


Understanding the Pilbara Region and its Economy

A BASELINE SOCIO-ECONOMIC ASSESSMENT





The Pilbara region has been a major contributor to Western Australia's economy since the 1960s.

Underpinned by strong and considered growth in the resources industry and the development of associated infrastructure, the emergence of the Pilbara as a strong resources base has been a genuine economic success story.

However, due to a range of significant unique social and economic issues, the future prospects and long term sustainability of the region may be somewhat unclear.

The ability of the Pilbara region to expand its economic base and population significantly in order to realise the government's vision for a thriving, sustainable and diversified regional economy has the potential to be compromised unless regional development planning addresses a series of challenges.

Among these are a lack of economic and industry diversity, resulting from an over-reliance on the mining industry; a lack of long-term population growth; high costs of infrastructure and services; a lack of clarity over towns service provision; and an Indigenous community that is effectively marginalised from the mainstream economy.

Over the past 18 months, Pilbara Iron has commissioned a number of socio-economic studies and surveys of the Pilbara, in order to better understand the issues that might prove to be barriers to the region becoming thriving, sustainable and diversified.

The purpose of the studies was to characterise the Pilbara region and its challenges, not to propose solutions.

Pilbara Iron's focus now is to work together with state and local governments, other companies and Pilbara communities to map a way forward for the region.

The studies have highlighted that there are few prospects for economic diversification through market forces alone. A common characteristic of the resources industry worldwide is that typically there is not a significant economic flow-on effect on the immediate local area.

Clearly, strategic, collaborative intervention by governments and industry will be needed for the region to further expand. Different sectors must work together to stimulate debate, determine strategies and policies and, ultimately, find mutually-beneficial solutions.

The research

Pilbara socio-economic studies commissioned by Pilbara Iron have included:

- (1) "The relative socio-economic status of Indigenous people in the Pilbara: a baseline for regional participation", completed by the Centre for Aboriginal Economic Policy Research (CAEPR) at the Australian National University.
- (2) "The structure and performance of the Pilbara economy: understanding the Pilbara economy and Rio Tinto's role in it", a study completed by ACIL Tasman.
- (3) "Socio-economic study of community relations in Pilbara Iron towns in the Pilbara region of Western Australia", a review undertaken by URS Australia.

(4) "Pilbara Iron: Towns Study", a desktop exercise undertaken by Curtin University in order to consider the future move towards normalisation of Pilbara towns and develop a database of evidence for future strategic planning.

These studies complement a range of other internal and commissioned external reports, including community perception surveys and township studies.

The information contained in this article reflects findings from the various studies.

Economy

The Pilbara region is dominated by a heavy reliance on the resources sector; it is effectively a "mono-economy". There are few other regions in Australia with such a dominance of a single economic sector that is as capital intensive as mining.

Mining accounts for 90% of gross regional product (GRP) in the Pilbara and 19.2% of gross state product in Western Australia overall.

In 2001-2002*, the Pilbara's GRP** was \$12.9 billion, with mining contributing \$11.4 billion. Industries that make the next largest contribution to the regional economy are related to the mining industry, namely trade (\$131m), construction (\$127m) and transport and storage (\$122m).

*01-02 financial year data was the last available Census data. While the past five years has seen rapid expansion in the mining industry, it is believed that overall trends have remained the same.

**Regional GRP of \$12.9 billion was developed through an input-output table, an economic tool created to describe a region's economy. In this case, the table was developed using 83 standardised industries. The \$12.9 billion differs greatly from the Department of Local Government and Regional Development's figure of \$3.7b due to differing methodological approaches. DLGRP calculates the size of the Pilbara economy as a share of the industries' contributions to the Gross State Product of WA using employment data. As mining is a capital intensive, rather than labour intensive industry, this calculation underestimates the value added to the Pilbara through mining.

Other unrelated industries in the Pilbara, including pastoral, fishing and aquaculture, account for approximately \$40m of the \$12.9 billion. Hospitality (accommodation, cafés, restaurants), is an important service industry in the Pilbara, but similarly its economic contribution of \$35m is dwarfed by the value of the resources sector.

Pilbara Iron is an important player in the region, with the company's share of GRP 17%.

The resources industry is known as a capital intensive industry, with comparatively low levels of employment for the value of economic wealth generated. Despite this, the mining and resources sector remains the highest employing sector in the Pilbara, with more than 5000 employees.

The next largest industry employer is construction with 2,184 employees, followed by retail trade (2,043) and property and business services (1,728). Pilbara Iron employs approximately 13% of all workers in the Pilbara region.

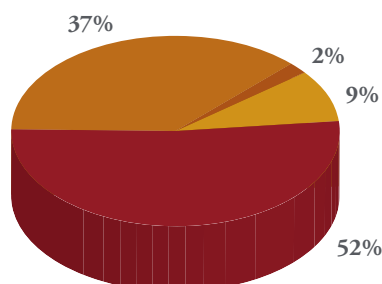
The economic modeling work conducted showed that, despite substantial wealth being generated in the region, most of the payments to suppliers for goods and services are made outside the region.

For example, a postcode search of supplier invoices estimated that 61% of Pilbara Iron's purchases of goods and services were made within Western Australia. However just nine percent of purchases were made within the Pilbara region. An underdeveloped services sector compounds the issue.

Further, of the nine percent of purchases in the Pilbara region, the value added by local industries is estimated to be in the order of six percent of total spend, as not all of the local Pilbara purchases represent goods that were actually manufactured in the Pilbara region.

Pilbara Iron spend on goods and services

■ International
 ■ Pilbara
 ■ Other WA
 ■ Australia



Mining activity in the Pilbara has expanded rapidly over the past five years, increasing by 74%, yet this does not necessarily correlate to increased economic spin-off in other sectors.

This is because there is little evidence of a corresponding expansion in economic sectors other than mining and related areas such as construction. Further, little mineral processing occurs locally, and few goods and service supply needs are met locally, hence regional economic flow-on is limited.

A lack of diversity is evident in the decrease in the total number of small and medium-sized enterprises (SMEs) in the region, with 2000 SMEs in 2000-1 and 1100 currently. This is in contrast to an increased number of small businesses throughout Western Australia.

High housing costs and difficulties in attracting and retaining employees are two of the key impediments for small businesses.

Who lives in the Pilbara?

The Pilbara, a region of 502,000 square kilometres, is sparsely populated by approximately 40,000 people, or two percent of Western Australia's population.

There is a high proportion (38%) of residents in the 25-45 age bracket, with the average age of Pilbara residents 31, compared with the state average of 34.

The population is skewed towards males, (eg 64% of the population of Pannawonica is male).

The majority of non-Indigenous Pilbara people are not long-term residents. In 2001, less than half the population had lived there five years earlier.

Pilbara residents are highly educated, with the highest proportion of people with vocational qualifications (20%) in Western Australia, and proportionally more people with a Bachelor's degree than any other non-metropolitan region.

The population is centred in the larger towns of Karratha and Port Hedland, with additional groups in Tom Price, Dampier, Roebourne, Paraburdoo, Pannawonica, Newman, Onslow and Wickham. A relatively small number of people live in Indigenous communities and on pastoral stations.

Pilbara residents are likely to be employed; the region has a lower rate of unemployment than the rest of the state. Most non-Indigenous people leave the region when they leave employment or retire from the workforce.

They are most likely to be a tradesperson or involved in production or transport roles.

The population in general has higher incomes than the state average, with the majority of people earning more than \$1000 per week, in comparison to most people in Western Australia earning \$160-\$599 per week.


Social issues

Research shows the existence of three distinct groups in the Pilbara region:

- The mining community, mainly comprising Woodside, Pilbara Iron and Dampier Salt employees. This group is, relative to other sectors, highly paid, with good access to housing.
- Community of "others", including small businesses, service providers and government employees. This group faces challenges in high labour, housing and living costs. Unable to match the salaries of the resources sector, this group often loses staff to mining. Housing standards and availability for public sector employees contributes to a high turnover of doctors, teachers, nurses. Pilbara Shires have experienced periods of having up to 30% of local government positions vacant.
- Indigenous communities. Various social, economic and cultural issues confront this group, including lack of participation in the mainstream economy and limited opportunities for economic contribution.

The non-Indigenous Pilbara population can also be loosely described according to the goals and aspirations of residents. Colloquially, there are "two, five, 10 and 20-year people".

Two-year people generally survive one Pilbara summer and two winters before leaving the region; five-year people are likely to have a clear savings goal and leave the region once they have achieved it; 10-year people often go to the Pilbara with



the intention of staying five years but stay 10 due to agreeable lifestyle conditions; and 20-year people are seduced by the Pilbara way of life and find it hard to leave, often staying for financial reasons.

The three-group and “two, five, 10 and 20-year people” models underline a range of social issues that provide challenges for long-term regional planning.

Interviews show that the majority of Pilbara residents intend on living there for a defined period and do not intend to “put down roots”.

For this reason, the majority of savings and investment (including residential housing) is done outside the region. Housing investment in the region is affected by the dominance of company housing and the boom-bust cycles that affect residential housing prices. The emergence of fly-in, fly-out workforces further compounds the issue.

Robust economies need an expanding population, however the population of the Pilbara is decreasing. In 1993, 43,000 people lived in the region, compared with less than 40,000 today.

Productivity improvements in the mining sector over the past two decades have reduced the number of employees required on minesites, even though production tonnages have increased.

The reasons people leave the Pilbara are varied. A lack of choice and availability of schools results in families relocating to Perth once children reach high school. Fly-in, fly-out options have given employees flexibility to commute for work and live in Perth.

A lack of community and sense of belonging can result from transient and decreasing populations. Resultant perceptions about Pilbara towns include a lack of community leadership, social apathy and a sense of isolation.

The Pilbara offers an attractive outdoors lifestyle for many people, with water sports, bushwalking, camping and fishing being popular pursuits.

However, as in most communities, negative social issues provide an undercurrent in the Pilbara.

There are perceptions of increasing crime rates, levels of domestic violence are almost three times the state average, and the suicide rate among males aged 18 to 25 is much greater than state norms.

There is a level of frustration about costs of living (overall, prices for goods in the Pilbara are 11.3% higher than in Perth), median housing prices are far higher than the state average, and a lack of choice and availability in services such as daycare and medical facilities.

Normalisation and Urban Sustainability

When Pilbara Iron (then Hamersley Iron and Robe River) initially built towns within the Shires of Roebourne and Ashburton, the company had full control and responsibility over all aspects of town management, maintenance and development.

The towns – in particular Dampier, Tom Price, Paraburdoo, Wickham and Pannawonica – were classified as “closed towns”.

During the 1980s, a process of normalisation occurred, with state and local government authorities starting to assume responsibility for standard functions in each community.

The majority of State and Federal Government functions in the towns were transferred to the relevant government entity during the 1980s. However, the transfer of accountability for assets and services to local government varies from town to town and in many instances is incomplete.

While some assets have been handed over to governments, Pilbara Iron currently retains responsibility for township utilities and provides in-kind maintenance and management services in Dampier, Wickham, Tom Price, Paraburdoo and Pannawonica. In particular, Pannawonica has not commenced a normalisation process and it is unlikely that this will occur.

There are a number of factors in the Pilbara that work against the financial viability of independent “normal” towns, including:

- The lack of robust population growth. The likely outcome for the region is stable or declining resident population;
- Aged infrastructure. In many areas, town infrastructure is close to 40 years old and major upgrades are needed;
- Infrastructure and assets are spread over large geographic areas and there is limited ability to achieve economies through sharing resources;
- Pilbara residents and the major employers have high expectations of quality and delivery of services; and
- Pilbara shires have limited revenue opportunities and are reliant on the grants process.

There are no simple solutions to the challenges surrounding the recent lack of progress towards full normalisation. Pilbara Iron intends to work with State and Local Governments to resolve outstanding normalisation issues.

What makes an “ideal” town?

In developing strategies for sustainable Pilbara communities, it has been important to reflect on the attributes of “ideal towns”.

Research by Curtin University characterised an ideal town as having:

- A resilient diverse economy;
- High levels of social and economic capital;
- A balance of public and private investment;
- A sense of community and belonging;
- Robust and inclusive social and local networks;
- Local formal and informal leadership and decision making;
- Adequate goods and services;
- A young population with high average education levels;
- Tolerance of diversity;
- A high proportion of owner-occupied accommodation; and
- Upward population growth.

By comparison, a company dominated town tends to have:

- A polarized “mono economy”,
- A tendency to exclude entrepreneurialism and outsiders;
- A high service and amenity demand;
- The company determining property rights;
- Paternalistic practices;
- Little or no social capital;
- A tendency to exclude new ideas and cultures;
- The company heavily influencing local governance; and
- Reduced local capacity for decision making.

While there are clearly major impediments for Pilbara towns to achieve “ideal town” status, aspirational planning by governments and industry can help to ensure that many of the ideal attributes are met.

Indigenous participation in the Pilbara

Participation in the Pilbara economy by Indigenous people is an important issue, with the Indigenous population rising, along with expectations about the role that Indigenous people will play in the mainstream economy.

The Indigenous population in the region has been rising steadily since the mid-1980s, and Indigenous people currently account for 17.5% of the resident Pilbara population.

More than one-third of Indigenous residents are under 15 years of age, with greater than one half aged 15-57 years.

Population growth highlights the urgency of addressing the range of challenges facing Indigenous communities.

Research has shown that Indigenous people in the Pilbara are severely disadvantaged, with reduced life expectancy, high unemployment, low education levels, poor housing standards and disproportionate crime rates.

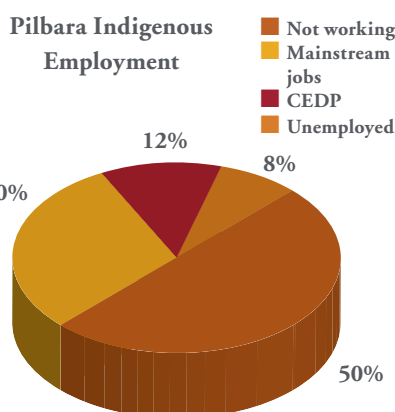
In general, Indigenous people are overly-dependent on welfare, detached from the labour market and ill-equipped to engage in it.

At the same time, they have a unique connection to Pilbara, a sense of belonging and strong family ties.

Success in increasing and enhancing Indigenous participation in the region will only be achieved by balancing family and cultural values with the needs of the mainstream economy.

Economic participation by Indigenous people remains low, despite significant advances in economic activity and employment opportunities in the region over the past 30-40 years.

The overall employment rate for Indigenous people has risen by just four percent over three decades, from 38% in 1971 to 42% in 2001. This compares with the non-Indigenous employment rate in the Pilbara of 81%.



In general, Indigenous employment in the Pilbara is higher than in other regions of Western Australia, with cleaners being the single largest occupation, compared with metal fitters and machinists the most common role among the non-Indigenous population.

Pilbara Iron currently accounts for approximately 18% of Indigenous mainstream jobs. Research shows that the resources sector will account for at least half of all Indigenous people in mainstream work by 2011.

Significantly, the Indigenous Pilbara population is on the rise. The total of 6514 residents in 2001 is predicted to rise to 8515 by 2016, when Indigenous people will represent 18% of the Pilbara population, a 30% increase.

The greatest numeric increase (17%) up to 2016 will be among those of prime working age (25-54 years), a statistic that stresses the importance of committed planning from government and employers in the region.

The reasons for lack of economic participation by Indigenous people in the mainstream Pilbara economy are complex but certainly are not unique to the Pilbara.

Ultimately, the accountability for this multi-faceted problem lies with State and Federal Governments, who must collaborate and take a lead role.

The contribution that Pilbara Iron can make to increasing Indigenous employment and business development is in the area of education support, training, skills development and direct and indirect employment opportunities.

For Pilbara Iron and other employers to meet their respective targets for increased Indigenous employment levels (equivalent to the demographic representation of Indigenous people in the Pilbara), there must be an expansion of the pool of “fit for work” Indigenous people. This means increasing the participation of people who currently work part-time, are in the CDEP program, or are unemployed.

In 2001, according to ABS Census data, 50% of working age Indigenous people in the Pilbara were not in the workforce. Reasons for lack of participation include a lack of fitness for work, health issues, substance abuse, lack of adequate housing, inadequate parenting skills, high levels of incarceration and low levels of education.

Health is a major issue for Indigenous people in the Pilbara. Life expectancy is up to 20 years lower than for non-Indigenous people (Indigenous male life expectancy is 52-55 years, female 60-63 years).

More than half of 15-year-old Indigenous males have no chance of surviving to 65.

Preventable diseases such as diabetes, heart disease and respiratory illnesses are the main causes of mortality and morbidity.

The Indigenous community is characterized by low levels of education. Indigenous students represent just nine percent of Year 12 students, while 25% of Indigenous adults complete school above Year 10, compared with 54% non-Indigenous.

Low attendance at school is another characteristic. Less than 80% of Indigenous children enrolled in primary school attend school on a regular basis.

Indigenous people represent just three percent of the 11,705 Pilbara people with a post-school qualification.

Housing standards for Indigenous people are low. In discrete Indigenous communities, 35% of dwellings don't have facilities, or have facilities that don't work.

Approximately 80% of Indigenous dwellings are rented, compared with 50% of non-Indigenous dwellings.

Crime rates among the Indigenous population are disproportionate. Approximately 60% of arrests in the Pilbara in 2003 were of Indigenous people.

Pilbara Iron has worked hard over many years to develop strategies and programmes to assist in enhancing Indigenous participation.

Through the award-winning Indigenous Training and Liaison (ATAL) unit, the company has achieved success in creating education, training, job and business development opportunities.

However, while there have been levels of individual success, Pilbara Iron recognizes that on the whole Indigenous people are marginalized.

The challenges faced by Pilbara Indigenous communities are growing. Overall regional planning must consider specific problems, which cannot be solved by either industry or government alone.

Solutions will come from the public and private sectors working collaboratively with Indigenous people to formulate strategies and deliver outcomes.

Community Perceptions Survey

In 2005 Pilbara Iron commissioned a *Community Perceptions Survey* of residents in Pilbara towns near the company's operations, in order to establish baseline attitudes and opinions.

The findings of the survey reflect anecdotal and qualitative feedback provided to Pilbara Iron through community advisory forums and community liaison representatives.

Issues of major concern to residents include:

- The high costs of living in the Pilbara;
- A lack of medical facilities;
- A lack of education opportunities; and
- The sense of isolation.

With regard to issues specifically connected to Pilbara Iron, residents identified housing and rental rates as key challenges. Fly-in, fly-out practices, operation expansion programmes, dust (particularly in Dampier and Point Samson) and environmental issues were also raised.

Residents rated employment, support for the community and economic development as being particularly important objectives for Pilbara Iron.

Pilbara Iron was easily recognised by most survey respondents, and was well regarded, particularly in terms of "fairness in dealing with Indigenous people".

There was strong recognition of the ways in which Pilbara Iron actively supports the community.

Survey respondents identified infrastructure development or maintenance, housing/rent assistance and support for medical facilities as the major ways in which Pilbara Iron could contribute in the future.

Pilbara Iron intends to utilise survey findings in development of its community relations strategy.

Conclusion

In commissioning the various socio-economic studies, Pilbara Iron sought to answer the question: *Can the region thrive at eventual cessation of mining?*

The studies raised many and varied issues, as well as some firm requirements for the long-term sustainability of the Pilbara region, including:

- Development that is aligned with the economic limitations of the Pilbara economy;
- Development that reflects a partnership approach between the private and public sectors;
- Development that elicits a higher degree of Indigenous and non-resources business participation than currently exists;
- A thriving Indigenous population that is part of the mainstream economy; and
- SMEs that can be helped to prosper, and attract and retain staff.

Mining companies cannot alone ensure the sustainability of the Pilbara region, nor will market forces on their own lead to prosperity.

Rio Tinto is sharing with stakeholders the information addressed in the socio-economic studies with the view to encouraging a collaborative approach to the planning for the future of the Pilbara.