

78 Tongarra Rd, Albion Park

Industrial estate economic assessment

Delmo Albion Park Pty Ltd. April 2007



This Report has been prepared on behalf of:
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1 Introduction

This report has been prepared by SGS Economics & Planning for Delmo Albion Park Pty Ltd response to the Director-General's requirements, as part of the State Significant Site Study to be submitted to the Minister for Planning. The work deals with the site adjacent to the Albion Park Airport (Airport) also known as the Illawarra Regional Airport.

1.1 The proposed development

The site is located at 78 Tongarra Road Albion Park with frontages to Tongarra Road and to the Illawarra Highway. It has an area of approximately 74ha. The proposed development involves the establishment of a business park on the currently rural zoned land. Rezoning into Business Park is a necessary provision.

The site has an area of 74 hectares of which 44 hectares or 59% will be zoned for employment uses. The remainder will be environmentally managed and conserved. The proposed development is expected to provide 290 FTE jobs during construction phase and 1 650 FTE jobs while 'in operation'.

The proposed development would provide for 62 parcels.

Table 1. Parcels of proposed development by parcel size

Parcel size	Number of parcels
< 500 m ²	0
500 – 1 000 m ²	0
1 000 – 5 000 m ²	27
5 000 m ² – 1 ha	25
1 – 5 ha	8
5 – 50 ha	0
> 50 ha	0
Total	60

Source: Delmo Albion Park Pty Ltd, 2007

Typical uses for the development would include, but would not be limited to, the following:

- bulky goods premises
- business premises
- community facilities and services
- educational establishments
- hotel, restaurant and accommodation premises
- freight transport facility
- helipad and heliport

- (light) industries
- liquid fuel depot
- mortuary
- neighbourhood shops
- office premises
- passenger transport facilities
- service station
- timber and building supplies
- transport depots
- vehicle (body) repair stations and showrooms
- veterinary hospitals
- warehouse or distribution centres

In short, the site would predominantly be aimed at light manufacturing, wholesaling, warehousing, transport and storage, business services and some retail activities.

The site is adjacent to the Albion Park Airport (Illawarra Regional Airport). To the west, the land use is predominantly rural with large lot subdivisions. To the south is the residential land of Albion Park and to the east there is an existing industrial area adjacent to the other boundary of the airport.

Albion Park is identified as a major town in the draft Illawarra Regional Strategy where business and industry will be supported. The site and the area around it is identified as employment lands in the strategy to provide employment for the large residential areas at Shellharbour and planned for West Dapto. The Albion Park Airport area is identified as a potential site for employment land.

The site is well placed in relation to transport routes with both Tongarra Road and the Illawarra Highway adjacent to the site and the Princes Highway which connect both. The new freeway will cross over the south west boundary of the site and then along part of the western boundary. The airport is adjacent to the site as is the railway and Albion Park Rail Station.

1.2 Current use of the site

Currently the land is used for agricultural purposes. For an important part the land consists of wetlands and is prone to flooding. This limits its agricultural usability to low intensity activities. It is estimated only half of the current land, approximately 40 hectares would be suitable for more intensive agricultural uses.

The current use is grazing. Grazing is a relatively low value-adding agricultural activity. In the short term its current use seems viable, unless the opportunity cost of land is considered. The land is being used by one small-scale farm firm and employs less than five persons. The farmer apparently is keen to sell, which indicates that farming is unlikely to be the 'highest and best use' when opportunity cost is taken into account.

In the medium to longer term, the economic viability of the land's current use is questionable. As surrounding developments such as residential and commercial uses in Albion Park and Illawarra

Regional Airport intensify, land values rise and local government rates will increasingly make the economic viability of the farm marginal and eventually unviable.

1.3 This report

An understanding of the future demand for industrial and commercial land and floor space is important in planning for suitable industrial areas, suitably located, to be available for future expansion of employment activities. Such an understanding allows sufficient – but not excessive – areas to be provided and allows the efficient and orderly development of infrastructure (transport, hydraulic services, energy and communications) to serve this land.

A good understanding of the demand for employment land aids in ensuring that a scarcity of land does not hamper development and local employment opportunities, that land development for these uses is not excessive – displacing other higher priority uses that could better occupy the space – and providing a rationale for the re-use of former industrial land for other purposes given that it is no longer suitable for industry due to context, fragmentation, cost or other constraints.

This report identifies the overall regional context and strategic planning framework for the Illawarra Region and Shellharbour LGA. It looks at the need for additional employment land in the Shellharbour area, and the industry requirements for land. This is put in context by a review of the currently available and planned industrial and commercial land in the region. Finally, an assessment is provided of the likely role of the proposed site within the regional context.

2 Development Context

2.1 Illawarra Regional Environmental Plan

Objectives relating to industrial development include:

- to ensure that there is sufficient industrially zoned land to meet industrial requirements;
- to encourage industries and other enterprises to locate within the region to diversify the economic base or act as stimuli to the local economy or both, and so provide new employment opportunities; and
- to locate industrial land where it will meet the particular requirements of industry while having a minimal adverse impact on the natural environment and the amenity of living areas.
- A draft local environmental plan to substantially reduce the amount of land zoned for industrial purposes shall be prepared only after the consent authority has:
 - made an assessment of land availability, land value, servicing and the location and size of industrial lots within the relevant areas, and
 - can satisfy the Director of Planning that the reduction will not jeopardise the economy or job opportunities within the relevant sub region.

The Illawarra Regional Environmental plan was developed in 1987 and is statutory. Some amendments are expected to update the plan based on new insights resulting from the Illawarra Regional Strategy (see below).

2.2 Illawarra Regional Strategy

The strategy will guide local planning in the three local government areas of Wollongong, Shellharbour and Kiama over a 25 year period.

By 2031, the region's population is expected to increase by 47,600 people. The strategy will ensure that adequate land is available and appropriately located to sustainably accommodate the region's projected housing and employment needs over the planning period.

Major regional centres are identified as Warrawong, Shellharbour City Centre, with Dapto an emerging major regional centre. Major towns are identified as Corrimal, Figtree, Albion Park, Warilla, Kiama, with Unanderra and Fairy Meadow emerging major towns.

2.2.1 Overall employment land

The Strategy seeks to position the region to capture the employment benefits of the \$140 million expansion of Port Kembla, expected to boost the local economy by \$200 million per annum and secure 1,000 direct and indirect jobs.

The Strategy requires councils to ensure an adequate supply of strategically-located employment land to create 30,000 new jobs, on top of the region's current 100,765 jobs. Wollongong is identified as a regional city, with the capacity for 10,000 new jobs. West Dapto and Kembla Grange have the capacity for 8,400 new jobs.

About 478 hectares of existing vacant zoned employment lands in Wollongong must be protected. Shellharbour and Kiama councils are requested to create new employment lands, to overcome an expected shortfall. The Strategy notes there are social, economic and environmental benefits in increasing local job opportunities to reduce the current 16 per cent outward commuter rate.

2.2.2 Shellharbour employment land

The Strategy identifies a shortfall of vacant zoned employment land in the Shellharbour LGA. Of the 535 hectares of vacant zoned employment land within the region, only 49 hectares are in the council area. Shellharbour City Council will need to identify additional employment land over the next 25 years to address this shortfall and encourage small business growth and diversification. Key employment lands and infrastructure within the Shellharbour LGA include the Illawarra Regional Airport, Shellharbour City Centre and the Shell Cove precinct.

The strategy identifies that clustering business with synergies and similar environmental impacts will reduce land use conflicts and improve business efficiency and identity. For example, clustering transport, freight and logistics in and around the Illawarra Regional Airport should be encouraged. Albion Park is identified as the Illawarra Regional Airport.

The Strategy supports a commercial centres hierarchy which clearly defines the roles of the commercial centres in the region.

Shellharbour City Centre is identified as a major regional centre with a concentration of mid to higher density living, professional services, specialised shops and associated warehousing and transport logistics. It will be a focal point for subregional road and transport networks, servicing a number of districts.

Warilla and Albion Park are identified as major towns, while Albion Park is also identified as an existing centre in which revitalisation will be encouraged to improve the mix of employment opportunities and support business viability.

A range of smaller centres such as Shell Cove are identified as having a small to medium concentration of retail, health and other services with lower density residential.

2.2.3 Other relevant features of the strategy

In support of economic development the strategy ensures that existing and proposed transport corridors are protected to support freight transport and improve network efficiencies.

The strategy proposes to provide 38,000 new dwellings by 2031 to cater for the region's growing population and changing demographics, mainly through the revitalisation of Wollongong City Centre, urban renewal around centres and the development of West Dapto.

It also places a strong emphasis on protecting high value environments including coastal lakes, estuaries, aquifers, threatened species, vegetation communities and habitat corridors by ensuring that new urban development minimises impacts on these important areas and their catchments.

According to the Stage 2 Report of the Illawarra Employment Land Strategy the demand for industrial zoned employment land will be driven by a range of forces, these include:

- A perceived need to increase employment self-containment of the workforce, reducing the present 20+% percent of the workforce commuting to Southern Sydney and providing them with careers in Wollongong; and
- The role of Shellharbour and Kiama as dormitory areas for Wollongong, together with the shortage of employment land in those LGAs, means that some 50% to 60% of the increased employment for their residents needs to be absorbed within the Wollongong LGA.

However, according to the study over a period of twenty years BlueScope Steel has the potential to raise its output and its employment of its own and contract employees by 4,000-5,000 without increasing its land needs.

A major expansion of activity at Port Kembla is expected in the future, as some operations (car imports) are shifted from the Port of Sydney. However, expansion of Port Kembla operations is unlikely to make major demands on employment land before 2020.

2.3 Shellharbour City Council Policy

The Illawarra Region is a large coal and grain exporter, home to the largest integrated steel works in the Southern Hemisphere, a national centre for metal fabrication and engineering, home to an internationally recognised university and a major tourism destination and the home for 380,000 people. The Services Sector of the economy continues to develop as well.

Over 62,000 people live in Shellharbour City. It is 154 square kilometres and the land use pattern consists of established urban and commercial areas, farmland, and new residential estates emerging as the development of the city continues. Shellharbour's key industry sectors are construction and retail.

The Council recognises there is a general shortage of industrial employment lands. Apart from the airport there is limited potential for zoning of additional and suitable industrial land because of the lack of flat land. The Council is currently preparing an economic and employment land study to identify and assess the need and potential locations for future economic and industrial development

within the council. An important aspect of the study will be an assessment of the potential for land conversion.

Self-containment of employment is an important issue within the council just as is recognised in the Illawarra Regional Strategy. Youth unemployment is a serious issue in the region, with youth unemployment rates lying around 34.5% in Shellharbour (ABS (2002), Regional Statistics). Shellharbour has a relatively young population which worsens the impact in the local context. Young workers are in general less mobile and therefore local employment opportunities for this group is of crucial importance.

Important growth sectors for local employment recognised by the Council are aeronautical industry, transport and logistics and tourism. The airport plays a crucial role in respect to these three sectors' future prosperity.

The regional airport in Albion Park, the Illawarra Regional Airport, and its small scale aeronautical industry and services sector is seen as a key driver of the local economy. It is within the Council's scope to seek for additional air services and to promote airport related industries within the airport precinct that accord with the airport light industrial zoning.

3 Regional employment growth

A range of factors influence the location of employment-generating activities in the Wollongong (SSD) and Shellharbour (LGA). The key drivers of employment growth and requirements are as follows:

- Population growth: Wollongong is expected to experience considerable population increase over the next thirty years. The 2004 Population Projections released from DoP reveal that Wollongong SSD will experience growth of 58,800 over the 2001- 2031 period. This population increase will be a key driver of employment growth and raises implications for the adequacy of employment lands in the sub-region;
- Labour market trends: increasing participation of the female labour force, the growth of part-time work, changing occupational structures, the growing importance of small businesses, and the growth of home-based work are all factors reshaping the supply and demand for labour;
- Self-containment improvement of retention: a large share of the region's workforce has jobs in the Sydney area and commutes between Wollongong and Sydney every day. A sustainable community should aim to create an area where people live, work, shop and recreate with minimal environmental costs (travel costs, car emissions) and maximum regional and local multipliers of revenue and benefits.
- Connectivity: The proximity of Wollongong to Sydney's metropolitan system, the access to suppliers, the airport and the port are all key considerations in the current and future location decisions of industry, and;
- Selective spill-over of activities from Sydney: The manufacturing, utilities, and distribution sectors, in particular, are being 'pushed' away from Sydney through intense development pressure. Areas such as Wollongong are increasingly under scrutiny as a potential firm location.

This chapter discusses population and labour force growth and its consequences for employment growth requirements to at least sustain Shellharbour's self-containment of the workforce. ABS population projections form the basis of the analysis.

In addition, this chapter evaluates expected employment growth for the area, derived from NSW Department of Planning employment projection model. Potential trends of displacement of Sydney activities towards Wollongong and Shellharbour are identified.

3.1 Population and self-containment

The Wollongong statistical sub-district, consisting of the LGAs of Wollongong, Shellharbour and Kiama, is an important population growth area for the Greater Sydney area. Over the last fifteen years population has increased considerably. Especially in Shellharbour and Kiama, population growth rates have been well above NSW average. In Shellharbour, population increased from just over 46 000 in 1991 to 57 071 in 2001. Average growth rates were approximately twice the NSW average (see table below).

Table 2. Population growth in Wollongong SSD, 1991-2001

	Census 1991	Census 1996	Census 2001	Average annual growth 1991 - 2001
Kiama (A)	15 908	17 706	18 827	1.7%
Shellharbour (C)	46 294	52 080	57 071	2.1%
Wollongong (C)	173 764	177 009	181 612	0.4%
Wollongong SSD	235 966	246 795	257 510	0.9%
NSW	5 732 032	6 038 696	6 371 745	1.1%

Source: ABS, Census 1991, 1996, 2001

Recent ABS data (NRP, 2005) show that population growth has accelerated even more since 2001. Estimated population for Wollongong (SSD) in 2003 accounted for just over 190 000, and for Shellharbour nearly 62 000.

Compared to NSW as a whole, the Wollongong labour market shows a lower than average participation rate. In 2001, 59% of the Wollongong potential was part of the labour force (see table below). For NSW this rate equals 62%. In addition, unemployment in the Wollongong area is higher than in NSW on average. Labour force participation in Shellharbour is below NSW but above Wollongong average. However, the unemployment rate of 9.4% is higher than for both NSW and Wollongong.

Self-containment is an important issue recognised in the Illawarra Regional Strategy. Self-containment could be expressed by comparing the number of workers with a job within their own residential area with the total number of workers in that area. In Shellharbour approximately 29% of employed persons has a job within that council area. In Wollongong, this share is much higher and reaches 68%. On average, approximately 57% of employed persons in Wollongong SSD has a job within their own LGA.

To bring both participation of the labour force and unemployment in Shellharbour to NSW average, an additional 1 220 jobs would be required (2001 data).

To bring self-containment of employment in Shellharbour to the regional's average of 57%, the additional number of jobs required would be 5 400 (2001 data).

Table 3. Labour market characteristics and self-containment, 2001

	Participation Rate (% of potential labour force)	Unemployment (% of labour force)	Resident workers	Jobs accessed by resident workers	Self-containment (jobs / employed persons)
Kiama (A)	59%	6.0%	7 766	2 849	37%
Shellharbour (C)	60%	9.4%	22 622	6 644	29%
Wollongong (C)	58%	9.1%	72 399	49 354	68%
Wollongong SSD	59%	9.0%	111 163	58 847	57%
NSW	62%	7.2%			

Source: ABS (Census 2001), DoP (employment 2001)

Since 2001 population in Wollongong as a whole and Shellharbour specifically has increased considerably. According to ABS population projections to 2002-2022 population of Shellharbour is expected to grow twenty four per cent between 2002 and 2022. Its growth rate is much higher than for Wollongong SSD (11% population increase) and NSW as a whole (16% population increase).

Table 4. Projected population growth, 2002 - 2022

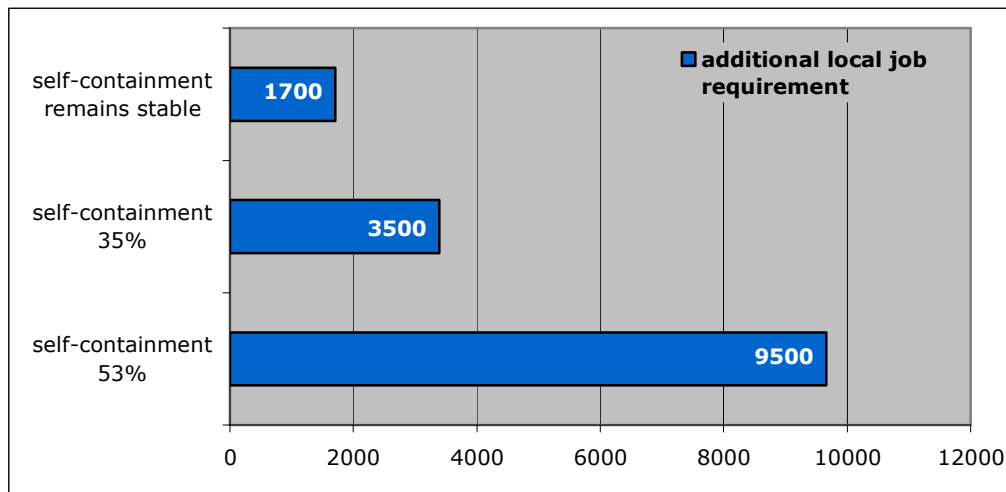
	2002	2022	count growth 2002-2022	% growth 2002-2022
Kiama	20 139	23 205	3 066	15%
Shellharbour	60 696	75 349	14 653	24%
Wollongong (LGA)	191 254	203 670	12 416	6%
Wollongong SSD	272 089	302 224	30 135	11%
NSW	6 640 355	7 683 993	1 043 638	16%

Source: ABS, 2006

The figure below shows the number of additional jobs required in Shellharbour between 2002 and 2022 to at least retain current self-containment. Between 2002 and 2022 Shellharbour should accommodate an extra 1 700 jobs to keep its self-containment rate at the current level of 29%¹. To significantly improve its self-containment to 35%, total employment within the LGA should expand with approximately 3 500 in twenty years. Currently, self-containment in Wollongong SSD is approximately 57%. If Shellharbour was to reach this regional containment level, it would need to provide for nearly 9 500 additional jobs.

¹ Assuming its labour force participation and unemployment rate remain stable, and assuming that all additional jobs are taken up by resident workers

Figure 1. Required additional employment in Shellharbour, three self-containment scenarios, 2002-2022



Source: SGS (2007)

Conclusions

Shellharbour is to a certain extent a dormitory residential area. Many residents commute to Wollongong or even Sydney for their jobs. Just 29% of working residents have a job within the Shellharbour municipality. The Illawarra Regional Strategy aims to retain and where possible to improve the level of self-containment within the region. Local job creation is crucial to achieve this goal and at the same time allow for substantial projected population growth.

Shellharbour shows an above average level of inactive persons due to a low labour force participation rate and a high unemployment rate. Approximately 1 200 additional jobs would be needed to overcome this backlog and have a comparably strong labour market as NSW on average (2001 estimate).

Population growth between 2002 and 2022 is projected to remain strong. Population growth poses substantial pressure on requirements for the creation of additional jobs within Shellharbour. To retain its current self-containment level of 29% at least 1 700 additional jobs need to be created. To significantly increase Shellharbour's self-containment level to 35% in 2022 at least 3 500 additional jobs would be needed.

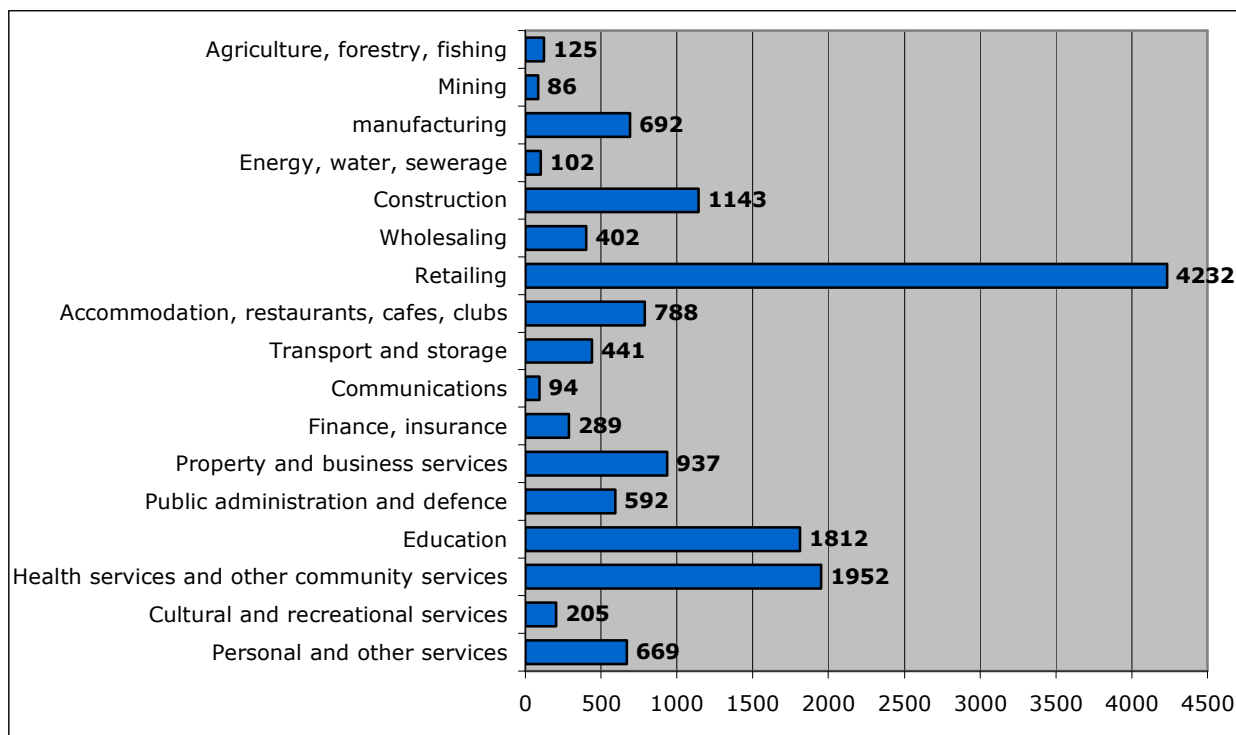
3.2 Employment projections

According to NSW Department of Planning employment data reveal that estimated employment in Shellharbour lies around 15 000 jobs in 2006, which accounts for approximately 14% of total employment in Wollongong SSD.

The figure below shows the distribution of employment by sector. Shellharbour's major sector in terms of employment is retail, followed by health and community services and education. These

sectors of employment are population driven and aimed at servicing local population. It represents a typical economic distribution for a dormitory community. Export oriented industries such as manufacturing, mining and to a lesser extent wholesaling and transport & storage play a much less significant role in Shellharbour.

Figure 2. Employment by industry, Shellharbour, 2006



Source: NSW DoP, 2006

Employment projections for Shellharbour's economy look prosperous. Annual average employment growth rates in Shellharbour are expected to lie around 1.8% between 2006 and 2031, which is considerably higher than the regional average of 0.8% per annum (Wollongong SSD). In total, economic expansion in Shellharbour is projected to equal nearly 8 300 jobs between 2006 and 2031.

The table below shows projected growth per sector of industry. The shaded cells belong to sectors that would be suitable to locate on the proposed development at 78 Tongarra Road. In total these relevant sectors add up to approximately 5 800 jobs over the next 25 years. However for some sectors like retail, only a modest portion of the total will be suitable for the subject site. Annual employment growth rates in these relevant sectors are higher than in the economy as a whole; 2.1% compared to the previously mentioned 1.8%. For the entire region of Wollongong employment in the relevant sectors is expected to grow by 12 050.

Table 5. Projected employment growth by sector, Shellharbour and Wollongong SSD, 2006 – 2021

Sector of industry	Shellharbour 2006-2031	Wollongong SSD 2006-2031
Agriculture, forestry, fishing	0	220
Mining	30	-265
Manufacturing	165	-4 125
Energy, water, sewerage	65	-265
Construction	100	-645
Wholesaling	235	760
Retailing	3 845	8 455
Accommodation, restaurants, cafes, clubs	375	2 125
Transport and storage	245*	-975
Communications	-20	-45
Finance, insurance	-5	60
Property and business services	835	6 455
Public administration and defence	180	3 305
Education	1 105	1 905
Health services and other community services	1 095	4 845
Cultural and recreational services	70	320
Personal and other services	225	940
Unclassified	-25	-235
TOTAL	8 520	22 835
Sum relevant sectors	5 800	12 050

Source: NSW DoP, Nov 2006 (rounded numbers)

According to the *original* employment projections, employment in the transportation and storage sector would decrease over the next 25 years. However, it is not likely this would occur. On the contrary, transport related activities are expected to increase because of the area's proximity to Sydney, expanding port activities and good transport connectivity (see also text below). Therefore it is assumed that transport related employment will expand by 1.8 % per annum (equal to wholesale employment growth) between 2006 and 2031.

On top of projected employment trends, some additional potential developments could further stimulate economic growth in the area. The airport next to the proposed site is home to and attracting aeronautical small firms and is seen as a developing aeronautical cluster. Anecdotal evidence reveals small-scale aeronautical firms are interested in locating at the regional airport. Over the last 18 months five new businesses were attracted to the airport. The airport is small-scale and therefore attractive for small-scale aeronautical industries, such as light avionics, maintenance, training and repair of aircrafts. Furthermore, it seems the attractive location of the airport (near Sydney and well accessible) is being recognised more widely. Some of the aeronautical industries are relocating from regional airports such as Queanbeyan and Camden to

Albion Park. Located at the airport is the Historical Aircraft Restoration Society which hosts major air shows on a frequent basis, attracting many visitors.

Also, it is expected the airport will expand its role in passenger transportation. Currently, passenger transportation consists of business flights for BlueScope Steel in Wollongong and a new passenger service by Qantas, which is doing well. Planned tourist developments at Shellcove Marina are expected to generate additional passenger traffic to the airport.

Land availability in metropolitan Sydney area is deteriorating and land value levels increasing. As a result the use of employment lands is intensifying (more employees per hectare). Also, accessibility of sites within Sydney's urban fabric is becoming an issue for industry supply chains. As a consequence, some industrial activities are pushed out to available, affordable and accessible land at the fringes of Sydney. Wollongong SSD is well situated to capture an important share of Sydney's overflow. It is located near Sydney, well accessible by road through the Princes and Illawarra Highways, accessible by rail and by air and Port Kembla. From 2008 and onwards Sydney's car import industry will be relocated to Port Kembla. The investment tied to the relocation is approximately \$140 million. It is expected the industry will attract additional transport & logistic and other servicing activities to the area.

Conclusions

Projected employment trends show that employment in Shellharbour is expected to grow approximately 1.8% per annum between 2006 and 2031. Wholesale, (light) manufacturing, retail, accommodation and business service activities – sectors that would potentially locate on the proposed site – are expected to grow at a higher pace of 2.0% per annum. These sectors are expected to provide employment for an additional 5 500 persons up to 2031.

In addition to that Wollongong SSD and the Illawarra Regional Airport could potentially benefit from firms that are pushed out of Sydney and choose to relocate in the area and benefit from its location benefits.

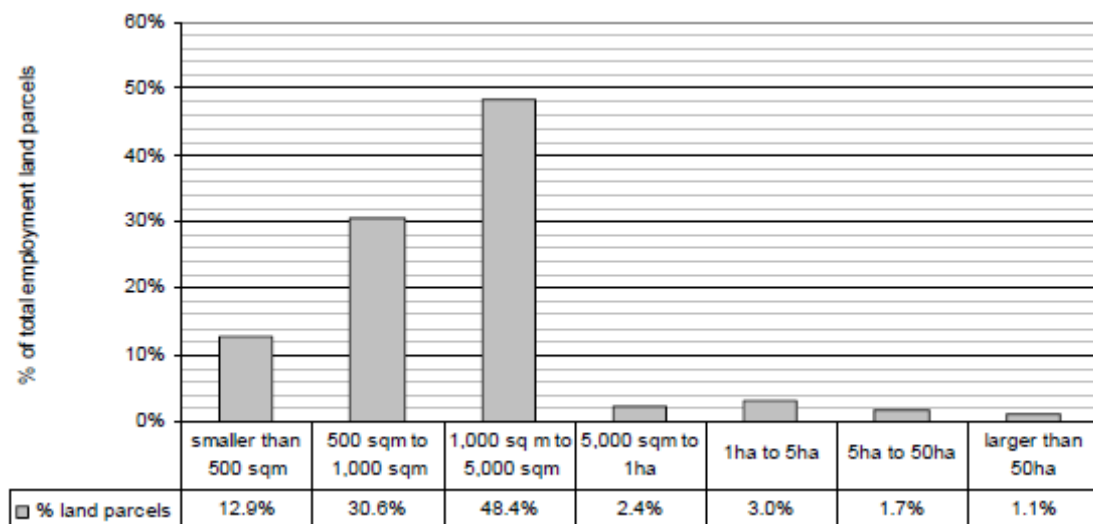
4 Availability of land in area

In 2004 SGS conducted the Illawarra and South Coast Employment Lands Audit for DoP NSW. The employment land audit reveals that in Shellharbour 884 hectares of land is being occupied by industrial activities. This amounts to approximately 18% of the overall employment land area in Illawarra and South Coast region.

The vast majority of employment land in Shellharbour, 666 hectares or 75%, is used for mining activities. The remaining share (25% or 218 hectares) is of importance to this study: land used for activities such as manufacturing, wholesales, retailing, transport & storage and services.

Land use patterns show the predominance of small businesses in Shellharbour's economy. Most parcels in Shellharbour are smaller than 5 000 m² in size (see figure below). By contrast, less than 6% of parcels are larger than 1 hectare. Nearly all large parcels of 10 hectares and over are taken up by the mining industry.

Table 6. Land use by parcel size, Shellharbour, 2004



Source: SGS Employment Land Survey, 2004

Supply of sites between 5 000 m² and 1 hectare is for an important share located at the Oak Flats business park just south of the regional airport. This relatively young estate was taken up fairly quickly.

Availability of vacant land

Shellharbour Council indicates it perceives there is a shortage of industrial land. Additional supply to allow for future economic growth is limited to a few, predominantly small sites that are dispersed over the council area. Apart from the proposed site, the most substantial site would be in Shellcove with nine hectares of land available to corporate and commercial uses (non industrial uses). Due to its topography the amount of flat land suitable for industrial use is limited. The

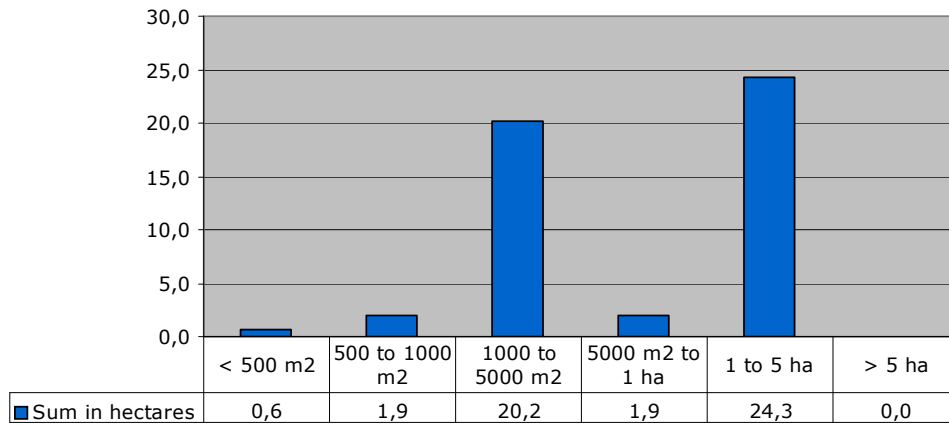
Council is planning to conduct an analysis to assess the potential for land conversion. Experience shows that in case of land conversion and rezoning the new use is often that use which delivers the highest returns. Often one would observe these are residential and high quality commercial uses.

At time of the land audit in 2004, Shellharbour had approximately 180 parcels of vacant land that account for nearly 50 hectares. The majority of vacant parcels remained undeveloped while approximately 40 were classified as developed. Most of these developed sites were serviced with water, electricity and telecom infrastructure. Of the undeveloped sites just over half (56%) had been levelled in preparation for some form of development.

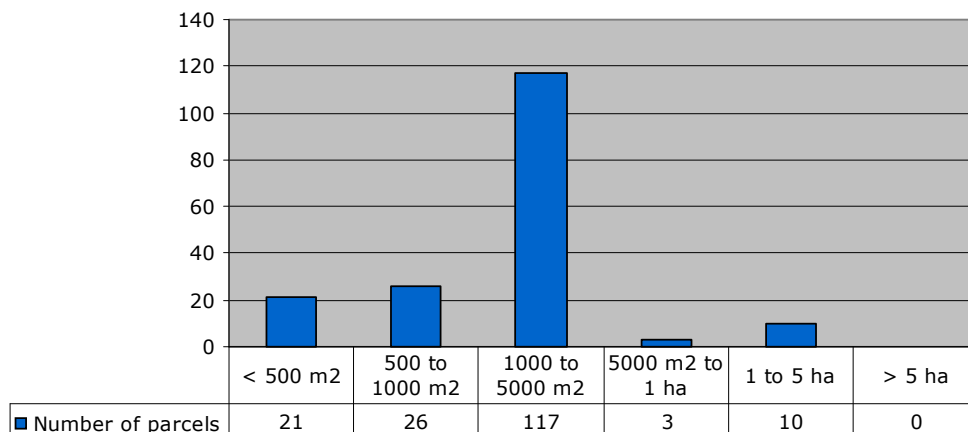
Most vacant land available in Shellharbour consists of parcels between 1 000 and 5 000 square metres, in terms of number of parcels and a large proportion of total area. The figure below shows the distribution of vacant parcels to parcels size in terms of total land and in number of parcels.

Figure 3. Vacant, undeveloped land by parcel size, sum of land in hectares (a) and number of parcels (b)

a



b



Source: SGS Employment Land Survey, 2004

Many of the smaller vacant sites in Shellharbour are too small for industrial development. In addition, these sites are dispersed over the council area, which makes merging of sites impossible.

Currently, within Shellharbour LGA there is approximately 50 hectares of vacant land. This means approximately 5.5% of all employment land is vacant. As a rule of thumb, to smoothly allocate economic growth and industrial development a growth area one should allow for approximately 10% of vacant land, which would account for approximately 88 hectares. Specific requirements in terms of location, parcel size, accessibility, infrastructure and other services differ for firms according to their activities and size. A substantial vacancy rate is required to better enable the supply of a wide range of parcels that can meet specific needs.

Conclusions

Availability of employment land to allow for future economic growth is limited within Shellharbour. Supply of parcels in the range of 5 000 m² to 1 hectare is limited (3 vacant parcels in 2004). Vacancy rate for employment land in Shellharbour is 5.5%, which is fairly low.

5 Employment land demand

In recent years, from approximately 2004 to 2006, the number of development applications for industrial activities in Shellharbour has decreased somewhat. This movement is consistent with the overall business cycle in the entire region. After a period of strong economic growth, price rises and interest rate rises the willingness to invest and expand has flattened. Overall, Shellharbour Council indicates there is a shortage of industrial land to allow for future demand. This perception is substantiated by DoP employment projections for the period between 2006 and 2031.

Demand for employment land, based on current land use patterns (i.e. land use per person employed) and employment estimations as discussed in Chapter 3, is expected to expand considerably. In the analysis, future land demand for mining activities was not taken into account although a part of the sector's activities would potentially classify as light-industrial.

Shellharbour is expected to experience a period of continued economic growth between 2006 and 2031. To be able to accommodate future industrial uses it is estimated additional supply of between 66 and 92 hectares will be needed within the Council. The table below shows the estimated additional industrial land demand for Shellharbour between 2006 and 2031. Employment projections of DoP were used as input. Land use per employee ratios were computed². These ratios were then applied to projected employment growth between 2006 and 2031.

Table 7. Estimated demand for additional land, Shellharbour, 2006-2031

	High scenario	Low scenario
Estimated additional land demand (selected sectors*)	92	66
Estimated additional land demand (all sectors excluding mining)	130	93

* manufacturing, wholesale, construction, retailing, accommodation, cafes and restaurants, transport & storage (including air transport) and business services

Source: SGS (2007)

Projected demand for industrial land of 66 to 92 hectares includes those sectors the proposed development at Tongarra Road aims at: manufacturing, construction, retailing, retailing, accommodation, cafes and restaurants, transport & storage (including air transport) and business services. These activities in general have a representative intensity of land usage per employee of between 60 and 80 square metres per employee. Transport related and some manufacturing activities are relatively larger land users with ratios between 180 and 370 square metres per employee.

² Land use data are from the Employment Lands Survey from 2004. Employment data are from 2001 (Census) and 2006 (DoP). Land use ratios are computed through dividing land use through employment. The high scenario used 2001 employment data as input. The low scenario used 2006 employment data as input.

The above projections do not include the potential attraction of activities that are being pushed out of Sydney and other unforeseen major industry investments.

Small to medium sized parcels between 1 000 and 5 000 square metres are, based on current land occupation patterns, in demand. However, an important share of the small parcels is not being used specifically by industrial activities. Shellharbour is characterised by small business entrepreneurship. There is no evidence this pattern is about to change in the future; small businesses will continue to be the drivers of the local economy.

Previous experience (Oak Flats Business Park) suggests there is specific demand for medium-sized parcels of between 5 000 m² and 1 hectare. In addition, the Wollongong area is expected to expand its logistics and warehousing related activities. In general, these activities tend to use medium-sized parcels between 5 000 m² and 1 hectare and to a lesser extent up to 5 hectares. The Council confirms there is unmet demand for land parcels of between 3 and 5 hectares.

The Illawarra Regional Strategy states large sites are in demand as well, especially parcels of 10 hectares and over.

Conclusions

Projected additional demand for employment land between 2006 and 2031 is expected to lie between 66 and 92 hectares for selected activities. Total demand for employment land is expected to lie between 93 and 130 hectares. These estimates do not include potential influx of displaced activities from Sydney or other unforeseen major developments.

It is expected demand would be aimed at small parcels between 1 000 and 5 000 square metres and at medium-sized parcels of 5 000 m² to 1 hectare. Currently, most supply of industrial land is dispersed over the area. A larger combined industrial-commercial estate would offer flexibility to certain users. In addition, there is a perceived unmet demand for parcels of between 3 and 5 hectares.

6 Role and suitability of subject site

The proposed development

The proposed industrial development at Tongarra Road, Albion Park would consist of 44 hectares of employment land or 60 parcels. The site is expected to provide full-time employment to approximately 1 650 persons. Nearly half of the parcels are small with an area of between 1 000 and 5 000 m². Most other parcels would fall in the 5 000 m² to 1 hectare category. In addition, the proposed site would include eight parcels of between 1 and 5 hectares.

The development would aim at uses that include airport and aeronautical activities, light manufacturing, wholesales, transport (including air passenger services), accommodation, cafes and restaurants and business services.

The proposed development is located next to the Illawarra Regional Airport and would be directly accessible from the Illawarra Hwy and indirectly from the Princes Highway. Nearby rail infrastructure would also be available.

The regional context

The Council of Shellharbour is seen as a dormitory town and for employment is dependent on jobs outside the council predominantly in Wollongong and to a certain extent Sydney. Population is expected to grow considerably up to 2022 with approximately 24% compared to 11% in Wollongong SSD. Self-containment of employment is an important issue for the region and a true challenge in the face of projected population growth. One major employment issue is the high unemployment rate for youth which nearly equals 35%. Due to their limited mobility, local employment provision is essential in providing Shellharbour's youth a prosperous future.

Illawarra and South Coast region are important economic growth areas, increasingly capturing displaced industries from Sydney. One example is the relocation of the car imports cluster from Sydney to Port Kembla. The area offers relatively affordable land and is well serviced by road, rail, air and port infrastructure facilities. In addition, the area is much less tormented by congestion issues as is Greater Sydney. At the local level, Shellharbour is home to a growing aeronautical cluster with an increasing number of firms needing a location near the regional airport.

Land supply and demand for industrial uses

Employment projections indicate demand for additional land in Shellharbour is expected to lie between 66 and 92 hectares for selected activities that would be suitable to locate at the proposed Business Park site. Total demand for additional employment land is expected to lie between 93 and

130 hectares, mining sector excluded. These estimates do not include potential influx of displaced activities from Sydney or other unforeseen major developments.

Currently, within Shellharbour an area of 49 hectares of land is vacant for employment use. The vacancy rate is just 5.5%, which is fairly low to flexibly allocate demand for land. In addition, the Council indicates it expects there is limited potential to create additional industrial land in the near future. The Council is planning to do an economic and employment land study to assess in detail what potential is available for future development.

For Shellharbour, estimated demand for additional land for uses that would potentially locate on the proposed site equals 66 to 92 hectares between 2006 and 2031. In light of expected future demand for land and the current availability of vacant land there is an obvious shortage of land to allow for future growth of employment. Land supply shortage would lie between 17 and 43 hectares just for selected activities, assuming these selected uses would take up all of currently available vacant land (see table below).

However, it is more plausible to assume that vacant land would partly be taken up by other activities such as health services, government administration and other services as well. Based on that assumption, total demand for additional land would add up to 93 to 130 hectares between 2006 and 2031. The land shortage would be between 44 and 81 hectares (see table below).

Table 8. Future demand and supply of land for industrial uses, Shellharbour, 2006-2031

	Future demand for selected uses 2006-2031	Future demand for all uses 2006-2031 (except mining)	Currently vacant land	Estimated shortage of land for selected uses	Estimated shortage all uses (except mining)
Low	66	93	49	- 17	- 44
High	92	130	49	- 43	- 81

Source: SGS (2007)

Current supply would not be sufficient to meet projected demand for employment land. The potential shortage of land would be a severe barrier to future economic growth in Shellharbour and would worsen local issues of self-containment and youth unemployment. The proposed development could potentially reduce the impending shortage of employment land. The proposed development would offer 44 hectares of industrial land, which is enough to offset future demand according to the low scenario or to significantly reduce land shortage according to the high scenario.

In addition, the present industrial land use pattern shows the predominance of small businesses and occupation of small parcels (1 000 to 5 000 m²) in Shellharbour. There is no evidence this pattern is about to change in the future; small businesses will continue to be the drivers of the local economy.

Illawarra is expected to expand its logistics and warehousing related activities (Port Kembla). This could push up demand for medium-sized parcels between 5 000 m² and 1 hectare and to a lesser extent up to 5 hectares. Potentially, a share of this additional demand for land could be attracted to Shellharbour. Recent uptake of land in Oak Flats Business Park reveals there is substantial demand for parcels of this size. The proposed development is well located in terms of access to transportation to take advantage of these needs. In terms of parcel sizes, it would fit well with expected demand characteristics. It would predominantly offer parcels of 1 000 m² to 1 hectare.

In addition, Shellharbour Council indicates most supply of industrial land consists of small parcels fragmented over the area. Most of these sites are too small for industrial development. The Council identifies there is unmet demand for parcels of between three and five hectares. A business park that consists of a large number of sites would offer flexibility in land use for certain users.

Also, the proposed development could provide synergies with the adjacent regional airport and its aeronautical cluster. Availability of vacant land on the airport is limited. Future growth prospects for both the aeronautical cluster and (tourist) passenger flight services look prosperous.

Appendix 1

List of contacted professionals:

- Louise Wells, Environmental Planning Officer, Department of Planning, Southern Region
- George Curtis, Regional Planner, Department of Planning, Southern Region
- Kate Harris, development manager, Ashe Morgan Property
- Michael Tuffy, strategic planner, Shellharbour City Council
- Jane Robinson, economic development officer, Shellharbour City Council
- Geoff Hoines, group manager Planning Services, Shellharbour City Council