Social Impact Commentary

SIMTA

SYDNEY INTERMODAL TERMINAL ALLIANCE

Part 3A Concept Plan Application

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urbis

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1 Introduction

This report has been prepared on behalf of the Sydney Intermodal Terminal Alliance (SIMTA), a consortium of Stockland, Qube Logistics and QR National, and in respect of a proposal for an Intermodal Terminal Facility (ITF) at Moorebank Avenue, Moorebank. It has been developed to assess the surrounding demographic, social policy context and identify a range of social impacts and benefits associated with the proposed development. It also highlights some of the mitigation measures proposed for the development that will reduce some of the social impacts identified through the consultation process.

The Preliminary Environmental Assessment noted that the Environmental Assessment would identify and assess the potential social and economic impacts deriving from the SIMTA Moorebank ITF. The social impacts of the proposal at a local level have been identified and assessed as part of the public consultation process and have factored in the identified environmental impacts and any mitigation and management measures proposed to off-set those impacts.

This document includes:

- a demographic profile of the South-West Subregion, Liverpool LGA and the suburb of Moorebank;
- a review of relevant documents and policies with a review of their implications for the development of an intermodal terminal at Moorebank; and
- Identification of a range of potential community impacts and benefits building on issues identified through the draft community consultation report and the findings of the specialist reports.

The purpose of this report is to provide SIMTA with an assessment and summary of potential social impacts and benefits and highlights details of where these have been addressed in the specialist reports and where, if required, mitigation measures have been proposed.

We note that the Director Generals Environmental Assessment Requirements (DGRs) have no specific social impact assessment requirements and that this report was prepared in parallel with the statutory process to provide a summary of the potential social impacts identified through the community consultation and the mitigation measures identified in the specialist reports.

1.1 BACKGROUND

It is proposed that the Moorebank ITF will provide an integrated transport solution for the movement of freight to, from and within the Sydney metropolitan area. It is envisaged that this will in turn provide a boost to national productivity, reduce business costs, alleviate urban congestion and address the critical shortage of freight handling capacity in Sydney. A staged redevelopment of the ITF is expected to commence in 2013 (subject to planning approval), with the first stage of the ITF expected to be operational by 2016.

1.2 PROPOSED MOOREBANK INTERMODAL TERMINAL FACILITY

The SIMTA site is located on Moorebank Avenue, Moorebank. The legal description of the property is Lot 1 in Deposited Plan 1048263. The key existing features of the site are described as follows:

- The total site area is approximately 83 hectares.
- The allotment is regular in shape, with a length of 1,382 metres and a width of 600 metres.
- Relatively flat topography with a low hill on the eastern part of the site.
- The site has been developed and currently comprises approximately 238,000m2 of low-rise buildings, including warehouses and administrative offices.

- The site is in private ownership and is currently owned by MIPT (SIMTA). The site is currently occupied by the Department of Defence and is commonly known as the Defence National Storage and Distribution Centre.

- A rail corridor that comprises approximately 65ha of land, being: the Commonwealth land situated between the southern boundary of the SIMTA site and the East Hills Railway line, the Southern Sydney Freight Line railway corridor land to the west, the School of Military Engineering on the western side of Moorebank Avenue, and the Glenfield Waste Disposal Centre land on the western side of the Georges River. The rail corridor will contain a 30 metre wide rail alignment to accommodate freight rail movements between the SIMTA site and the SSFL.

The site is also surrounded by Federal Government owned land to the east and south. The area was nominated by the NSW Government because of the following advantages it has over other sites:

- Large size in single ownership;

- Over 2 kilometres in length, thereby allowing it to accommodate trains of up to 1.8 kilometres in length;

- Proximity to key transport corridors including the proposed South Sydney Freight Line, main interstate rail line, and the M5 and M7 Motorways;

- Proximity to key industrial precincts in Western and South-Western Sydney, including Bankstown, Prestons and Ingleburn.

The terminal facility operations will involve freight being loaded onto trains at Port Botany, directly transporting containers to Moorebank on a dedicated freight line, unloading the containers at Moorebank into warehouses on site or onto trucks for delivery to businesses and warehouses across South-West Sydney. This operation would also work in reverse, taking freight containers to Port Botany.

It is expected that, once fully operational, the facility will have capacity to handle up to 1 million TEUs annually. The expanded freight rail capacity that will be achieved through development of the Moorebank ITF will support the New South Wales Government's target of increasing the share of freight that is transported from Port Botany to Sydney's intermodal facilities by rail to 40% by 2025, from 23% in 2009.

1.3 THE CONCEPT PLAN

The Concept Plan is to seek approval for the redevelopment of the SIMTA site as an intermodal terminal with warehouse and distribution facilities. The proposal comprises the following key components:

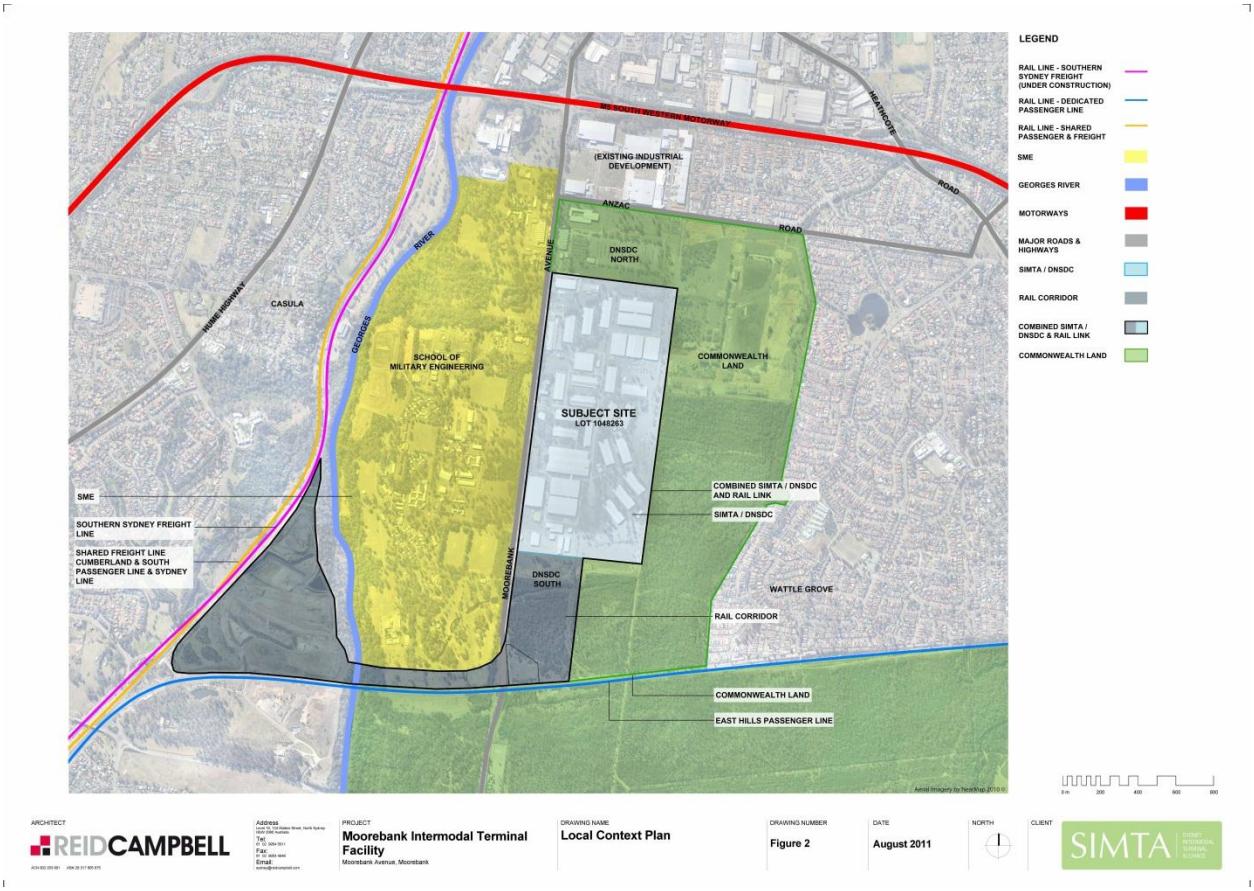
- Rail Link – the Concept Plan includes land nominated for a rail link that will connect the SIMTA site with the Southern Sydney Freight Line. The detailed design of the rail infrastructure comprising the rail link will be subject to a further application and approval process.

- Intermodal Terminal – the terminal is proposed to include on-site freight rail sidings of up to 1,200 metres in length to accommodate local freight trains to Port Botany. Freight will arrive by rail and be transported to the warehouse and distribution facilities within the SIMTA site, or be directly loaded on to trucks for transport to warehouses and nearby logistics centres. Exports and empty freight containers will be transported to the facility by truck and then loaded onto rail for transport back to Port Botany. The terminal is expected to contain four rail sidings, with areas for container handling and storage, and is anticipated to have the capacity to handle up to 1 million containers (twenty foot equivalent units or TEUs) per annum.

- Warehouse and Distribution Facilities - approximately 265,000m^2 of warehouses with ancillary offices will be constructed to the east of the intermodal terminal. These buildings are proposed to be constructed in stages in response to site servicing availability and market demands. It is expected that warehouses will range in size, depending on tenant needs.

- Freight Village – support services will be provided on site. These may include site management and security offices, meeting rooms, driver facilities and convenience retail and business services.

FIGURE 1 - MOOREBANK ITF SITE LOCATION



2 Demographic Profile

Moorebank is a suburb of the Liverpool LGA in Greater Western Sydney. Greater Western Sydney is home to approximately 1.85 million people, or over 43% of the metropolitan Sydney population.

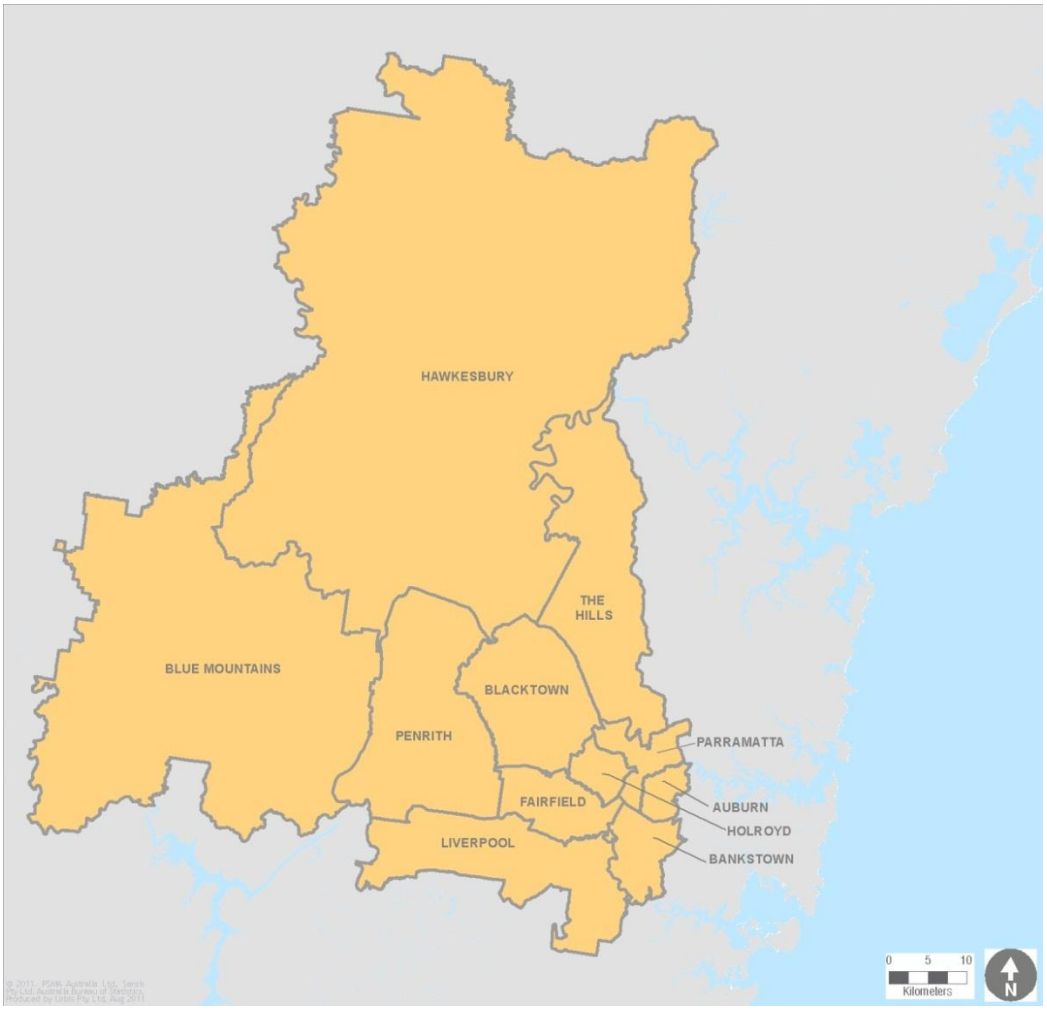
Growth forecasts posited in the *Moorebank Intermodal Terminal: Economic Impact Assessment (August 11, Urbis Property Economics)* forecast an average annual growth rate of between 2.1% and 3.3% between 2006 and 2036 for the South-West Subregion. Liverpool LGA is expected to account for 30% to 35% of this growth. Development of the Growth Centres is expected to affect the need for future employment lands within the region.

The development of employment lands is considered integral in local government areas such as Liverpool which face the added pressure of population growth directed toward neighbouring LGAs as part of the Growth Centres against the need to ensure that local area residents have improved access to employment opportunities in the local domain. Apart from the North and South Subregions, the South-West Subregion has the lowest provision of jobs, with just 0.72 job opportunities per person in the labour force. As at 2006, approximately 40% of Liverpool LGA's population was employed. Of these working residents, 28% worked within Liverpool LGA.

2.1 REGIONAL CONTEXT – GREATER WESTERN SYDNEY

The map below shows the location of Liverpool LGA within the local context of Western Sydney (the yellow area being those Councils that are members of the Western Sydney Regional Organisation of Councils).

FIGURE 2 – LOCATION MAP OF GREATER WESTERN SYDNEY LOCAL GOVERNMENT AREAS



Source: Western Sydney Regional Organisation of Councils (WSROC)

The release of the 2006 Census highlighted the significant population growth that has been occurring in the western Sydney region with over two-thirds of the growth (2001-2006) occurring in the major release areas of Blacktown, Liverpool and Baulkham Hills. The growth has not been uniform over the region and while many Western Sydney Council areas are remaining static or even slightly declining (such as Blue Mountains, Hawkesbury, Fairfield and Penrith) others continue to see substantial growth and increased residential densities. However, over time both newer and older suburb areas will be impacted by redevelopment and resulting growing populations. In particular Liverpool will experience growth through its designation as a regional city under the Metropolitan Strategy and growth rates in Baulkham Hills, Blacktown and Penrith will be affected by the release of land in the North-West and South-West Growth Centres. A summary of population trends across the Greater Western Sydney LGAs is provided below:

TABLE 1 – POPULATION GROWTH, ABS CENSUS 2001-2006

TOTAL POPULATION	2001	2006	GROWTH 2001-06	% INC 2001-06
Auburn	55,793	64,958	9,165	16.4%
Bankstown	165,070	170,489	5,419	3.3%
Baulkham Hills	139,804	159,391	19,587	14.0%
Blacktown	256,367	271,709	15,342	6.0%
Blue Mountains	74,323	74,069	-254	-0.3%
Fairfield	181,484	179,892	-1,592	-0.9%
Hawkesbury	61,354	60,561	-793	-1.3%
Holroyd	85,762	89,766	4,004	4.7%
Liverpool	153,901	164,602	10,701	7.0%
Parramatta	142,308	148,325	6,017	4.2%
Penrith	172,353	172,139	-214	-0.1%
WSROC	**1,488,519**	**1,555,901**	**67,382**	4.5%
Sydney (SD)	3,961,451	4,119,190	157,739	4.0%
NSW	6,326,579	6,549,177	222,598	3.5%

Source: ABS Census

2.1.1 REGIONAL ISSUES AND CHALLENGES

Analysis of the Greater Western Sydney context has yielded a number of issues of potential consideration with relation to social infrastructure requirements. Some key social characteristics of relevance in the Greater Western Sydney include:

- A high proportion of residents born overseas creating an environment of cultural, linguistic, religious and ethnic diversity. The demographic profile of Moorebank reflects this profile, as does that of Liverpool LGA.
- The region has a young population profile which is rapidly ageing with a trend towards smaller households and with single person households increasing at a significantly higher rate than Sydney as a whole.
- A large retired workforce, with concern toward the provision of health and social services to an older population and the spatial impacts of substantial immigration of retirees. The policy implications of decreased mobility and increased social isolation, coupled with increased housing and transport stress are also important. [1]

Significant new development in the release areas and redevelopment in established areas is putting considerable pressure on social infrastructure in the region. As identified within the Issues Paper prepared for the 2007 State Election by the Western Sydney Councils, social sustainability within Western

[1] Future West Final Report, Sept 2006, Western Sydney Regional Organisation of Councils

Sydney has been declining in recent years. This has been due to a number of factors summarised in the Issues Paper as being:

- Increasing socio-economic polarisation, with a growing gap between rich and poor. This is manifest in the pattern of declining areas in some older middle ring suburbs, contrasting with prosperous areas especially in some core and newer suburbs.

- High unemployment in some parts of south-western Sydney is now double the national average. This is accompanied by a rapid increase in mortgage defaults and housing stress partly as a result of the recent housing boom and bust. Other factors include the emergence of cultural divides in the Australian community, with Western Sydney identified as a focus of this division.

- These problems have been exacerbated by under-provision of social infrastructure as the region's population has grown over the past 30 years, especially in release areas. Whilst this issue has been increasingly recognised, social planning must be integrated in planning for residential development and additional funding provided to ensure the provision of adequate infrastructure and services.

Employment issues warrant special attention and priority in the region, which endures the spatial impact of distance from most major employment centres, such as Sydney's Global Economic Corridor, along with structural factors including high regional unemployment.

2.2 LIVERPOOL LGA SOCIO-DEMOGRAPHIC PROFILE

The following section provides an overview of demographic trends and conditions in the Liverpool local government area. The Liverpool LGA is located at the western fringe of the Sydney metropolitan area - about ~27 kilometres from Sydney centre. The City is bounded by the LGAs of City of Fairfield and City of Penrith in the north, City of Bankstown and Sutherland Shire in the east, City of Campbelltown and Camden in the south and Wollondilly Shire in the west.

2.2.1 CURRENT DEMOGRAPHIC TRENDS

The population of the Liverpool LGA is generally young, with a median population of 32 years compared with 37 for Australia as a whole. Future population growth within the Liverpool LGA is forecast to increase from 170,900 in 2006 to 202,000 in 2016 and 324,400 in 2036. The projected annual average growth rate between 2006 and 2011 is 1.8% and between 2011 and 2016 is expected to be 1.7%. The South-West Subregion is projected to have higher average annual growth rates over these periods – 2.1% and 2.7% respectively.

2.2.2 CULTURAL DIVERSITY AND LANGUAGE

Just over half of the Liverpool population was born in Australia (53.8%) and there is a high rate of Australian citizenship (83.8%).The proportion of Indigenous people in the population is 1.3%. Of those born overseas, the highest proportion was from Fiji (3.2%), Vietnam (2.8%), Iraq (2.0%), Lebanon (2.0%) and the Philippines (1.9%). Approximately 47% of the population spoke only English at home. Other languages spoken at home tend to be non-European languages: Arabic, Vietnamese, Hindi, with some speaking Italian and Spanish. Liverpool has a reasonably high proportion of couple families with children (57.2%) compared with Australia as a whole (45.3%).

2.2.3 HOUSING AND HOUSING TENURE

The Liverpool LGA has a smaller proportion of couple families without children indicative of first time 'home-buyer' families, and this is reflected in 'tenure types' for housing, where 39.1% of homes are being purchased, compared with 32.6% for Australia as a whole. The proportion of single parent families is 17.4%, compared with 15.8% for Australia as a whole.

Most dwellings are detached houses (77.0%). Median rental is higher ($195p.w.) than for Australians ($190p.w.) and median monthly loan repayments are also higher ($1,733) than the Australian average ($1,300). Average household size is also higher (3.1 persons per household) compared with Australia (2.6). There is a smaller proportion of lone person households (15.1%) than for Australia (22.9%) and a smaller proportion of group households (1.8%) compared with Australia (3.7%). There is a slightly lower proportion of homes being rented through real estate agents in Liverpool (49.7%) compared with 50.7% for Australia, and a significantly higher proportion of those in public housing (26.9%) compared with Australia (14.9%).

Due to its low density development pattern and reliance on motor vehicles for transport, Liverpool is likely to have a higher proportion of 'oil vulnerable households' (Dodson & Sipe, 2007)[2]. These households are more susceptible to fluctuations and long term upward trend in fuel prices and consequent impact on the non-shelter costs of housing and employment opportunities.

2.2.4 EMPLOYMENT

Urbis's *Moorebank Intermodal Terminal: Economic Impact Assessment (August 2011, Urbis Property Economics)* illustrates a potential fall in the level of job provision in the Liverpool LGA and South-West Subregion between 2006 and 2036. The key findings from that analysis include:

- From 2006 to 2036 approximately 105,000 new jobs are expected to be created in the whole South-West Subregion.
- Of these, approximately 44,000 (42%) are expected to be located in Liverpool LGA.
- Over the period from 2006 to 2036, the South-West Subregion's population is expected to grow by around 465,000 people (153,000 in Liverpool LGA). Applying 2006 labour force ratios results in a forecast for 2036 of 64,000 people in the workforce in Liverpool LGA and 214,000 in the South-West Subregion.
- If the above targets and forecasts are realised, the ratio of additional jobs to additional persons will be 0.69 for Liverpool LGA and 0.49 for the South-West Subregion – below the existing jobs to persons ratio for the South-West Subregion.
- This means that the population and job projections that have been set would translate to a fall in the level of job provision in the Region.

According to ABS census data (2006), over 38% of persons in the Liverpool LGA work in industrial sectors, such as manufacturing, wholesale trade and transport, higher than the metropolitan Sydney benchmark of 28%. Additionally, employment within the agricultural industry is slightly higher than the metropolitan Sydney benchmark, reflecting the regions outer suburban location and the currently high provision of agricultural land within the LGA. These findings are roughly commensurate with results reported for Kemps Creek suburb, which had a higher than average proportion of residents employed in the transport industry (but lower than average in the agricultural industry). Major industries of employment in the area are summarised in the table below.

[2] Dodson J & Sipe N (2007), 'Cracks in the Veneer', *The Griffith Review Edition 15: Divided Nation*

TABLE 2 – MAIN EMPLOYMENT INDUSTRIES – LIVERPOOL LGA

RANK	INDUSTRY OF EMPLOYMENT	NO. OF PERSONS	% OF LABOUR FORCE
1	Manufacturing	10,691	15.80%
2	Retail Trade	7,207	10.70%
3	Construction	5,935	8.80%
4	Health care & social assistance	5,869	8.70%
5	Transport, postal & warehousing	5,189	7.70%
6	Public administration & safety	4,537	6.70%
7	Wholesale Trade	3,889	5.80%
8	Education & Trading	3,435	5.10%
9	Accommodation & food services	3,391	5.00%
10	Financial & insurance services	3,069	4.50%
11	Professional, scientific & technical services	2,988	4.40%
12	Other services	2,728	4.00%
13	Inadequately described/Not stated	2,362	3.50%
14	Administrative & support services	2,289	3.40%
15	Information media & telecommunications	1,158	1.70%
16	Rental, hiring & real estate services	912	1.40%
17	Arts & recreation services	707	1.00%
18	Agriculture, forestry & fishing	561	0.80%
19	Electricity, gas, water & waste services	540	0.80%
20	Mining	71	0.10%

Source: ABS Census Data, 2006 – Employment, Liverpool LGA

A combination of issues relating to demographic composition, urban development/housing patterns and regional context draw attention to the importance of local area employment opportunities. High transport costs and higher than average levels of housing stress may reduce the attractiveness and practicality of employment opportunities outside the local domain, and this adds a significant opportunity for increasing employment in the local area.

2.3 MOOREBANK SOCIO-DEMOGRAPHIC PROFILE

The following section provides a snapshot of the local population and current trends of relevance, including an overview of local employment patterns and activities occurring in the area. The ITF site includes approximately 83 hectares in size and is occupied by the Defence National Storage and Distribution Centre as well as the rail corridor. The site is surrounded by Federal Government owned land that includes the School of Military Engineering to the west and land held by the Department of Finance to the east.

2.3.1 CURRENT DEMOGRAPHIC TRENDS

In the 2006 census, the population of Moorebank was 7,599 persons, comprising 4.6% of the population for Liverpool LGA. The population was comprised of 3,830 males (50.4%) and 3,769 females (49.6%), with a higher percentage of males than both Liverpool LGA and the national averages, reflecting a lower than average number of persons aged over 65 years (and hence reflecting differences in average life expectancy between males and females) and higher than average rates of local employment in industries with a demographically male skew, including defence and road freight transport. The number of indigenous persons in the suburb, at 57 persons (0.8% of the population), is very low.

2.3.2 AGE AND AGEING

The median age of persons in Moorebank suburb is 34, higher than that for the Liverpool LGA (32 years) but lower than the national average (37 years). The number of persons aged 65 and over (737 persons, or 9.7%) is lower than the national average (13.3%). This lower age profile is also accounted for by the slightly higher proportion of persons aged 0-24 years in the suburb (2,584 persons), comprising 34% of the population, compared to the national average of 33.4%; and the higher proportion of persons aged 55-64 (14.4% compared to 11.0% for Australia). The age profile of persons in the area is provided in the table below.

AGE GROUP	MOOREBANK (SUBURB)	LIVERPOOL LGA	NATIONAL AVERAGE
0-4 years	8.10%	8.30%	6.30%
5-14 years	12.70%	16.60%	13.50%
15-24 years	13.20%	14.50%	13.60%
25-54 years	41.80%	43.80%	42.20%
55-64 years	14.40%	8.60%	11.00%
65 years +	9.70%	8.20%	13.30%

Source: ABS Census Data, 2006

2.3.3 CULTURAL DIVERSITY AND LANGUAGE

The area is culturally diverse, with lower proportion of persons born in Australia (5,006 persons, or 65.9% of the population) compared the national average's (70.9%), but higher than Liverpool LGA (53.8%). The main countries of birth for residents include England (2.3% of residents), New Zealand (2.2%), Greece (2.2%), Fiji (2.1%) and Vietnam (2.1%). Fewer than 67% of residents speak only English at home, with other important languages including Arabic (379 speakers), Greek (377), Vietnamese (223), Italian (188) and Hindi (181). Major religions affiliations in the area include Catholic (2,545 persons), Anglican (1,530), Eastern Orthodox (638), No Religion (633) and Islam (267).

2.3.4 EMPLOYMENT

The local rate of unemployment is 4.3%, lower than both the national average (5.2%) and the Penrith LGA (7.1%).

Rates of part-time workforce participation are higher in Moorebank (22.3%) than for the Liverpool LGA (22.0%), however, the number of persons not stating their hours of employment in the census was greater in Liverpool LGA. In the 2006 census, 3.3% of residents did not state their hours of employment, compared to an average of 3.7% in the Penrith LGA.

TABLE 3 – MAIN EMPLOYMENT INDUSTRIES – MOOREBANK

INDUSTRY	NUMBER EMPLOYED	PER CENT LOCAL LABOUR MARKET (SUBURB)	INDUSTRY EMPLOYMENT (NATIONAL)
Defence	296	7.80%	0.70%
School Education	160	4.20%	4.50%
Road Freight Transport	117	3.10%	1.80%
Cafes, Restaurants and Takeaway Food Services	104	2.70%	3.60%
Hospitals	97	2.60%	3.30%

Source: ABS Census Data, 2006

A similar proportion of residents in Moorebank work at home (2.7%) while a higher than average number commute to work by truck (2.4%) compared to Liverpool LGA. Comparing Moorebank to Australia as a whole, a smaller proportion of Moorebank residents work at home and a greater proportion travel to work by truck, (4.7% and 1.3%), reflecting the prevalence of local employment in the transport industry and trades such as building construction.

2.3.5 HOUSING AND HOUSING TENURE

Median rents and housing loan repayments for Moorebank were higher than the Australian averages. Liverpool LGA also had a lower median rent than Moorebank, but the same housing loan repayments. Median weekly individual incomes ($522), household incomes ($1,166) and family incomes ($1,272) are all above averages for the Liverpool LGA and the national average.

TABLE 4 – MEDIAN RENTS AND HOUSING REPAYMENTS – MOOREBANK

	MOOREBANK (SUBURB)	LIVERPOOL LGA	NATIONAL AVERAGE
Median Weekly Rent	$ 223	$ 195	$ 190
Median Housing Loan Repayment (Monthly)	$1,733	$ 1,733	$1,300
Per cent of Weekly Household Income (Rent)	19.1%	18.0%	18.5%
Per cent of Weekly Household Income (Home Loans)	37.2%	40.0%	29.2%

Source: ABS Census Data, 2006

Some 88.1% of all dwellings in the suburb are detached houses. Moorebank also has relatively large average household sizes (2.9 persons per dwelling) when compared to the Australian average (2.6 persons), but smaller than that of Liverpool LGA (3.1 persons per dwelling).

2.3.6 IMPLICATIONS

Some of the key implications of the regional and local population profile include:

- The local and regional population is growing. There is significant forecast growth associated with the nearby South-West Growth Centre.
- The region has high levels of ethnic diversity and varied language groups.
- There is high dependency on private motor vehicles for transport.
- There are relatively high levels of youth and indigenous unemployment within the region.
- Higher levels of regional unemployment with some areas up to twice the national average.
- The region has a younger population with a median age of 32 years compared with 37 for Australia as a whole. Moorebank suburb has a population of 34.
- A higher proportion of people in the Liverpool LGA (38%) of persons work in industrial sectors, such as manufacturing, wholesale trade and transport, higher than metropolitan Sydney (28%).
- Defence is a significant employer of people in the suburb of Moorebank.
- In 2006 the resident population of Moorebank was 7,599 persons in around 2600 dwellings.

3 Document Review

This document review provides a summary of key regional and local documents that identify social policies or guidelines that have implications for the proposed development. The primary documents reviewed as part of this section include:

- Draft South-West Subregional Strategy (November 2007).
- North-West and West Central Sydney Employment Strategies (November 2008).
- Liverpool City Council Community Strategy (2009).

3.1 DRAFT SOUTH-WEST SUBREGIONAL STRATEGY (NOVEMBER 2007)

The South-West Subregional Strategy sets an employment capacity target of 208,500 jobs for the south-western area of Sydney (comprising Liverpool, Campbelltown, Camden and Wollondilly LGAs) by 2031. This represents growth of 75% from current levels, and advocates the growth of Liverpool into a Regional City, high quality urban development in the South-West Growth Centre, improved access provided by the M7 Motorway and improvements to the M5 Motorway. The employment capacity target for the Liverpool LGA set by the South-West Subregional Strategy totals 35,000 for the year 2031. This is the highest growth target for the subregion.

3.1.1 STRATEGIC EMPLOYMENT LANDS IN THE SOUTH-WEST

MOOREBANK

The Strategy outlines the history of the Moorebank area from industrial zoning of the 1970s to the addition of Defence land south of the M5 Corridor in 2003. Forty per cent of the land is currently vacant or not productively used for an industrial purpose. Land to the east, west and south of the defence land is listed as potential employment land.

Moorebank contains a full range of industrial activities including:

- logistics and warehousing (especially west of Heathcote Road);
- manufacturing and heavy industry (between Newbridge Road and Heathcote Road); and
- local and light industry north of the M5 corridor.

Redevelopment of larger sites is providing an opportunity for more business and technology park type uses to locate close to Liverpool City Centre, replacing heavy industry.

It is important to note that, the State Government regards the proposal for a transport terminal at Moorebank as a key component in meeting Sydney's intermodal capacity needs.

3.2 NORTH-WEST AND WEST CENTRAL SYDNEY EMPLOYMENT STRATEGIES (NOVEMBER 2008)

This report was prepared by a consortium led by the Urban Research Centre at the University of Western Sydney. Primarily, it analyses and recommends employment strategies for two of the subregions of Western Sydney, North-West and West-Central. It was commissioned by the Western Sydney Regional Organisation of Councils and its project partners.

JOBS AVAILABILITY AND REGIONAL SELF-SUFFICIENCY

The report found that there has been a slight fall in both the proportion of residents working locally and as well as a fall in the ratio of total local jobs to local workers.

In 1981, 59% of Western Sydney's residential labour force found work within the region; by 2001 the equivalent figure rose to 64.3%. The proportion of the Western Sydney labour force working locally has not risen since, instead it had fallen slightly to 63.7% by 2006. Over a third of Western Sydney workers are forced to commute to destinations outside the region every day for their jobs.

SIMULATION RESULTS

A simulation was conducted to reveal how the target of 235,000 net additional jobs would be generated. It was found that:

- The rate of net job production in the Western Sydney region would fall dramatically short of the target of 235,000 net additional jobs if the economic conditions from 1983 to 2001 are a useful guide to the period 2006 to 2031 and if the sectoral composition of the Western Sydney labour market persists.
- At 1983-2001 growth rates a total of 600,274 new full-time jobs would be created by 2031; but 566,784 full-time jobs would be destroyed, resulting in a net increase of only 33,489 full-time jobs between 2006 and 2031.

CLIMATE CHANGE

The report notes that the region has a major concentration of transport and logistics firms where the basic way business is transacted will change substantially as responses to the threat of climate change are implemented.

Western Sydney is the prime destination for Sydney's goods traffic, performing the major role in logistics handling, wholesaling and distribution in each of the metropolitan area's international, interstate and NSW regional supply chain linkages. Road freight transport is currently the most significant transport mode in these operations. It is reasonable to expect that this industry will undergo major transformation over time as climate change responses are enacted.

Jobs generating opportunities will arise from responding positively to global climate change issues; and that there will be opportunities for the generation of cost-saving measures and greater competitiveness among local producers arising from national and global pressures for change.

INDUSTRY DRIVERS

Western Sydney is a large diversified economy containing nearly 250,000 businesses and producing around 9% of the nation's GDP. Employment growth in Western Sydney over the next 25 years will be driven by five major factors:

1. Engagement with the global economy.
2. Capturing benefits of population growth and rising incomes.
3. Access to supply and distribution chains through quality infrastructure.
4. Competitively priced and well equipped employment lands.
5. Investment in knowledge infrastructure and skills training.

Population growth will be an employment growth driver reflected in growing employment in retailing, construction, health and community services, and education. Growth in population and of household consumption also generates the movement and distribution of freight. The North-West will play an increasingly important role as host to transport and logistics industries attracted by lower-cost greenfields sites and easy access to the Sydney orbital via the M4 and M7 motorways.

The most significant impediments to growth in Western Sydney are identified in the report as:

- insufficient competitive industry clusters;
- transport bottlenecks;
- skills shortages;
- inadequate telecommunications infrastructure;
- cost pressures on households especially in housing and transportation; and
- ineffective governance.

LABOUR MARKET

In an analysis of 2006 Census labour force data, using comparisons with the 1996 Census, it was found that:

- Strongest labour force growth was associated with areas of highest population growth.
- Lagging labour force growth in the West-Central Subregion was particularly associated with stagnation in the male-dominated labour market segments.
- There was very little change in the structure of Western Sydney's labour force, either in terms of occupation and industry, such that the area remains over represented in its traditional areas of concentration and under represented in the areas where it was deficient a decade ago.
- Western Sydney remains over represented in the manufacturing; construction; retail; transport and warehousing; and low value adding services segments of the workforce.
- Western Sydney remains under represented in the accommodation and food services; information, media and telecommunications; finance and insurance; rental, hiring and real estate services; administrative and support services; managers; and professional, scientific and technical services segments of the workforce.

3.2.1 STRATEGIES

The report sets out a range of strategies to improve socio-economic prospects for Western Sydney. It is noted that among these are strategies for coordinated provision of regional and local employment to reduce time spent in travelling to and from jobs.

TERRITORIAL COMPETENCE

Achieving the desired employment targets for Western Sydney depends on building a regional platform that encourages seven aims. These are:

1. Geographical prowess.
2. Business and people climate.
3. Talented workers.
4. Regional knowledge infrastructure.
5. SME and entrepreneurship policies.
6. Regional innovation systems.
7. Effective governance systems.

URBAN STRUCTURE

This strategy involves:

1. Enhancing the movement of people and goods into, out of, and across the region.
2. Moving the region forward as an environmentally sustainable territory.
3. Improving the liveability of the region especially through reductions in commuting times and distances.
4. Providing the benefits of urban concentration through the promotion of the region's key urban centres.

5. Improving the region's competitive spaces through the provision of well-provisioned employment lands, business parks and other specialist business and industrial spaces; and thereby build concentrations of successful jobs generating products.

6. Nurturing the region's moves to build dense networks of co-located and connected enterprises.

7. Enlivening the Metropolitan Strategy's City of Cities vision by including the generation of a new spatial diagram for the metropolitan area which captures Western Sydney's aspiration to be a world class regional economy that supplies quality jobs for its residents.

INFRASTRUCTURE

The strategies seek infrastructure enhancement through:

- enhanced labour market access both to jobs within the region and to external labour markets;
- enhanced infrastructure provision to employment lands including the subregional centres;
- major public transport expansion and upgrades;
- extensions to the orbital motorways systems alongside major upgrades to arterial roads; and
- significant new investments in freight handling and interchange infrastructure and facilities.

3.3 LIVERPOOL CITY COUNCIL COMMUNITY STRATEGY (2009)

The Liverpool Community Strategy supports the Council's 'commitment to the economic, social and environmental sustainability of Liverpool' and focuses on 'social sustainability and its connection with the economy, the environment and civic leadership'.[3]

The Strategy is guided by *Liverpool Directions 2006-2016*, which includes six key directions for the City:

1. The Regional City for South-West Sydney.

2. Neighbourhoods and Villages.

3. The Land Between Two Rivers Where City and Country Meet.

4. A Place for People.

5. Community and Governments Working Together.

6. Sustainability.

The Community Strategy is underpinned by the principles of social justice which is based on equity, access, participation and rights. This means a commitment to ensuring:

- fairness in the distribution of resources.
- rights are recognised and promoted.
- people have fairer access to economic resources and services essential to meet basic needs and to improve their quality of life.
- people have better opportunities for genuine participation and consultation about decisions affecting their lives.

[3] Liverpool City Council, 2009, *Community Strategy*

Priority groups include:

- children;
- young people;
- Aboriginal and Torres Strait Islanders;
- women;
- people with disabilities;
- people of diverse sexualities;
- people from culturally and linguistically diverse backgrounds; and
- older people.

The Strategy focuses on six key outcome areas that were determined through a review of the previous Liverpool Social Plan. The key outcomes of the Community Strategy are:

- A socially inclusive community.
- A family friendly community.
- A learning and working community.
- A safe and healthy community.
- A diverse and culturally rich community.
- An accessible community.

3.3.1 KEY OUTCOME STRATEGIES

This table provides a summary of the City strategies and social indicators for each outcome area recommended in the Liverpool Community Strategy. The strategies are based on consultation and research completed as part of the community planning process. The social indicators assist in the monitoring progress toward the desired outcomes.

The following community outcomes, strategies and social indicators may be important to consider in any development proposal in Liverpool LGA.

TABLE 5 - KEY OUTCOME STRATEGIES

KEY COMMUNITY OUTCOME	STRATEGIES	SOCIAL INDICATORS
Social Inclusion	▪ Support community volunteering opportunities ▪ Increase multi-purpose community facilities, particularly for young people, in areas of growth and the CBD ▪ Improve community information, engagement and consultation ▪ Increase opportunities for participation in community activities and programs ▪ Support the community services sector in delivering co-ordinated programs and services ▪ Strengthen community and civic leadership ▪ Increase resources and funding for community services particularly in areas of population growth and for children, families, young people, older people and new and emerging migrant communities	▪ Proportion of people who feel most people can be trusted ▪ Community services expenses per capita ▪ Volunteering rates ▪ Community facilities floor space per capita
Family Friendliness	▪ Improve affordable and accessible services, activities and spaces for young people ▪ Improve informal recreation and leisure opportunities that cater for families ▪ Support initiatives that improve early life such as early childhood programs and family support programs ▪ Improve child friendly spaces and services ▪ Support affordable programs for older people on income support ▪ Support information, services, activities and accommodation for an ageing population ▪ Promote and expand sporting programs and facilities ▪ Enhance the physical amenity of Liverpool's public and open spaces ▪ Support services for families affected by changing economic conditions	▪ Proportion of people who can access a family friendly park close to their home ▪ Proportion of people who feel they can access local recreation and leisure opportunities ▪ Net recreation and leisure expenses per capita ▪ Number of childcare places per children aged 4 years and under
Safety and Health	▪ Improve community sense of safety in public spaces relating to alcohol, drugs, graffiti and group violence ▪ Increase safety for women and children ▪ Support community safety in the CBD ▪ Support community development and community renewal initiatives in 2168 suburbs, Warwick Farm and Outer Liverpool ▪ Support initiatives that improve health outcomes for Aboriginal people ▪ Increase opportunities for physical activity ▪ Increase access to healthy food and community gardens	▪ Physical activity rates ▪ Proportion of people who feel safe using their local park ▪ Rate of smokers ▪ Obesity levels ▪ Rate of assault non-domestic related ▪ Rate of assault domestic related

KEY COMMUNITY OUTCOME	STRATEGIES	SOCIAL INDICATORS
	▪ Promote development of men's health ▪ Support health promotion and healthy lifestyle choices ▪ Improve access to community based health programs and mental health services	
Learning and Working	▪ Support opportunities for informal learning ▪ Improve access to internet, and particularly, broadband connection ▪ Support initiatives that improve education and employment outcomes for Aboriginal people ▪ Increase access to employment and training services in response to changing economic conditions ▪ Build on the effective TAFE system and improve access to university education ▪ Support programs that increase school retention for students requiring assistance ▪ Support pathways to accreditation of overseas skills and qualifications ▪ Reduce unemployment particularly for young people and those experiencing long term unemployment ▪ Support economic development and access to local employment opportunities	▪ Unemployment rate ▪ Number of households by type of internet connection ▪ Proportion of young people attending TAFE or university ▪ Apparent school retention rate ▪ Rate of commercial development in Liverpool
Diversity and Culture	▪ Increase community activities and events in Liverpool ▪ Support services for new and emerging migrant communities particularly in central Liverpool and Warwick Farm ▪ Increase access to English language support and services ▪ Improve community harmony and respect ▪ Support consultation and services for Aboriginal people ▪ Support the environment and environmental projects and groups ▪ Improve community pride and identity ▪ Promote and protect historical and cultural sites and events ▪ Enhance the entertainment and retail precinct in Liverpool ▪ Develop the river system as a community asset	▪ Rate of participation in community events ▪ Proportion of people who feel a connection with Liverpool ▪ Proportion of people who feel pride in Liverpool
Accessible	▪ Support delivery of local infrastructure and services in areas of urban development ▪ Support development of Liverpool City Centre into a regional City with accessible services, employment and leisure opportunities ▪ Improve support, services and access for people with a disability and their carers ▪ Improve walking and cycling infrastructure ▪ Reduce car dependency by improving access to affordable and reliable public transport and infrastructure especially for older people, young people, people with disabilities and those in the outer areas of Liverpool ▪ Increase affordable and accessible car parking in the City Centre ▪ Improve support and services for people that are homeless ▪ Increase affordable housing options for purchase and rent ▪ Support affordable goods and services	▪ Proportion of people using public transport to travel to work ▪ Proportion of people who can access a shared pathway close to home ▪ Rate of usage of Liverpool and Parramatta T-Way ▪ Rate of housing stress

3.4 SUMMARY AND IMPLICATIONS

The document review identifies significant jobs growth in the LGA across a number of industries, with Liverpool assigned the highest employment growth target for the South-Western Subregion. The local environment is characterised by a high level of labour market regionalisation with a low job to resident ratio exacerbated by rapid growth of the local labour market, which has grown faster than the overall population. Some of the key implications noted from the document review include:

- In addition to economic and regional development aspects, the issue of employment creation and development of employment lands takes on a significant social dimension in Liverpool, where there is a capacity for such development to address supply-side issues, and spatial disparities relating to travel distance.

- There has been a declining local employment base with a fall in the ratio of local jobs to local workers. This is forecast to change over the next 10 years facilitated by the North-West and West Central Sydney Employment Strategies.

- There is an existing strong employment base in logistics. Western Sydney is well represented in the manufacturing; construction; retail; transport and warehousing. Many employment opportunities at the fringe have tended to occur in low skilled areas, including manufacturing, wholesaling, transport and construction, with fewer opportunities in more skilled employment sectors.

- The City of Liverpool states in its Community Strategy a number of priorities relevant to the ITF. These include:

  - Reduce unemployment particularly for young people and those experiencing long term unemployment.

  - Support initiatives that improve employment outcomes for Aboriginal people.

  - Support economic development and access to local employment opportunities.

  - Support development of Liverpool City Centre into a regional City with accessible services and employment opportunities.

  - Support affordable goods and services.

4 Potential Social Impacts and Benefits

Following the issuing of the Director-General's Requirements and a review of consultation outcomes and specialist reports, and taking into account the context in terms of the demographic profile and document review, a number of potential social impacts have been identified. The consultation report prepared by Elton Consulting structures the potential impacts against areas of identified community concern. The following section notes the concerns raised through the consultation and then provides a summary of the findings from the specialist report relating to those issues. The specialist reports which have been reviewed include:

- The Consultation Outcomes Report (Elton Consulting)
- Transport and Accessibility Impact Assessment (Hyder Consulting)
- Air Quality Impact Assessment (PAE Holmes)
- Health Impact Assessment (Toxicos)
- Noise Impact Assessment (Pae Holmes)
- Visual Impact Assessment and light spill (Reid Campbell)

The key findings from the consultation outcomes, the findings of the specialist reports and recommendations from a social impact perspective are highlighted below.

4.1 TRAFFIC

The major concerns identified in the draft Consultation Outcomes Report include the potential for congestion, mainly truck traffic, on major roads, on local roads and on residential streets. The report detailed responses to traffic issues, including the strategic role of the proposed ITF as a solution to Sydney's traffic congestion; the intended local route for truck movements (i.e. Moorebank Avenue) and the indication that there would be no advantage for trucks to use residential streets. These responses are being provided to questions arising through consultation channels. The Consultation Outcomes Report also noted the need for traffic modelling on Moorebank Avenue to determine the requirement for modifications which was completed by Hyder Consulting.

Some of the key social impacts identified from the consultation report are related to:

- Potential for increased trucks on residential streets
- Congestion and truck impact on the M5
- Truck traffic along Anzac Road and Moorebank Avenue

A Transport and Accessibility Impact Assessment has been prepared based on a number of specialist inputs to model the potential impacts of the ITF. These reports provide the modelling for the potential traffic generated and identify the issues with some of the traffic at key intersections. It is also important to note that the overall scope and aim of the project is to reduce overall freight distributions on Sydney's road network. The key features of the development assessed for the purposes of the transport models were:

- 1,035 rigid truck movements per weekday (200,000 TEU per annum).
- 1,603 articulated truck movements (both directions) each weekday (600,000 TEU per annum).
- Number of train paths per day (500,000 TEU per annum).
- With 2,258 personnel working on site, a total of 4,516 movements will be generated to or from the site each weekday. Assuming 80% of these movements will be made by private car (driver or passenger), about 3,613 car movements will be generated.

- The project proposes 1,800 car parking spaces.

From the outcomes of the transport modelling undertaken by Hyder, the following potential impacts and needs were identified:

- *Moorebank Avenue between M5/Moorebank Avenue interchange and the SIMTA northern access. Capacity problem is forecast for both northbound and southbound movements. The analysis has suggested the need for a potential upgrade to four lanes when SIMTA site is fully developed.*
- *Concurrent with four lane widening on Moorebank Avenue, the Moorebank Avenue/Anzac Road signal will require some form of widening at approach roads.*
- *A new traffic signal at SIMTA's northern access with the Moorebank Avenue.*
- *M5 Motorway/Moorebank Avenue interchange. The analysis has suggested the need for additional capacity improvements in the form of widening at the following ramp locations including:*
  - *M5 westbound off ramp;*
  - *M5 westbound on ramp;*
  - *M5 eastbound off ramp.*

The following mitigation measures are proposed in the transport report.

ROAD INFRASTRUCTURE

The analysis identified the road capacity improvements required to cater for the traffic demands from both background growth and additional traffic generated by the SIMTA proposal. This investigation reviewed existing infrastructure and then identified the need for road and intersection upgrade. The analysis identified the need for road network improvements by 2031 when the SIMTA site is fully developed. They are:

- *Widen Moorebank Avenue to four lanes between the M5 Motorway/Moorebank Avenue grade separated interchange and Northern SIMTA site access. Some localised improvements will be required around central access and southern access points;*
- *Concurrent with four lane widening on Moorebank Avenue, the Moorebank Avenue/Anzac Road signal will require some form of widening at approach roads;*
- *A new traffic signal at SIMTA northern access with the Moorebank Avenue;*
- *Potential upgrade works at the M5 Motorway/Moorebank Avenue grade separated interchange to cater for both background and additional SIMTA traffic growth.*

TRAVEL DEMAND MANAGEMENT

Travel Demand Management (TDM) plan has been developed with initiative to target a 30% public transport mode share target. This involves the application of strategies and initiatives to change travel behaviour and reduce travel demand, especially for car based trips to and from the proposed development. A TDM approach seeks to bring about more efficient travel patterns and travel choices by:

- *Improving transport and trip making choices;*
- *Providing incentives to modify the choice of mode, travel times and the need for travel;*
- *Enhancing land use accessibility;*
- *Changing policies.*

There are many benefits of a TDM approach:

- *Reduces car based trip making;*
- *Reduces road traffic congestion;*
- *Allows total on-site car parking provision to be minimised and for land to be put to other uses;*
- *Encourages the use of less environmentally damaging modes such as walking, cycling and public transport;*
- *Health and fitness benefits through increased walking and cycling;*
- *Lessens the costs associated with car ownership and maintenance.*

The proposed TDM measures are outlined in the table below.

Mitigation Measures	Summary
Measure 1 – Travel behaviour change program	Various measures including marketing, promotion campaigns, events and Workplace Travel Plans designed to influence the mode choice of individuals by better understanding their travel needs.
Measure 2 – Reduce On-Site Car Parking Supply	Reduce proposed on site employee parking by up to 680 spaces.
Measure 3 – Liverpool Station Express Bus Services	Provision of a peak and shift change over time express bus service to and from Liverpool Station via Moorebank Avenue and Newbridge Road
Measure 4 – Holsworthy Station Express Bus Services	Provision of a peak and shift change over time express bus service to and from Holsworthy Station via Anzac and Heathcote Roads.
Measure 5 – Bus Interchange/Waiting Area	Provide an employee bus interchange/waiting areas near Freight Management Office and in southern sector of terminal site.
Measure 6 – Bus Priority Works	Bus priority measures at key intersections as required.
Measure 7 – Walking and Cycleways	Shared or separate walking and cycle paths connecting the warehousing areas to the employee bus interchange/waiting areas and to the Moorebank Avenue bus stops.
Measure 8 – Extend Bus Services 901	Extend bus route services 901 to traverse at least the northern sector of the site (via the Estate Road and Internal Road 2) taking advantage of the suggested possible future link to Greenhills Avenue.

Source: taken from Draft Traffic Report

From a social impact perspective, and in relation to the concerns raised in the Consultation Outcomes Report, the transport impacts modelled is likely to create increases to some of the local peak hour congestion. However, a range of mitigation strategies is being proposed to minimise these impacts. Some of those mitigation measures that will reduce potential social impacts are outlined below, including:

- A range of intersection and road upgrades to increase the local road capacity.
- The travel demand management actions will seek to encourage more active modes of transport and public transport to reduce potential peak hour congestion associated with journey to work. The target is for a 30% public transport mode share.
- Pedestrian and cycle infrastructure is also being proposed which will serve the new development as well as the surrounding community.
- Some of the proposed public transport infrastructure work proposed will increase the frequency and accessibility of the local public transport services, providing benefit for local residents.

4.2 AIR QUALITY

The issues relating to poor air quality in South-Western Sydney and its attendant impacts on population health (in particular on asthma rates) are well-documented in academic studies and reflected in various plans, from the Metropolitan Plan for Sydney 2036, to the local scale. NSW DECCW has played a role in monitoring and reporting on air quality in South-Western Sydney over many years.

The Consultation Outcomes Report indicates concern about potential impacts on local air quality; the question of increased particulates through diesel fumes; the effects of idling trucks; the methodologies for assessing current and future air quality and the effect of the proposal on the existing 'asthma zone'. Similar to the above comment regarding traffic impacts, it is not possible to gauge the intensity, volume or specific origins of views about air quality from the consultation activities.

Responses in the Consultation Outcomes Report include reference to the investigation of potential impacts by technical experts in accordance with Government policies and the availability of these studies for public comment during the Environmental Assessment process. The Consultation Outcomes Report also refers to the scheduled arrival of trucks at the terminal to avoid queuing on Moorebank Avenue, and identifies the potential for other mitigation measures as required, based on expert studies.

Hyder Consulting completed an Air Quality Impact Assessment in June 2011 to assess the potential impacts of the proposal. It notes that from an air quality perspective, the potential emissions during operation of the proposed ITF are primarily from diesel vehicle exhaust (locomotives, trucks and container handling equipment). During construction, fugitive dust emissions can also be expected from the site; however, construction impacts are proposed to be staged, temporary and relatively short. The specialist report finds that the addition SIMTA proposal may result in one to two additional occurrences of increased particulate matter (dust) above the 24-hour advisory reporting standards. However, it is noted that the modelling is based on the busiest hour of operation at the site, and applying this for averaging periods of 24-hours and longer will result in a conservatively high prediction of impact. In terms of impacts on regional air quality, the operation of the SIMTA proposal is expected to have a net positive impact by reducing freight transport by truck and reducing the overall emissions to the local area.

A technical health impact assessment report was completed by Toxicology Consultants Toxicos to assess the potential local health impacts associated with air quality concerns. The cumulative health impacts were assessed that considered the existing air quality data with the addition of the proposed ITF. The report found that the emissions from the terminal facility were unlikely to have acute or chronic direct health effects on the local residents. Individual concentrations of Nitrogen Dioxide ($N0^2$) and Particulate Matter (PM_{10} and $PM_{2.5}$) are modelled to be below their respective health guidelines. The report does note that there may be some incidences where the nitrogen dioxide and particulate matter may exceed the standards but this does not mean that health effects would be probable or imminent in the vicinity of the IMT facility.

The Air Quality report provides the following recommended minimisation or mitigation measures to minimise potential air quality impacts.

It is recommended that all feasible and reasonable measures are taken to minimise potential impacts on local and regional air quality, including:

- *Consideration of advances in rolling stock servicing the ITF.*
- *Use of electrically powered container handling equipment in lieu of diesel equipment where possible.*
- *Use of LPG forklifts in lieu of diesel forklifts where possible.*
- *Minimise truck movements through the efficient management of deliveries and dispatches.*
- *Minimise truck idling and queuing on-site.*
- *Construction dust mitigation measures should be considered as part of future Project Application construction management plans.*

Source: Pae Holmes Air Quality Impact Assessment 13 July 11

From a broad socio-economic perspective, some other potential mitigation measures may include:

- A program to encourage use of diesel/electric hybrid trucks to both minimise local air quality impacts and provide a more sustainable long-term solution.
- Consider a program to encourage the uptake of vehicles that meet the European emissions standards, eg: http://en.wikipedia.org/wiki/European_emission_standards
- A program to ensure maximum tyre pressure is maintained to improve the efficiency of the truck stock.
- Potentially providing an on-site monitoring system to monitor individual truck emissions with requests for servicing.

From a social impact perspective in relation to the concerns raised in the Consultation Outcomes Report, the Air Quality impacts have not been identified as significantly exceeding the standards and determined as unlikely to have acute or chronic direct health effects on the local residents.

4.3 LIGHT SPILL

The Consultation Outcomes Report identifies concerns about the potential brightness and extent of light spill and how it is proposed to be measured. It also notes a response indicating that SIMTA proposes to measure light spill and to mitigate against its effects through the design and location of light poles.

A specialist report was prepared by Reid Campbell in June 2011 which assessed the potential visual impact of the facility as well as the potential impact of light spill. This report concludes that from a visual impact perspective the proposed development would generally be in keeping with the existing character of the area being consistent with general industry within the local area. The visual impacts were considered generally low visual impacts with some limited and highly localised visual impacts. In addition to this those areas where negative visual impacts were identified mitigation measures have been proposed including significant and intensive landscaping, planting, built-form screening and mounding.

From a light spill perspective the report concludes the following:

The light spill from the site has been modelled based on a preliminary lighting concept and results suggest that 1 lux in residential dark surrounds during curfew hours is achieved approximately 150 metre from the light source. The nearest residential properties are approximately 400 metres away and hence the impact of light spill to the residential properties will be well within the required criteria as specified in Australian Standard AS4282-1997 "Control of the Obtrusive Effect of Outdoor Lighting".

Source: P 105 of the June 2011 Visual Impact Assessment

This conclusion does not consider existing vegetation and orientation and therefore is proposed to be conservative. The proposed landscaping and works associated with reducing visual impacts will also have an impact on the effects of light spill.

4.4 NOISE AND VIBRATION

The Consultation Outcomes Report identifies concerns about the methods of assessment for monitoring of noise levels; the extent of the areas included in noise level studies; how impacts on existing noise levels might occur; impacts of rail noise and ongoing noise monitoring plans. Responses to these issues in the Consultation Outcomes Report noted that acoustic assessments will be carried out as part of the Environmental Assessment process; the effects of physical and vegetation barriers; the role of existing warehouses in 'dampening' noise and the potential for future noise and vibration measures to be monitored on an ongoing basis if required.

In July 2011 PAE Holmes completed a Noise Impact Assessment as part of the preparation of the Environmental Assessment. This report concludes the following:

- *Predicted noise levels from operations at the proposed Moorebank ITF site indicate that the potential for noise impact at surrounding residences would be relatively low and all relevant criteria are likely to be met during operation of the facility.*

- *Typically, rail vibration analysis is required for properties located within 60m from a rail corridor. Given the separation distances, vibration at residences generated by trains along the new rail line is anticipated to be unnoticeable and well within vibration criteria.*

- *The vibration criterion associated with either construction or operation is easily complied with at this project, considering the typical distances that any construction activities will be occurring from residential buildings.*

Source: Noise Impact Assessment 13-07-2011

This report sets out best practice mitigation and management measures to minimise construction noise at noise sensitive receivers and will be described in a construction noise management plan (CNMP).

4.5 LOCATIONAL ISSUES

The Consultation Outcomes Report also identified several concerns about the suitability of location of the proposed ITF and its effect on amenity and character of the area and on property values. Responses to these issues in the Consultation Outcomes Report noted that both the Commonwealth and State Governments had previously identified Moorebank as the preferred location for an intermodal terminal, the distances from nearest residences and existing buffers. The proximity to the freight rail network and connection to the M5, M7 and the Hume Highway is a primary consideration for the function of an intermodal terminal. There are also regional benefits from an employment perspective with Liverpool having an above average rate of unemployment and a low ratio of local jobs to local people.

4.6 EMPLOYMENT

There are significant local employment opportunities that will be associated with both the construction and operation of the terminal facilities. This has the potential to provide a significant social benefit to the region considering the regional demographic and policy context.

- Reduced travel distance and commuting time for local potential employees.

- New jobs created in construction, operation, maintenance, logistics and transport.

- The types of employment will include a range of skilled and unskilled labour needs.

- Potential opportunities for some of the youth or long term unemployed people in the region.

- Potential opportunities to support and improve employment outcomes for Aboriginal people.

4.7 CUMULATIVE IMPACTS

The Director-General's Requirements indicate the need to consider "the relationship with the Steele Barracks/School of Military Engineering site and investigations being undertaken by the Moorebank Project Office". It is noted that discussions are ongoing regarding the potential relocation of military activities, but that there is an expectation that the current level employment at this site would simply be transferred to another location within Sydney. Thus, the impacts are likely to be no effective loss of employment and a potentially positive impact in terms of less vehicular traffic to the site.

The Consultation Outcomes Report also identifies concerns about potential cumulative impacts of adjacent sites/developments. This may include expansion plans for the Holsworthy Military Base.

There are several other potential impacts and benefits associated with the proposal, including:

- The potential to enhance pedestrian/cycleway links to the site as part of recreational facilities to connect to the Georges River. This could potentially service employees and local recreational users and benefit the health of the broader community.

- The potential for recreational facilities (such as commercially operated gyms, walking tracks, exercise areas) on-site that may be available for the health benefit of employees and the wider community.

- The potential for inclusion of facilities such as commercially operated childcare that may be available both for the benefit of employees in a younger population cohort and for the benefit of wider community subject to tenant demand and ongoing stakeholder consultation.

5 Recommendations

Following the research outlined in this report and considering the potential social impacts associated with the development we recommend the following actions be considered for future detailed design or approval stages:

- Further consider landscaping design in relation to minimising visual impact and light spill and enhancing the local environment.
- Consider the development of a vehicle efficiency and emissions reduction program for the facility to encourage good maintenance and efficient vehicle selection.
- Potentially extend the reach of the pedestrian and cycle infrastructure including signage to encourage local pedestrian and cycling trips. Further, consider providing appropriate cyclist facilities in the development including undercover bike storage, showers and change facilities. The site is a 7-10 minute bike ride from Liverpool train station.
- Ensure effective noise management and complaints reporting procedure is set up for the construction and operational phases of the development.
- Consider the potential to include social service facilities on-site that would serve the local employees and wider community. These may include such things as a childcare facility or recreational facilities, as identified above. Provision of these would require further needs assessment and stakeholder consultation to ensure appropriate infrastructure was provided.

Appendix A Key words from news articles

The following is a key summary from 14 media articles and web blogs identified in relation to the Intermodal Terminal from 2010/11. These articles were sourced from Liverpool City Champion, Street Corner, Liverpool Leader, Supply Chain Review, Transport and Logistics News, Southern Courier.

FIGURE 3 – MOOREBANK INTERMODAL TERMINAL – MEDIA WORD CLOUD

Generated using - http://www.wordle.net/

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