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7 October 2011



Secretary
Standing Committee on Regional Australia
House of Representatives
PO Box 6021
Parliament House
CANBERRA ACT 2600

To Whom It May Concern,

I am writing to provide a submission to the House of Representatives Standing Committee on Regional Australia Inquiry into Fly-In, Fly-Out (FIFO) practices.

The Chamber of Minerals and Energy of Western Australia (CME) is the peak resources sector representative body in Western Australia, representing 95 per cent of the State's minerals and petroleum production value.

The resources sector is a major driver of both the Western Australian and Australian economies. The WA resource sector has a total export income worth more than \$100billion and produces royalty income for the Western Australian Government valued at \$4.9billion. The projected outlook for the sector in Western Australia is one of substantial growth, with over \$200billion of planned mining and energy (and relevant infrastructure) projects across the state.

FIFO employment has become a critical element of maintaining a viable resources sector workforce, as the industry is challenged by significant tightening in the skilled labour market. In Western Australia, FIFO employment has had a long history and remains a popular and practical work practice.

FIFO, along with investing in skills and training, increasing workforce diversity and ensuring a flexible skilled migration program will help address skill shortages in the resources sector, delivering ongoing growth in both the Western Australian and Australian economies.

Yours sincerely

Reg Howard-Smith
Chief Executive



Chamber of Minerals and Energy of Western Australia

**Submission to the Standing Committee on Regional Australia's
*Inquiry into the Use 'Fly-In, Fly-Out' (FIFO) and 'Drive-In, Drive-Out'
(DIDO) Workforce Practices in Regional Australia.***

October 2011

Executive Summary

The Chamber of Minerals and Energy of Western Australia (CME) is the peak resources sector representative body in Western Australia, representing 95 per cent of the State's minerals and petroleum production value. The resources sector is a major driver of both the WA and Australian economies. In particular, the sector has a total export income worth more than \$100billion and produces royalty income for the WA Government valued at \$4.9billion.

The WA resources sector has grown significantly in recent years with strong growth expected to be sustained well into the future, with a project development pipeline approaching \$300 billion capital expenditure. Initially it was gold, from the 1960's iron ore and now Liquefied Natural Gas (LNG), which in many ways drive the large investments in the WA resources sector.

Iron ore exports have increased from 150 million tonnes in 2000, to around 400 million tonnes in 2010. Recent announcements will see tonnage continue to grow into the future. The LNG sector in WA is in the midst of enormous growth, headlined by the Gorgon Project, valued at over \$42 billion. In September 2011, Chevron added the \$29 billion Wheatstone project to the list.

With this growth we've seen the shortage of skilled labour in WA present ongoing challenges to industry. CME's 2011 State Growth Outlook forecasts the workforce required to meet current growth plans in the minerals and energy sector to peak at over 119,500 people in 2012 – around 43,800 above the 2009 sector workforce of 75,600.

In WA, the majority of resource operations are remotely located without a nearby regional centre that has sufficient infrastructure, services or existing population base necessary to attract the number of people to support future growth.

Fly-In, Fly-Out (FIFO), along with investing in skills and training, increasing workforce diversity with more women and Indigenous employees and a flexible skilled migration program will all play their role in addressing current and future skill shortages in the resource sector.

In WA, the majority of long distance commuting workers commute on a FIFO basis, with a minority utilising Drive-In, Drive-Out (DIDO) arrangements. As such CME's submission will primarily reference FIFO as a descriptor of non-residential workforces.

The demand and supply of suitably qualified personnel has created in WA a skilled labour market that is tight, competitive and reliant upon flexibility and adaptability. Over time the industry has developed an employment model to attract and retain its skilled workforce in the most safe and competitive manner. The workforce model is a combination of residential and FIFO.

Workforce models vary between company to company, site to site and depend greatly upon what stage each project is at – construction, operational or maintenance/shut-down. Each of these workforce models will require different skill sets and different accommodation options at different times.

FIFO and residential employment are complementary, not supplementary approaches in a total workforce management package, with the mixture of employment type governed by the individual's circumstances and lifestyle choices.

FIFO is essential to meet the industry's needs for skilled labour, flexibility and global competitiveness in a relentlessly tough operating environment. FIFO is undeniably sensible from a public policy standpoint, and perhaps most importantly is meeting many employees' desires for flexibility in deciding how to match career and quality of life aspirations.

In a competitive labour market, employee choice is paramount. Choice of what job they do, who they work for and importantly of where they choose to live. Employees cannot be forced to live in regional or remote locations if they don't choose to do so. FIFO enables employees to work in an industry or region and live where they choose.

In summary CME believes the debate about FIFO should be less about whether it should continue to occur and more how all relevant stakeholders can work together to ensure employees have access to an employment option that suits them best, is sustainable for families and communities, while ensuring the State and nations ongoing economic prosperity.

Term of Reference 1

“The extent and projected growth in FIFO/DIDO work practices, including in which regions and key industries this practice is utilised.”

The resources industry in Western Australia, which is a primary driver of the State’s rapidly growing economy, is largely located in regional and remote areas of the State. The main locations are in the Pilbara (iron ore, hydrocarbons) and the Goldfields (nickel, gold) regions. The export value of key minerals and energy resources in the last two quarters is shown in Table 1. The Western Australian resources industry contributes about \$100 billion to Australia’s exports.

Table 1: Export value of key WA commodities

Commodity	Description	A\$ million	
		Dec Qtr 2010	March Qtr 2011
Iron ore	Iron ore and concentrates (lump and fines)	13,707	13,430
Gold	Refined and unrefined gold bullion	3,598	3,378
LNG	Liquefied natural gas	1,911	1,964
Copper	Copper ore and concentrates	479	349
LPG	Liquefied propane and butane	195	195
Titanium dioxide	Titanium dioxide pigments and preparations	114	136
Nickel	Nickel ore and concentrates	107	273

Source: CME (2011a)

Developments underway in the Kimberley (hydrocarbons, base metals, nickel, coal), Pilbara (iron ore, gas) and in the Mid West (iron ore, copper) will add greatly to this picture. At the end of April 2011, there were 39 projects at an advanced stage of development in WA, with total capital expenditure at a record \$109.5 billion. Examples of the projects being developed in regional and remote WA at April 2011 are presented in Table 2.

In most cases, the new developments are occurring in locations remote from sizable established communities, while expansion in the existing resources powerhouses in the Pilbara and the Goldfields cannot be supported by those regional communities and their infrastructure alone. The demand for labour in regional and remote WA is large and growing.

Table 2: Snapshot of selected major projects (proposed, advanced and completed)

Project	Commodity	Location	Status	Capex
Jimblebar mine and rail (BHP Billiton)	Iron ore	Pilbara	Committed	US\$3.6 bn
Brockman 4 project (Phase B) (Rio Tinto)	Iron Ore	Pilbara	Committed	US\$1.1 bn
Macedon Gas Project (BHP Billiton/ Apache)	Gas	Pilbara	Construct	US\$1.5 bn
DeGrussa (Sandfire Resources)	Copper	Mid West	Construct	\$400 m
Karara (Gindalbie Metals/ Ansteel)	Iron ore	Mid West	Construct	\$2.6 bn
Extension Hill Magnetite (Asia Iron Holdings)	Iron ore	Mid West	Approved	\$2.5 bn

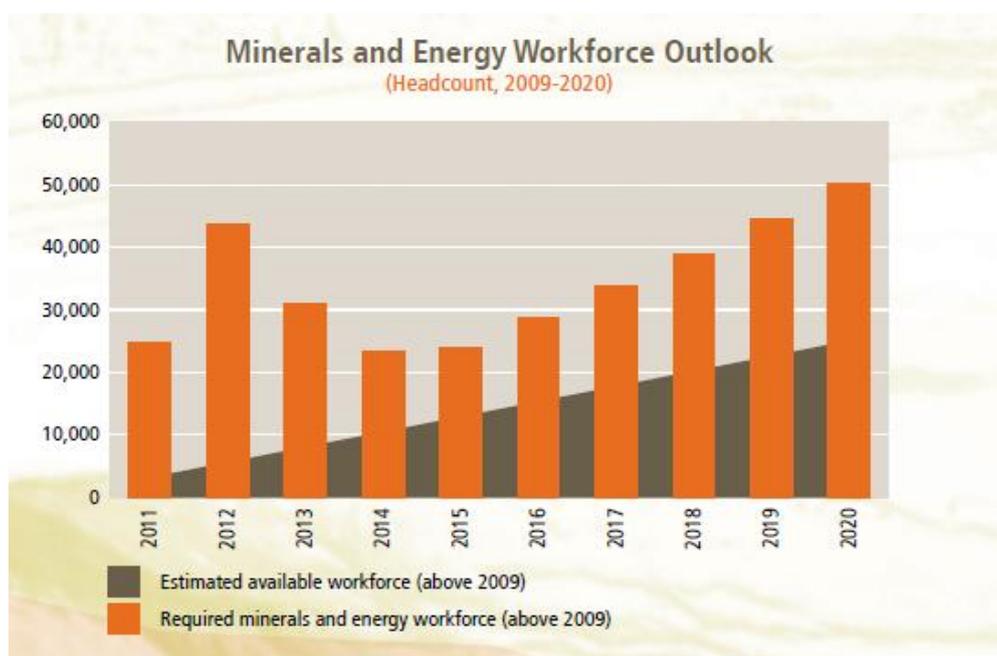
Source: CME (2011a).

There is no specific data available on the aggregate dollar value of mining operations in WA that are reliant on FIFO. However, analysis of the mining operations of publicly listed companies in Western Australia has shown that 46.6 percent of companies utilise FIFO as part of their workforce arrangements.

In 2009 and again in 2011, the CME has investigated the Western Australia’s outlook for growth in the resources development, and the resultant impacts on labour, electricity demand, domestic natural gas demand and water demand. Whereas in 2009, the industries were facing a slow-down precipitated by the 2008 global financial crisis, in 2011, there is a return to a strongly positive outlook for the resources sector (CME 2009, 2011b).

As shown in Chart 1, the workforce required to meet current growth plans in the minerals and energy sector is expected to peak at over 119,500 people in 2012 – around 43,800 above the 2009 sector workforce of 75,600. This profile is consistent with forecasts developed in the 2009 study, although the peak in 2012 is forecast to be much sharper.

Chart 1 Minerals and Energy Workforce outlook 2009-2020



The operations workforce will continue to increase over the period with Western Australia requiring an additional 27,000 operations staff by 2015. The construction workforce will peak in 2012 and then reduce by 2015 as committed projects move towards full operation.

It is estimated over the period to 2020, an additional 30,000 to 50,000 people every year will be employed in other industry sectors as a result of increased minerals and energy activity (CME 2011).

The report released by the National Resources Sector Employment Taskforce (Australian Government 2010) entitled *Resourcing the Future* notes the demand for resource sector workers has national implications, stating that ‘... *resources sector labour shortages can quickly become regional, state, and then nationwide skills shortages*’ (p. 2). The same report predicted the resources sector could be 36,000 tradespeople short by 2015.

History

‘Long distance commuting’ – including FIFO as its most recent manifestation has a long history in WA. It could be argued the arrangements whereby shearing teams recruited in Perth and travelling from sheep stations in the Kimberley south through the pastoral areas in

the first half of the 20th century were an early form of this workforce management practice.

Early construction of the iron ore mining and shipping facilities in the Pilbara in the 1960s and 1970s was undertaken by gangs of specialist labour recruited from outside the region who were housed in temporary camps. At the completion of construction, some of these workers took permanent jobs in the region, but most returned home. Similarly the development of the North West Cape Naval Communications Facilities in the 1960s and the associated construction of the Exmouth town-site were done by workers housed in temporary accommodation.

The new towns built to service the mining industry in the 1960s and 1970s were located immediately adjacent to the major resources (e.g. Tom Price and Mt Tom Price, Newman and Mt Whaleback, Leinster and Leinster Nickel Operations) and the port facilities (e.g. Dampier and Dampier Port, Wickham and Cape Lambert). Some towns that were located near resources that have become exhausted have subsequently been removed entirely – such as Goldsworthy and Shay Gap. This history of short term settlement and then abandonment of mining towns is not new – as the legacy of abandoned towns from the early 1900s in the Goldfields shows (e.g. Kanowna, Niagara, Kurrajong, Lawlers etc).

In other instances some resource company established towns have since become ‘normalised’ as the communities have become more diversified, either with more than one resource company operating in the area or through different industries. Where this type of diversification hasn’t occurred to a large degree, the towns have remained partially ‘closed’ such as Leinster.

FIFO today

FIFO evolved into its current form to break from the expensive (to both government and industry) and socially challenging process of town construction and then abandonment – or rapid expansion and then slow contraction (as in Nullagine, Yalgoo etc). It has also developed to compensate for the increased urbanisation of Australia, a trend that has been in place for more than a century. Census data shows in 1921, the population living in metropolitan Australia increased from 43 per cent to almost 70 per cent in 2006. With most resource projects operating or under development in regional and remote Australia, resource companies are working against this long term trend in sourcing a skilled workforce. This requires different and innovative approaches to obtain the required workforce in a tight and highly competitive labour market. The importance of FIFO for resource projects is recognised nationally, where mobility in the workforce is required to service new projects as they emerge.

FIFO and residential employment are complementary, not supplementary approaches in a total workforce management package, with the mixture of employment type governed by the individual’s circumstances and lifestyle choices. The percentage increase in FIFO employment in recent years has been driven by a tighter and more competitive labour market, increasing volatility in the resources sector, increased disparity between the relatively large construction workforces and smaller operational workforces in new projects, and increased dispersion of resources operations. FIFO employment offers companies and individuals the spatial and temporal flexibility necessary to develop these resources profitably and in a sustainable way.

More mines, more locations remote from existing towns

As discussed above, there is an increasing number of resource projects underway in WA, with many of these located some distance from existing towns and communities. In most cases, the new developments are occurring in locations remote from sizable established communities, while expansion in the existing resources powerhouses in the Pilbara and the Goldfields cannot be supported by those regional communities and their infrastructure alone. In the Pilbara region, new iron ore mines are invariably located remotely from towns built in the 1960s and 1970s to service projects in operation at that time.

The contrast between large, highly mobile construction workforces employed for a short timeframe and smaller operational workforces over longer timeframes, means it is unrealistic for construction workers to be expected to take permanent residence in remote communities.

In summary, the short-term nature of construction versus ongoing operations, the relatively short life of some new mines, the cost of building towns with a limited life and with no alternative economic supports, and the reality of workers seeking to make individual lifestyle choices for themselves and their families, requires that many new and expanding mines be operated by long-distance commuting workforces.

This is not a situation peculiar to WA, but is exacerbated here by the large size of the state, and the mineral rich regions being in the less populated areas. While mineral and energy development will be the most important industry in regional Australia for the foreseeable future, an increasing proportion of resource recovery will occur in locations at some distance from existing towns.

It is worth noting the desire for FIFO employment is not confined to the resources industry, with an increasing number of state and local government employees in regional WA opting for the flexibility these arrangements provide for themselves and their families. The further capital intensification of broad-acre agriculture in WA is also leading to less people being permanently resident on farms with some seeking FIFO arrangements with the resources sector to supplement their incomes.

Further, expansions in many developments that are close to existing towns cannot be supported by the small workforces available in those communities. For example, the iron ore mine being developed at Karara will require a construction workforce of 500 and an operating workforce of 130. The nearby Wheatbelt town of Perenjori has a population of about 220, and has very limited infrastructure, services and pool of available skilled labour.

Strengthening regional FIFO ‘source communities’

Most FIFO employees in Western Australia live in the Perth-Peel Region. There is a move encouraged by companies and local governments to increase the number of employees living in regional centres and employed on FIFO arrangements in more remote parts of WA. Some towns participating in this approach to easing workforce pressures include Broome, Carnarvon, Geraldton and Busselton. Other towns such as Manjimup and some Wheatbelt towns are keen to participate as a means of diversifying their economies and maintaining a sustainable population base. The situation and its advantages are explored in more detail under Terms of Reference 3, 4, 5 and 9.

CME regards this approach as a ‘win-win’, combining regional development and industry development benefits. CME supports complementary initiatives such as the Royalties for

Regions and Pilbara Cities Programs in strengthening regional communities and increasing their attractiveness as lifestyle locations for workers in the resources industry who are employed elsewhere on FIFO rosters. In the particular case of Pilbara Cities, achieving populations of 50,000 plus in Karratha and Port Hedland should lead to these cities being attractive locations for some families to live, with family members employed on FIFO in remote mines in the Pilbara.

While the majority of FIFO workforce is sourced from the Perth/Peel region, many other communities around the state and Australia are benefitting from the employment opportunities available in WA. It is expected that resource companies in WA will increasingly look to underutilised workforces in other states as the skilled labour market in WA continues to tighten.

Predicted increase in long distance commuting (FIFO)

In 2011, the mineral and energy sector's workforce in WA is estimated to be close to 90,000 with approximately 52 per cent or 46,800 people employed on FIFO rosters. This number will increase as the new projects commission and existing activities expand. Regions of highest labour demand are in the Pilbara and Mid West, with the majority of the additional workforce driven by projects in the Pilbara. Current planned projects indicate an additional 34,000 workers in 2012 in the region, reducing to 21,000 above the 2009 workforce by 2015. The Mid West will require an additional 7,500 workers by 2012, experiencing the highest labour force growth rate of any region.

Most of this additional workforce demand will be met by increased long distance commuting (i.e. FIFO) from the Perth and Peel regions, supplemented by interstate arrangements, and company-specific programs established with towns in regional WA that have surplus skilled labour. Factors such as the rapid growth in labour demand, the dispersed nature of resources projects in regional and remote WA, the inability of existing communities in these areas to respond in a sufficient and quick enough manner to the demand for skilled labour and the reality of individuals seeking to make a lifestyle choice for themselves and their families— are key drivers of an increased reliance on FIFO workforces in the resources industry. The increase above 2009 numbers in the FIFO workforce is expected to peak at around 30,000 in 2012, remaining at around 16,500 by 2015.

In summary, by 2015, the WA resources industry will employ about 110,000 people, with an estimated 63,500 (or 57 per cent) of that workforce employed on FIFO arrangements.

Term of Reference 2

“Costs and benefits for companies, and individuals, choosing a FIFO/DIDO workforce as an alternative to a resident workforce.”

As noted in addressing the previous term of reference, FIFO is a long established work practice, having been in operation in WA for decades. The nature and location of the resources industry in WA is resulting in an increased reliance by companies on this workforce model as a means of addressing regional and skill-type labour shortages, and by employees as a means of achieving flexibility in where they work and where they live.

Many of the benefits to companies in employing FIFO workforces are also benefits to individuals. Therefore, in addressing this Term of Reference, there may be some duplication in the points presented.

For companies ...

The importance of FIFO in addressing skill shortages in regional Australia

FIFO is a critical element of maintaining a viable resources sector as the industry is challenged by significant tightening in the labour market. While skill shortages are an issue for many industries across Australia at present, the problem is exacerbated in regional and remote areas due to the smaller pool of skilled labour being available. FIFO, along with investing in skills and training, increasing workforce diversity with more women and Indigenous employees and a flexible skilled migration program will all play their role in addressing skill shortages in the resource sector.

Providing temporal and locational flexibility in obtaining workforces

Many employees and their partners and families opt for FIFO arrangements because they have a preference for metropolitan over regional and/or remote living. For example, less than 20 per cent of FIFO workers in Moranbah (7,000) in the Bowen Basin would like to live in the town (Rolfe, undated) and those living in Mackay (population 75,000) in 2007 stated they would require a \$55,000 increase in salary to move 180 km inland to live in Moranbah. Key factors that are important in the choice of communities are the level of health and education services, availability of jobs for partners and children, and the standard of public infrastructure (Rolfe et al. 2007). Although equivalent WA data is not available, it is likely that a similar situation occurs vis-à-vis the smaller Pilbara towns and Perth, Broome or Geraldton. The clear implication is that if resource companies are not able to offer FIFO employment in a tight labour market, then either these people will be lost to another company or the industry, or the labour costs will become prohibitive.

Although some operations may already have a residential workforce, the resident population may not fill all the technical positions required. FIFO allows industry to fill these labour and skills shortages when needed.

Migration of people between roles in defence, agriculture and mining over time is occurring in some regions. 'Off-farm' work in the mining industry is already an important source of income for people in parts of WA, especially in areas where the agricultural and pastoral industries are in some difficulties. People looking for this flexibility also require the flexible working conditions that FIFO and/or DIDO can provide.

With high commodity prices, companies are operating mines with a limited resource (shorter mine life) that was not previously economically viable. The majority of these mines are more remote or isolated from existing population centres. These resources would not be viable without FIFO as a workforce option, which would result a loss of economic return to the State via taxes and royalties.

Competition between industries and operators across the resources sector in all jurisdictions for labour is requiring employers to be able to offer increased flexibility in terms and conditions of employment.

The increased expectation of flexibility is not confined to the resource sector. Both State Governments and Local Governments outside major urban centres have had to adjust to employees seeking 'long distance commuting' working conditions.

The impact of capital intensive, specialised technology in the resources industry

Resource industry operations are capital and technology intensive, and are becoming more so with technological advancements. The bulk of labour demand is in the construction phase, in the development of mines, gas plants, rail and port facilities. During this phase there is a demand for a relatively large, highly skilled and specialised workforce, and specialised equipment. However, once a project is operational, the advanced technology being used means the demand for labour is often very small. Hence a town that accommodates construction workers will likely have surplus accommodation once operations commence unless they have a diversified population base. Conversely, there are no towns in regional or remote WA that are able to provide residential accommodation to a transient construction workforce. It is also worth noting major maintenance or shut downs occur during the life of a project and during that time there is often a large, short term workforce on site. The flexibility FIFO can provide is an essential part of labour force management in facilitating the development and operation of most projects in regional and remote WA.

The feasibility of building new towns to service resource development

The location of most of WA's resources industry being in regional and remote areas, with few large scale population centres located in close proximity has already been referred to as a driver for FIFO employment. The argument by some commentators is that companies should commit to the construction of towns and/or associated infrastructure to support residential workforces in these areas, as occurred in the 1960s and 1970s (e.g. with towns such as Dampier, Newman, Pannawonica and Leinster).

In a global economy, and given Australia's high costs of labour and infrastructure compared to other resource rich countries, it is no longer feasible to construct purpose built towns to support resource projects that increasingly have a shorter project life than the early large mining operations. Where these towns exist as a legacy of past and different economic circumstances, expansions are possible (as in Wickham, Newman, Port Hedland and Karratha). Some of the principal factors preventing investment in towns to support residential workforces are:

- Government is unable to provide financial support for new town development. For example, the introduction of Fringe Benefits Taxation (FBT) in the 1980s imposed a tax impost on the benefits received by employees in such company owned and operated towns. It is no coincidence that Leinster in the Northern Goldfields, which was constructed in the early 1970s, was the last such 'company town' built in WA. In a further example, the Pilbara Cities project in WA, which is funded through the WA Government's Royalties for Regions program is focusing investment in developing critical mass in Port Hedland and Karratha to enable them to be 'hubs' in supplying services and labour to smaller remote towns and mines in the region.
- The cost of building and operating new resource towns in remote locations is prohibitive. In 1989, it cost 1.5 times more to build a mining town compared to a similar size city suburb. Another consideration of cost is the knowledge that there is a projected life expectancy of the mine. (Fisher 1989). The discrepancy in 2011 is even greater, with construction costs for urban infrastructure (including houses) estimated as being twice the cost of similar construction activities in Perth.
- For some companies the shorter project life of many projects is due to both high commodity prices and a market bias towards investment in precious metals linked to risk aversion strategies that favour projects with low cost, short life commitments. For others, it is simply that the large scale deposits discovered in the 1960's and the 1970's have been or are being mined with only small to medium sized deposits being discovered today. All these factors have tended to reduce the operating time frame of many of the State's mining operations, and therefore lends itself to both employees and employers seeking to utilise FIFO arrangements.
- Resources companies are not urban planners, developers or local governments. Obtaining approval for town design and construction requires a long lead time that is sometimes not aligned with market conditions for commodities, and the short-term return required on capital. Operating 'company towns' is expensive, especially given the need to provide community infrastructure and activities where community expectations are ever increasing, and is therefore not core business for resource companies. Finally companies are not able to address the costs associated with town closure, once a resource is exhausted or no longer economically viable.

In summary, in 2011, opening a new town based on a finite resource simply does not make sense – many of the struggling small towns in the more remote parts of WA are a legacy of mining activity that did not last and was close to the town (e.g. Nullagine, Laverton, Wiluna) – and the more realistic approach is to increasingly rely on FIFO arrangements so that skilled labour can follow the resources market.

Other factors encouraging companies to use FIFO employment

The improvements in transport arrangements in Western Australia mean most workers can travel more quickly and more safely to their place of work. There have been dramatic

improvements in aircraft design, safety and efficiency, and lower transport costs. It is almost certain that most FIFO workers are able to spend more time 'on the job' earning incomes than if they were employed where daily commuting eats into that time.

The quality of telecommunications is reducing the isolation factor associated with FIFO employment. Many workers have access to on-line communication to maintain contact with families and friends, and to engage in distance education and training. The introduction of the National Broadband Network to regional WA will further improve the quality of telecommunication.

FIFO camps are low environmental impact settlements, in that they have a smaller footprint, require less land clearing, less impact from recreational activities, lower risk from exotic species and a smaller scale of requirements for services and infrastructure such as power, water and wastewater treatment. At the conclusion of a mine's operating life, the area utilised for the FIFO camp will be rehabilitated in line with the company's obligations under its mining approvals. This situation is in stark contrast with the construction of a residential town.

For individuals ...

The take-up of FIFO employment within the labour market is high and is increasing, whereas there is evidence that significant inducements are required to attract employees and their families to relocate permanently to a regional town. Clearly, employees in the resources industry perceive significant benefits in the FIFO workforce model for themselves and their families.

Choice in employment and residence

FIFO arrangements have enabled large numbers of resource sector employees and their families to obtain attractive incomes, while retaining a residential base in a preferred location. By maintaining a family base in a large regional or metropolitan centre, resource sector employees have been able to maintain employment in their industry while also ensuring they and their families are able to enjoy a good level of government and commercial services. In short, FIFO adds a 'spatial dimension' to career development, with movement between companies as opportunities present themselves, without the need to move the family base.

There is also a temporal basis to the opportunity to move from FIFO to residential employment and vice versa. It is becoming more common in some regional areas for employees to move from residential work in a small town to a period of FIFO employment to ensure their children have access to a preferred secondary and tertiary education in a metropolitan centre. Conversely, there is anecdotal evidence some older workers choose to return to a residential location once their children have become independent.

Equally important for employees when deciding on a career in the resources sector is the career and employment opportunity for their partners who may not be working in the same industry. FIFO arrangements provide greater opportunity for both partners to achieve their career and employment objectives. Without that flexibility, it is likely recruitment into the resources industry in regional Australia would be even more difficult.

A special case is the opportunity for FIFO work to assist individuals with their adjustment to structural shifts in the Australian economy. The employment declines in other sectors of the economy, as in eastern Australia in recent months, can be mitigated by workers being able to obtain FIFO employment in the Pilbara or Goldfields region, while their families can remain in a secure and supportive environment, with income derived from the WA resources sector. The alternatives of either relocation of the whole family or remaining in the community on unemployment benefits are clearly less attractive.

In another unique case, for Indigenous people in isolated communities remote from mainstream employment, FIFO employment may be one of the few opportunities to be involved in the industrial wage economy without having to leave their particular social and cultural environments. Earned incomes mean taxes for government, and where incomes are spent locally there will be spin-off employment and income benefits for other community members and local businesses (see Storey 2010). In the Pilbara, Indigenous FIFO (or DIDO) is being developed in some of the small mainly Indigenous towns and communities in the region.

Work-life balance

FIFO enables employees to enjoy a different and arguably better work-life balance. While at work, many people work long days (up to 12 hours shifts are common) but with no 'waste time' involved in daily commuting as occurs in jobs in metropolitan areas. The benefit is that when not away at work, they are able to enjoy relatively long, uninterrupted periods with friends and family and in their community.

The competition for skilled labour in the WA resources industry is leading to a wider range of shift arrangements to ensure that potential employees can select arrangements that best suit them and their families. While rosters will vary from site to site and employer to employer, popular rosters are 2 weeks on site, 1 week off site and 9 days on, 5 days off. FIFO employees highly value the lengthy times off which allow them to participate for example, in children's sport, community work, education, cultural and family activities.

Inability of existing towns in mining areas to provide desired services

The corollary to the expressed preference for metropolitan/large regional centres to small town residences for most Australians is the difficulty being experienced by many regional and remote towns in providing comparable services. Housing is a critical issue, especially in the Pilbara where housing affordability (ownership and rental) is beyond the reach of most families. Although governments are investing significant funds in land release and town infrastructure, the high cost, as well as the perception of inadequate and ageing housing, of inappropriate design, and with high costs of maintenance and improvements all act as deterrents for people considering entering the private housing market in these towns (see Haslam McKenzie 2008).

Beyond housing, which is a core challenge in the Pilbara, are numerous reports of residents' dissatisfaction with key social services in secondary and higher education, health services, childcare provision, and services for the youth and aged (see Haslam McKenzie 2008). Finally, many towns in regional WA, lack the economic diversity and alternative employment opportunities required by contemporary two income families.

Improved facilities in FIFO accommodation

There has been a vast improvement in mining camp facilities. Standard facilities on-site now include en suite rooms, extensive recreation amenities such as swimming pools, gyms, sporting courts and games rooms. Meals provided in the mess facilities would rival most hotel buffets with a selection of hot and cold dishes with healthy low-fat options always available.

Employee expectations for quality accommodation are increasing. Hence building layouts, style, and facilities are critical considerations for employers seeking to ensure they recruit and retain employees in WA's tight and competitive labour market. Throughout the resources industry, the construction of this type of accommodation is moving away from rows of 'dongas' to more attractive 'villages' that are able to provide high quality amenities.

While the form of the accommodation continues to be of the transportable type, able to be dismantled and removed, more attention is being directed towards the design, liveability and energy-efficiency of the structures and the landscaping and amenity of the surrounds. Further, where located adjacent to existing towns (such as for construction workers), they may also be able to provide some facilities and services to the community and enable construction workers to still utilise community services and facilities in an integrated manner.

Term of Reference 3

“The effect of a non-resident FIFO/DIDO workforce on established communities, including community wellbeing, services and infrastructure.”

The term used in this submission for a town where a FIFO workforce is housed in an existing town is termed a ‘host’ community or town. The term ‘source’ community or town is used in describing the town or city where the FIFO worker’s permanent residence is located and where his/her partner and dependents live.

Many smaller mining towns are not ‘established’

It is important in this context to distinguish between large regional centres that have a critical mass for services in the private and public sectors (e.g. Geraldton, Kalgoorlie, Karratha, Port Hedland, Broome) and smaller mining-dominated towns that have fluctuating populations and limited services (e.g. Leonora, Paraburdoo, Newman). The focus in this section is how well these smaller towns function and the challenges they face.

Many smaller towns dominated by mining activities in regional WA are not easily categorised as ‘established communities’ as compared to major regional centres in the south west of the State. Towns in the Pilbara and the inland Mid West with a high dependency on the mining industry have mono-dimensional economies with mining (and sometimes one company) contributing up to 70 per cent of their primary economic activity. They are susceptible to variations in both price and demand for the commodities; leading to fluctuations over time in populations and commercial activity. The dominance by a single industry reduces the role that small and medium enterprises can play in economic life.

Newer towns dominated by mining operations lack mature, properly functioning housing markets. People who may choose to work for large private and public employers (e.g. mining companies and government employers) in an area for five years or less will not likely commit to a house purchase, and will instead expect their employer to provide housing. This makes it difficult for people not employed by the company or government to obtain affordable accommodation (Haslam McKenzie 2008).

A related feature of these towns is a high population turnover with ABS statistics showing that less than 30 per cent of people at a census date having lived in the community five years previous (1). This indicates many residents live in the town for employment opportunities rather than the amenities offered by the town. Many transient populations in regional WA operate on a cycle of life approach to residency – living in towns as young families, to bigger towns with older families; and then opting for FIFO to accommodate children’s education needs and partner’s careers etc. The conclusion is that people resident in the town are largely attracted by the work opportunities, and not by the town itself, with a time horizon set on the period of residency. Further, managing expectations around what can be provided in a small community is difficult – with expectations from people raised in major urban settings being unlikely to be met in many small settlements.

In short, the economic environment in these towns, the nature of employment available, and the infrastructure and services on offer make it difficult for many communities to develop as

¹ The same percentage in the Perth metropolitan area is about 49 per cent.

‘established communities’. CME supports the Western Australian Government’s Royalties for Regions Program which is addressing infrastructure and community service deficits in some of these type of towns which will improve their attractiveness to longer-term residency.

It is worth noting a major regional development program in WA – Pilbara Cities – is focusing on supporting Karratha and Port Hedland to become sustainable ‘established’ cities, with populations of about 50,000 people, but recognises the same cannot be achieved for many smaller towns in the region. As noted earlier, CME supports this program which should in time make these towns important ‘hubs’ or ‘sources’ for workforces and small businesses provided throughout the Pilbara region, in a manner that already occurs in Geraldton and Kalgoorlie and their respective ‘regions of influence’.

FIFO as a driver for regional investment

Many of the resource projects currently being developed or in production in regional WA would not be economic to develop without FIFO arrangements.

FIFO enables the development of resource projects that would be uneconomic in the event a residential workforce was the only option. The provision of associated services and infrastructure for FIFO operations generates economic benefits to the region that would otherwise be lost. For example, FIFO has enabled investment in the regional aviation industry in WA and has enhanced their ability to provide services to regional and remote communities and other industries – principally tourism. Increased services and reductions in ticket prices have been made possible through economies of scale attributable to FIFO operations (CME 2005).

In Pilbara towns, the workforce is a mixture of residential and FIFO – it is typically only in operations remote from an existing town that all employment is on FIFO basis. This flexibility in working arrangements allows people to move between the working modes, and also adds diversity to the community. Initial FIFO operations may lead to residential based workforces, in that a relatively large FIFO construction workforce may be used to establish a project, with the company then moving towards a smaller residential based operational workforce in a graduated, planned and sustainable way.

There are limits to what can be achieved. In the construction phase of a project there is a requirement for a large workforce for a short period of time, typically two to three years. It is worth noting that while the construction phase may last a few years, many employees or contractors are only on site for a much shorter period of time. Once a project shifts to the operations phase the size of the workforce reduces considerably. This is a real challenge in small regional towns, where there is no alternative to FIFO for the construction phase. It is simply not realistic for a community to gear itself for a construction ‘boom’ and then to find itself in a slump when the construction phase is over and operations commence.

Several commentators have referred to the 'fly-over effect' of FIFO in taking funds from the town that is hosting the FIFO workforce. While this is partly true, it is also true that FIFO workers located in an established town inject considerable funds into retail and hospitality businesses in the towns. Given the low costs to most towns in supporting a FIFO workforce, the money spent by workers in these towns is a direct benefit.

There is evidence residential workforces also direct funds away from the town, in investments in real estate in larger centres (many people have one or two investment properties outside the town), and particularly in high levels of on-line shopping. For example, Karratha residents are reported to spend six times the national average for on-line shopping, and ranking 14th in Australian cities for on-line shopping (Pilbara News, 21 September 2011, p. 4).

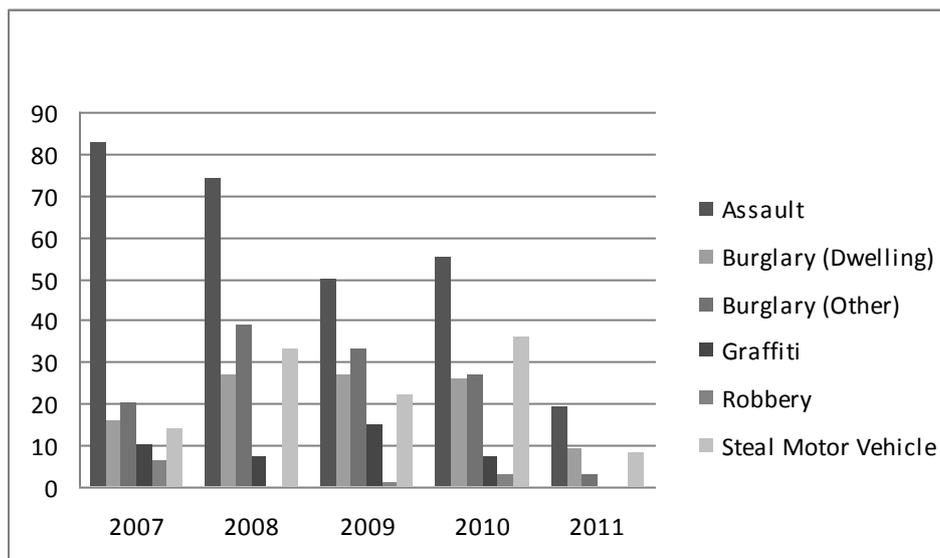
As noted previously, high FIFO employment has improved air services to regional and remote WA, which benefits all community members, and in some cases local governments where they are the owners and operators of regional airports. The Shire of Roebourne, which operates Karratha Airport, the busiest regional airport in Australia receives revenue of about \$30 million per year as a result of the high traffic, most of which is from a FIFO workforce.

Social impacts in 'host' communities

There is some commentary suggesting high FIFO workforce numbers generate higher anti-social and crime problems for 'host' communities. The evidence from Pilbara towns does not support this claim.

In Karratha, a town with a relatively large FIFO workforce, reported key community safety issues and statistics are similar to those occurring throughout regional towns in Western Australia, with no specific issues relating to life in Karratha, or, the Pilbara more generally. Police spokespersons routinely report no specific community safety issues related to FIFO workforces, however, they did note the excessive alcohol consumption across the Pilbara region. As such, much of the crime that occurs in Karratha and the Pilbara more generally is associated with alcohol consumption, but this is certainly not confined to FIFO workforces. Indeed, managers of FIFO accommodation are able to exert a greater influence over the behaviour of residents than can be achieved in the wider community. In support of these observations, the crime statistics for Karratha in Chart 2 show a steady decline in reported crimes over the period 2007-2011, despite a growth in FIFO workforce numbers. Crimes of 'assault against the person' have decreased since 2007, however, motor vehicle theft has peaked in that period.

Chart 2 Karratha Reported Crime Statistics



NOTE: 2011 statistics are from January to April.

Source: Western Australian Police Service

Further evidence is provided in Police Service numbers, which are similar in terms of persons per sworn officer in most Pilbara towns to the state average.

FIFO infrastructure and workers as a potential social and environmental benefit

FIFO accommodation facilities and FIFO workforces can make positive social contributions to the life of small mining-dominated towns. In small towns, workforce planning needs to account for the balance between FIFO and permanent resident numbers and ideally to provide opportunities for the FIFO workforce to make a positive economic and social contribution to the town, and mitigate any undesirable financial pressures on town assets and functioning.

Location of FIFO villages to provide benefits to residents

A well located FIFO village, integrated sensibly with town facilities provides a significant opportunity for local businesses to benefit; provided the FIFO workers can readily access shops, and facilities. Apart from the increase in revenue to local businesses from an increase in the workforce numbers there are opportunities for local businesses to increase per capita spending of workers. Further, townspeople can also make use of the dining room facilities, gym and recreational facilities. There can be an opportunity for local businesses to increase the supply of goods and services by:

- delivering orders of goods and services to workers;
- establishing a temporary (limited hours) shop or mobile van-come-shop at the accommodation camp; and
- providing other opportunities, such as movie theatres, indoor sports facilities and personal services.

A number of companies are addressing this need with the construction of temporary high quality modular workers' accommodation in many areas across Australia. These structures can be removed or re-purposed as workforce accommodation needs change. In this way,

structures may then be utilised by the community in which they are housed during or after the period of FIFO use. For example, the Four Seasons Motel in Newman commenced life as single person's quarters in the 1970s. Being able to use FIFO accommodation after it is no longer required for that purpose is also a means of increasing housing diversity for people, which is being advocated for Pilbara towns.

Indigenous participation in FIFO

FIFO arrangements may offer some particular benefits for Indigenous people in that the smaller footprint and generally shorter mine life of FIFO operations are arguably less disruptive to indigenous communities than residential towns. For those Indigenous people entering the resources industry, it has been found that positive employment programs which encourage participation in resource development while maintain key elements of traditional lifestyle and culture could be more successful under FIFO than residential arrangements.

Environmental benefits of FIFO

Resource companies are focussed on reducing their environmental impact, where possible. The creation of new towns would increase the environmental impact of mining operations, whereas a camp for FIFO workers occupies a smaller environmental footprint than a residential town. Rehabilitation of mine camps is also far easier and more likely to occur than in a residential town, following mine closure.

The WA Government's Department of Mines and Petroleum's annual 'Golden Gecko' award for environmental excellence have recently recognised mining company, St Barbara for their innovative and sustainable temporary mine village in Leonora. Initiatives at the site included improved insulation, photovoltaic power units, solar hot water, water-wise landscaping, energy efficient appliances and flyscreen windows to encourage the use of natural ventilation. Monitoring undertaken since the completion of the project has demonstrated a 30 per cent reduction in energy use and a 50 per cent reduction in water consumption.

Term of Reference 4

“The impact on communities sending large numbers of FIFO/DIDO workers to mine sites.”

The desire to be ‘source’ communities

Although most of the FIFO workforce in WA is resident in the Perth-Peel area, several regional towns in WA are already ‘source’ communities, with many others keen to participate. Existing towns providing FIFO workforces to the Pilbara include Broome, Carnarvon, Derby, Geraldton and Busselton. Special transport arrangements have been set up by companies to facilitate FIFO employment from these towns.

Local Governments in these towns and others (e.g. Manjimup, Exmouth) are keen to be source communities for the extra population they will attract, the economic benefits they will derive and in some cases, to address structural difficulties in their own circumstances. For example, Rio Tinto is working with the Exmouth community to obtain workers to assist the small, largely tourism-dominated economy of this small town, and in Manjimup, FIFO employment is seen as a means of off-setting the decline in traditional employment in the timber industry.

FIFO as a source of economic benefit and diversification

Following on from the points above, FIFO employment offers towns with small populations and limited services (e.g. Carnarvon, Morawa, Exmouth) an opportunity to grow the residential population, add another industry to the town’s economy and bring income to the town. In particular, this is seen by some agricultural shires as being a way of reversing a long period of population decline in their country towns while working on FIFO rosters in the Pilbara or Goldfields. The case is easier to sell in larger, well services communities such as Busselton and Geraldton, with the City of Geraldton-Greenough advocating people move to the town to participate in FIFO employment in the Pilbara and Mid West.

As well as broadening the economic base of these communities, opportunities for FIFO work in construction projects in the resources industry can assist in covering periods of low labour demand in industries with high seasonality, such as the rock lobster industry along the west coast, cereal cropping, and the tourism industry in the Kimberley. For example, the WA Department of Agriculture and Food’s North East Agricultural Region (NEAR) Strategy includes a program directed at facilitating employment in the Mid West mining industry on terms suitable to industry and farming demands.

Perceived stresses associated with FIFO

FIFO enables people living in other areas of WA and Australia to engage in and benefit from the economic opportunities offered by the resources sector. By maintaining a family base in a large regional or metropolitan centre, FIFO employees have been able to maintain employment in their industry while also ensuring that they and their families are able to enjoy a good level of government and commercial services.

While these are obvious benefits, several commentators have suggested long periods of separation within families as a result of FIFO employment can generate a range of problems including increased divorce rates, stresses for the primary carer of children, and increased substance abuse. These perceived negative impacts of FIFO arrangement on families are

not supported by studies in the WA environment. Research which examined the psychological stresses upon the families of FIFO workers revealed

'...preliminary indications that despite being exposed to the risk factors of frequent parental absence associated with hazardous employment conditions, children from FIFO families did not experience significantly higher levels of depressive symptomatology, anxiety and family dysfunction than non-FIFO children' (Sibbel 1991).

These findings have been supported by more recent research which found FIFO employees and partners were generally no more likely to have high stress levels, poor relationship quality or poor health behaviours than residential employees and their families or other community members. In summary, 62 per cent of FIFO and 76 per cent of residential employees felt their commute arrangement suited their lifestyle (Clifford 2009). A small proportion of those people in the study who found the working arrangements particularly stressful sought to adjust their working arrangements. The researcher Susan Clifford suggested:

'the project findings can be used to inform current and potential FIFO employees and families about the likely impacts of FIFO and extended working hours on their lives, assist industry stakeholders to improve FIFO facilities and roster design to minimize negative impacts on their workforce, and provide tailored assistance to those identified as being most vulnerable to finding the lifestyle stressful.' (Clifford 2009).

Social benefits for source communities

Many mining companies have corporate commitments totalling many millions of dollars to support neighbouring communities where their workforce lives. Where a percentage of the entire workforce is FIFO, this extends to investing in the social development of source communities, although these may be a long way from the project location. For example, companies with operations in the remote parts of the Mid West of WA who draw their workforce from Geraldton as the major population centre in the region, invest in community projects in the town as a means of supporting the 'source' community.

These investments can include education and training projects designed to assist local people (especially young people) into the FIFO workforce. The support provided by resource companies into source communities is highly welcomed by the WA and local governments and community groups.

Term of Reference 5

“Long term strategies for economic diversification in towns with large FIFO/DIDO workforces.”

The nature of some host communities

The peculiar nature, of many mining towns in WA that act as host towns to FIFO workforces, has been noted in addressing earlier terms of reference. These towns have economies dominated by the resources industry and sometimes by one company. The economic future of these towns fluctuate with commodity prices and the availability of sufficient resources nearby to sustain a workforce, whether resident or FIFO.

The economic homogeneity in some cases has led to a distortion of the economy as is evident in many Pilbara, inland Mid West and Goldfields towns. These towns struggle in addressing the following questions.

- How does a town subject to fluctuating mining fortunes (and the ebb and flow of construction and operational workforces) build economic diversity?
- What other options can realistically be developed?
- How can feasible options be developed?

Limited diversification opportunities in many host towns

The reality is economic diversification options for towns hosting large FIFO workforces in WA are limited. By ‘diversification’, CME means an industry that has an entirely different set of economic drivers to mining and oil and gas projects.

The WA Government and local governments have worked hard to develop tourism in these regions, based on the natural heritage, and in some locations (Eastern Goldfields, Mid West) building on the mining heritage. Although towns in the Pilbara such as Tom Price, Newman and Dampier are located close to important attractions such as the Karijini National Park, the Dampier Archipelago and Burrup Peninsular rock art, tourism contributes a small percentage to these towns’ total economic activity (less than 10 per cent). In part this is because of the nature of tourism activity in these regions. Expenditure by domestic tourists tends to be low, less than \$100 per day per person and the regions do not tend to attract the high end of international tourism (Broome being an exception due to location and history). Finally, the tourist industry is seasonal, with maximum activity in the winter months, and reduced activity over summer. These factors limit what can be achieved through diversification by tourism alone.

Beyond tourism, other diversification options can occupy ‘niche’ opportunities, with a range of ideas suggested including specialised irrigated horticulture, air crew training on underused airstrips, and specialist Indigenous cultural tourism. None of these have taken off in any WA remote towns to any degree. The NBN roll-out to regional areas could serve as the spur for more diverse economic activities in the region, but this will need support and encouragement from all levels of government.

Although linked to the resources industry, the best opportunity for a form of diversification is to build the small and medium business (SME) sector in regional resource-dependent towns. Data for the Pilbara show the number of SMEs is roughly the same in 2010 as in 1999 – about 2,200 businesses – although the total economy is now much larger (ABS 2011). Expansion of the SME sector will result in a higher percentage of the services to the resource industry being sourced locally, with these businesses employing a larger percentage of the total workforce.

Policies to encourage local flow of resource industry benefits

Government-industry partnerships around strategic regional development activities can assist the broadening of resource industry activities in regional towns hosting FIFO populations. The Pilbara Industries and Communities Council (PICC) in WA, which includes representatives from CME, BHP Billiton Iron Ore, Rio Tinto Iron Ore, Fortescue Metals Group, Woodside, Chevron and the North West Shelf has developed strategies in health, education and Indigenous employment which by supporting town populations, can increase the ability of these communities to access direct and indirect opportunities with resources industries.

Companies in WA have local and regional procurement policies for labour, goods and services that seek to maximise local area benefits from resource projects. At the same time communities need to appreciate and align with industry requirements to ensure that they are pursuing realistic and achievable benefits (see Storey 2010).

The development of a high quality and competitive local suppliers is of vital importance to the WA resources industry. The resources industry advocates the policy of full, fair and reasonable opportunity for competitive local suppliers to participate in WA's resource projects. Advice from CME members indicates a very high level of local industry participation in spending in the mining sector, with 86% Australian spending in construction phase, and 95% Australian spending in operations phase. With the dramatic expansion of the WA resources sector, operations spend has increased substantially, representing a significant and sustained opportunity for local suppliers

Many of the challenges being faced in widening the economic base in many resource industry towns is the supply of land, infrastructure, water and energy. The 2011 State Growth Outlook (CME 2011) has highlighted the requirement for increased investment in water and energy supplies. Difficulties with accessibility and cost of housing in many towns are also limiting opportunities. Poorly functioning private housing markets, limited diversity in housing styles, and high costs for the purchase and rent flow, through to difficulties in staff recruitment and retention for SME enterprises.

Term of Reference 6

“Key skill sets targeted for mobile workforce employment, and opportunities for ongoing training and development.”

The need for skills in FIFO construction workforces

Construction work in the resources industry, especially in the oil and gas sector, requires unique skills and experience across a wide range of infrastructure types. The report released by the National Resources Sector Employment Taskforce (Australian Government 2010) entitled *Resourcing the Future* highlights the importance of a dedicated construction workforce, and states:

..... the resources economy is indirectly supported by: the engineering and construction sectors – whose workers undertake the construction of mining infrastructure, including desalination plants, power generation, crushers, conveyors, constructors, road, ports and rail. Construction is usually short term, often done on a fly-in fly-out (FIFO) or drive-in drive-out (DIDO) basis by workers from every state and territory in Australia (p. 1).

The Report highlights deficits across the whole gamut of construction skills and recommends much closer coordination between industry, government and training providers in increasing the numbers of trades and professionally qualified people available to the industry. Suggested approaches in developing qualified trades people include the use of onsite and mobile training centres at mining sites, better recognition of prior learning and flexible combinations of on-site training and campus based learning. The intent of the Report's recommendations is closely aligned with the CME's position outlined in the State Growth Outlook 2011 which urges greater investment in education and training initiatives to increase the total skilled workforce over the longer term.

Developing career paths

For many individuals FIFO work offers opportunities for on-the-job training and career advancement at a faster rate than might be the case in more traditional workplaces (Storey 2010). Progression through roles that require mobility between sites operated by the one company is easy in FIFO employment, but constrained if re-location of a family is required. It is common in the Pilbara environment for workers of major companies (e.g. BHP Billiton, Rio Tinto and Fortescue Metals Group) to move between sites (mines to ports, etc) as part of personal skills acquisition and career development while at the same time addressing company priorities. FIFO arrangements support this flexibility.

The FIFO 'downtime' spent in the source community represents an opportunity for structured learning in well-resourced facilities, or on-line through distance education. It is anticipated that some education and training providers will seek to restructure their course delivery in order to provide flexibility for the FIFO workforce.

Exploiting on-line opportunities

The NBN roll-out to regional areas will assist in providing better education services in regional and remote areas. This will need investment in 'virtual product development and delivery' to ensure that the potential offered by the new broadband technology can be realised. Properly developed, the technology offers the opportunity to provide instruction to FIFO employees, on-site apprentices and trainees as part of obtaining trades qualifications, as well as updates to people with existing qualifications.

Term of Reference 7

“Provision of services, infrastructure and housing availability for FIFO/DIDO workforce employees.”

Improving FIFO workforce accommodation

As noted earlier, heightened accommodation expectations and competition for skilled labour has resulted in a change to the standard and quality of temporary workforce accommodation. Modern facilities include en-suite individual rooms, high standard dining facilities, indoor sports and recreation rooms, swimming pools and tennis courts and well landscaped gardens, often based around native plant species to minimise water use. As noted elsewhere, the environmental footprint of such villages is low, and certainly lower than that for an equivalent number of people housed in conventional detached ‘suburban housing’. High quality of FIFO accommodation is more attractive to workers, and can result in higher standards of expected behaviour in and around the facilities.

Sharing FIFO facilities with residents

Where FIFO accommodation is located in a town, some of the facilities (e.g. dining room, gym, outside sporting facilities) can be shared with townspeople in a manner that builds a relationship between the FIFO and local communities, and adds to the social benefits for the town.

Longer term, well designed ‘high density’ dwellings constructed as FIFO accommodation can be an asset to a town and its community. Construction of this type of accommodation in towns is moving away from rows of ‘dongas’ to more attractive ‘villages’ that blend in well with the existing townscape. It can be converted easily for residential use after the demand for FIFO accommodation has declined. This pattern of development is starting to occur in the ‘Pilbara Cities’ of Karratha and Port/ South Hedland, and will assist in blurring the boundary between FIFO (e.g. dongas) and residential (e.g. 4 x 2 houses) accommodation, and will result in a legacy of more diverse housing for the town (see commentary in Haslam McKenzie et al. 2009).

Arguably the best outcome would be for a mixed-use blend of flats and apartments (for transient worker accommodation) and houses and duplexes (for resident families and couples). Finally, construction of this type of facility will increase its value post-mining use, either for alternative accommodation on site (as in the Four Seasons Hotel in Newman) or for relocation for another purpose. Providing shared facilities and services is attractive for both companies and employees, where this can supplement existing town facilities, but not compete with existing commercial enterprises.

Social and cultural interactions

The conventional wisdom is that townspeople and FIFO workers do not interact well. Interestingly, the presence of FIFO workers in a town does not feature highly in the issues raised by residents when queried on the issues they believe need addressing in their towns. Instead, there is potential for beneficial interactions between townspeople and FIFO workers which in turn generates benefits for the town, and social outlets for the workers.

Some local governments have publicly welcomed FIFO workers to their town for the contribution they can make to retail activity, sporting activities (on rostered days off), volunteering activities and fund-raising. Examples include the 'Yalgoo Yahoo' Charity Walk between the Golden Grove Mine and the small town of Yalgoo (56 km), with mine workers raising funds for Variety WA (www.mmg.com/shared/1631.aspx), and contributions made by workers at BHP Billiton's Macedon Gas Plant to a family in Onslow whose house was burnt down. These are not isolated instances, with many FIFO workplaces raising funds for community causes (e.g. RFDS) through the wet messes, and providing assistance with community projects (e.g. playground construction etc).

Term of Reference 8

“Strategies to optimise FIFO/DIDO experience for employees and their families, communities and industry.”

Social investments in ‘source’ communities

Some source communities are large, well resourced and preferred places to live in (e.g. Perth, Broome, Geraldton, and Busselton). The income from FIFO workforces into these centres is useful, but not essential supplement to the towns’ economies. Quality health, education and community services for the partners and families of FIFO workers are readily available, although some specialist services to assist new participants adjust to a FIFO model may not be. This point is further explored in following sub-sections.

Smaller centres, such as Carnarvon, Exmouth, Manjimup and remote Indigenous communities will benefit significantly from the economic income provided by FIFO workers. However, some of these centres have limited social and community services and families with FIFO workers may be looking for additional support. CME supports the WA Government’s Royalties for Regions program which is tackling the social infrastructure and service deficits in many of these towns. This is a tangible investment of resource company royalties into communities where some of the workforce lives.

Companies also recognise a social obligation to contribute to the communities where their FIFO employees live, with direct investments into social and community infrastructure and activities, education and training programs and cultural activities. These contributions are welcomed by communities, who are able to use them to leverage support from governments and other private sector organisations.

Supporting people considering FIFO employment

There is an increasing body of work available to advise professionals and participants in adjusting to and managing FIFO employment. One outcome has been developing rosters that enable workers to optimise their time on-site and off-site to the benefit of their careers, work-life balance, and most importantly, their home life. All this flows through to higher job satisfaction and retention rates in the industry which benefits employees and employers alike.

The Centre for Social and Community Research, Murdoch University has published *Fly-in fly-out employment: managing the employment transitions which provides important insights into decisions to be made and the nature of supports required for people entering FIFO employment* (Gallegos undated). Much of the findings were developed from the experiences of long-term FIFO employees and their families, who were able to offer practical advice to others considering a FIFO schedule. The advice from families and others (agencies, industry) included (Gallegos undated):

- ‘making sure the decision is a joint one;
- preparing the children as much as possible;
- maintaining regular contact;
- accepting help if offered and asking for help when needed;

- maintaining a consistent routine;
- keeping the worker involved in parenting and the household.'

The research also highlighted the need for collaborative programs involving industry and government agencies focusing on increasing psychological, human and social capital including developing domestic time-management and financial management skills.

Overall, the research found families in the study had a clear understanding of the reality of the FIFO lifestyle and the implications for their domestic life. They were able to develop lifestyle patterns in the context of FIFO employment that worked for them (Gallegos, undated).

Support for existing FIFO employees and dependents

The growing number of people who are involved in FIFO employment (either as a participant or partner, or family member) and the desire of people to share experiences and knowledge and provide assistance to others, has led to the development of support groups for 'FIFO people'. Two organisations are profiled. These organisations are supported by industry.

- FIFO Families (www.fifofamilies.com.au) is a support organisation for families where a member of the family is a FIFO employee. The organisation which established in 2008 provides a network, website, resources, events and newsletters for FIFO families allowing them to form a community. Approximately 70 events are held annually in Perth, Kings Park and Rockingham. The organisation also provides some assistance during an employee's induction process.
- Mining Family Matters (miningfm.com.au) is promoted as Australia's first on-line mining community and is committed to providing information, services and support to families in the mining and resources industries. The on-line services include contact with health and social services specialists, advice with money management, lifestyle information and advice, and career development, as well as blogs and newsletters.

As referred to earlier, the NBN roll-out to regional areas will be beneficial in upgrading telecommunications between resource projects areas and towns. Improved communication through means such as Skype will reduce the sense of isolation between on-site workers and their partners and families.

Term of Reference 9

“Potential opportunities for non-mining communities with narrow economic bases to diversify their economic base by providing a FIFO/DIDO workforce.”

FIFO as a source of economic diversification

The opportunity for regional towns to use FIFO employment as a means of diversifying their economic base has been referred to in addressing earlier terms of reference. It is likely that as the demand for labour in the resource sector increases, that an increased number of towns in the agricultural areas of WA will be supporting residents who are working in the industry on a FIFO basis. The benefits have already been described and include supporting adjustment to structural changes in industries without losing population, building flexibility in the town's economy, and increasing the net income to these source communities. There may be situations where families move to cheaper housing in country towns, while also participating in FIFO employment, leading to an increase in regional population. This strategy is being progressed by some local governments in regional WA.

Although the focus in addressing the earlier terms of reference has been on regional towns and cities, FIFO employment is already providing a buffer against unemployment and low incomes in parts of the Perth-Peel metropolitan area where a significant proportion of the workforce operates in a few workplaces – as in Kwinana in WA, and in the eastern suburbs. Being able to provide the social investments and support to current and potential FIFO employees, partners and families referred to earlier will be important in facilitating participation in FIFO, and hence delivering the diversification needed.

Housing, health, education and childcare in regional towns

Reports on the standard of living in smaller regional towns has identified housing availability and affordability, access to quality health and education services and childcare availability as the 'big four' issues. Addressing these issues will be important for communities keen to act as 'source communities' for FIFO employment, especially if they wish to attract people to move to a town to participate in FIFO employment.

Mechanisms are needed to improve the supply and diversity of housing, perhaps by stimulating land availability, private investment and building activity. Quality health and education services are key drivers in people's decisions to re-locate their families. Towns intending on hosting FIFO workers need to offer competitive services in these areas. Finally, child care services are important for sole carers of young children who want to enter the workforce.

Transport requirements

Improvements in transport arrangements will facilitate FIFO recruitment in smaller centres across regional WA. Currently, a FIFO worker living in a small town in the agricultural areas of the South West needs to drive (or bus) to Perth to travel by air to sites in the Pilbara, Mid West or Goldfields. This can add significant travel time, which reduces the time spent in the home environment and requires strategies in managing fatigue. Increased FIFO recruitment in agricultural towns needs to be supported by the upgrade of strategic airstrips across the South West to improve travel efficiency between source and host communities.

Term of Reference 10

“Current initiatives and responses of the Commonwealth, State and Territory Governments.”

FIFO Coordinator trial

In the *Resourcing the Future Report* (Australian Government 2010), the National Resource Sector Employment Taskforce recommended:

‘That the Australian Government fund an industry-based, fly-in fly-out development coordinator in Cairns for two years from July 2010 as a pilot, to develop links between resources projects in remote locations and skilled workers, including local unemployed job seekers. If successful, this measure could be replicated in other appropriate locations, jointly funded by the sector and governments’ (p. 6).

The FIFO Coordinator will assist resources companies to attract and connect skilled workers from the Cairns region to available work on mining, construction and infrastructure projects in remote areas; establish training and employment pathways for skilled workers and unemployed job seekers; and link mining companies with airline and airport services to facilitate the engagement of FIFO workers.

‘If this FIFO coordinator pilot is successful and leads to a self sustaining model, the Government will then consider providing other regional centres an opportunity to establish a FIFO coordinator.’

The recommendation and its acceptance by government is implicit recognition (i) that FIFO is a sustainable workforce model, and (ii) it can contribute to addressing regionally specific structural adjustment issues affecting labour supply and demand. CME supports this initiative and if it proves to be successful will be encouraging the establishment of a similar program in WA.

The Australian Government have recently announced that they will consider rolling out similar program in four other regions around Australia. CME believes that this is a positive policy response to assist in the mobility of labour throughout Australia.

Royalties for Regions

As discussed earlier, the WA Government’s Royalties for Regions program is delivering important economic and social infrastructure throughout the state. CME is supportive of this investment as it can bring tangible improvements to the available amenities in regional WA. This, in turn, will ensure that these towns and regions become more viable in attracting a skilled workforce to the area.

It should be noted that many WA Government agencies also struggle to find skilled labour in regional WA. As such WA has seen an increasing reliance on contract/agency nurses and other services delivered using FIFO rosters. In employment terms, the WA Government, along with the resource sector will benefit from the outcomes of the Royalties for Regions program.

Conclusion

In WA, FIFO employment in the resources industry has a long history and is a popular and sustainable work practice for many. FIFO, along with investing in skills and training, increasing workforce diversity - with more women and Indigenous employees and a flexible skilled migration program will all play their role in addressing skill shortages in the resource sector.

FIFO employment has become a critical element of maintaining a viable resources sector as the industry is challenged by significant tightening in the labour market. While skill shortages are an issue for many industries across Australia at present, the problem is exacerbated in regional and remote areas due to the smaller pool of skilled labour available. By 2015, the CME predicts the WA resources industry will employ about 110,000 people, with an estimated 63,500 (or 57 per cent) of that workforce employed on FIFO arrangements.

At the most basic level, FIFO is about providing choice for workers. While some are happy to live locally or in a regional centre, many more prefer to reside in the city, where they have existing homes, social networks and services and facilities they prefer for their children and partners. By maintaining a family base in a large regional or metropolitan centre, FIFO employees have been able to maintain employment in their industry while also ensuring that they and their families are able to enjoy a good level of government and commercial services. FIFO enables employees to enjoy a different form of work-life balance. They can enjoy longer periods of time with their friends and families when not at site. The ability to access suitable FIFO rosters, with a wider array of options becoming available is improving these working conditions.

Along with changes to rosters, there has also been a vast improvement in mining camp facilities. Standard facilities on site now include en suite rooms, excellent meals and dining facilities, extensive recreation amenities such as swimming pools, gyms, sporting courts, team sports and games rooms.

In the next few years, the vast majority of FIFO workers will be involved in construction of resource projects. The work is short-term making it unreasonable for these workers to be expected to take permanent residence. With high commodity prices and the disparate location of new deposits, companies are operating mines with a limited resource life. Many of these mines are more remote or isolated from existing mining and population centres.

We are now facing skilled labour supply challenges that are potentially more acute than those experienced prior to the Global Financial Crisis. The ability to respond to the rapid increases in demand for skilled labour in the sector will be a determining factor in the on-time delivery of minerals and energy projects.

The ability of companies to offer, and individuals to take up, flexible working arrangements available through FIFO will be an essential component of the overall strategy to maintain and grow the WA resources industry's contribution to national well-being.

From the perspective of industry, use of FIFO as part of an overall workforce management strategy to support mining projects is partly a function of:

- project life and locations – it being not possible for resources projects with a short life in remote locations to support the development of a town;
- fluctuating workforces (construction and operating) over time horizons that are impractical to house in a residential situation near the project;
- the high cost of providing town infrastructure and operating that infrastructure in regional areas; and
- the clear desire by a significant proportion of the workforce for the flexibility that FIFO provides in terms of life choices – as in allowing partners to obtain/maintain work, and children higher education needs in ‘source’ communities.

In conclusion, FIFO employment is a sustainable and sensible approach to meeting the requirements of companies and individuals working in the WA resources industry. The task facing governments, industry and communities is to develop refinements as to how this model meshes with other workforce models to enhance and sustain regional and remote economic and social development.

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