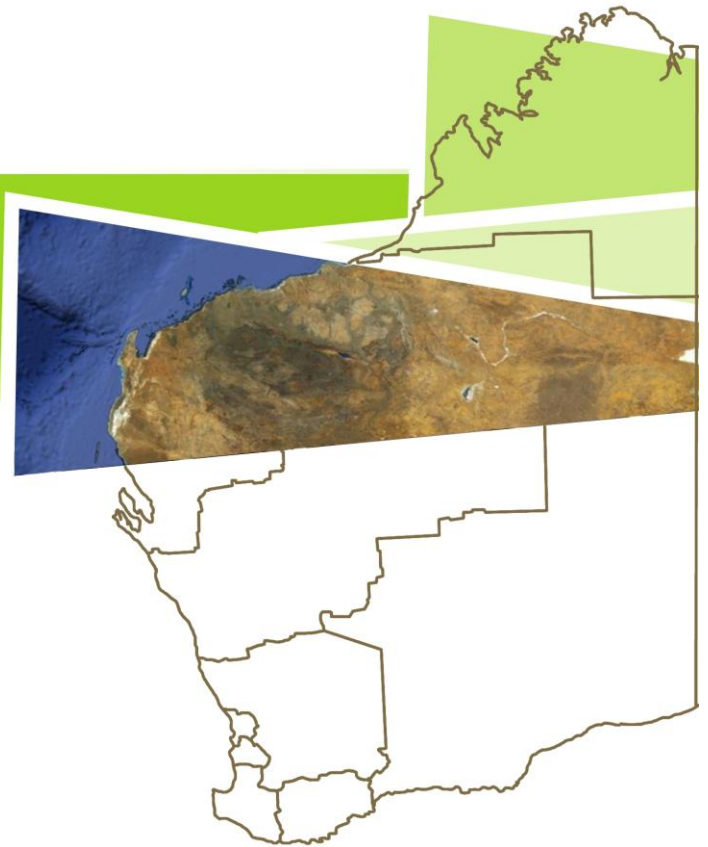




Logistics Industries ENVIRONMENTAL SCAN November 2011

Regional



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The following information relates to activity impacting on the transport and logistics industry and occurring in the nine regions of WA, as listed below:

Gascoyne	Kimberley	Pilbara
Goldfields/Esperance	Mid West	South West
Great Southern	Peel	Wheatbelt

There are currently \$176.4 billion of resource projects committed or under consideration for Western Australia. The value of advanced resources projects totalled \$86 billion in April 2010, representing 79% of resources projects across Australia (ABARE).

With such growth comes challenges and pressures, particularly those relating to ensuring infrastructure development occurs in a timely and coordinated manner.¹

Development of major infrastructure, particularly ports, transport and freight corridors and energy and water to support this growth requires a holistic response. It is apparent from the pressures currently being experienced in the Pilbara that consideration must also be given to supporting social and community infrastructure.²

GASCOYNE REGION

The major industries of the region are tourism, retail, horticulture, mining, fishing, and pastoralism.

A study has been conducted into the demand for additional berth space in the Gascoyne region to support local growth in salt and gypsum production and opportunities in the live cattle export trade. South Bejaling and Darwin Reefs are considered suitable for the export of all potential commodities identified from stakeholder consultation and desktop study. Dampier Salt has stated that it would not share infrastructure at Cape Cuvier with other salt or gypsum exporters.³

Dampier Salt intends to increase annual salt production, which will result in an increase in the size of bulk carriers loading at Cape Cuvier shiploading facility, which in turn will mean larger, more powerful tugs will be required to manoeuvre carriers at the mooring buoys. A new tug berthing facility will be built within the small boat harbour and third tug purchased.⁴

A detailed study has been undertaken by the Shire of Carnarvon to identify the relative merits and cost benefits of moving the airport to a new site and upgrading to commercial jet standards.⁵

GOLDFIELDS ESPERANCE REGION

The region has extensive infrastructure and a substantial economy, based predominantly on the extraction and processing of mineral resources (in particular gold and nickel), and well established agriculture industries, such as cereal crops, wool and livestock production.⁶

Major projects currently under way include:

Esperance Port Access Transport Corridor, involving major improvements to facilitate future expansion of the port. This will significantly improve safety for all road and railways

users, enhance community access across the transport corridor, improve transport efficiency of freight in and out of the port and reduce freight costs.⁷

Esperance Line Upgrade, Brookfield Rail is partnering with Cliffs Natural Resources to upgrade rail infrastructure to support the iron ore operation from Koolyanobbing through to Esperance Port, due for completion January 2012.⁸

Eastern Goldfields Railway Upgrade, involving the replacement of 185 kilometres of the railway between Koolyanobbing and Kalgoorlie. This will significantly increase the number of train paths per week and provide opportunities for the continued growth of exports through the Port of Esperance. Currently approximately 315 workers are employed on this project.⁹

Major planned projects include:

Portlink (\$3.45 billion), an inland freight initiative to link WA's regional ports and proposed Oakajee port to the eastern states' transport corridors through a new intermodal logistics hub to be located in Kalgoorlie. This will significantly reduce freight movements on the Great Northern and North West Coastal highways between Perth and the north and between the eastern states and the Perth metropolitan area. The three-stage project includes construction of an intermodal hub at Kalgoorlie-Boulder; a road link between Kalgoorlie and Port Hedland, including a new road north of Wiluna; and new infrastructure corridors linking the Kalgoorlie-Pilbara road through the resource rich Yilgarn and Mid West Regions to the ports at Geraldton and Oakajee.¹⁰

The comprehensive freight network will help grow regional economies, generate employment and provide social and economic benefits to regional communities. It will also break the dependence on Perth as the central distribution for interstate general freight and provide considerable saving in time and money for the transport industry.¹¹ This project will be delivered by the Department of Transport.¹²

CBH Facilities - CBH's current focus is on completing the Munglinup storage facility upgrade, which has provided another 120,000 tonnes of storage at a cost of about \$11 million. CBH is also undertaking a storage facility upgrade at Ravensthorpe at a cost of about \$6 million.¹³

Woodchip Export Facilities - Elders Forestry plans to commence construction of a facility at the Esperance Port to stockpile and handle woodchips during the first quarter of 2012, subject to the company meeting all relevant environmental and works conditioned required by the port and agencies.¹⁴ Initial production could start at approximately 100,000 tonnes in 2012 and will reach a maximum of 450,000 tonnes a year by 2013.¹⁵

Esperance Port Upgrade (\$300 million) - Esperance Ports Sea and Land, in partnership with Cashmere Iron Limited (CIL), is investigating the development of a multi-user iron ore facility to cater for projected iron ore throughput from the Yilgarn region. It is expected that this process, incorporating a definitive engineering study, environmental approvals and confirmation of funding by CIL, will be completed by October 2011. Pending ministerial approval to proceed to the next phase of the project, it is expected that construction will commence in 2012 for completion by mid 2013.¹⁶

GREAT SOUTHERN REGION

Agriculture dominates the regional economy, making it the second largest agriculture producing region. Whilst retail, building and tourism make a significant contribution to the economy, timber, fishing and mining are also important industries.¹⁷

Albany is the infrastructure hub for the regions' agriculture and mining industries. The region's woodchip exports also pass through the Port of Albany. The region has a small mining sector, with a total production value of \$5.1 million in 2009-10.¹⁸

A \$2.6 billion magnetite project near Wellstead is being developed by Grange Resources. It is planned to produce 10 million tonnes per annum of high grade magnetite concentrate to be shipped from Albany Port, via an underground slurry pipeline. The concentrate will be processed into pellets in Kemaman Malaysia.¹⁹ The Albany Port is undertaking dredging to accommodate larger iron ore ships as part of this project.²⁰

KIMBERLEY REGION

In terms of production, the resources industry is the most dominant in the Kimberley Region, with significant production in diamonds, iron ore, nickel and gold. The Argyle Diamond Mine in the East Kimberley is one of the world's largest diamond producers and provides significant opportunities for the further establishment of local support industries. High grade iron ore is mined at Cockatoo and Koolan Islands. There is also potential development of the Browse Basin offshore oil and gas reserves at James Price Point.²¹

Agricultural production constitutes 2.6% of the value of agriculture in WA, and this is attributed to the Ord River Irrigation Area (ORIA) located near Kununurra, and the large numbers of pastoral stations in the region. Whilst the Kimberley has the potential to extend commercial aquaculture development, the industry has declined in recent years. The historic pearling industry operating out of Broome also declined as a result of the global financial crisis.²²

The Port of Broome supports the Browse Basin offshore oil and gas exploration industry including seismic and supply vessels. To optimise the potential benefits from the offshore development opportunities associated with the proposed LNG precinct, the Broome Port Authority is planning to provide project ready land, additional logistic handling equipment and infrastructure modifications. Other port business includes the importation of petroleum products and cement, livestock exports, cruise liners and expeditionary cruise vessels, coastal trading vessels, pearling, fishing and tourism charters.²³

With a 47.4% indigenous population, there has been a strong focus for the Ord-East Kimberley Expansion Project to develop a range of indigenous employment and training opportunities.²⁴

MID WEST REGION

Whilst mining has been a major contributor to the Mid West's economy for some years, the region also boasts valuable agriculture, fishing and tourism industries. There are currently many mining projects and transport and infrastructure projects to support the industry.²⁵ These include the following:

Mount Gibson Iron/Geraldton Port Authority – Port Train Unloader Upgrade – Upgrade to increase iron ore receival rate to 3,000 tonnes per hour, extend port rail network to accommodate longer trains, align existing iron ore ship loading capacity with receival capacity and reduce reliance on road network to transport iron ore to port.²⁶

Oakajee Port and Rail - Development of heavy freight rail to link proposed northern mines to proposed Oakajee Port and development of an import/export multiuse, multi-function deepwater port to support a world class industrial estate, both projects under the terms of a State Development Agreement signed on 20 March 2009. Planned to commence in 2012 and be completed in 2014.²⁷

Karara Iron Ore Project – development of magnetite deposit by Gindalbie Metals at Karara. Rail solutions have been identified to transport iron products from Karara to Geraldton Port for shipping. Work on a new 85 km spur line from Karara to Tilley Siding, near Morawa commenced in 2011. The existing rail line which runs from Morawa to Geraldton will be upgraded to support Karara's production.²⁸

The Geraldton Port remains the initial solution to export iron ore products from Karara to China. Facilities upgrades at the port will include new dedicated Karara storage facilities, train unloader and a new berth/shiploader. The facilities will provide the capacity to export up to 16 mtpa. The proposed Oakajee Port, north of Geraldton, remains the planned export port for the future expansion of Karara.²⁹

PEEL REGION

The Peel Region has a diverse economy based on mining and mineral processing, agriculture (including the equine industry), timber production, fishing, manufacturing, construction and tourism. Mining is the leading contributor to the region's economy, with gold, bauxite and mineral sands the main minerals mined. The Newmont Boddington Gold Mine is expected to be the largest open cut gold mine in Australia when it reaches full production.³⁰

BHP Billiton Worsley mines bauxite at its Saddleback mine near Boddington which is transported via overland conveyor to Worsley (near Collie) to be refined. Additionally, the BHP Billiton Worsley Alumina Expansion is estimated to cost \$2.5 billion with an increase in output from 3.5 to 4.6 million tons of bauxite.³¹

PILBARA REGION

The Pilbara is rich in natural resources, generating considerable wealth for both Western Australia and the nation from an economy dominated by the extraction, processing and export of minerals and hydrocarbons. The region was responsible for 48.7% of the State's mineral production in 2009-10 and currently makes a significant contribution to the State and

Commonwealth export income.³² Iron ore accounts for 93.3% of production, whilst other resources include gold and silver (2.6%), copper (2%), manganese and salt (1.8%).

The Pilbara also services the largest known oil and gas reserves in the Carnarvon Basin, with key oil and gas projects including the following:

- North West Shelf – the State’s largest hydrocarbon export project, operated by Woodside
- Woodside Pluto project – process of gas from the Pluto and Xena gas fields, with the first LNG cargo from Pluto estimated for March 2012.
- Gorgon Project – on schedule to produce and export LNG at its processing plant on Barrow Island. Production is anticipated to commence in 2014 and end between 2054 and 2074.
- Wheatstone Project – LNG and gas project developed by Chevron Australia, and supplied from the Wheatstone and large off-shore gas fields³³

Construction of a rail line by construction firm Briety for the Fortescue Metals Group’s Solomon mine will commence shortly and is due to be completed by June 2012. Solomon lies in the Hamersley Ranges to the west of Fortescue’s existing Cloudbreak and Christmas Creek mines in the Chichester Ranges.³⁴

The Dampier Port Authority has expended its focus to consider the facilitation of trade across the West Pilbara region and to provide expertise and support to initiatives in the region, eg Pilbara Cities, Greenfield port developments, working with proponents on new export developments and improving safety and environmental management across the port locations.³⁵

Pilbara Cities - A new \$1.5 billion development in Karratha should help ease house prices in the Pilbara town. It will involve the re-vamp of the town’s centre and the construction of more than 1,500 new homes. Stage one of the development is expected to be completed by mid 2014.³⁶ A bulky goods centre is also planned as part of the town’s transition to a regional city. The complex will be the retail base for a range of stores including whitegoods, hardware and electronics.³⁷

SOUTH WEST REGION

The main contributors to the economy in the South West region are mining, manufacturing and construction. Future growth of the region will depend on the capacity and efficiency of the port.³⁸

Alumina, which accounts for 70% of exports from the Port, is railed from Pinjarra, Wagerup and Worsley on the Perth to Bunbury single track narrow gauge line. Due to the size of the freight task, congestion occurs on the track and at the Port. Planned plant expansions and a new plant near Collie will add another 40% to the annual freight task.³⁹

The southern freight component of 2.03 million tonnes is delivered to the port via a road system that contains a mix of heavy and light domestic traffic. Completion of the Bunbury Port Access Road and Bunbury Outer Ring Road will improve the efficiency of these linkages and increase public safety by separating traffic.⁴⁰

Bunbury Projected Tonnages - Targeted transport infrastructure upgrades are required to effect significant port-focused regional growth. The road network covering the Port Access Road, Bunbury Outer Ring Road, Eelup Roundabout, Coalfields Highway, a second railway track from Brunswick to the Port and re-alignment of the Preston River are inextricably linked catalysts to future economic development.⁴¹

Bunbury Port - The Bunbury Port is a seven-berth deep water facility that services the South West region. Commodities trade through the Port has grown significantly to 13.866 million tonnes in 2009/2010. This represents a 52% increase over the preceding 10 years. Trade is expected to increase by 50% in the next five years and double over the next decade.⁴² The Port is also planning the development of a container handling service, which will directly connect South West exporters to overseas markets and facilitate trade through the Port⁴³

Rail Network - Upgrading the Brunswick Junction to Bunbury Port section of the rail network with a second track is considered the highest priority rail infrastructure project in the region. This is currently the most congested section of the network and is presently operating at or near capacity. Major projects currently under consideration for the region will require access to this section of the network.⁴⁴

WHEATBELT REGION

Whilst the wheatbelt is Western Australia's most significant agricultural region, it has a booming resources industry, particularly gold, silver, nickel and iron ore, which is mined at Koolyanobbing and sent by rail to the Port of Esperance for export. Other industries include a lucrative fishing and rock lobster industry, aviation, construction and renewable energy.⁴⁵

The Wheatbelt Aviation Strategy Ministerial Taskforce report was completed and officially presented to the Minister for Regional Development and Lands in August 2010. The Wheatbelt's aviation industry continues to grow with significant developments at Northam, Cunderdin and Wyalkatchem airfields. The Wheatbelt Development Commission was not successful in accessing the resources to complete a regional aviation development plan but will continue to work with local governments and industry to develop strategic aviation related projects within the Wheatbelt.⁴⁶

The Strategic Grain Network Committee (SGNC) has released a report which outlined a plan for future investment in the grain freight network (both rail and road). The Wheatbelt Development Commission will continue to advocate for a grain freight network that is capable of delivering product in a timely manner, within a clear policy and business environment (allowing operators within the supply chain clarity to make margin/risk business decisions) while minimising community impact.⁴⁷

The Wheatbelt Development Commission is undertaking planning with local governments to identify a strategic road grain freight network. This process identified a strategic network of roads for the transfer of grain from bin to bin and bin to port. The identification of this network will allow more targeted and strategic investment in road infrastructure.⁴⁸

Mining in the central coast sub-region area is volatile in terms of commodity prices, mineral quality and mine lifespan which has resulted in a number of recent mine closures and downgrading.⁴⁹

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