

The changing look of shift work: Fly-in, Fly-out Workforces in the Resources sector – What are the Impacts and Opportunities?

It's been described as the boom that keeps on delivering - an export bonanza that will help this Country ride through the world-wide economic downturn. Across Australia, workers have vacated their jobs to make more money in the Resources sector. In the rush to exploit the nation's natural resources, employers have all but set aside the idea of developing, expanding or fostering communities. Instead they pay big wages to fly-in, fly-out (FIFO), encouraging them to work long shifts, leaving them with little reason to become part of the local community. Whereas 30 years ago, the typical shift worker was a nurse, police officer, or other front-line emergency worker, Australian Bureau of Statistics figures show that the resources sector is single-handedly changing the face of shift workers. The Resources sector now has the highest proportion of men who work shifts (52%), and we now see the eight-hour-day and home-in-time-for-tea lifestyles sacrificed to the productivity demands of resources exporters. Despite a hefty pay-packet, many sleep more nights in "donga" camps away from home than they do under their own roof with a continually rotating schedule involving morning, afternoon and day shifts. Evidence suggests this is particularly hard on the human immune system and workers are rarely there to see children off to school.

What is FIFO?

Fly In, Fly Out (FIFO) jobs are those where employees fly in to their work site for the duration of their roster, before flying out to their preferred location when off duty. Mining companies provide lodging, catered meals, cleaning and recreation facilities for workers living on site. FIFO workers may be wealthy, but are their lifestyles unhealthy? Despite wealth for toil, some FIFO workers find themselves sick and tired. Depending on roster, after fatigue is taken into account, usable time off can be often less than 75% and sometimes as little as 50%.

The FIFO lifestyle is dictated by a roster. A typical FIFO roster in mining is 2 weeks on, 1 week off. More remote mining sites may stipulate longer term rosters such as month on, month off rosters. This is due to the increased time and costs of flying workers to and from remote areas. Sites closer to city areas and major airports often allow shorter rosters such as 2 days on, 2 days off. Other common roster periods are 9 days on, 5 days off or 6 days on, 4 days off. FIFO workers are expected to work long shifts. A 12-hour shift is common but you may be asked to work even more hours. 18 hour shifts are not unheard of. While on-site, shifts are scheduled 7 days a week. Longer rosters such as month on, month off rosters may allow one day's rest every second weekend. Most rosters, however, require staff to work every day while on site.

Benefits of FIFO

People choose FIFO work for many reasons. FIFO arrangements benefit both mining companies and mine employees. For mining companies, FIFO facilitates employment of skilled individuals who would otherwise be unwilling to relocate to remote areas. For employees, the benefits include:

- Financial rewards. Mining companies pay significant travel and living allowances on top of excellent base salaries. In addition, tax concessions may apply for workers in remote areas.
- FIFO Accommodation. Many mining companies work hard to make mine site living an enticing prospect for potential FIFO candidates. Living quarters can be anything from small

portable homes with a private en suite right through to luxury hotel-type accommodation. Regardless of the style, workers can expect fully-equipped rooms with comfortable beds, television, phone and internet connection. Many FIFO workers also have access to a gymnasium and swimming pool, amongst other recreational facilities.

- Live anywhere. Skills shortage in Australia means mining companies are willing to fly workers from a number of Points of Hire. FIFO workers can live interstate in a location of their choice, while continuing to enjoy a mining career. This is especially helpful to FIFO parents with school aged children. Parents can pursue a mining career without disrupting children's schooling. The Tablelands region, west of Cairns, has the attributes to become a lifestyle destination of choice to attract Fly In-Fly out (FIFO) workers and home-based businesses in the professional services industries. There is a range of property sizes and range of Climate e.g. house in Mareeba, Atherton, Yungaburra etc., unit on Tinaroo Dam, Rural Residential, Rural etc. and the closeness to Cairns airport as a major Point of Hire.
- Extended time off. Long breaks in between shifts give people the chance to travel, pursue hobbies or other business interests and spend quality time with friends and family. As a FIFO worker, you can choose to fly home or fly to any other location in the world during your rest and relaxation (R&R) period.
- Changing jobs is easier. FIFO employees can change jobs with minimal disruption to their family and home life. A constant home base and flexible worksite makes it easy for people to change jobs, work assignments and employers to facilitate career growth and secure new income when a project ends.
- Frequent Flyer Rewards. Depending on the airline use to commute, FIFO staff may enjoy frequent flyer rewards. Even though the employer pays for flights, it is the employee who quickly accumulates points that can be used to offset the costs of leisure holidays.

High salaries are not the only factor in the decision to become a Fly-in-Fly-Out (FIFO) worker, the initial findings of a new study by Edith Cowan University (ECU) researchers have shown. A team from ECU's School of Management, led by Professor Alan Brown, have been investigating staff turnover within the iron ore mining industry in Australia. They surveyed FIFO employees on a range of areas, including job satisfaction, pay scales, rosters and training and development. Initial findings show that whilst the high salaries are attractive, employees were actually more concerned with job satisfaction, training and development and the overall camaraderie of the workforce. No major research has previously been done on this aspect of FIFO mining operations. Anecdotal evidence suggests that turnover is between 15 and 25 per cent in these companies. As demand for labour increases the turnover is also likely to increase (Brown 2012).

Professor Brown said that the results were not what the team had initially expected and went against public perception that FIFO workers were only in it for the money. *"Our initial findings have shown that many people enter into this type of employment with a long-term career goal,"* said Professor Brown. *"Money is not the driving factor we thought it would be. In fact FIFO work is seen as an opportunity to further develop careers within the mining industry."*

Based on a 5 point scale (with 5 the highest), results from the study showed that FIFO workers:

- Don't think of leaving due to money – 3.21
- Strongly agreed they're in the industry for their long term career – 4.10
- Strongly agree the availability of training influences them staying in mining – 4.03
- Feel very strongly that getting along with colleagues is important – 4.52

“This research shows that workers are not just interested in the high salaries. Employers must now balance expectations and find ways of attracting and retaining FIFO employees by focusing on training and development strategies and the provision of a positive working environment,” Professor Brown said.

Benefits of FIFO from the Company Viewpoint

The high rate of workforce turnover often associated with operations in remote areas is a significant sustainability issue for the minerals industry.

- Research indicates that families will make a decision about the FIFO working arrangement within 6 months of starting with the company. It is estimated to cost up to three times a workers wage to replace staff;
- Lower accident rates – when a worker is distracted by home issues, they are more likely to be involved in workplace incidents;
- Lower absenteeism – workers will be mentally ready to return to work after their time off and less likely to take leave due to family stresses;
- Recognition as an employer who cares – by providing support services you are avoiding other issues that can affect families who may not be coping, such as mental health issues (depression), substance abuse and marriage breakdown;

The research involved from Beach *et. al* (2003) from case studies of nine remote mining operations in Queensland and WA found:

- Annual turnover of company employees ranged from 10 to 28 per cent, with the average being 21 per cent.
- Employee turnover in excess of 20% per annum was generally considered detrimental to mine operations. Six mines were at or above this level.
- Costs for an average rate of employee turnover at a mine with 300 employees were estimated to be \$2.8m per annum.
- Managers at sites experiencing high turnover tended to see this as something that was outside of their control.
- Workplace culture and roster design appeared to have a significant impact on the turnover rate.

FIFO Personal & Family Challenges

FIFO creates challenges for the workers themselves, but also for the friends and family they leave behind. These include:

- Extended periods away from your family and friends.
- Body clock adapting to change in roster from family time in your home base to work roster time.
- Relationship strain from being out of the home working long hours.
- Children missing their father (or mother) being not at home for long periods. Younger Children, in particular, because emotionally and psychologically there is a lot going on.
- Roster changes that make it hard to plan social events in your home base.

- Possible depression - the highs of coming home versus lows of leaving for work (or vice versa)?
- Some FIFO workers indulge in binge-drinking, drug-taking and eating fatty foods when they were off site, leading to obesity. When they're on site they live a regimented lifestyle, but that may change once they return home where they may tend to drink more, eat less healthy and they are not exerting as much energy.

FIFO workers wives, children and sometimes older fragile parents are suffering from the disconnectedness, relationship strains and lack of availability of their loved ones. Many were also suffering increased levels of stress, mental illness and substance abuse, behavioural problems in children and loss of support for elderly parents (AMAWA 2012).

A Griffith University team, funded by the federal government's Australian Research Council and the CFMEU Mining and Energy division, is conducting one of the largest longitudinal studies of the social, physical, and psychological impacts of shift work: the Australian Coal and Energy Survey (ACES). While the study of over 2500 miners and over 1900 of their partners is large, in fact the respondents under-represent the stress in the industry. Those who stay in mining, such as the respondents, are characterised by a resilience that the average Australian doesn't share. Over 20% of those lured by the big money drop out within the first few months. They simply can't handle the pace. There are, of course, plenty who love the job, with the bigger slabs of days off that it can bring, but even the "thrivers" and "survivors" are showing the strain (Muurlink, 2012).

While only the first ACES data is in, and no definite conclusions about what causes what can be made, it is obvious many workers don't feel in control of the changes, and they don't feel safe. Over a third claim that they had no choice but to accept shift work. Close to 60% say they have no say at all over the amount of hours they work, two thirds say they have no say over the types of shift or which set of shifts they work, over 70% have no say over start and finish times—and this doesn't include those who say they have only "some" say over these factors. Depriving workers of control over such fundamental aspects of their working life does have serious consequences (Muurlink, 2012).

Looking at minor illnesses such as headaches, flu and abdominal pain, those who reported having no say over their hours, for example, reported an average of 1.83 illnesses on the compound scale they used in ACES, compared to 1.59 amongst those who reported having greater say. Workers who wanted to work fewer hours reported an average of 1.85 short-term illnesses, compared to 1.61 amongst those who were content with the number of hours they were working. Amongst those who wanted to work fewer hours and claimed no say over their hours, the average number of short-term illnesses was as high as 1.98. These differences remained significant even when age was controlled for (Muurlink, 2012). They may be minor illnesses, but such disorders act as a marker of immunosuppression, and links with more serious illnesses such as ulcers, heart disease, and even cancer, are beginning to appear in literature (Muurlink, 2012).

A third of fly-in, fly-out workers are dangerously obese and at risk of heart attack. The Australian Medical Association WA state president Richard Choong warned WA miners that their expanding waistlines mean many may not live long enough to enjoy the fruits of their six-figure salaries. "*Being overweight makes you a prime candidate for a heart attack, something that is compounded by the stress of the (FIFO) lifestyle with its long hours and little rest... Mining workers need to realise their health is more important than their salary,*" Dr. Choong said (in DeCeglie, 2012).

Curtin University dietitian Denise Griffiths said many FIFO workers were too exhausted at home to cook nutritious meals or exercise. *"The FIFO lifestyle is a difficult one to lead. Its long hours for weeks at a time and when (workers) come home they just want to relax and spend time with their family and friends. They want to be able to enjoy themselves and have a beer not exercise"* (in DeCeglie, 2012).

One 47-year-old truck operator said: *"I don't know whether it would have happened anyway due to age, but since being in mining ... I feel I have really pushed myself and my body too far due to the shift work. I've never been so sick than I have over the past five years. I hardly ever went to the doctor all my life and now I live at the doctor's. I truly feel that my environment at work and home is unhealthy and the shift work is a killer. I don't think I will be in mining for much longer"* (in Muurlink 2012).

Boredom and stress often lead to risk-taking behavior and, potentially, excessive drug and alcohol abuse when FIFO workers return home. The partners are left as "basically single parents" each time their partner goes back to work on long FIFO shifts. Often they are single parents who then have to deal with a partner who comes down and wants to party hard for the week that they are back. The partner then has to pick up the pieces again. This disruptive lifestyle often leads to marriage breakdowns and stress-related illnesses.

Australian Medical Association WA president Associate Professor Dr. David Mountain told a Federal Parliamentary hearing into FIFO practices, held in Perth on Tuesday 17 April 2012 that *"Almost universally, people have noticed that FIFO workers have increased levels of mental stress and mental illnesses ... quite significant increases in alcohol and other drugs ... significant rates of familial disharmony - relationship breakdowns - and significant rates of high-risk behavior"* Dr. Mountain told the hearing. *"Rates of sexually transmitted disease among FIFO workers and in some small communities where they were based were at `epidemic proportions" ... "It's very common that you're dealing with people who have caught something while they've been away in Southeast Asia"* Dr. Mountain said.

When people think about drugs and alcohol in mining, it's the workers who generally come to mind. But drugs and alcohol may affect mining wives and partners. Rosters and workload strain put a huge stress on families and this can lead to a dependency on drugs and/or alcohol as an escape. For example, the wives and partners may turn to drugs, like marijuana, and alcohol as a coping mechanism due to lack of support from the husband where the kids are concerned. One lady said *"I think mums have stressful days in general, but when your husband is gone for most of the week, us mums need a drink to relax and get us through full-on days...From what I've experienced, there seems to be a culture of drinking among mining wives living the expat lifestyle, especially in warm weather climates"*. However, most mining wives don't have financial worries or need to work because mining pays well and therefore there are options to do something more productive with their time such as study, gym, getting involved in community or charity work, making friends outside mining or even getting a hobby. With Children, many partners are busy with school, after-school activities and generally just looking after the kids to even think about other things (Martin, 2012). From a small poll of people, it seems drugs and alcohol are less of an issue among mining wives and partners who live residentially, with the miner coming home each night to eat dinner with the family, help bathe the kids and put them to bed compared to FIFO (Martin 2012).

It can be difficult to maintain a tight relationship with a partner who works away, even without kids to pile on the stress. For some women, it's like being attached, and single, at the same time. With

FIFO, marriages can break down. It usually starts with the wife not being able to deal with her husband's absence... which can lead to drugs and alcohol, then an affair and total disarray in the family unit (Martin 2012).

There is no doubt that the resources sector revolution has brought great wealth to shareholders and to the ordinary Australians who work in the sector. However, the costs are rising.

Effect on Towns

Bernard Salt, a demographer who spoke on a recent 4 Corners report on the ABC said "*Towns are at risk, I think, of losing their identity and I think it's emblematic of a number of mining towns across Australia. It's turning from a proud self-contained community into a hotel town.*"

Local businesses that do benefit from the resources boom are hotels, motels and real estate agents as house prices and rents skyrocket.

In the same Four Corners report, reporter Andrew Fowler looked at the impact of the rush to riches taking the cameras into Moranbah, in the heart of Queensland's Bowen Basin. He visited locals who could not get medical treatment and families who say they are frightened to go out on the streets at night because of violence. Things have become so bad in Moranbah that local residents voted the council out and gave the new mayor a mandate to rehabilitate the town.

WA's growing fly-in, fly-out (FIFO) workforce is putting a strain on health services, with sexually transmitted disease, alcohol and drugs, risk-taking behavior, stress and family breakdowns having major impacts (Bennett 2012). With the number of FIFO workers continuing to increase, the impacts they are having on health services are enormous. These impacts are felt most severely by smaller remote towns and communities that already struggle to provide and maintain health and other services. Dr. David Mountain told a Federal Parliamentary hearing into FIFO practices, held in Perth on Tuesday 17 April 2012 that the FIFO model was putting a huge strain on health services around Western Australia. A dearth of healthcare workers - who faced the same isolation and cost-of-living pressures as others in remote mining communities - was compounding the problem. "*Given the fact it's incredibly hard to attract people to regional and remote Western Australia already, losing any further (medical) workforce in those centres would be catastrophic,*" Dr. Mountain said (cited in Bennett 2012).

Dr. Mountain (cited in Australian Medical Association (WA) 2012) also said "*a recently completed survey of WA medical professionals showed that more than 80 per cent believed those responsible for FIFO, both governments and companies, should support and improve health services*". In presenting his submission to the Federal Inquiry Dr. Mountain detailed the results of the survey (see Table below), which also reported mental health issues as the most commonly seen by doctors when treating FIFO workers, as well as major relationship strains, drug and alcohol abuse and other lifestyle issues. Dr. Mountain warned the Committee against being swayed by arguments from the powerful mining lobby that they already contributed too heavily to all services by way of taxes paid to State and Federal governments (AMAWA 2012).

Dr. Mountain said "*Most large productive mines are making huge profits for both the miners and State and Federal governments. If State governments feel they have already raised enough funding from the miners it is essential they urgently direct funding, services and staff to those areas which*

are bearing the brunt of the FIFO migration... We realise that mining companies, like all good corporate citizens, already contribute strongly to government coffers. However their impact, according to the survey, in the health sector has been enormous". Dr. Mountain also told the Committee it is essential that both the companies and governments put money into researching what are effective remedies for the well-known issues relating to FIFO workers and their impact on communities.

Dr. Mountain said it was becoming increasingly more common for doctors themselves to adopt the FIFO model of being based in a major city and flying to remote communities. Other major issues raised by medical professionals included the costs of hiring medical and practice staff in regional areas servicing mining companies, extreme rents and poor living conditions for their staff or themselves.

Summary of AMA (WA) FIFO Survey Results

	Response %	
	Yes	No
Have FIFO/DIDO workers had an impact on the provision of health services in the community in which you practise?	56.6	43.4
If you have answered 'Yes' to Question 2, what was the impact?	25.5 (positive)	74.5 (negative)
Is your practice experiencing increased costs due to the impact of FIFO/DIDO workers?	28.3	71.7
Do you believe mining companies should make financial contributions toward minimising the health impact of their workers on country centres?	81.9	18.1
Do you believe mining companies should make other contributions to rural centres to help minimise the health impact of their workers on country centres?	82.1	17.9
Have higher costs in mining orientated centres caused you to consider leaving your current practice/ locality?	9.2	90.8

There is also an argument that society should change its social structures to accommodate the FIFO workforce rather than blaming FIFOs for social woes. Without the FIFO roster many towns would suffer severe consequences, with not only the worker but entire families forced to leave to be closer to work. If a town has 20 people who are FIFO in a small town they bring in \$2.9-3.5 million in income to that community. If they left, 20 families would leave. The flow on effect would be that two teachers would leave, possibly a doctor or nurse would leave, some shops would close... so that would have a really negative impact on the town. The same can be said that the addition of 20 FIFO workers to a town could bring flow on effects.

People have travelled for work for centuries, but unlike past experiences where relatives supported, and even honoured, family members, who sacrificed home life to earn money overseas to support the extended family, FIFOs are often stereotyped as young male bogans causing relationship and social breakdowns. Allan Tranter, who recently wrote the Chamber of Minerals and Energy submission to a federal parliamentary inquiry into FIFOs (cited in Trenwith 2012), said "*As we adjusted to a multicultural society, as we adjusted to an ageing society, so we need to adjust to a society where FIFO is a part of life... To say the resource sectors FIFOs are destroying our community is a naive*

and stupid statement for people to be making. It's a convenient, small minded political opportunity" Mr Tranter said.

"Volunteerism has been dying for years; clubs are struggling throughout the state. People are saying FIFO causes this - that's such a stupid, naive statement but it takes away the responsibility for me to have to do something about it... overall health figures for FIFO and residents is about the same, marriage breakdown is the same" Mr Tranter said (Trenwith 2012).

Clearly, with the number of FIFO workers continuing to increase strongly, the impacts they are having on health services are enormous. These impacts are felt most severely by smaller remote towns and communities that already struggle to provide and maintain health and other services.

What are the answers?

- Rosters are an extremely important term of employment, as the sacrifices workers make when they leave home are many. The challenge is to achieve rosters that strike the right balance between earning capacity and lifestyle. Workers have said that traditional FIFO rosters are too long (usually 4 weeks on 1 week off i.e. 4/1 or 28/7 days). Two rosters that workers said strike the right balance between earning capacity and lifestyle are 21/7 (3 weeks on 1 week off) or 10/4 (10 days on 4 days off).
- Children, in particular, need plenty of reassurance and connection during the period the FIFO parent is at home. Children need both parents and the most effective form of 'discipline' at her age is recognising and praising behaviour you want to see more of, and ignoring the behaviour you want to see less of.
- Mining companies could learn a lot from how the Defence Force supported families, in particular the counselling options available for the partner left at home.
- Tranter (cited in Trenwith 2012) suggests homework assistance for children of FIFO parents, encouraging schools to allow FIFO dads to volunteer during their extended breaks, establishing community digital hubs with Skype facilities to allow communication while parents are away, creating women's and children's clubs similar to support networks for families of Australian Defence Force personnel, and sporting clubs offering special FIFO memberships and competition days.
- Mining Company, Commonwealth, State and Local Government investment in Infrastructure to match the Workforces' needs in the face of multi-billion dollar developments that are delivering State and Federal governments' royalties and tax i.e. Mining companies make a special contribution to health services in rural and remote areas.
- FIFO workers with families to base themselves in an attractive, safe and secure location with the lifestyle options away from work to enjoy the 'time-off' and de-stress. The Tablelands region, west of Cairns, has the attributes to become a lifestyle destination of choice to attract Fly In-Fly out (FIFO) workers and home-based businesses in the professional services industries. When its natural assets and position is considered the potential is clear. Well suited to younger and middle aged families with adventure and lifestyle. The Tablelands is "An Adventure-seekers paradise" with Tinaroo Lake, mountain-biking, parachuting, mustering and unsurpassed scenery and sports. The price range for a "standard" urban house in Mareeba or Atherton is in the range of \$285,000 to \$420,000 for a 3 or 4 bedroom house on an Urban allotment. There is a range of property sizes and range of Climate e.g. house in Mareeba, Atherton, Yungaburra etc., unit on Tinaroo Dam, Rural Residential, Rural etc. and the closeness to Cairns airport as a major Point of Hire.

Whether FIFO benefits make the challenges worthwhile comes down to personal opinion. Many people enjoy the FIFO lifestyle, making it a long term career choice. Other people choose to accept the challenges for a short period of time, in the hope of making fast financial gains. However, the FIFO lifestyle can have an impact on relationships and societies. For some people maintaining the FIFO lifestyle, living in a country town and commuting and having the community accommodate your lifestyle is the ideal way. For other people it may be relocating their family.

If you're considering a FIFO position, try to negotiate a roster that suits your lifestyle and your coping abilities. Can you cope with living for extended periods on a mine site, or would you prefer shorter on-site stays? Are you willing to work a combination of day and night shifts, or would you prefer to work only during the day? Consider your personal tolerance for working long hours away from home, as well as your family's ability to cope without you, before committing to any FIFO arrangement.

References

Australian Medical Association (WA) 2012 *Extra mining payments required for FIFO health services* viewed 28 November 2012

<http://www.amawa.com.au/NewsMedia/MediaReleases/tabid/74/articleType/ArticleView/articleId/665/Extra-mining-payments-required-for-FIFO-health-services.aspx>

Beach, R, Brereton, D & Cliff, D (2003) *Workforce Turnover in FIFO Mining Operations in Australia: An Exploratory Study. Summary Report*. Centre for Social Responsibility in Mining and Minerals Industry Safety and Health Centre University of Queensland, Brisbane.

Bennett, C. 2012 *WA's health services strained from growing FIFO workforce* in Perth Now viewed 28 November 2012 <http://www.perthnow.com.au/business/was-health-services-strained-from-growing-fifo-workforce/story-e6frg2qc-1226330318529>

Brown, A. 2012 *Big bucks not only draw card for FIFO workers*, media release, Tuesday 10 July, Edith Cowan University, viewed 5 December 2012, <http://www.ecu.edu.au/news/latest-news/2012/07/big-bucks-not-only-draw-card-for-fifo-workers>

DeCeglie, A. "Fat FIFO workers high risk" from The Sunday Times 30 June, 2012.

Fowler, A & Cronau, P (2012) *Casualties of the Boom: Four Corners*, Podcast, ABC viewed 28th May at 8.30 pm <http://www.abc.net.au/4corners/stories/2012/05/25/3510948.htm>

Martin, B., 2012. *Mining Wives talk Drugs and Alcohol* in Mining Family Matters, viewed 26 November, 2012, <http://www.miningfm.com.au/news/news-archive/643-mining-wives-talk-drugs-a-alcohol-.html>

Muurlink, O 2012. *Despite wealth for toil, FIFO workers find themselves sick and tired*, Research Fellow, Griffith Business School at Griffith University viewed 26 November, 2012 <http://theconversation.edu.au/despite-wealth-for-toil-fifo-workers-find-themselves-sick-and-tired-8540>



TABLELANDS INDUSTRY WORKFORCE GROUP INC.
Helping to make the Tablelands a region of choice by creating a skilled and sustainable workforce

Trenwith, C 2012 *Society should change, not FIFOs* WA today viewed 20 November 2012
<http://www.watoday.com.au/wa-news/society-should-change-not-fifos-20120725-22qu8.html#ixzz2ByvmW9Wy>