PILBARA INDUSTRY'S COMMUNITY COUNCIL (PICC)

PLANNING FOR RESOURCES GROWTH IN THE PILBARA: EMPLOYMENT & POPULATION PROJECTIONS TO 2020

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DISCLAIMER - This publication contains statements about the Western Australian resources sector based on actual and estimated statistics and forecasts with no guarantee of future results.

Planning for resources growth in the Pilbara: employment & population projections to 2020

Background

The Pilbara Industry's Community Council (PICC) is undertaking joint planning for major growth in the output of the resources sector in the Pilbara over the period 2015-20. As part of this work, PICC is looking to broaden the understanding of the implications of this growth for service and infrastructure provision arising from the resulting employment and population changes in the region.

The key population measure normally used for service planning in Australia is based on place of usual residence (termed the estimated resident population - ERP). For rapidly growing areas with large numbers of workers on different employment conditions, such as fly in-fly out (FIFO), ERP data needs to be supplemented with other information that better reflects the likely level of demand for goods and services across the region.

The PICC therefore asked Heuris Partners to compile a bottom up picture of major planned and potential resource projects and model the resulting direct and multiplier impacts on Pilbara employment and population growth out to 2020. This paper summarises the high level results of this work, both in aggregate and for sub-regions and townships in the Pilbara, using a range of employment measures to reflect the potential locus and timing of service demands out to 2015-2020.

The work reflects invaluable data and comment from both industry and government members of the organisations represented on PICC, for which the authors are very grateful.

Data sources and critical drivers

The operating and construction employment outcomes summarised here reflect the project roll out and production/workforce assumptions for the Pilbara resource projects. These assumptions are based on individual company data, publicly available information on company investment plans and input from the Western Australian Department of Industry and Resources which maintains a database of committed and prospective projects.

Iron ore projects are the dominant driver of operating employment in the Pilbara. By contrast, oil and gas projects tend to be very capital intensive, employing relatively fewer operating staff but generating very high demands for construction workers.

Pilbara iron ore shipments underpinning the employment projections total some 700 million tonnes a year from 2015 to 2020. This is at the lower end of the potential capacity of iron ore projects known to be under consideration. This conservatism was adopted to address the uncertainty about the timing, scale and market demand of iron ore output above this figure.

The balance of residential/FIFO employment presented in the projections reflects current company judgments on how and where staff will be deployed as operations expand or contract. These judgments will flex over time as expansion plans mature and workforce supply and demand and employment preferences change.

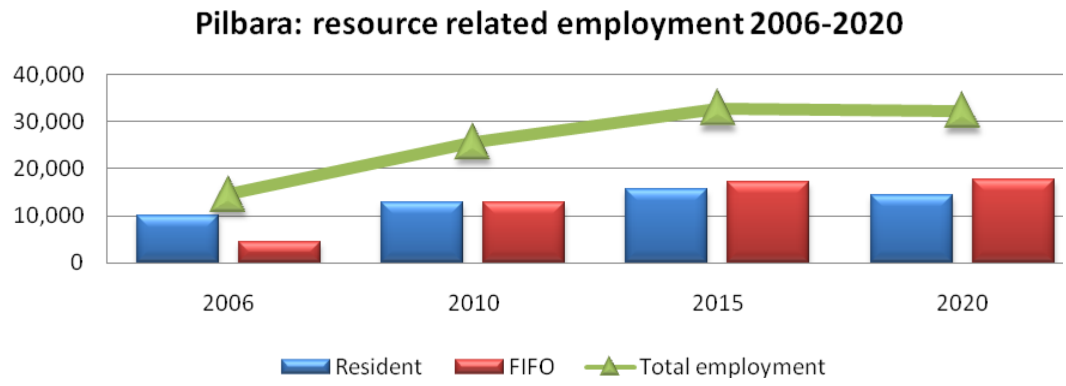
Family formation and employment multipliers are based on the results of social impact analysis undertaken for Pilbara iron ore expansion projects. The population projections use the preliminary ABS 2006 Census data for the Pilbara as a base.

Finally, the further out the projections go the more uncertain the evolution of projects and hence the potential employment impacts. The projections beyond 2015 should be treated as illustrative, with a greater degree of uncertainty around the likely outcomes.

Employment projections – operations (Figure 1)

Total resource related employment in the Pilbara is projected to grow from some 15,000 to above 30,000 from 2015 onwards. These totals include local jobs required to support direct employment in the Pilbara and FIFO positions. Residential employment increases from 10,000 to 15,000 in 2015. FIFO grows at a faster rate, rising from 5,000 to a potential 17,000 by 2015. Depending on their location, FIFO workers may create a range of pressures on Pilbara infrastructure and services.

Figure 1



Construction cycles – employment impacts (Figure 2)

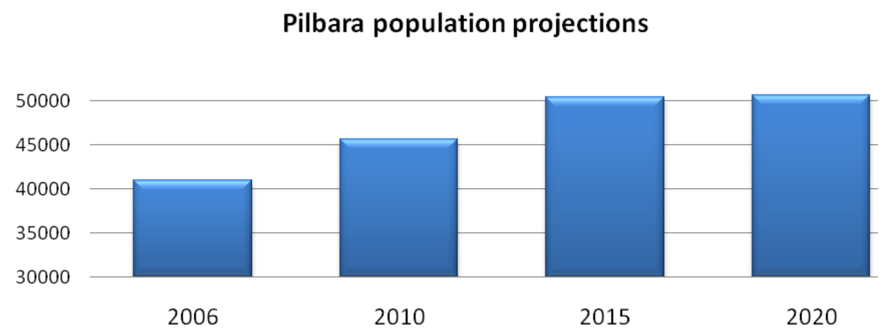
Announced investment intentions and their suggested timing imply a rapid ramp up of construction employment. They point towards an extended period in high Pilbara construction activity during 2010-2012. Construction employment is projected to reach around 10,000 in 2009, moving above 18,000 in 2010 and not dropping below 10,000 again until 2015 (Figure 3). Nearly all of these workers can be expected to be FIFO but, depending on their location, they may also create a range of pressures on infrastructure and services.

Figure 2

Population projections - the Pilbara as a whole (Figure 3)

Applying multiplier assumptions to the resident employment numbers suggests the Pilbara's population could reach over 45,000 in 2010, and exceed 50,000 by 2015. This compares with the 2006 Census figure of some 41,000.

Figure 3



Population projections – how township numbers might change (Figure 4)

These projections show residential population changes for townships/areas where resource related developments are expected to have an impact. They reflect potential changes in permanent full time workforce numbers within a geographical location but employment data by township is not shown for confidentiality reasons. The numbers should be regarded as illustrative and provisional, particularly for smaller townships where numbers are very sensitive to assumptions about the timing and locus of workforce changes. Areas have been aggregated where the location of employment is unclear.

Figure 4: township projections