td>12%</td>
<td>6%</td>
<td>24%</td>
<td>2%</td>
<td>1%</td>
<td>4%</td>
<td>46%</td>
<td>100%</td>
</tr>
<tr>
<td>Outback</td>
<td>13%</td>
<td>7%</td>
<td>23%</td>
<td>2%</td>
<td>2%</td>
<td>5%</td>
<td>48%</td>
<td>100%</td>
</tr>
<tr>
<td>Sunshine Coast</td>
<td>18%</td>
<td>11%</td>
<td>24%</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
<td>39%</td>
<td>100%</td>
</tr>
<tr>
<td>Toowoomba</td>
<td>20%</td>
<td>9%</td>
<td>23%</td>
<td>2%</td>
<td>1%</td>
<td>3%</td>
<td>42%</td>
<td>100%</td>
</tr>
<tr>
<td>Townsville</td>
<td>17%</td>
<td>8%</td>
<td>24%</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
<td>44%</td>
<td>100%</td>
</tr>
<tr>
<td>Wide Bay</td>
<td>13%</td>
<td>6%</td>
<td>23%</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
<td>40%</td>
<td>100%</td>
</tr>
<tr>
<td>Queensland**</td>
<td>22%</td>
<td>9%</td>
<td>22%</td>
<td>2%</td>
<td>2%</td>
<td>4%</td>
<td>41%</td>
<td>100%</td>
</tr>
</tbody>
</table>

* Greater Brisbane consists: Brisbane East, Brisbane North, Brisbane South, Brisbane West, Brisbane Inner City, Ipswich, Logan-Beaudesert, Moreton Bay-North and

** Queensland also includes ‘No Usual Address, Queensland’ and ‘Migratory - Offshore-Shipping Queensland’ omitted here; regions don’t sum to state total.

**Source:** 2011 Census of Population and Housing

**LONG DISTANCE COMMUTING ACROSS AUSTRALIA - THE REALITY**

A 2013 study by KPMG for the Minerals Council of Australia ‘Analysis of the Long Distance Commuter (LDC) Workforce Across Australia’ confirmed the majority of LDCs are employed in industries other than mining.
Based on the 2011 Census, the KPMG study showed that only 2.1 percent of the national workforce undertakes LDC to work. Miners represent 21 percent of the total LDC workforce (i.e. only 0.44 percent of all the nation’s workers are commuting mining workers). More people LDC to Australia’s capital cities than to work in Australia’s nine mining regions, with a total of 64,056 people LDC to Australia’s capitals compared with 55,962 to the nine sampled mining regions, with 44,610 people identified as mining industry employees.

Overall, the KPMG study showed that at the time of the 2011 Census, 213,773 Australians were long distance commuting workers including more than 28,000 construction workers, about 14,000 public servants, more than 15,000 manufacturing industry employees, 13,000 healthcare workers and more than 12,000 people engaged in scientific research, architecture, engineering, IT, veterinary science and other professional services.

Other key findings of the KPMG study include:

- 25 percent of the total mining industry workforce was LDC at the 2011 Census (coinciding with the peak of the resources boom), just three percentage points higher than in 2006.
- KPMG estimates that 100,000 workers directly employed in mining operations and in industries allied to the resources sector LDC to work.
- Sydney is Australia’s largest LDC destination followed by the Pilbara, the Bowen Basin, Melbourne and regional New South Wales.
- Perth is the largest feeder location (place of usual residence) for LDC workers followed by regional Queensland, regional NSW, Sydney and Melbourne.
- The proportion of workers engaged in LDC work practices increased by just 0.4 percentage points to 2.1 percent in the five years to 2011.

**BENEFITS FROM RESOURCES SECTOR ACTIVITY IN RESOURCE COMMUNITIES**

The resources sector continues to strongly support regional communities. KPMG’s 2013 study ‘Analysis of the Changing Residents Demographic Profile in Australian Mining Communities’ for the Mineral Council of Australia, found on the whole, mining resident populations are growing and diversifying. The study highlighted:

- Incomes are higher in mining regions compared with regional Australia.
- There is higher full-time employment in mining regions – 66 percent compared with 58 percent across regional Australia.
- All but two mining regions recorded an unemployment rate below the national unemployment rate (5.2 percent) and the regional Australian unemployment rate (5.4 percent).
- There is a higher proportion of families in mining regions than non-mining regions. Thirty-three percent of resident households are made up of parents and children in mining regions, compared with 29 percent across regional Australia.
- There are higher rates of Year 12 completions in mining regions – 41 percent compared with the regional Australian average of 37 percent.

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*Note: The mining regions examined were the Pilbara, Central-West (WA), Surat Basin, North West QLD, the Hunter Valley, Kalgoorlie-Boulder, Central SA, the Gaililee Basin and the Bowen Basin*
Contrary to claims that with the increase in FIFO employees mining regions are not increasing in population size, KPMG found that employees are also moving to the mining regions. In the five years to 2011, the population of Australia’s mining regions had grown at 1.5 percent per year. This was the same as the national average but greater than the 0.8 percent for regional Australia more generally. As the report states: “Employment opportunities in mining Australia are stimulating the resident population growth crucial to sustainable communities.”

Retention of youth in rural areas has been a concern for decades in Australia and other countries, as school leavers depart primarily in search of employment opportunities. Monitoring regional transition in coal-seam gas (CSG) resource areas has been a key focus area of the CSG industry and CSIRO research alliance GISERA. Their 2014 research paper ‘Impacts of unconventional gas development on rural community decline’ found that CSG regions show signs of mitigating and reversing rural decline trends, particularly through the retention of youth between 2001 and 2011. These increases are occurring in both male and female populations and the wider rural population is experiencing social and economic benefits from the CSG sector. They found locations with unconventional gas development have larger, younger populations, with some income and education benefits.

3. Detailed response to the Inquiry’s Terms of Reference

a) The health impacts on workers and their families from long-distance commuting, particularly mental health impacts, and the provision of health services in mining communities.

Health and safety in Australian mining

Australian OHS mining legislation is generally viewed as the most progressive in the world, providing a rigorous framework based upon duty of care, risk management principles and workforce representation. Since legislative reform in Queensland and New South Wales 15 years ago, there have been considerable industry improvements in terms of work-related injuries, illnesses, diseases and conditions. The Australian coal mining industry’s safety record is now better than other major coal-producing countries, including that of the US; and metalliferous mining is among the safest in the world. The health of LDC workers in the mining industry is managed within this robust and proven framework.

Mental health impacts of LDC

The QRC takes concerns regarding the potential negative effect that LDC work arrangements may have on miners’ mental health and wellbeing seriously and recognises there are challenges associated with jobs that include extended and regular absences from family and home.

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6 Cliff, 2014
7 It is more difficult to compare metalliferous due to the variance in commodities between countries.
Yet large-scale federal\(^8\) and state\(^9\) government inquiries, and a review undertaken by the Australian Institute of Family Studies\(^10\) have concluded that the mental health of LDC workers (and their families) in the mining industry is no worse than the general public or residential mining employees.

Considering most LDC workers are employed in non-mining industries\(^11\), it seems a disproportionate amount of criticism is directed at mining.

The development or progression of mental ill-health is due to the complex interaction of biological, psychological, social and societal factors across someone’s lifespan. Work factors are among those that can play a role in mental (and physical) ill-health. The process is not simply linear, as individuals with pre-existing mental health problems can be more vulnerable to day-to-day job stressors.

Studies\(^12\) conclude LDC does not cause mental health problems though it exposes workers to risk factors which may be a concern for vulnerable workers. The many complex causes of mental ill-health demand a multipronged approach be taken to promote mental health and prevent and treat mental illness.

Official estimates of mental ill-health show that almost one in five Australians will experience symptoms of a mental disorder during a 12 month period\(^13\). Given the mining workforce is drawn from the general population, it will not be exempt from these problems and it is expected that these same rates would apply to the industry workforce – residential and LDC alike.

Currently, there is no data that accurately compares rates of mental ill-health across employment sectors. Between 2008-09 and 2010-11:

- Less than one percent (0.6) of mental stress claims through SafeWork Australia\(^14\) were from the mining workforce (a lower proportion than their proportion of the total workforce).
- The mental stress mechanisms causing most serious claims were bullying, workplace violence, exposure to a traumatic event and work pressure (e.g. high job demands and low job control).

Major resources companies have measures including Employee Assistance Programs and anti-bullying campaigns in place to minimise or mitigate these issues for all workers.

**Suicide and mining**

The QRC recognises suicide profoundly impacts society. In 2013, 663\(^15\) people died as a result of suicide in Queensland. Between 2008 and 2010\(^16\):

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\(^{8}\) House of Representatives Standing Committee on Regional Australia, 2013
\(^{9}\) Education and Health Standing Committee, Parliament of Western Australia, 2014
\(^{10}\) Meredith, Rush & Robinson, 2014
\(^{11}\) KPMG, 2013
\(^{13}\) ABS, 2007
\(^{14}\) SafeWork Australia, 2013
\(^{15}\) ABS 3303.0 - Causes of Death, Australia, 2013
\(^{16}\) De Leo, Jemeja Svetlic, Eeva-Katri Kumpula, 2013
• 3.1 times more men died from suicide than women, and
• suicide rates were higher in remote areas (18.98 per 100,000) than in regional (15.31 per 100,000) or metropolitan (12.23 per 100,000) areas of Queensland.

Overall there is no evidence to indicate that mental ill-health or numbers of suicides are more elevated in the mining sector (LDC or residential)\textsuperscript{17}.

The workplace is increasingly seen as a setting for promoting positive messages about mental health – particularly for men, who otherwise may avoid information about mental illness. There are a number of examples of mining companies using health promotion programs to raise awareness regarding stigmas surrounding help-seeking behaviour, to help workers identify symptoms of distress and to access timely treatment.

**Employee reasons for LDC work**

While the majority of resources sector workers are residential, there has been an increase in LDC work arrangements in the Australian mining industry\textsuperscript{18}. As demand for workers has increased (exceeding local labour supply), more companies have offered workers the choice of relocating their families or commuting from a distant home base, and more workers have opted for an LDC arrangement. Research by Gallegos\textsuperscript{19} found one of the most frequently cited reasons for participation in LDC work arrangements was that the roster facilitated a lifestyle with a block of time off that:

• Was relatively free from work commitments
• allowed time to spend with children
• provided separation between work and family life.

The same research found the alternative of relocating to a regional area is not an attractive option for many workers because it would involve separation from:

• Family support networks
• employment/educational opportunities for partners
• medical and emergency services
• services for children with special needs
• childcare services
• a range of leisure and educational options for children.

It could also present access and maintenance issues for children from previous relationships, and higher costs of living in regional areas.

Many LDC workers believe they would receive less emotional and social support if they resided in a mining town (with limited civic services and recreational activities). As a result, they implement strategies to manage separation and transitions, and maintain relationships and emotional connections while they are away from their families.

\textsuperscript{17} Roche et al. 2012
\textsuperscript{18} KPMG, 2013
\textsuperscript{19} Gallegos, 2006
Work schedules and LDC impacts

LDC work schedules are often criticised for being considerably more demanding than other working rosters. However, both LDC and residential mine workers have similar work schedules. Mining shift work schedules are also comparable to those of workers in other 24/7 industries. They all involve shift work, rotating shifts and compressed rosters. Unchecked, non-standard work schedules can affect workers' health and therefore require stringent management across all industries.

Roster analysis is undertaken regularly so that potential risks associated with rosters can be identified and mitigated or managed. Resource companies use a range of measures to manage work schedules including: limiting the number of consecutive night shifts worked, monitoring hours of work, regular and frequent breaks, specific management of safety critical tasks, restrictions on overtime and call-outs, controlling environment hazards (e.g. heat) and re-designing jobs to eliminate repetitive tasks.

Shift workers in the resources sector are also compensated with longer leave periods and higher wages. Queensland resources sector shifts are generally shorter than those in Western Australia and offshore oil and gas operations.

In Australia about 1.5 million Australians (16 percent of all employees) are shift workers\(^\text{20}\), commonly working in rotating shifts. Less than half of these shift workers (about 7 percent) are employed in mining. The industries with the highest proportion of shift workers are healthcare and social assistance (26 percent), transport, postal and warehousing (10 percent) and manufacturing (9.4 percent). There are many city-based shift workers: from taxi drivers and prison guards to airport and nursing home personnel.

Fatigue and LDC work

Fatigue has long been recognised as a potential hazard in the resources sector, and Queensland legislation (1999) requires mines in the state to develop risk-based fatigue management plans\(^\text{21}\). The development of these plans is guided by worker representatives and is closely scrutinised by worker advocacy groups. The onus on companies to demonstrate risks to workers are as low as reasonably possible (ALARP) has driven the industry to provide best practice fatigue management. All parties supported the development of the current Guidance Note for Fatigue Management, QGN 16\(^\text{22}\).

Resource companies have specific controls to prevent and/or mitigate worker fatigue associated with LDC and improve the quality of rest at on-site accommodation. Journey management plans and employment conditions/contracts are used to specify maximum commute distances, arrival time in camp and departure policies. Accommodation facilities are also being continually improved to enhance sleeping conditions - particularly day-time sleep. For example, rooms are built to mitigate noise and light impacts and meals are scheduled to consider sleep patterns. Sleep rooms are also provided for use before and after a roster cycle.

\(^{20}\) ABS 6342.0 - Working Time Arrangements, Australia, November 2012
\(^{21}\) Queensland Coal Mining and Mining and Quarrying Safety and Health Acts, 1999
\(^{22}\) QGN 16 Guidance Note for Fatigue Risk Management, 2013
One study found LDC workers experienced more, and better quality, sleep\textsuperscript{23} between shifts than residential workers who travel home after each shift to households with different activity cycles and home responsibilities. This is especially difficult for night shift workers, who may have to compete with their families’ sometimes noisy day-time activities to get quality sleep. In comparison LDC workers are able to take full advantage of their shift breaks for rest and sleep without disturbance if accommodation facilities are well managed.

**Nutrition and exercise**

Many camps/accommodation villages now provide nutritious food choices and exercise facilities and programs to support workers’ health. Clifford\textsuperscript{24} found LDC employees had similar, and in some cases significantly better health behaviours and outcomes than residential mining workers, despite public perception that LDC arrangements have a negative effect on workers’ physical health. LDC employees were generally healthier and reported more exercise and sleep during the work period than a residential mining group. Clifford concluded LDC workers’ access to accommodation facilities such as gyms and quiet, dark sleeping quarters during their roster may boost physical health and wellbeing, as there were no significant differences in health behaviours between LDC and residential workers during their leave period.

**Drugs and alcohol**

Queensland resource companies are obligated under OHS legislation to effectively manage risks associated with alcohol and illicit drugs. In line with this, resource companies have robust health and safety management systems that address drugs and alcohol through education programs and employee assistance programs as well as random testing of employees to ensure compliance with drug and alcohol ‘zero tolerance’ policies while at work and fitness for work.

However, companies are unable to control their employees’ behaviour outside of work. Increased drug usage in society, particularly among men and young male adults is well documented and has been linked to increasing incidence of mental health issues in the population as a whole.

While the overall use of methamphetamines has remained stable in the last decade (~2 percent of people), the use of one form of it – ice (or crystal methamphetamine) has doubled. It is more commonly used by 18 to 30 year old males, particularly those living in remote and very remote areas who are technicians or tradespersons\textsuperscript{25}. Recognising that the mining workforces’ demographic is similar to that of those at risk for illicit drug use, QRC’s member companies continue to participate in workforce and community interventions that build awareness of the effects of drugs and alcohol on health, wellbeing, medical and psychological conditions, particularly for at-risk groups (e.g. young males).

\textsuperscript{23} Clifford, 2009  
\textsuperscript{24} Clifford, 2009  
\textsuperscript{25} National Drug Strategy Household Survey detailed report, 2013
Interventions used by mining companies to promote mental health and prevent and treat mental ill-health

Features of health management systems used by mining companies to minimise psychological harm/stressors, enhance individual resilience, facilitate early intervention and promote recovery from mental ill-health

- Psychosocial wellbeing (psychosocial hazards) addressed in mine’s health management plan
- Promotion of good mental health in health management process
- Mental health first aid training and programs for supervisors and colleagues (e.g. Mates in Construction)
- First aid response procedures for workers who experience mental distress at work
- Return-to-work process (including flexible work practices)
- Strategies for management of mental health issues arising in persons involved in critical incidents on site (e.g. witnesses, bystanders, managers, first responders)
- Worker notification of absence as appropriate (e.g. establish appropriate system/process for absentee notification process; follow up phone call)
- Development of effective referral pathways to care
- Performance criteria for EAP’s services (especially response times)
- EAP system has the capacity to provide timely support services at site level, and for non-site/site-based family (phone and in-person)
- Promote awareness of EAP system within workforce and families
- Identification of mental health programs, the areas they address and their applicability to the mine.

How mining companies are currently creating an organisational climate/culture that accepts and supports psychosocial wellbeing and workers managing mental ill-health

- Education (supervisors, managers, workers and their families) about how to stay psychosocially healthy, including awareness of the specific risks that mining workers may be exposed to and how to control them
- Awareness for management in strategies to promote mental health as well as identifying risk factors and ways to address them effectively
- Promoting an understanding of common mental health problems to assist in reducing stigma of, and encouragement for, the treatment of mental ill-health
- Developing and implementing anti-bullying and anti-discrimination policies and practices
- Identifying and addressing negative workplace culture (e.g. ‘macho’ culture, stigmas about mental ill-health) through targeted programs that encourage early identification of mental illnesses and self-referral
- Identifying and discouraging negative behaviours of work colleagues, supervisors and managers
- Demonstration of management commitment and support for worker reporting
- Encouraging a culture where asking for help and offering support is a positive thing
- Creating a supportive environment for workers to disclose their mental ill-health problem to an appropriate person
- Encouraging workforce to use sick leave when appropriate
- Consideration of negative effects of incentive schemes (e.g. rewards for work attendance, not using sick leave; refer to NSW Mine Safety Advisory Council and Dept of Industry and Investment (2009), Review of safety incentive schemes).
Organisational processes that are currently being used by mining companies to support psychosocial wellbeing

- Fair and inclusive employment practices
- Providing workers with clear job expectations and feedback on individual performance
- Worker involvement in design of tasks/jobs to optimise worker empowerment and input regarding skill use, time allocation and organisational decisions that can moderate their experience of stress (e.g. what jobs would you change, and how would you change them?)
- Training and communication to foster successful performance
- Recognition of workers' success and achievement
- Promoting positive work team/group identity
- Create culture that fosters peer identification and support.

Features of fitness for work programs that include mental health and wellbeing currently being used by mining companies

- Pre-employment and periodic health assessments (e.g. consider inclusion of psychological assessment together with corporately directed physical functional assessments)
- Access to allied health professionals (e.g. social workers, psychologists, psychiatrists)
- Increasing health professionals' awareness of mine site conditions (e.g. first person underground tour, mobile plant conditions/vibration, FIFO/DIDO)
- Awareness of signs of mental ill-health (e.g. depression awareness campaigns)
- Encouraging worker participation in wellness programs
- Targeting groups at higher risk, or workers exposed to adverse events (e.g. workers experiencing a relationship breakdown, major life events, people returning to work after injury or illness, shift workers or those away from their families)
- Promotion of existing community based psychosocial wellbeing programs (e.g. Beyondblue workplace program, Mental Health First Aid Training, R U OK, Movember, Mental Health Week, FIFO Families)
- Consideration of programs for family members and friends (e.g. family access to corporate EAP programs), given adverse effects on/from the wider family (e.g. Partners in Depression Program)
- Incorporate psychosocial wellbeing into general health programs

b) The effects on families of rostering practices in mines using FIFO workforces;

Demographics

URS conducted a survey of resources sector employees on behalf of QRC in late 2011. Based on the results from 2275 participants, young families (i.e. employees with a dependent child) account for less than half of the overall survey respondents. The majority were either in a relationship or single with no dependent children. The results were similar for the residential workforce component, indicating there is no ‘typical case’ or ‘type’ of employee who chooses to LDC. Rather, each employee makes a choice as to which arrangement suits them best.
Resource companies seek to understand the demographics of their workforces and to provide flexibility to enable a work/life balance for employees. This includes a breadth of residential and non-residential policies to ensure the industry can offer both options wherever possible to attract and retain high-value employees. QRC members report a range of residential/non-residential and roster arrangements that are determined on a case-by-case basis. Importantly there is no ‘one-size fits all’ solution that works best across all resources, communities, workforces and companies.

**Rosters**

Rosters differ between construction and operational project phases. Construction phases of projects typically have larger, contract workforces operating on longer rosters (e.g. 21 days on, seven days off). These roles tend to be short-term with longer rosters to expedite the construction phase.

During the operational phase of Queensland projects, rosters differ considerably, although even-time rosters (e.g. seven days on, seven days off or four days on, four days off) are most common. Often, the rosters will be the same for both LDC and residential employees. These impose significantly less disruption to ‘conventional family life’ compared with the Western Australian 14:7 rosters and enable families to enjoy more quality time, often more so than families living under ‘residential’ arrangements. Considerable effort has been made in Queensland to establish safe, yet productive work schedules.

**Potential benefits to families**

LDC work arrangements provide employees and their families with the option of living in metropolitan areas or near the coast. LDC allows employees to pursue resources sector career pathways, while remaining connected to their social networks, spousal employment opportunities, medical services and minimise disruption to children’s schooling. Given a large proportion of families in Australia now have two incomes, decisions to accept a job and move to a regional centre will have wage consequences unless there are strong job prospects for the partner in the resource community. Research suggests that lack of job prospects for one partner can act as an impediment to geographic mobility.

The 2014 Productivity Commission’s Geographic Labour Mobility Research report found considerable benefits for families from commuting concluding that “these jobs tend to pay high salaries which allow workers to pay off debts, including mortgages, and increase their financial security.”

Importantly, the Commission noted that LDC is a choice many employees make in preference to relocating. The report notes “...some workers might prefer long-distance commuting rather than relocating themselves, and potentially their families, to a mining region. Long-distance commuting might allow them to maintain links with their friends and family and broader community, and accommodate the career of their spouse.”

While time is spent away from the family, research shows one of the most common reasons for continuing participation in LDC arrangements was that the rosters offered a block of time off, relatively free from work commitments, allowing more quality time to be spent at home with the family than in non-commuting work arrangements.

27 Productivity Commission, 2014
28 Gallegos, 2006
Many workers and their partners make the decision to commute to minimise disruption to family living arrangements such as schooling and the partner's existing employment. It is evident from QRC members' experiences that families put a high value on educational and other social services, which they perceive as being more attractive in a number of coastal and metropolitan centres. In particular, matters raised consistently in community perception and workforce surveys across the Bowen Basin and Central Queensland include educational and social service facilities, education standards and curriculum choice. Also rated highly are experienced teachers and social services, particularly special needs such as pediatric care, autism and disability services, speech pathologists etc. The issue is often about connectivity to hubs that provide these services (e.g. Mackay and Rockhampton) and how this can be made easier and more affordable for families. LDC arrangements provide an important option for families seeking these types of services.

The importance of choice

The URS survey of worker accommodation arrangements across the Surat and Bowen Basin and in North West Queensland\(^29\), provided an insight into the reasons why workers choose both residential and LDC in relation to family and demonstrated the importance of choice if an adequate supply of labour was to be sourced. The survey results showed:

- The overall trend for both respondent non-residential workers and residential workers is the same – 'work-life' balance' and 'overall quality of life' factors are the most important influencing factors in deciding accommodation arrangements for both groups.
- The factors 'quality of accommodation', 'suits family arrangement' and 'allows involvement in family life' were ranked highly by both residential and non-residential respondents.
- Although the two groups are likely to have different interpretations of what these more highly-ranked terms mean to them, the fact that these are scored similarly for both groups shows that there are features of non-residential working that suit some people, just as there are features of residential working that suit others.

The resounding message from the survey was that being able to offer choice between residential and non-residential options is essential if the resources sector is to provide options that respond to the changing demographics of society and enable workers to choose the accommodation arrangement that best suits themselves and their families and as a result, ensure an adequate supply of staff for current and future projects.

By restricting an employee's choice of residence you thereby restrict the company's ability to attract and retain quality people, as well as a diverse and inclusive workplace.

Psychological well-being

There is an increasing body of research that suggests FIFO workers and their partners are within the norms for healthy functioning on the scales of measures of psychological wellbeing, relationship satisfaction and perceptions of family function.

Dr A.M. Sibbel's 2010\(^30\) research concluded FIFO does not lead to family dysfunction. Children from FIFO families do not experience significantly higher levels of depression, anxiety and family dysfunction than non FIFO children.

\(^{29}\) URS, 2011
\(^{30}\) Sibbel, A.M., 2010
Hubinger\textsuperscript{31} summarises the benefits as ‘spouses do not have to give up their own existing careers, friends or activities; children do not have their education disrupted; a worker losing his job does not have to automatically move house; and wives do not have to put up with boredom and loneliness of remote locations.’

c) The extent and projected growth in FIFO work practices by region and industry;

Residential workers

While the extent of LDC varies across the resources sector, it is important to note the majority of workers are resident in or near resource communities. Those mines with larger proportions of LDC workers are frequently in more remote parts of the state where there are no nearby communities or where demand for skilled labour exceeds local supply. In many instances residential workers are on the same rosters as non-resident workers and it is not uncommon for residential workers who live locally to be required to live on site during shifts due to safety considerations, such as fatigue management.

Extent of LDC

The Productivity Commission’s Geographic Labour Mobility Research Report\textsuperscript{32} described geographic labour mobility as an ‘important element of a well-functioning labour market’ and ‘by improving matches between employers and workers, geographic labour mobility can contribute to economic efficiency and community wellbeing’.

KPMG’s analysis of the 2011 census data, at the peak of the resources boom, showed approximately 2 percent of the Australian workforce undertakes LDC and of this, only about 21 percent were mining workers, demonstrating that LDC is not unique to the resources sector. The analysis also showed that around 25 percent of all mining workers were LDCs, 75 percent were not\textsuperscript{33}. The practice of LDC is common in service sectors such as policing and health to ensure service delivery to rural and remote areas.

The KPMG study identified Regional Queensland as the second largest feeder location (place of usual residence) for LDC workers in Australia, following Perth, and the majority of people undertake ‘intra-state’ (within state) commutes. This indicates that although employees may not be ‘resident’ a large portion of the ‘non-resident’ commuting workforce is sourced from within regional Queensland. The majority of regional Queensland to Bowen Basin LDCs were found to be travelling from homes on the outskirts of Mackay or Rockhampton. This has been further confirmed by QRC members who report source communities such as Cairns, Mackay, Rockhampton, Emerald and the broader Bowen Basin region, sharing the benefits of resource development over a larger geographic area.

\textsuperscript{31} Hubbinger L, Parker AW, Clavarino A., 2002
\textsuperscript{32} Productivity Commission, 2014
\textsuperscript{33} KPMG, 2013
What factors influence LDC

The extent to which LDC arrangements are used in resources sector operations in Queensland varies on a case by case basis depending on factors such as:

- The location of the resources operation including proximity to local towns and communities
- The phase of the operation ie construction vs operation
- The availability of skilled labour – (ability to recruit locally, competition for labour, types of skills being sought)
- Willingness of prospective workers to reside in local towns
- Local infrastructure and services eg education and health services
- Activity levels across the resources sector (global demand, competition, cost, commodity prices)
- Life cycle of the mine
- Safety considerations, especially fatigue management
- Economic/commercial considerations

As these factors vary over the operation's life cycle as well as with changing economic circumstances, resource companies must be flexible in order to remain both productive and competitive. There is no one size fits all solution. A crucial aspect of this flexibility is the ability to offer choice in workforce arrangements including LDC arrangements.

Individuals choose where they want to live and many workers would not accept a job unless their preferred workforce accommodation arrangement was available. Any moves by government to regulate a maximum percentage of LDC arrangements permissible, including FIFO, would have an immediate negative impact on the productivity and competitiveness of the industry as well as impacting on the lives and livelihoods of commuting workers.

Present and likely future extent of LDC in Queensland

Recent population reports released by the Queensland Government’s Statistician’s Office (QGSO) are invaluable as a measure of the current resident and non-resident workforce (LDC) mix in the Bowen and Surat basins and Gladstone. The annual reports are based on data collected from accommodation providers and industry sources. Data from the most recent report (June 2014) indicates:

- the non-resident population of the Bowen Basin was 16,360 persons in June 2014, down from a peak of 25,040 in June 2012 which is a 35 percent reduction. This fall is attributed to completion of construction for new mines and expansion projects and CSG projects, as well as mine closures and workforce restructuring.
- the non-resident population of the Surat Basin reached 14,490 persons in June 2014, more than four times the number estimated in June 2011 (3,270 persons). This growth was largely influenced by the FIFO/DIDO construction workforces of three CSG projects, which are estimated to have peaked in 2014. The Surat Basin non-resident population is anticipated to approximately halve to 7,170 by June 2015 as the large CSG construction workforces taper off and are replaced by smaller operational workforces.

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34 URS, 2011
The estimated non-resident population of Gladstone grew rapidly from 1,210 persons in June 2011 to a peak of 6,660 persons in June 2014. This increase was largely due to the construction workforces of three (LNG projects on Curtis Island, new port and rail projects, and associated infrastructure development. The number is predicted to fall to around 3,450 persons by June 2015, as the large construction workforces of the three LNG projects and Stage 1 of the Wiggins Island Coal Export Terminal (WICET) begin to taper off.

The future use of LDC practices will not be as extensive as during the recent boom years due to a moderating demand for skilled labour.

The recent QGSO reports on non-resident population projections (2015 to 2021) for the Galilee, Bowen and Surat basins and Gladstone present four different non-resident projection series, which represent a range of possible outcomes arising from the future development of resources projects and operations in resource regions. The following projections describe the Series A scenario, which takes into account the non-resident workforces of existing resource operations and projects that have passed final investment decision (FID):

- The Bowen Basin region’s non-resident population will moderate to 13,670 persons by 2021, a level similar to that recorded in 2008 (13,660 persons). When projects that have undertaken Environment Impact Statements (EIS) but are yet to reach FID are taken into consideration (Series B scenario), the non-resident population is expected to increase over the coming years, however not to the extent experienced in 2012. This reflects the construction workforce associated with the proposed new projects as these workforces due to their short term nature are primarily engaged as commute workforces. This projection also assumes that all projects will go ahead which in the current economic climate may lead to an over-estimate of the non-resident population.
- The Surat Basin non-resident population is expected to continue to decline to 3650 persons by 2021.
- Fluctuations in the non-resident population of Gladstone are cyclical by nature and are closely linked to levels of project construction activity. Future production workforces for these projects will be largely resident in Gladstone, and will have little impact on the region’s non-resident population. The non-resident population is anticipated to decline to 670 persons by June 2016, then stabilising at 590 persons by 2019 and beyond.
- In the Galilee Basin the proposed development of large greenfield mining projects, rail and power infrastructure would see the non-resident population increase to a peak of around 3,260 persons in 2021 (Series B projection35). The increase in non-resident workforce for the construction of these greenfield projects is considered essential, given the exceptionally low unemployment rate for the Galilee Basin Resource Region (1.5 percent at December Quarter 2014), of a small total labour force of just over 3,500 people36.

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35 Series B projection includes the Series A projection plus projected growth in the non-resident population arising from Category B projects (those that have an EIS approved but have yet to reach FID).
36 Queensland Regional Profiles (Galilee Basin Resource Region), Queensland Government Statistician's Office, Queensland Treasury.
Figure 3: Past and projected non-resident workers on-shift, Bowen Basin

Source: QGSO estimates, 2006 to 2014; QGSO projections, 2015 to 2021

Figure 4: Past and projected non-resident workers on-shift, Surat Basin

(a) Estimates for 2009 are extrapolated from 2008 data.

Source: QGSO estimates, 2006 to 2014; QGSO projections, 2015 to 2021

Figure 5: Past and projected non-resident workers on-shift, Gladstone

Source: QGSO estimates, 2006 to 2014; QGSO projections, 2015 to 2021
For the purposes of the population projections, the Galilee Basin is defined as Barcaldine (R). Where the population impacts of Galilee Basin projects will occur in Isaac (R) and Whitsunday (R) (Bowen only), they are included in projections for the Bowen Basin.

The need for flexibility

Governments have traditionally not mandated how resource companies should source and house their workers as it is recognised that the environment in which the resources sector operates is dynamic and flexibility is required. Trying to mandate what companies should do in terms of their workforce could potentially stifle productivity and competitiveness of the resources sector in Queensland.

The recent dramatic fall in both the global coal and oil price provides a salient reminder of the resources sector’s susceptibility to volatile commodity markets and pricing. Coupled with competition for highly skilled labour during peak periods, maintaining non-mandated LDC arrangements as part of a company’s workforce sourcing strategy enables the sector to remain agile during tougher economic times. Flexible work practices such as LDC will continue to be an essential component of the resources sector into the future.

Equally there is no case for complete elimination of FIFO. Beyond the dubious prospect of success in compelling people to live in specific locations, mandatory relocation in close proximity to resource operations may drive away many skilled workers, increase project costs or make projects unviable. Such a move would also require massive social infrastructure investment by government in response to population increases. In addition, when projects end given mines have a finite life, there would be negative consequences for local residents including stranded infrastructure such as housing with consequences for the state and local councils.

The costs and/or benefits and structural incentives and disincentives, including tax settings, for companies choosing a FIFO workforce;

- Tax concessions and incentives do not drive companies toward LDC workforce arrangements over residential. There are no significant tax incentives which would promote a LDC workforce over a residential workforce.
The below table summarises at a high-level the range of benefits available and their respective tax treatments given the individual’s circumstances. It shows that there are a variety of tax treatments of benefits provided which vary dependent on an individual’s personal circumstances. There are not clear tax incentives provided to companies which would privilege a LDC workforce over encouraging a residential workforce. While some taxation measures, including FBT concessions, encourage the development of LDC work practices, there are an equal number of taxation benefits to workers living in regional and remote areas. In fact, concessions for remote residential arrangements provide scope for the largest value of assistance.

Table 4: Benefits and Tax Treatments

<table>
<thead>
<tr>
<th></th>
<th>FIFO remote (e.g. Dysart)</th>
<th>FIFO non-remote (e.g. Gladstone)</th>
<th>Residential remote (e.g. Moranbah)</th>
<th>Residential non-remote (e.g. Rockhampton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td>No FBT</td>
<td>No FBT or reduced FBT</td>
<td>FBT applies</td>
<td></td>
</tr>
<tr>
<td>Meals</td>
<td>No FBT or reduced FBT</td>
<td>No FBT or reduced FBT</td>
<td>FBT applies</td>
<td>FBT applies</td>
</tr>
<tr>
<td>Flights</td>
<td>No FBT</td>
<td>FBT applies</td>
<td>Reduced or full FBT</td>
<td>Reduced or full FBT</td>
</tr>
<tr>
<td>Utilities</td>
<td>No FBT</td>
<td>No FBT</td>
<td>Reduced or full FBT</td>
<td>FBT applies</td>
</tr>
<tr>
<td>Zone tax offset*</td>
<td>Possibly, subject to time requirement</td>
<td>Depends on whether location qualifies and time limit</td>
<td>Available to individual</td>
<td>Depends on whether location qualifies and time limit</td>
</tr>
<tr>
<td>Corporate deductibility</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*Recent Federal Budget changes will have implication for this zoning.

The cost of providing a fringe benefit together with any applicable FBT is a deductible cost for corporate income tax purposes. Whether an employee was provided with assistance in a LDC, residential, remote or non-remote context, the cost of the benefit plus any applicable FBT would be deductible to the employer.

Structural incentives and disincentives in tax play only a small role in workforce decision making. There are many other decisions that have greater impact on the decision to have a LDC workforce over residential (see Section c). The most pertinent aspect is skill portfolios, with drilling (for example) being a specific skill set that often requires international sourcing, as Australia generally does not have large numbers of trained professionals in this field. Economically, the costs of transporting and accommodating workers at site will be greater than the tax concessions applicable for companies which have LDC workers, leaving residential workforces as the preferred option if skill levels are equal. Any changes to the

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37 CMEWA, 2014
38 MCA, 2013
existing tax settings, such as the recent amendment of the zonal tax offset allowance from the Federal Governments 2015 budget, will not make a difference to businesses choosing LDC over residential workforces, it will simply make it harder and more costly for businesses to operate, and discourage labour mobility.

e) The effect of a 100% non-resident FIFO workforce on established communities; including community wellbeing, the price of housing and availability, and access to services and infrastructure;

QRC understands that 100 percent FIFO mines near regional communities in Queensland will be the subject of an independent, expert panel review process to support this Parliamentary Inquiry. QRC welcomes the opportunity to participate in the review and will engage separately with the panel. With that in mind, the following section will provide only a brief overview of the 100 percent FIFO mines currently in Queensland.

There is a limited number of mining operations in Queensland where the state government has approved a FIFO workforce of 100 percent and it should be acknowledged the Government has not generally imposed conditions on the commute or workforce arrangements for major projects in Queensland.

In the majority of cases these arrangements have been put in place because the mine is in a remote location where there is no nearby community - so long distance commuting is the only option. This is not a new phenomenon as, by their very nature, mines are often in remote parts of the state where labour is not easily accessible on the scale required.

Examples of the approvals being granted for a 100 percent FIFO workforce include the Daunia and Caval Ridge coal mines operated by BMA (BHP Billiton Mitsubishi Alliance) in the Bowen Basin. These mines are located near the mining town of Moranbah in Central Queensland and began operating in 2013 and 2014.

When these two mines entered project sanction and construction phase in 2011/12 unemployment in the surrounding region (former Belyando Shire, amalgamated into Isaac Regional Council Area in 2008) was 1.3 percent and BMA at that stage had 750 jobs unfilled in the Bowen Basin. The coal sector was experiencing full employment, and around 33,000 Queenslanders applied for these 950 roles. Demand for housing in the local areas also far exceeded supply resulting in an over inflated housing purchase and rental market. The proponents jointly agreed to invest in these multi-billion dollar projects on the basis of a FIFO workforce being in place to operate the mines.

The Government of the day agreed with the need to operate these mines with a 100 percent FIFO workforce given the undersupply of labour compared with employment opportunities in the Bowen Basin. The then Treasurer and Minister for State Development said he took “the broader interests of the state” into consideration when making the approval and the increase in proposed FIFO from 70 percent to 100 percent was supported.

In reality, these mines have always supported local employment and economic participation. In February 2015, there were about 1000 residential (non-FIFO) worker and contractor visits to these two mines to support their operations as well as a large volume of goods and services purchased through BMA’s Local Buy program relating to these two mines.

It is important to note this FIFO workforce is only around 10 percent of BMA’s total workforce in the Bowen Basin, where most of its workers live. BHP Billiton has more than 10,000 employees and contractors in the Bowen Basin. Of these, only 950 are FIFO and the remainder live and work in the region.
Recruited during the peak of the resources boom, the operators at the Daunia and Caval Ridge sites are from a diverse array of backgrounds and many were recruited from outside the traditional resources sector.

The two mines now employ nearly 25 percent female and 3 percent indigenous workers—statistics well above the industry norm with massive economic benefits to Cairns through employment opportunities and subsequent flow on economic activity that exists because of the opportunity for hundreds of residents there to work in these mines. The entire Cairns community benefits through an annual injection of more than $60 million into their local economy. This is a positive contribution to a region suffering from high unemployment rates, far in excess of that experienced in resource communities (see Table x), and a traditional reliance on the tourism sector which was in the doldrums at the time.

Housing the workers in an accommodation village also served to relieve the pressure on the housing market.

Investment decisions and operational arrangements were made on the basis of the approvals given by the government of the day.

f) The quality of housing provided in accommodation villages for FIFO workforces

There are various state and local government policies and procedures that guide the construction and operation of quality accommodation facilities, including those that relate to health and safety issues.

The provision of high quality accommodation village facilities provides employees with access to comfortable, quality and safe living arrangements while they are away from home. In an August 2013 report from the University of Queensland[39] based on a survey of 286 FIFO workers in the Australian resources industry, the majority of respondents (63%) rated their accommodation as good or very good, and about a quarter (23%) did not want to change anything.

The Queensland Guidance Note for Fatigue Risk Management recognises that “a well-designed camp is a control measure for a number of fatigue risk factors”[40] The following factors can contribute to fatigue and can be controlled within accommodation villages:

- Lifestyle e.g. children and child-care responsibilities, voluntary work or diet
- Home environment e.g. noisy neighbours or a bedroom that is too hot or not dark enough for day-time sleep[41]

Certification to ISO 22000, the International Standard for Food Safety Management, is not uncommon in accommodation village kitchen and mess facilities providing a level of food safety guarantee beyond those in many public dining facilities.

Accommodation villages often provide the opportunity for residents to improve their wellbeing with access to nutrition information, exercise equipment, lifestyle coordinators and

[40] See Section 5.4 Risk Control QGN16
[41] See Section 5.2 Hazard identification: identifying factors that may contribute to fatigue QG16
personal trainers. The benefit of these programs goes beyond the individual and can be shared with their family and friends in their resident communities.

Social interaction is encouraged within the accommodation villages through the inclusion of communal areas such as BBQ gazebos and communal events like “State of Origin” screenings. Socialisation is managed to prevent unnecessary disturbance to residents who are sleeping, an advantage over living as a shift-worker within the general community where the individual does not always have immediate means to control noise issues. Provision of internet services also allows the modern day resident the opportunity to maintain face-to-face contact with family and friends whilst away from home.

The operation of accommodation villages within mining communities helps to control the “boom and bust” effect of mining on the housing market, especially where access to land for development is limited. Individuals will continue to choose where they live and if camps are not available, communities run the risk of inflated rent and purchase prices as transient workers turn residential units into quasi camps with multi-sharing arrangements. Skills can be quickly attracted to the regional areas allowing individuals to explore the area and make an informed decision on whether relocating will suit their personal needs or whether they will continue with a commuting lifestyle.

g) Strategies to optimise the FIFO experience for employees and their families, communities and industry;

Following on from the URS Workforce Survey in 2011, and in recognition that LDC can be a challenge for some resources sector employees, the QRC released a guidance document to assist existing workers to settle into LDC and prospective employees to better understand LDC. The Guidance for Long-Distance Commuting (FIFO/DIDO) Workers42 (2014) project, carried out by the University of Queensland’s Centre for Social Responsibility in Mining (CSRM) analysed existing research and conducted interviews with HR professionals and representatives of LDC family support organisations. The purpose was to identify the factors that would assist LDC employees adapt to the LDC routine or to assist prospective workers determine whether a commuting arrangement was for them.

The guide outlines the benefits and challenges of the commuting workforce lifestyle and identifies the social and personal factors that enable individual workers to adapt to the lifestyle. It also contains a list of useful organisations that can provide assistance to commuting workers and their families and can form the basis of an induction tool used by HR professionals.

QRC member companies undertake a range of strategies both pre and during employment to further support LDC employees and their families. These are summarised in table 5 below.

Table 5: LDC Employees and families support

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Tool</th>
<th>Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ensuring prospective employees understand potential impacts of a long-distance commuting lifestyle on personal and family life and make informed choices when considering long-distance commuting work</td>
<td>Reference guide for FIFO/DIDO workers Prepared for the Queensland Resources Council (QRC) by Centre for Social Responsibility in Mining, University of Queensland.</td>
<td>Prospective workers and their families</td>
</tr>
<tr>
<td>Networking and support for families with FIFO members</td>
<td>FIFO Families <a href="http://www.fifofamilies.com.au/">http://www.fifofamilies.com.au/</a></td>
<td>Chiefly targets non-FIFO members of families</td>
</tr>
<tr>
<td>'How to' guide for managing family relationships</td>
<td>Mining Family Matters The Survival Guide for Mining Families</td>
<td>Workers and their families</td>
</tr>
<tr>
<td>Free, confidential counselling and advice</td>
<td>Independent 24/7 Employee Assistance Programs (EAPs) – by phone and online</td>
<td>Employees and their families</td>
</tr>
<tr>
<td>Build awareness of importance of mental wellbeing and detecting signs of stress in your colleagues</td>
<td>Company run safety campaigns and regular toolbox talks.</td>
<td>Employees</td>
</tr>
<tr>
<td>Maintain physical well-being</td>
<td>Camp facilities including gyms, pools, tennis courts as well as Camp healthy-eating advice</td>
<td>Employees at camps</td>
</tr>
</tbody>
</table>

Many companies also undertake a range of community investment activities in host communities, that is, the communities where long distance commuters reside to optimise the LDC experience for those communities. These include ‘local buy’ programs where preference is given to providing support for local suppliers.

**Case Study: BMA Local Buy Program**

The BMA Local Buying Program is a targeted program providing opportunities for small businesses, with less than 25 full-time employees, to competitively supply goods and services to BMA. The Program targets businesses registered or operating with a primary place of business in the Bowen Basin and Mackay Region.

From the start of the program in June 2012 to 31 March 2015, 641 local businesses were approved to participate in the BMA Local Buy Program – 383 located in the Bowen Basin and 258 located in the Mackay region. This has delivered substantial benefits to local industry and the community through visibility of work opportunities at Bowen Basin mines and supplies of goods and services through 3,604 approved work packages.

Over $46 million was awarded with an average supplier payment time of 10.8 days between June 2012 and March 2015.
The commuting practices for FIFO workforces, including the amount of time spent travelling, the methods of transportation, and adequacy of compensation paid for commuting travel times;

Commuting practices and the associated duration of travel varies across the resources sector in Queensland and is dependent on a number of site specific factors, such as the resource location, transport infrastructure and condition and, most importantly, workforce safety considerations. Commuting practices currently in place include FIFO, DIDO and BIBO or a combination of these options.

The resources sector has delivered significant financial compensation to workers as well good employment conditions including attractive roster arrangements. It is not however possible to identify the component or quantum of the salary package which reflects rosters or compensation for travel time, rather these arrangements are part of the generous salary package.

Jobs in the resources sector are highly sought after with a history of significantly more applicants than there are positions available. Prospective workers apply for and ultimately accept positions in the full knowledge of the employment conditions including where the position is located and the likely commuting travel times and arrangements. While it is acknowledged that the resources sector is not for everyone, there is generally no shortage of people wishing to enter the industry.

ABS data reveals wages in the resources sector at an average of $2,600 per week for male workers and $2,000 per week for female workers or 62 percent and 56 percent respectively higher than wages paid across all industries (see Table 6). The industry has delivered benefits to the workers far in excess of workers in all industries with ordinary time wages growing by 28 percent and 20 percent respectively over the last 5 years.

Industry has responded to changing expectations of a highly mobile society whose qualifications and experience are highly valued nationally and internationally including through the provision of attractive salary packages. These packages reflect the conditions of employment in the industry including rosters and travel time.

### Table 6: Full-time adults Ordinary time earnings, by select industry ($ per week)

<table>
<thead>
<tr>
<th>Time period*</th>
<th>Mining</th>
<th>Electricity, gas, water &amp; waste services</th>
<th>Manufacturing</th>
<th>Construction</th>
<th>All industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>$1,945</td>
<td>$1,340</td>
<td>$1,126</td>
<td>$1,245</td>
<td>$1,227</td>
</tr>
<tr>
<td>2010</td>
<td>$2,077</td>
<td>$1,461</td>
<td>$1,144</td>
<td>$1,299</td>
<td>$1,275</td>
</tr>
<tr>
<td>2011</td>
<td>$2,185</td>
<td>$1,508</td>
<td>$1,192</td>
<td>$1,368</td>
<td>$1,330</td>
</tr>
<tr>
<td>2012</td>
<td>$2,361</td>
<td>$1,611</td>
<td>$1,223</td>
<td>$1,419</td>
<td>$1,396</td>
</tr>
<tr>
<td>2013</td>
<td>$2,470</td>
<td>$1,620</td>
<td>$1,291</td>
<td>$1,451</td>
<td>$1,437</td>
</tr>
<tr>
<td>2014</td>
<td>$2,495</td>
<td>$1,631</td>
<td>$1,354</td>
<td>$1,475</td>
<td>$1,477</td>
</tr>
<tr>
<td>Change 2009 to 2014</td>
<td>28%</td>
<td>22%</td>
<td>20%</td>
<td>19%</td>
<td>20%</td>
</tr>
</tbody>
</table>

*December quarter of each year
Source: Australian Bureau of Statistics
The effectiveness of current responses to impacts of FIFO workforces of the Commonwealth, State and Local Governments; and

In Queensland, projects are assessed under one of two legislative regimes. Either through the Environmental Protection Act or, if the project is of economic, social and/or environmental significance to the State, through the State Development and Public Works Organisation Act 1971, with the project being evaluated by the Coordinator-General. Both regimes are rigorous and, except for quite small projects, require the preparation of an Environmental Impact Statement (EIS) incorporating a Social Impact Assessment (SIA). In certain cases an EIS will also be submitted to the Australian Government for assessment. Local governments are key stakeholders within the EIS framework and are engaged throughout the process.

These approval processes are appropriate and effective and require project proponents to describe the:

- Proposed development activity
- Existing environment
- Potential environmental and social impacts and
- Ways of avoiding, mitigating or offsetting these impacts.

Impacts include direct, indirect and cumulative impacts resulting from the construction, commissioning, operation and decommissioning of the project.

The EIS typically involves comprehensive studies to establish the qualities of the existing environment (natural, social, economic and built) and determine the project's potential impacts and involve stakeholder and community consultation.

As part of the EIS process, project proponents are required to describe their workforce profile including numbers, where they will be sourced from and proposed accommodation and work site transportation arrangements. The potential impacts associated with these are assessed and mitigation measures developed as required.

In preparing their EIS, proponents make decisions carefully based on need and project economics including factors such as expected mine life cycle and availability of labour at construction and operational stages as well as social licence factors. In these deliberations each issue is carefully considered.

As an example, in the area of housing a proponent may commit to building an accommodation village to house 500 workers at a cost of $60 to 80M. If government through the approvals process, requires the proponent to instead build 500 houses (which could cost in excess of $250M) the project may immediately become uneconomic and not proceed. It is likely that in small regional communities development of such a large number of houses would require an additional expenditure for the provision of social infrastructure such as water supply and sewage facilities. With increased world competition, declining commodity prices and high costs, each aspect of the project must be optimised financially for the project to be viable and investment to proceed.

Once approvals are given, project proponents can proceed to finalise final investment decisions based on the detail of those approvals. These projects represent significant investment and any alteration of those EIS conditions has the capacity to render projects commercially unviable.

Over recent years attention has been focused on making the EIS approval process, including Social Impact Assessments more timely, efficient and effective which the resources sector has applauded.
Changes should not be made to EIS approvals retrospectively as these are arrangements upon which Final Investment Decisions have been made and operational arrangements are based. For example resource companies will have negotiated long-term contracts with airlines and loan funds will have been committed by financial institutions.

Projects must already cope with changes to commodity prices, fluctuating world demand and increased competition. Any changes to the government landscape in which resources sector projects operate, whether it be taxation, royalties, environmental or social policies, have the potential to create uncertainty and ultimately sovereign risk.

j) Any other related matter.

Importance of infrastructure and services

QRC and its member companies recognise the importance of working with governments and other stakeholders to support the liveability of the regional communities where the resources sector operates. Queensland is heavily dependent on the resources sector for income, investment and employment while resource companies are heavily dependent on the regional and remote communities that host and support their operations.

The appeal of resource communities as places to live and raise families is greatly influenced by the level and standard of planning for and delivery of social services and infrastructure that are offered including in areas such as:

- health
- education
- emergency services
- civic facilities
- roads and related transport infrastructure.

Government’s obligations are to provide base levels of service in these areas that are no lower than in other communities of comparable size. These factors are undoubtedly part of the decision making process around whether to commute or live locally.

Resource regions generate substantial revenue for the state in the form of royalties and taxes. Spending on social infrastructure in resource communities should be looked on as a form of reinvestment of public 'profits' in maintaining the productive potential of the state’s resources.

Under the previous LNP government $495M was allocated through the Royalties for the Regions (R4R) program to support critical infrastructure, roads and floodplain security projects in regional communities which had seen resources sector development. Through this program a proportion of royalties paid by the resources sector were returned to the regions in the form of critical infrastructure and services that would support liveable and sustainable resource communities. Unfortunately projects approved under R4R were not always allocated to the areas in greatest need nor did they go to communities hosting the major resources sector operations and hence, making the greatest royalty payments. The program was also quickly diverted to non-resource communities before needs were met in resource impacted locations.

The new ALP government has committed to a Building our Regions program comprised of four funds:
• Transport Infrastructure Development Scheme, $60 million over two years
• Regional Capital Fund, $70 million over two years
• Royalties for Resource-Producing Communities Fund, $55 million over two years
• Remote Communities Infrastructure Fund, $15 million over two years.

The stated intention of the program is to provide funds to help create jobs, support economic development and ensure critical infrastructure is delivered in regional communities. Allocation of sufficient funds to improve the level and standard of social services and infrastructure is essential if resource communities are to become more liveable and sustainable and as a result, more attractive to live.

Importantly governments must encourage diversification of regional economies especially those that are heavily reliant on single industries like the resources sector, if these communities are to be sustainable and resilient. However, as Australia’s internal population migration continues to trend towards the coast, both major cities and nearby towns⁴³, government may not be able to counter this demographic shift.

**Impact of Technology**

Technology has the capacity to change the nature of jobs and work in the resources sector including the skills required to undertake that work and where that work is performed. Sites being operated remotely from urban centres hundreds of kilometres away from the mine location is already a reality. Disruptive technology as transformational technology is referred, has the capacity to render location irrelevant. Regulating LDC has the potential to drive technological innovations that will accelerate transformation of the industry with potential impacts on the workforce.

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⁴³ Holms et al, 2005
4. References


Carrington, K., & McIntosh, A. (2013). A literature review of wellness, wellbeing and quality of life issues as they impact upon the Australian mining sector. Brisbane, Qld: Crime and Justice Research Centre.


5. Appendix

QUEENSLAND RESOURCES COUNCIL MEMBERS, MAY 2015

Full Members (miners, oil and gas producers, explorers, site contractors, minerals processors, electricity generators).

Aberdare Collieries Pty Ltd
Adani Mining
Allegiance Coal Limited
Altona Mining
Anglo American
Aquila Resources Ltd
Areva Resources Australia
Arrow Energy Limited
Bandanna Energy Limited
Beach Energy
Bengal Coal Pty Ltd
BHP Billiton Cannington
BHP Billiton Mitsubishi Alliance
Caledon Resources Pty Ltd
Cape Flattery Silica Mines Pty Ltd
Carabella Resources Pty Ltd
Carbine Resources Ltd
Carbon Resources Ltd
Carbon Energy Ltd
Carpentaria Gold Pty Ltd
Civil Mining And Construction
Coalbank Limited
Cockatoo Coal Limited
ConocoPhillips Australia
CopperChem Limited
Downer EDI Mining Pty Ltd
Ensham Resources Pty Limited
ERM Power Limited
Evolution Mining
Glencore Coal
Glencore Copper
Glencore Zinc
Guildford Coal Limited
GVK
International Coal Limited
Investigator Resources Limited
Jellinbah Resources Pty Ltd
John Holland Pty Ltd
Kalimati Coal Company Pty Ltd
Laramide Resources Ltd
Linc Energy Ltd
Lucas Group
Macmahon Holdings Pty Ltd
Mastemyne Pty Ltd
Metallica Minerals Ltd
Metro Mining Limited
Millmerran Power Management Pty Ltd
Minerals And Metals Group
Mitsubishi Development Pty Ltd
Mitsui Coal Holdings Pty Ltd
Moreton Resources Ltd
New Hope Group
Norton Gold Fields Limited
Origin Energy
Paladin Energy Limited
Peabody Energy Australia Coal Pty Ltd
QCoal Pty Ltd
QER Pty Ltd
QGC Limited
Queensland Coal Investments
Rio Tinto Alcan
Rio Tinto Coal Australia
Rockland Resources
Santos/TOGA Pty Ltd
Senex Energy Limited
Shell Australia Pty Ltd
Sibelco Australia Limited
Sojitz Coal Mining
Stanmore Coal
Summit Resources Limited
Thiess Pty Ltd
U & D Mining Industry (Australia) Pty Ltd
Vale
Valiant Resources Pty Ltd
Wesfarmers Resources
Westside Corporation
Whitehaven Coal Limited
Yancoal Australia Ltd
Service and Associate Members (providers of goods and services to the Queensland resources sector)

ACIL Consulting Pty Ltd
Actuar
Adagold Aviation Pty Ltd
Advisan
Align-ment Queensland Pty Ltd
Allens
Alliance Airlines
AMC Consultants
Amec Foster Wheeler
Ashurst
Aurecon Australasia Pty Ltd
Aurizon
Ausenco Limited
Australian Institute Of Management Qld & NT
Baker & McKenzie
Balance Advisory
BB Communications Group Pty Ltd
BDO
Bennett + Bennett
BMD Constructions Pty Ltd
BMWBM
BOC Limited
Bushell & Comish Pty Ltd
Buslink Vivo Pty Ltd
Cadden Crowe
CAE Mining
Calibre Global
Careers Australia
Carter Newell Lawyers
Cater Care
Champ Resources
Civeo
Clayton Utz
Computer Sciences Corporation
Cons Chambers Westgarth
CQG Consulting
CQ University
Cultural Heritage Systems And Strategies
DBCT Management Pty Ltd
Decmil Australia
Decmil Engineering Pty Ltd
Deolite Tuche Tohmatsu
Downing Teal Pty Ltd
Easternwell
Eco Logical Australia Pty Ltd
Ecology & Heritage Partners
EMM
Energy Skills Queensland
EY
Ferris Management Consultants Pty Ltd
FK Gardner & Sons
FTI Consulting
Fugro Geospatial
G&S Engineering Services
GD Energy Services
GHD Pty Ltd
Golder Associates Pty Ltd
Grant Thornton Australia
Greencap
Greyhound Commercial
Hanrick Curran
Hansen Bailey Pty Ltd
Hastings Deering (Australia) Ltd
Hatch Pty Ltd
HDR
Herbert Smith Freehills
Hetherington Exploration And Mining
HopgoodGanim
Hyder Consulting
IBM Corporation
IHS Australia Pty Ltd
Incitec Pivot
J J. Richards & Sons Pty Ltd
John T Boyd Company
Joy Global
King & Wood Mallesons
Klohn Crippen Berger Ltd
KPMG Brisbane
Lambert & Rehbein (SEQ) Pty Ltd
Lapro Pty Ltd
LCR Group Pty Ltd
Leanne Bowie Lawyers
Lend Lease Construction Australia Pty Ltd
LogiCamms
LSM Technologies
Macquarie Capital (Australia) Limited
Marsh Pty Ltd
McConnell Dowell Constructors (Aust) Pty Ltd
McCullough Robertson
McInnes Wilson Lawyers
METServe
Minter Ellison
Mitchell Services Limited
Monadelphous Engineering Pty Ltd
Morgans Financial Limited
Murphy Pipe And Civil
North Queensland Airports
North Queensland Bulk Ports Corporation
Norton Rose Fulbright Australia
NuGrow Pty Ltd
Ostwald Bros
Pacific National (Qld) Pty Ltd
Palaris Mining Pty Ltd
Phillips Group
Phoenix Drilling Services Pty Ltd
Piper Alderman
Port Of Townsville Limited
Prospect Group
PwC
Qantas Airways Limited
QuaySource (Australia) Pty Ltd
Ranbury
Remuneration Services QLD
Reserve Support Services Pty Ltd
Resource Strategies Pty Ltd
Rio Tinto Technology And Innovation
Rowland
RPS
SAS Institute Australia Pty Limited
Sedgman Limited
Sparke Helmore Lawyers
SRK Consulting
SunWater Limited
Sustainable Minerals Institute
Synergies Economic Consulting Pty Ltd
Talent2
TAS Legal Pty Ltd
Tracey Brunstrom & Hammond Pty Ltd
TransCoal
Trility Pty Ltd
Umwelt (Australia) Pty Limited
Urbis Pty Ltd
URS Australia Pty Ltd
UTM Global Pty Ltd (UTM)
WDS Limited
Weir Minerals Multiflo
Wiggins Island Coal Export Terminal Pty Ltd
WorleyParsons
WSP Environmental Pty Ltd
Xenith Consulting Pty Ltd
Mr John Abraham
Mr Rodney Bedggood
Mr Daryl Brumpton
Mr Nicholas Currey
Mr Gil Fletcher
Mr Nathaniel Gaughan
Mr Barry Golding
Mr John Gooding
Mr Lance Grimstone
Dr Sue Henderson
Mr Peter Hollingsworth AM HonFIEA FAICD

Mr Ray Ison
Mr Bevan Kathage
Mr Tom Kaveney
Mr Peter Matheson
Mr Ralph McIver
Mr Brendan Monckton
Mrs Emma Montgomery
Mr Tim Moore FAIM, MAICD
Ms Fiona Murcott
Mr Brice Mutton
Ms Fiona Nicholls
Dr Geoff Oldroyd
Mr Jim Oliver
Mr Michael Owens
Mr Ray Parkin
Dr Chris Rawlings
Mr Joe Reichman
Mr Peter Slaughter
Ms Jayne Steele
Mr Russell Williams