

2.0 Local Planning Context

2.1 Rockdale City Urban Strategy 2010

Rockdale City Council prepared the *Rockdale City Urban Strategy 2010* (an internal urban planning document) to guide and inform the preparation of the *Rockdale Local Environmental Plan 2011 (RLEP 2011)* and *Rockdale Development Control Plan 2011 (RDCP 2011)*.

The principles in the *Rockdale City Urban Strategy* that affect or are relevant to the future vision for Princes Highway, include:

- Revitalise villages and neighbourhoods;
- Ensure opportunities for future employment and growth;
- Promote opportunities for sustainable transport and minimise the need to travel; and
- Improve residential amenity by improving the variety and quality of new housing.

There are two key objectives in the Urban Strategy that will be considered and balanced as part of the Princes Highway Corridor Strategy:

- *Encourage revitalisation of the Princes Highway Corridor to improve employment opportunities and present a more attractive image along this prominent vehicle route through the City, and*
- *Concentrate future development around the City’s existing villages and local centres, improving their vibrancy and character through an increase in the local residential population, and reducing the need to travel.*

The Corridor Strategy will address the ability to meet both the relevant objectives of the Urban Strategy by facilitating a better corridor for employment uses, and future development around Arncliffe and Banksia to improve their vibrancy and character.

2.2 Capacity Analysis and Built Form Study (2010)

The *Capacity Analysis and Built Form Study* documents the development potential that is achievable under the *RLEP 2011* and the built form testing that underpinned the building height and floor space ratio formulation.

The analysis identifies the ability for Rockdale to deliver approximately 5,900 additional dwellings and 410,000m² of additional commercial floor space within the next 10-15 years. This was considered as sufficient development potential to cater for the short term and contribute to the dwelling and employment capacity targets applicable to the Rockdale LGA.

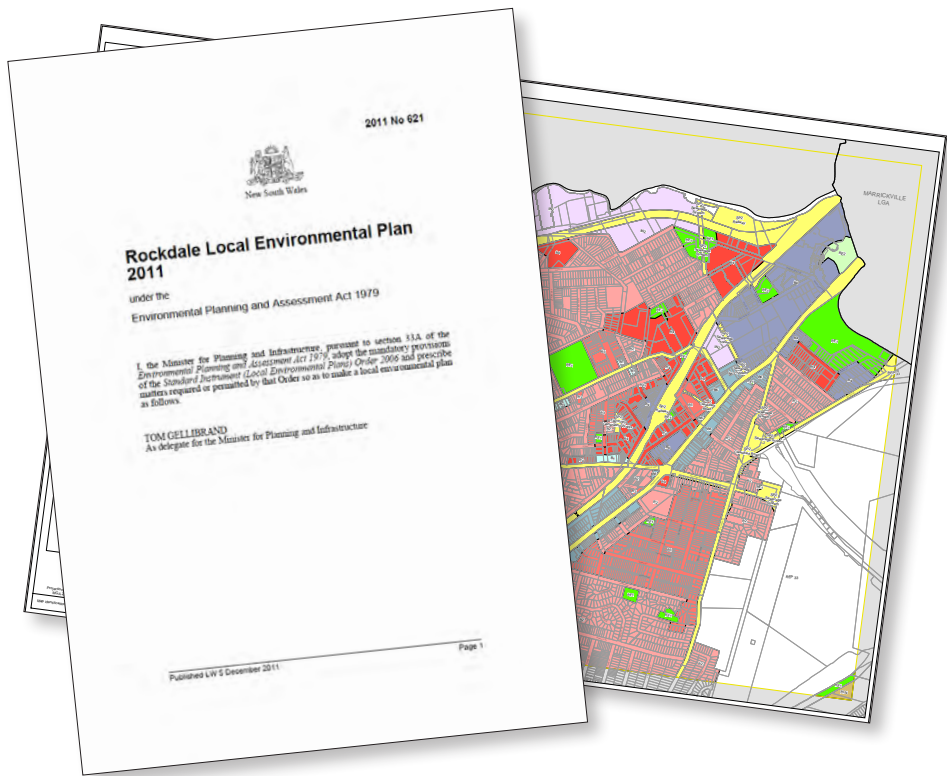
The study identifies the centre of Banksia as a strip of business zoned land along the western side of the railway line (ie. not within the study area). No additional development potential (housing or employment) is identified for Banksia on either side of the railway.

Arncliffe is identified as part of the ‘Arncliffe Planning Precinct’ which includes the commercial area around the railway station and land on both sides of the railway line. The study indicates significant residential development potential (2,248 additional dwellings) within the ‘infill residential’ components of the Arncliffe Planning Precinct, which includes 108 Princes Highway, 213 Princes Highway and 4 Wardell Street, and 213 Princes Highway (and other areas not subject to this study).

This Strategy identifies opportunities for additional dwellings and jobs that can be accommodated along the Princes Highway, over what is identified in the Capacity Analysis and Built Form Strategy.



2.3 Rockdale Local Environmental Plan 2011



The key planning controls applicable to the study area are the *RLEP 2011* and *RDCP 2011*. The *RLEP 2011* includes the following controls that provide a framework for development in the study area:

- land use zoning,
- maximum height of buildings,
- maximum floor space ratio (FSR),
- active street frontages,
- acid sulfate soils,
- heritage,
- flood planning, and
- aircraft noise.

The details of the zoning, FSR, building height and active frontage are described in detail below. The sites affected by heritage, flood planning and aircraft noise are described in Section 1. The entire study area is also affected by Class 5 Acid Sulfate Soils. *RLEP 2011* requires an Acid Sulfate Soils Management Plan to be prepared with all development applications affected by Class 5 Acid Sulfate Soils.



Figure 18 – Land Zoning Map (*RLEP 2011*)

► Land Use Zoning (*RLEP 2011*)

The study area includes a wide mix of land use zones and permitted land uses (as shown at **Figure 18**). The northern portion of the study area, around Arncliffe, is zoned to permit a range of employment land uses (within the B4, B6 and IN2 zones), residential uses (in R2, R3, R4 and B4 zones) and infrastructure uses (SP2 zone).

The southern portion of the study area, around Banksia, is zoned solely for employment uses with all land zoned B6 Enterprise Corridor (with the exception of the road and railway which are zoned for infrastructure purposes).

The zoning objectives and list of permitted and prohibited land uses of the key zones along the corridor are identified in the following table.

There are additional permitted uses identified for a small number of sites within the study area, including 213 Princes Highway and 4 Wardell Street, 108 Princes Highway, and 10-12 Allen and 11-13 Ann Street (zoned B6 but also permitting residential development).

Table 1 – Summary of Key Zones and Objectives within the study area (*RLEP 2011*)

Zone	Objectives of zone	Key Land Uses (not exhaustive list*)
B4 Mixed Use	<p>To provide a mixture of compatible land uses.</p> <p>To integrate suitable business, office, residential, retail and other development in accessible locations so as to maximise public transport patronage and encourage walking and cycling.</p>	<p>Permitted</p> <p>Commercial premises (including office premises, business premises and retail premises); Shop top housing; Any development not identified as prohibited</p> <p>Prohibited</p> <p>Attached dwellings, dwelling houses, industries, multi dwelling housing, vehicle body repair shops, vehicle repair stations, and other various minor uses</p>
B6 Enterprise Corridor	<p>To promote businesses along main roads and to encourage a mix of compatible uses.</p> <p>To provide a range of employment uses (including business, office, retail and light industrial uses).</p> <p>To maintain the economic strength of centres by limiting retailing activity.</p> <p>To promote redevelopment that will contribute to the locality, including by improving the visual character of the locality, improving access and parking, reducing land use conflicts and increasing amenity for nearby residential development.</p>	<p>Permitted</p> <p>Bulky goods premises; Business premises; Light industries; Neighbourhood shops; Vehicle sales or hire premises; Warehouse or distribution centres; Any development not identified as prohibited</p> <p>Prohibited</p> <p>Residential accommodation, retail premises, and other various minor uses</p>
R4 High Density Residential	<p>To provide for the housing needs of the community within a high density residential environment.</p> <p>To provide a variety of housing types within a high density residential environment.</p> <p>To enable other land uses that provide facilities or services to meet the day to day needs of residents.</p>	<p>Permitted</p> <p>Neighbourhood shops; Residential flat buildings; Respite day care centres; Shop top housing; Any development not identified as prohibited</p> <p>Prohibited</p> <p>Commercial premises (including office premises, business premises and retail premises); industries, service stations, storage premises, warehouse or distribution centres, wholesale supplies.</p>

*refer to *RLEP 2011* for full list of permitted and prohibited development

► **Building Heights (*RLEP 2011*)**

The maximum building heights within the study area range from 8.5m (2 residential storeys) to 31m (9 storeys) (as shown at **Figure 19**). The *RLEP 2011* permits a maximum building height of 14.5m (3-4 storeys, depending on the land use) across the majority of the study area.

The maximum height, of 31m, applies only to 213 Princes Highway and 4 Wardell Street.

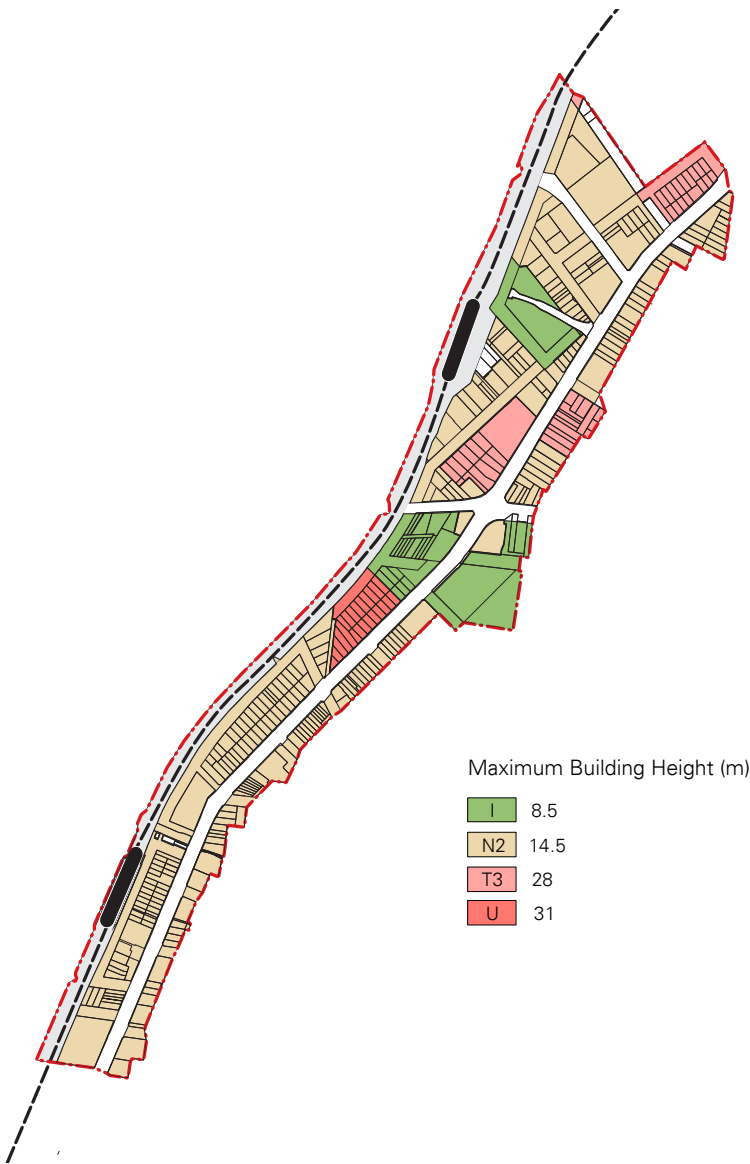


Figure 19 – Height of Buildings Map (*RLEP 2011*)

► **Floor Space Ratio (*RLEP 2011*)**

A range of maximum FSR controls currently apply to the study area including (refer to **Figure 20**):

- land zoned B4 - 2.5:1 or 2.85:1,
- land zoned B6 - 1.5:1,
- land zoned R4 and IN2 - 1.0:1,
- land zoned R2 Low Density Residential - 0.5:1, and

The maximum residential FSRs for 213 Princes Highway and 4 Wardell Street and 108 Princes Highway (zoned B6 but permits residential development) are 2.5:1 and 1:1, respectively. Both have a maximum FSR of 2.5:1.

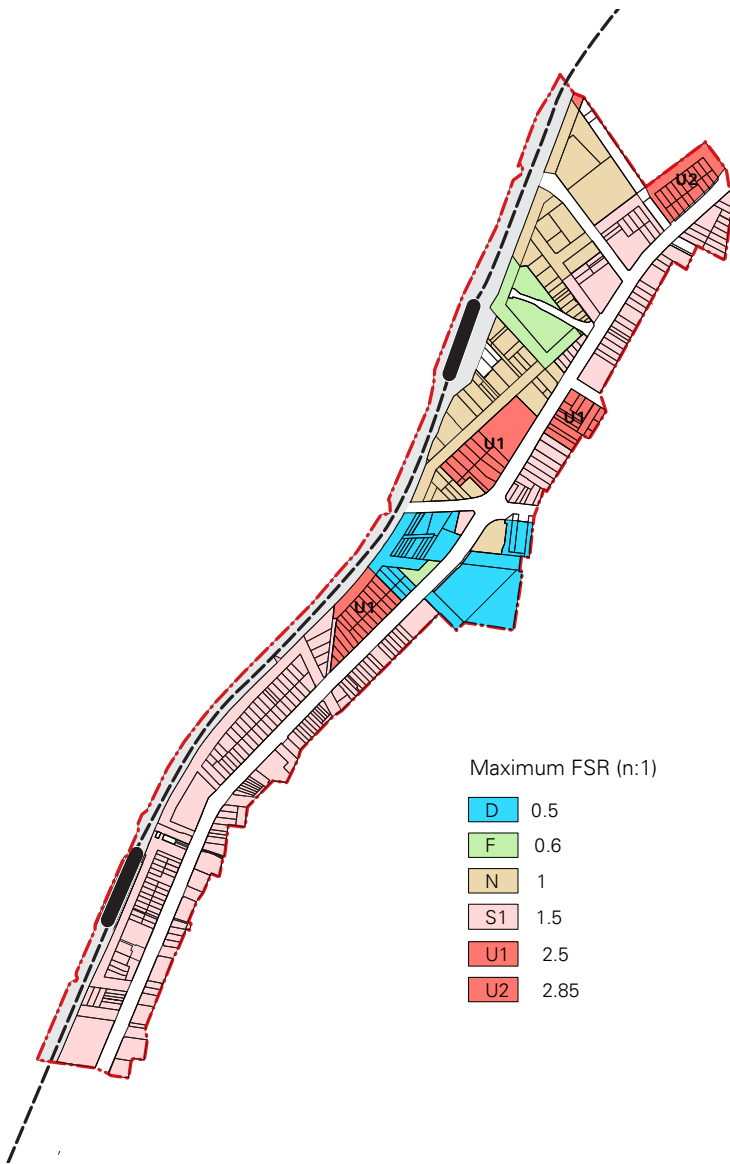


Figure 20 – Floor Space Ratio Map (*RLEP 2011*)

► **Active Frontages (*RLEP 2011*)**

RLEP 2011 includes a provision requiring active frontages on a small number of sites along Princes Highway (as identified at **Figure 21**). The provision requires active frontages on sites at the corner of Princes Highway and Forest Road (zoned B4 or B6).

Under *RLEP 2011*, a building has an active street frontage if all premises on the ground floor of the building facing the street are used for the purposes of business premises or retail premises. In the case of the site south of Forest Road, this requires the ground level to be used for business premises as retail premises are not currently permitted in the B6 Enterprise Corridor zone.

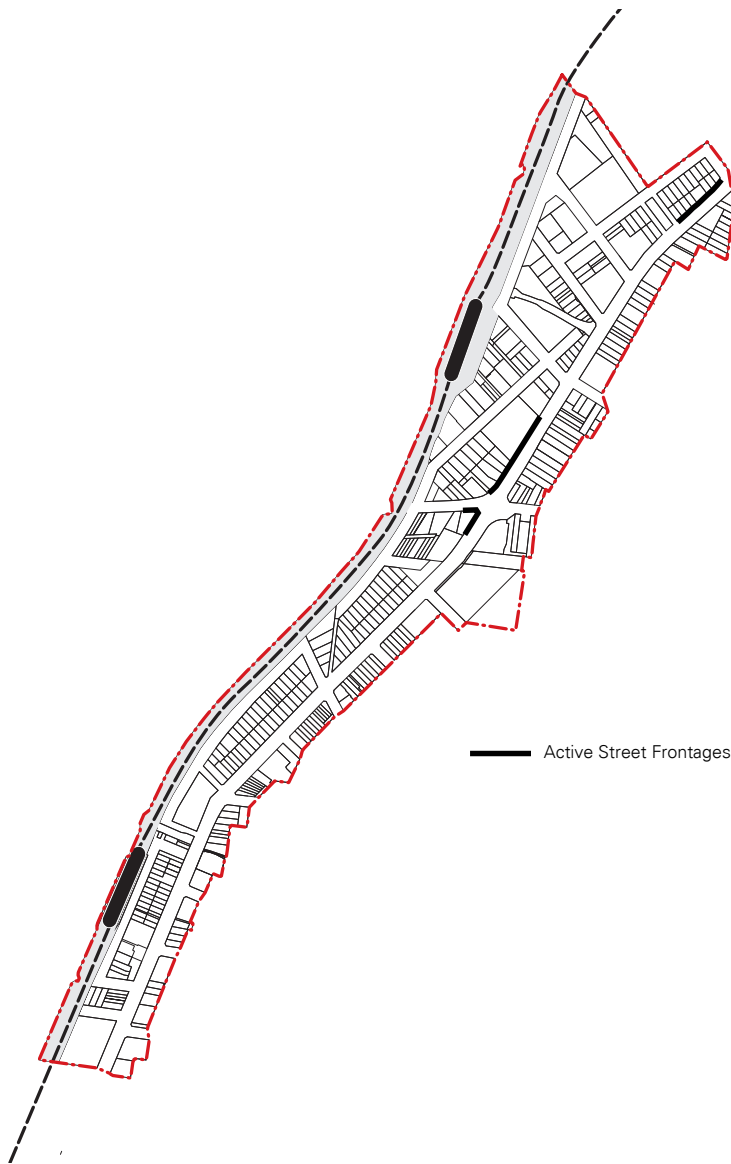


Figure 21 – Active Street Frontages Map (*RLEP 2011*)

2.4 Development Control Plans

► Rockdale Development Control Plan 2011

The *Rockdale Development Control Plan 2011 (RDCP 2011)* became effective in December 2011 and implements detailed development controls that are consistent with the *RLEP 2011*. It provides objectives and design requirements for all aspects of development

The *RDCP 2011* repeals the following site specific DCPs that previously applied to sites within the Princes Highway, and there are existing specific provisions for individual sites within the Corridor:

- DCP 33 - 158 – 164 Princes Hwy, Arncliffe,
- DCP 58 - Arncliffe & Banksia town centres,
- DCP 59 - 10-12 Allen St & 11-13 Anne St, Arncliffe and,
- DCP 64 - 213 Princes Hwy & 4 Wardell St, Arncliffe, and
- DCP 83 - Princes Hwy, Arncliffe “EFCO Site”.

The land zoned B6 Enterprise Corridor is subject to a small number of specific controls in the *RDCP 2011*, including:

Development setbacks, with the following detailed controls:

- » on primary frontages to the Princes Highway continuous uniform street setbacks are to be followed where evident,
- » buildings must be at least 4.5m from the side boundary where adjoining any residential development. If adjoining business development, zero side setbacks are permissible.
- » buildings must be at least 6m from the rear boundary where adjoining any residential zoned land.
- Building siting and layout, with the following detailed controls:
 - » Development must respond to topography, views and sight lines.
 - » The preferred location for retail display space is in internal showrooms.
 - » The location and means of access to customer car parking should be clearly visible to passing motorists.
 - » Developments are to avoid locating vehicle driveways adjoining residential zoned properties without a landscape buffer or suitable acoustic insulated fence.
 - » building layout must avoid any potential for overlooking or overshadowing of adjoining residential zoned properties.
 - » Developments must locate any potential noise sources away from any adjoining residential uses.
- Building Design – with a range of architectural design controls to guide the appearance of new buildings; and
- Public Domain Interface – with controls relating to the location of parking and landscaped interface with property boundaries.

The *RDCP 2011* also includes generic controls guiding the development of a range of uses which may be developed in the R2, R4, B4 and IN2 zone as they appear along the Princes Highway, including:

- Low and medium density residential development,
- Residential flat buildings,
- Mixed use development, and
- Industrial development.

2.5 Community and Stakeholder Engagement

Draft RLEP 2011 Public Exhibition

A number of submissions from land owners of properties located in the Princes Highway Corridor study area were received during the public exhibition of the draft *RLEP 2011* (November-December 2010). The majority of submissions requested changes to the development controls, claiming that greater incentives are required to achieve economically feasible development along the Corridor. The properties relating to the submissions are identified in **Figure 22**.

With the exception of one submission (which requested a minor change to the permitted land uses), the *RLEP 2011* was not amended to reflect the submissions received during the public exhibition. The submissions report prepared by Council indicated the majority of submissions were not accommodated in the *RLEP 2011* due to the forthcoming Princes Highway Corridor Strategy and Rockdale Town Centre Master Plan which would further inform the decision making process. The proposed increases in development potential at 30-32 Arncliffe Street and 213 Princes Highway and 4 Wardell Street were considered by Council as inappropriate and not to proceed. Submissions to the draft *RLEP 2011* have been considered in the preparation of the Princes Highway Corridor Strategy.

Community, Landowners and Business Owners Workshop (March 2012)

In March 2012 a community, landowners and business owners workshop was held for the purposes of the strategy to identify current issues and desires for the future of the area. All residents, businesses, and owners within the Corridor were invited to attend. Approximately 50 people participated in the workshop, represented by a near even split of residents and business/land owners, spread along the length of the Corridor.

The key issues which were raised at the workshop are summarised and have been taken into account in the preparation of the project Vision and Implementation Plan.

Feedback from Key Government Agencies

Council invited key state government agencies (Roads and Maritime Services, Railcorp, Housing NSW, Sydney Water and Transport NSW) with landholdings or influence in the Corridor study area, to make any relevant submissions.

Submissions received from Sydney Water, Housing NSW and Roads and Maritime Services have been considered in the development of the Strategy.

Copies can be found at **Appendix C**.

Summary of Community Workshop Outcomes

The following list of key outcomes forms a summary of community feedback gained at the workshop. These ideas and suggestions have been taken into account in the development of guiding principles and the Strategy for the Princes Highway Corridor.

- Improve the general appearance and character of buildings along the Corridor;
- Increase densities and improve residential amenity around the stations;
- Improve safety, security and access to railway stations;
- Provide landmark developments that define parts of the Corridor;
- Provide new and improved open space;
- Consider impact of traffic noise on new residential development;
- Improve pedestrian movement across the Highway;
- Provide rationale for zoning and development potential decisions and ensure holistic and coherent approach is adopted across the study area;
- Provide a mix and flexibility of uses within the Corridor;
- Consider impact of development on existing schools;
- Encourage lot amalgamation to form larger redevelopment sites; and
- Consider impact of development on views and vistas.

A summary of how key community concerns have been reflected in the Strategy is provided on the following pages, and a detailed list of comments made at the community workshop is provided at **Appendix B**.

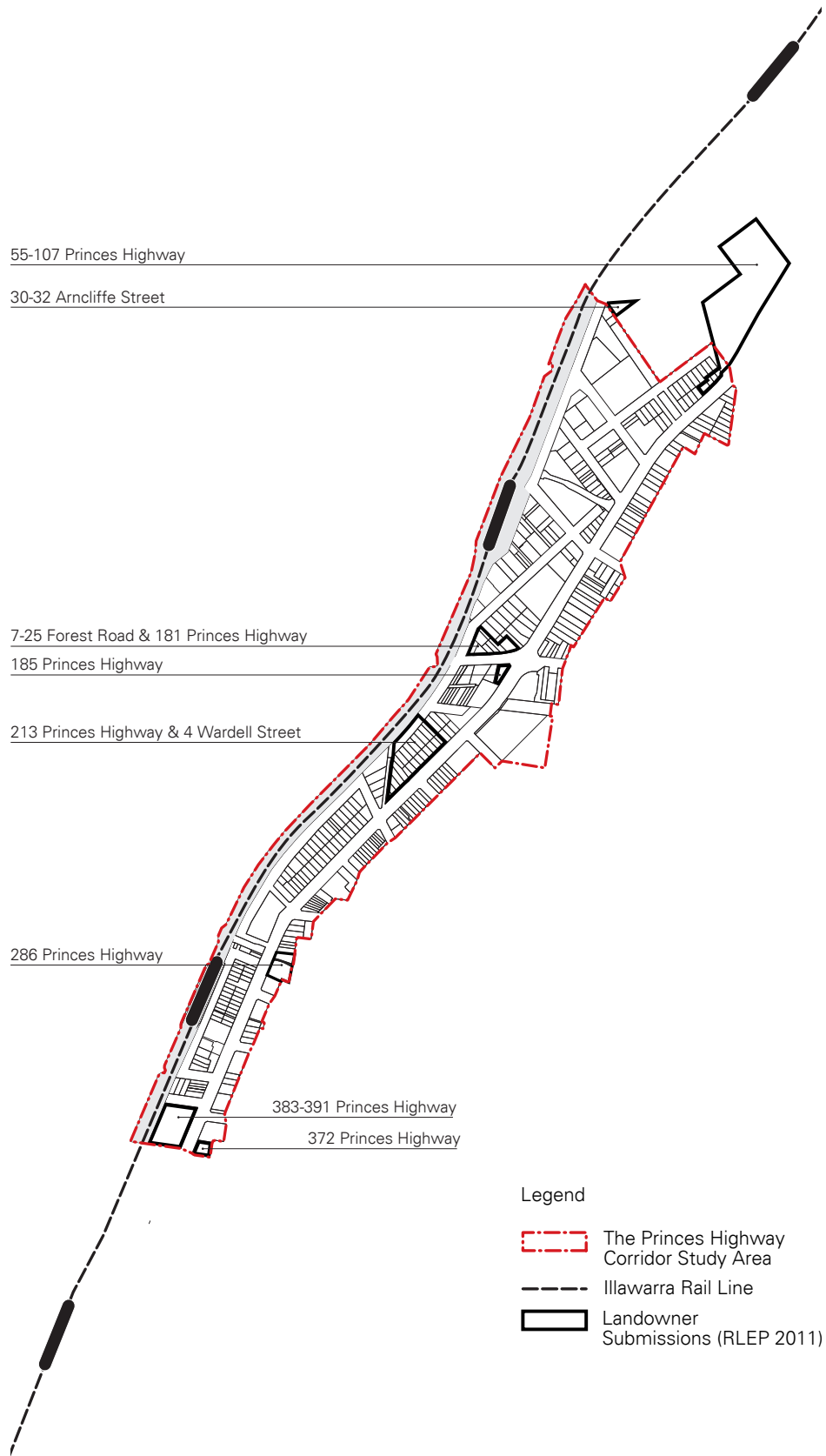


Figure 22 – Landowner Submissions to the *RLEP 2011*

Table 1 – Issues Raised at Community Workshop and Integration with the Strategic Vision

ISSUE	COMMUNITY CONCERNS	RESPONSE
Appearance and character	Improve the general appearance and character of buildings along the Corridor	A key aim of the Strategy is to improve the Princes Highway experience through high quality, consistent built form. In addition to encouraging lot amalgamation that will reduce site access points from the Highway, measures to achieve this outcome include requiring buildings to acknowledge the street by providing a basic level of visual activation through windows, glazing, entries and building articulation.
Densities around railway stations	Increase densities and improve residential amenity around the stations	The guiding vision of the Strategy is to grow and expand the Arncliffe precinct for predominantly high density residential uses. This can be achieved through a number of measures such as facilitating higher density residential development at the corner of Princes Highway and Burrows Street via formal road closure (part Eden Street) and site consolidation. Complementing this increased density, a range of public domain initiatives are recommended to improve residential amenity, such as progressively upgrading the footpath to a consistent treatment along the length of the corridor, starting in key locations such as the Banksia Precinct.
Safety, security and access	Improve safety, security and access to railway stations	<p>The Strategy recommends a number of initiatives to improve safety, security and access to Arncliffe and Banksia Stations. In addition to providing footpaths, street trees and lighting, the Strategy recommends extending Arncliffe Street to the Arncliffe rail station entrance and the provision of a vehicular drop-off point.</p> <p>These improvements will enhance the proposed Transport for New South Wales upgrade of Arncliffe Station in accordance with their Transport Access Program 2012. As part of this upgrade, it is recommended that lifts be installed on both sides of the station for accessibility and to coincide with the creation of the Arncliffe Street extension.</p> <p>The Strategy recommends that Council liaise with Transport for New South Wales to seek an upgrade of Banksia Station to include an improved station entry from Hattersley Street with formal structure, lighting and disabled access ramping.</p>
Landmark development	Provide landmark developments that define parts of the Corridor	The Strategy recommends an increase in maximum building heights in key parts of the precinct relative to adjoining areas to enable landmark buildings to be developed. The key area for this treatment is to the immediate east of Arncliffe Station, where maximum building height is recommended to be set at 35m, as well as to the south of the station on the Highway, where the recommended maximum building height is 31m (compared to 18m for surrounding land).
Open space	Provide new and improved open space	The Strategy proposes to establish a new local park at No. 2-4 Arncliffe Street (south) of approximately 3,200m ² . This park will be designed to be an open and accessible park, and a safe and inviting place for existing and future residents.

Table 1 – Issues Raised at Community Workshop and Integration with the Strategic Vision (continued)

ISSUE	COMMUNITY CONCERNS	RESPONSE
Traffic noise	Consider impact of traffic noise on new residential development	Due to the type and volume of vehicles using the Princes Highway through the Corridor, traffic noise will continue to be a major consideration for new residential development. In addition to compliance with State Government standards (<i>Development Near Rail Corridors and Busy Roads – Interim Guideline, 2008</i>), the Strategy recommends a number of additions to <i>RDCP 2011</i> to address noise, including landscape buffers, soundproofing of building plant and acoustic fencing.
Pedestrian movement	Improve pedestrian movement across the Highway	The public domain of the Princes Highway falls within the control of the State Government Roads and Maritime Services (RMS). While improvement to pedestrian movement across the Corridor is unlikely to occur in the near future, the Strategy recommends measures to improve the functional and visual amenity of the corridor such as improved footpaths and signage and additional street trees that will make general pedestrian movement more pleasant.
Strong urban planning basis for study recommendations	Provide rationale for zoning and development potential decisions and ensure holistic and coherent approach is adopted across the study area	The Strategy recommends a strong and cohesive approach based on growing Arncliffe as a residential precinct and revitalising the highway enterprise corridor for employment uses. Zoning and development potential decisions are underpinned by urban planning principles, such as focussing residential growth around areas with the highest level of public transport accessibility (the rail stations), and increasing the range of permissible commercial and retail uses on the highway corridor to stimulate renewal.
Land use mix	Provide a mix and feasibility of uses within the Corridor	The Strategy recommends a mix of residential and employment generating uses in the Corridor, including residential and mixed use focussed around Arncliffe Station, with commercial, retail and light industry uses on the Princes Highway Corridor. Development parameters such as FSR and height increases have been recommended, in order to uplift the development potential and feasibility.
Impact on schools	Consider the impact of development, including greater height and increased traffic on existing schools, in particular retention of views to the heritage listed landmark St Francis Xavier's Church tower	<p>The Strategy does not change the existing character of the heritage listed St Francis Xavier's Church / Primary School and Arncliffe Public School, retaining a Low Density Residential zoning and the lowest available FSR (0.5) and height (8.5m) for the site and nearby sites. Furthermore, a buffer is provided between the school and areas with a higher FSR and height to the south and north.</p> <p>New development will also be required to consider and respect the landmark St Francis Xavier's Church, as it is heritage listed.</p>
Lot amalgamation	Encourage lot amalgamation to form larger redevelopment sites	The Strategy encourages site amalgamation to help deliver larger and more feasible development opportunities, greater consistency in building product, improve access and vehicular flow through the reduction of access points to the highway, and provide the incentive for lanes to be implemented. This objective is further promoted by recommended additions to <i>RDCP 2011</i> addressing amalgamation and subdivision.

2.6 Local Planning Analysis: Conclusion

The relevant local planning strategies and instruments for the Princes Highway Corridor are:

- The Rockdale Urban Strategy
- Rockdale Local Environment Plan 2011
- Rockdale Development Control Plan 2011

► **Rockdale City Urban Strategy 2010**

The *Rockdale Urban Strategy 2010* raised the need for a specific strategy to be prepared for the Princes Highway Corridor.

The Urban Strategy seeks to encourage revitalisation of the Princes Highway Corridor to improve employment opportunities and achieve an improved urban environment along this prominent transport route.

The Urban Strategy also aims to concentrate future development around the City's existing villages and local centres and improve their vibrancy and character through increasing the local residential population.

The Princes Highway Corridor Strategy adopts and builds upon the principles within the *Rockdale City Urban Strategy*, focussing on revitalisation of the Highway Corridor and improving local centres.

► **RLEP 2011 and RDCP 2011**

The *RLEP 2011* and the *RDCP 2011* sets the current planning framework for future development in the Corridor.

Land Use Zones

- Banksia (south) is zoned B6 Enterprise Corridor (employment land uses only - retail and residential land uses are not permitted)
- Arncliffe (north) has a diverse mix of land use zones including B4 Mixed Use, R4 High Density Residential and B6 Enterprise Corridor, (permits a mix of residential, employment and industrial land uses)

Built Form

- Maximum building heights of 3-4 storeys, with up to 8-9 storeys achievable on selected sites.
- Maximum FSRs range from 0.5:1 to 2.85:1, generally reflective of the zoning.
- A small number of sites in the Arncliffe area require active frontages (i.e. business or retail uses on ground level) on Princes Highway.
- The *RDCP 2011* establishes specific controls applicable to a range of development types such as residential flat buildings, mixed use development and industrial development.

Currently, various land use zones and built form controls inhibit the viability of development. The Princes Highway Corridor Strategy recommends changes to the existing controls as an integral part of encouraging revitalisation through renewal and change.

► **Community Engagement**

The need for change and renewal in the Corridor was identified during community and landowner workshops. The key issues listed on the previous page have been addressed and understood as part of this Strategy.

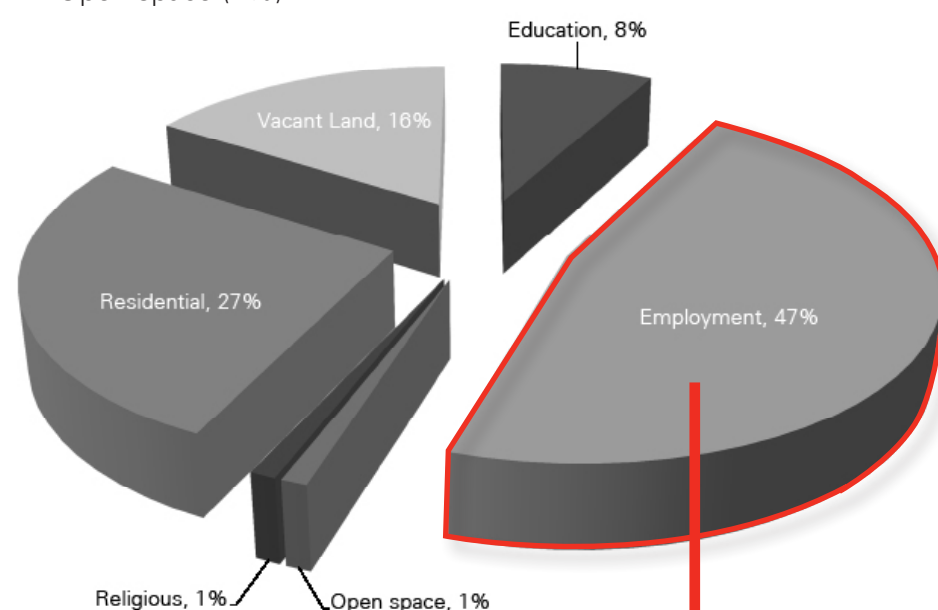
3.0 Economic Analysis

The following section provides a summary of the *Economic and Real Estate Analysis - Princes Highway Corridor* (Jones Lang La Salle 2012) prepared as part of this strategy (refer to **Appendix A**).

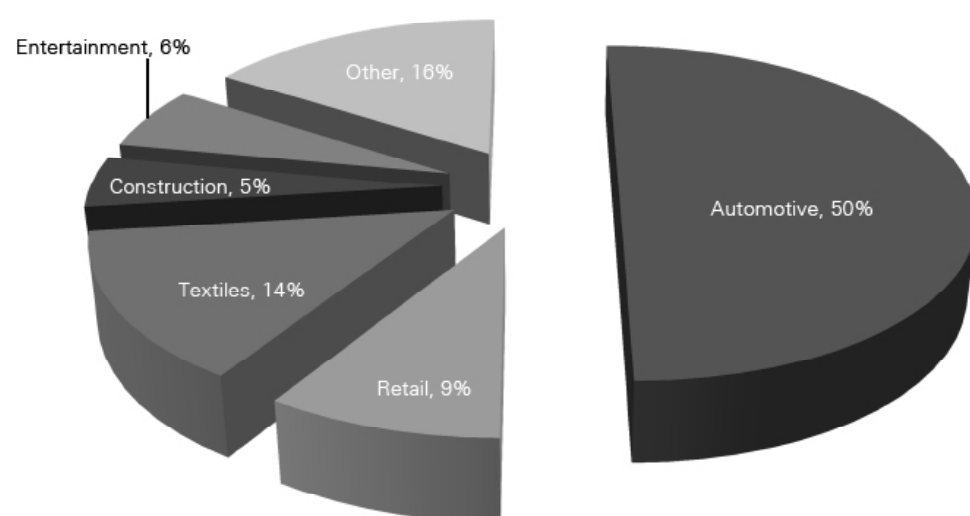
3.1 Economic Snapshot

The Princes Highway Corridor study area comprises a mix of land uses being:

- Employment (47%);
- Residential (27%);
- Vacant land (16%);
- Education (8%); and
- Open space (1%).



Breakdown of land uses



Breakdown of employment sub sectors

The dominant industry of employment in the area is the automotive sector. This accounts for approximately 50% of employment and includes showrooms, workshops and storage facilities. Bulky goods retailing is concentrated towards the southern end of the study area (383-391 Princes Highway, Spotlight and other retail centre). The Lowes Headquarters is also a significant employer in the area. The remaining employment uses (identified as 'Other' in the Breakdown of employment sub sectors in the chart to the left) comprise a mix of industries including electronics, printing, manufacturing, food, religious, storage and medical.

There are also significant residential uses throughout the study area mostly located away from the Princes Highway. Most of these are in the form of 3-4 storey walk up apartment buildings.

Many of the land uses fronting the Princes Highway are considered to be lower order uses, with the corridor providing low cost, older style accommodation for a wide range of local services. Many of the existing buildings are degraded and under-utilised and there is limited evidence of recent investment in the corridor. A small number of large sites offer significant redevelopment opportunities, however much of the land fronting the Princes Highway is fragmented and requires amalgamation to create major redevelopment opportunities.

There is limited development within the study area that take advantage of the Corridor's strategic location adjoining the Illawarra railway line.

As stated in Section 2.1, the draft South Subregional Strategy identifies an employment target for the South Subregion of 29,000 additional jobs (by 2031) with 13,000 new jobs to be provided in the Rockdale LGA. The Metropolitan Plan for Sydney 2036 updates the subregional target to 52,000 new jobs by 2036 which increases the number of jobs to be provided in Rockdale.

The three main identified locations for future employment growth in the Rockdale LGA are:

- Cooks Cove Redevelopment Area – Long-term potential for 11,000 employees;
- Wolli Creek Village – Up to 7,000 employees; and
- Sydney Airport Environs – 4,000 additional employees in the Rockdale LGA.

The three precincts will potentially cater for 22,000 jobs, well in excess of the LGA employment target identified for Rockdale LGA in the draft South Subregional Strategy.

Rockdale LGA has 19 centres in total, with the exception of Rockdale Town Centre. The rest are villages, small villages or neighbourhood centres. All of these centres need to contribute to employment growth.

Therefore, Rockdale City Council is not relying on significant employment growth along Princes Highway to meet the employment targets.

Three main light industrial areas (Turrella, Rockdale – Garnet Street and West Botany Street and Production Avenue Kogarah) provide employment opportunities and services, although the trend in inner and middle suburban industrial precincts has been for employment numbers to decline. This is due to a range of factors, including pressure from non-employment generating uses (primarily residential), general loss of industrial based employment due to structural changes to lower employment generating uses and movement to lower cost locations in the outer suburbs, and under-utilisation of existing industrial buildings. Future growth or containment of employment may come from a broader mix of services within such precincts.

The challenges faced by the area are not unique. There are many examples within Sydney of similar corridors where aging stock and a lack of investment have led to high levels of vacancy and a loss of employment.

While not looking to understate the challenges of the corridor, Jones Lang LaSalle considers that it is in a unique position with a number of features that differentiate it from other corridors. These factors include:

- Proximity to public transport i.e. rail and bus networks;
- Proximity to key employment areas including Mascot and Sydney CBD;
- Proximity to infrastructure which provides both jobs and amenity i.e. Kingsford Smith Airport, Port Botany Freight Terminal;
- Sufficient income in the area (i.e. not a low socioeconomic area);
- Proximity to other forms of amenity including retail, parkland / beaches (in the broader area); and
- A recognised cluster of automotive industries.

Given the material nature of the above factors, Jones Lang LaSalle considers it very likely that the study area will be a significantly more dynamic area than most other 'corridor' areas.

3.2 Land Use Survey and Analysis

Jones Lang LaSalle undertook a ‘high level’ survey of existing gross floor areas and employment densities for non-residential uses and analysis of the density of the existing residential product (refer to **Appendix A** for full details).

The survey provides information on the current land use mix including the type and density of employment, residential and other uses. The methodology included survey work and discussions with many of the businesses, as well as ‘desktop’ analysis.

Areas and Uses

The landholdings within the study area total approximately 25 hectares, with a breakdown shown in the table below. Of significance is the quantum of land currently used for employment related uses i.e. 47%, which underpins the economic importance of the local and regional area and its contribution to local employment.

Table 2 – Land use breakdown

Use	Land area (m²)	% of total
Employment	119,611	47%
Residential	67,884	27%
Open space	2,141	1%
Vacant land	39,965	16%
Education	19,878	8%
Religious	2,868	1%
Total	252,347	100%

Employment Use Analysis

A breakdown of the employment uses within the study area is provided in the table below. This data shows that automotive, retail, construction and textiles are the key industries in the study area in terms of land area. The automotive industry also dominates employment, accounting for an estimated 50% of the workforce. The automotive industry is spread across the study area however a very significant proportion is located on the Princes Highway in the form of car showrooms. It is important to note that employment in these showrooms comprises sales, finance, administration and car servicing.

Table 3 – Employment sub sector break down

Industry	Total building area		Total land area		Total FTE	
Automotive	33,144	46%	60,686	57%	386	50%
Retail	13,250	19%	10,692	10%	66	9%
Construction	3,964	6%	10,132	9%	40	5%
Entertainment	4,200	6%	7,293	7%	47	6%
Textiles	4,140	6%	4,352	4%	106.5	14%
Electronics	3,210	4%	4,004	4%	34	4%
Food	835	1%	2,502	2%	16	2%
Storage	4,000	6%	2,002	2%	5	1%
Other professional	1,250	2%	1,711	2%	24	3%
Manufacturing	1,700	2%	1,522	1%	18	2%
Printing	1,400	2%	1,374	1%	20	3%
Medical	320	0%	949	1%	4.5	1%
Total	71,413	100%	107,218	100%	767	100%

The following table shows the number of full time equivalent (FTE) employees by industry within the study area as well as the intensity of use i.e. average building and land space taken by those FTE Employees. Of significance are the low intensity retail uses and the high intensity of the automotive uses. Most of the retail uses in the study area are bulky goods retailing, which is a relatively low employment generator. Automotive businesses in the study area, however, have a relatively low built area for the site they sit on.

Table 4 – Full time equivalent (FTE) employees by industry

	FTE	Average Sqm Bldg / FTE	AverageSqm Land / FTE
Automotive	386	86	157
Textiles	106.5	39	41
Retail	66	201	162
Entertainment	47	89	155
Construction	40	99	253
Electronics	34	94	118
Other professional	24	52	71
Printing	20	70	69
Manufacturing	18	94	85
Food	16	52	156
Religious	8	263	358
Storage	5	800	400
Medical	4.5	71	211
Total	775	95	142

3.3 Influence of Regional Economic Activity

There are a range of macro economic and metropolitan planning influences that impact upon Sydney and the future potential of the Princes Highway Corridor study area. These are summarised below:

- concentrated higher order industries such as finance and business services are located around the Sydney CBD and North Sydney. The Sydney CBD continues to attract the majority of regional headquarters of global corporations locating in Australia;
- industry clusters are strengthening in information and communications technologies (Macquarie Park), biomedicine (Westmead, Sydney Central, Randwick), finance and business services, tourism and entertainment (Sydney CBD), and transport and logistics (Port Botany and Mascot);
- there has been rapid growth of business parks, particularly in North West Sydney, Rhodes and Sydney Olympic Park (eg. Macquarie Park and Norwest);
- home-based work has grown, particularly in areas with large professional populations such as the north western suburbs;
- there are continuing shifts in manufacturing, transport and distribution activities to Western Sydney, with concentrations of manufacturing activity in Bankstown, Blacktown and Fairfield; and
- more retail, construction and community service activities and jobs are dispersing to the high population growth subregions in the west.

In relation to occupations, recent data suggests that:

- jobs such as general and specialist managers, specialist business unit managers, business, information technology, science, and arts and media professionals are concentrating in and around the Global Economic Corridor;
- service professional jobs are dispersing and concentrating around education and health facilities. This includes nurses, teachers, GPs, counsellors and welfare workers;
- 'in-person' service workers are dispersed with higher densities in older and wealthier suburbs. This includes childcare, personal care and fitness instructors; and
- the industrial production workforce is concentrated in the post-war production areas — particularly along the M5 and M4 motorways. This includes store persons, hand packers, machine operators, product assemblers and factory labourers.

The Princes Highway Corridor study area is strategically placed at the south-western edge of the 'Global Economic Corridor (GEC)', a corridor of economic importance not only to Sydney but also to Australia's economy.

As noted in the NSW Government's Metropolitan Plan for Sydney 2036:

"The corridor of concentrated jobs and activity in centres, from North Sydney to Macquarie Park and the City to Airport and Port Botany has been the powerhouse of Sydney and Australia's economy."

The GEC is expected to be a major generator of future economic growth, with employment growing from an estimated 700,000 in 2001 (32% of the metropolitan total) to over 850,000 by 2031. Much of the growth will be in the CBD, while the new major centre of Green Square will be a hub of new commercial employment and residential activity. Major centres and employment clusters in the GEC south of the Harbour include the CBD, Pyrmont-Ultimo for telecommunications, Port Botany and Sydney Airport for transport / logistics, Bondi Junction Major Centre (retail and services), Randwick for Health and Education and Green Square, which is designated as a new Major Centre.

The study area is not identified as a major node of employment either now or in the future by the Department of Planning and Infrastructure. Nearby major centres at Hurstville and Kogarah are expected to attract employment growth. The study area is located adjacent the eastern side of the Banksia Neighbourhood Centre and Arncliffe Small Village and is flanked by the Wolli Creek Village to the north and the Rockdale Town Centre to the south.

However the Metropolitan Plan recognises that additional jobs will be required to be accommodated in corridors, smaller centres, villages and specialised activity areas and the Princes Highway Corridor study area should continue to provide a role in providing local employment.

There has been a long-term trend for manufacturing and logistics employment to shift towards the western suburbs of Sydney, with particular concentrations around Wetherill Park and the area known as the Western Sydney Employment Hub.

Manufacturing, transport and warehousing activity is concentrated along major transport corridors and arterial roads such as the Hume Highway, M5 and the M7. Planning for improved links between Sydney Airport, Port Botany and the manufacturing and distribution industries are a priority of the Economy and Employment Strategy.

The strategy for the Princes Highway needs to consider the changing nature of employment. A mismatch between planning frameworks that impacts supply and demand will most likely stagnate development potential and provide neither jobs nor housing outcomes. As such, the Strategy needs to take an approach that responds to and embraces these economic changes. The study area will need to accommodate a range of land uses, with planning controls that provide flexibility for future industrial and employment generating uses and trends.

3.4 Land Use SWOT Analysis and Feasibility Testing

The following SWOT analysis addresses the industry sectors considered to have greatest potential for development within the study area.

Retail (Bulky Goods)

The future development of bulky goods within the study area is going to be opportunistic rather than based on supportable demand. Furthermore, the one or two major opportunities may attract interest for a range of other uses (i.e. residential or car showroom) which will more than likely pay a premium for the site.

Table 5 – SWOT analysis: Retail (Bulky Goods)

Strengths	Weaknesses
<ul style="list-style-type: none">- Existing Retailers – Ikea; 383-391 Princes Highway (Spotlight and others retail centre)- High Exposure to Passing Trade	<ul style="list-style-type: none">- Potential difficulty with access / egress to site due to traffic volumes on Princes Highway.- Major locations for redevelopment do not complement / adjoin existing bulky goods outlets.- Depth and size of development sites restricts size of potential development.
Opportunities	Threats
<ul style="list-style-type: none">- Potential for bulky goods to be located along large amalgamated sites on the Princes Highway.- Potential for ‘mid-sized’ retail offerings to continue i.e. building (e.g. Reece, paint supplies), automotive parts (e.g. Repco) and home improvement.	<ul style="list-style-type: none">- Major competing bulky goods development – particularly Alexandria / Moore Park.- Competing uses for limited major development sites.- Potential development requirements may not suit preferred development format of bulky goods retailers (low density development; at grade parking in front of building).

Retail (Car Showroom)

The Princes Highway is a well-established and recognised automotive car showroom precinct. Recent transactions and discussions with automotive representatives demonstrate that the demand for well-located sites is strong.

Table 6 – SWOT analysis: Retail (Car Showroom)

Strengths	Weaknesses
<ul style="list-style-type: none">- High exposure from the Princes Highway- The clustering of automotive uses gives the area recognition	<ul style="list-style-type: none">- Fragmentation of landholdings dissuades development
Opportunities	Threats
<ul style="list-style-type: none">- Potential for intensification of automotive uses (i.e. ground floor show room and upper level office / repair / other)- Potential for mixed uses (i.e. ground floor showroom and upper levels of residential)	<ul style="list-style-type: none">- Potential for residential uses to take current market share of automotive uses

Retail (Enclosed Centre)

It is unlikely that enclosed retail centre will be in demand along Princes Highway for the following reasons:

- The strength of existing centres within the area and the proposed retail uses at Wolli Creek;
- Other competing land uses (which increase the land values); and
- Site amalgamation issues.

Table 7 – SWOT analysis: Retail (Enclosed Centre)

Strengths	Weaknesses
<ul style="list-style-type: none">- Intensity / density of residential uses- Proximity to transport (road, train)	<ul style="list-style-type: none">- Fragmentation of landholdings dissuades development
Opportunities	Threats
<ul style="list-style-type: none">- Continued intensification / densification of residential uses in the area, providing increased local customer base	<ul style="list-style-type: none">- Development of new enclosed shopping centres e.g. Wolli Creek immediately outside the study area- Competition from existing centres – Rockdale Plaza, Rockdale Town Centre

Retail (High Street and Secondary)

The viability of high street / secondary retail uses on the Corridor is poor. While these land uses do not have the same requirement for large un-fragmented landholdings, the poor access and lack of foot traffic are major influences on viability.

Where ground floor retail uses are required as part of mixed use developments, the viability of the development is generally negatively impacted from this requirement.

Table 8 – SWOT analysis: Retail (High Street and Secondary)

Strengths	Weaknesses
<ul style="list-style-type: none">- High exposure landholdings (traffic only)- Some sites benefit from rear access / corner location- Some sites are located near rail facilities	<ul style="list-style-type: none">- Access / egress to the Princes Highway- Poor foot traffic
Opportunities	Threats
<ul style="list-style-type: none">- Continued intensification / densification of residential uses in the area, providing increased local customer base- Low cost rents attractive for start-up retail businesses- Retail businesses supporting existing employment base	<ul style="list-style-type: none">- Development of additional retail outside of study area (e.g. Wolli Creek)- Competition from existing centres – Rockdale Plaza, Rockdale Town Centre

Commercial

After consideration of the drivers of office development, and supply in the local and broader market, the development of commercial development alone will be very unlikely to occur due primarily to:

- The current large volume of existing (South Sydney, Hurstville) commercial developments;
- Besides offering transport facilities the area, provides no other key points of differentiation; and
- Site / location challenges including the site amalgamation issue and competing high value uses.

Table 9 – SWOT analysis: Commercial

Strengths	Weaknesses
<ul style="list-style-type: none">- Good access to public transport- Proximity to Airport	<ul style="list-style-type: none">- Mismatch between market and economic rents- Poor environmental quality- Lack of supporting facilities- Traffic volumes on Princes Highway – difficult access to properties, noise etc
Opportunities	Threats
<ul style="list-style-type: none">- Major sites in close proximity to transit (on western side of Princes Highway)- Office / Warehouse units with good exposure to passing trade / proximity to airport	<ul style="list-style-type: none">- Existing competing markets – South Sydney, Hurstville, Kogarah- Future markets – Cooks Cove, Green Square

Industrial

There may be some potential for industrial uses in the study area however this development will compete with land values of competing uses and broader trends within the industry (i.e. move to cheaper land). The most likely type of industrial development product would be smaller strata product.

Table 10 – SWOT analysis: Industrial

Strengths	Weaknesses
<ul style="list-style-type: none">- Good access to public transport- Proximity to Airport- Automotive sector	<ul style="list-style-type: none">- Poor environmental quality- Lack of supporting facilities- Traffic volumes on Princes Highway – difficult access to properties, noise etc
Opportunities	Threats
<ul style="list-style-type: none">- Major sites in close proximity to transit (on western side of Princes Highway)- Office / Warehouse units with good exposure to passing trade / proximity to airport- Potential cost advantage over higher profile markets (such as Alexandria)	<ul style="list-style-type: none">- Existing competing markets – South Sydney (Alexandria, Mascot etc.)- Interface with adjoining uses (although “light industrial” uses are less likely to cause interface concerns)

Residential

Broadly, residential uses are likely to be the ‘highest and best use’ for land within the study area except those sites impacted by aircraft noise, road noise and existing industrial uses.

The viability of residential land use generally improves with the intensification of development (although this is dependent on site specific considerations). While specific to the location, the observation is that ground floor retail / commercial uses generally detract from the viability of pure residential uses.

Table 11 – SWOT analysis: Residential

Strengths	Weaknesses
<ul style="list-style-type: none">- Proximity to good transport options (rail, road)- Strong underlying demand for completed residential product and quality development sites- Proximity to major centres of employment (Mascot, Sydney)	<ul style="list-style-type: none">- Noise exposure- Princes Highway facing sites provide poor amenity and impact achievable gross realisations- Fragmentation of landholdings dissuades development
Opportunities	Threats
<ul style="list-style-type: none">- Current undersupply of housing stock in Sydney	<ul style="list-style-type: none">- Continued instability in the financial markets impedes development finance

3.5 Development Activity and Market Assessment

Future Development Drivers

A summary of employment trends that are having a significant impact on development in the study area includes:

- Centralisation of higher order industries in dedicated locations
- West movement of manufacturing jobs
- Growth of home-based working

While there will continue to be a requirement for local retail and manufacturing services, it is not expected that these will be a key driver of employment.

The automotive cluster and its associated uses will continue to strongly compete for sites within the study area.

Demand for residential development will be the main driver of growth, planning parameters permitting.

Development Activity In and Around the Corridor

There has been comparatively little development within the Corridor in the past few years. The development that has occurred has primarily comprised the smaller scale refurbishment of existing buildings. While development has occurred outside the corridor (including significant residential developments such as Wolli Creek), planning policies have supported this development.

Development Feasibility Analysis

Development feasibility analysis was undertaken as part of the *Economic and Real Estate Analysis - Princes Highway Corridor* (JLL, 2012). The feasibility analysis tested the various land use scenarios across a number of sites in the study area.

The feasibility analysis indicated that residential development generates the highest residual land value and is therefore the highest and best use along the Corridor.

However, it is noted the feasibility testing is based on the existing market conditions for employment generating land uses which may change as a result of evolving market demands in the future.

3.6 Princes Highway Overview

The SWOT analysis below summarises the strengths, weaknesses, opportunities and threats of the Corridor:

Strengths

- The Princes Highway corridor's key strengths are considered to be its accessibility and connectivity to the airport, Port Botany and the Sydney CBD and other key employment areas via good road and rail infrastructure. The Princes Highway more specifically provides excellent exposure to passing traffic and has been a key reason for the clustering of the automotive industry. Sites that benefit from safe access / egress and / or rear access provide better solutions.
- More broadly, the area is attractive to live in, which in turn provides strong underlying demand for developers to provide product to the market (supplying a broader undersupply in the Sydney market).
- The Princes Highway provides a high level of exposure for business, however it does not provide good access / egress to the potential passing trade, nor do the high levels of traffic provide a pleasant environment for pedestrians. For many land uses, the high exposure is countered by issues associated with high traffic volumes.

Weaknesses

- Key weaknesses impeding development primarily relate to environmental quality. High traffic volumes, noise, and low levels of pedestrian amenity impact on demand for property along the Princes Highway, despite its obvious high volumes of passing trade.
- Land ownership fragmentation is considered a barrier to redevelopment, however should demand for development sites along Princes Highway grow, then the expensive process of land amalgamation may become attractive.
- Access to sites with Princes Highway frontage is expected to be limited due to the impact this would have on traffic movement.

Opportunities

- The Princes Highway Corridor is well located to future residential redevelopment, potentially incorporating limited ground level retail uses. There are a small number of key large sites that would provide good opportunities, within close proximity of a train station.
- An increased residential population would support increased demand for a range of services, including retail, light industry and service office uses.
- It is expected that residential development will be more desirable set back from the Princes Highway frontage.
- There may be opportunities for additional bulky goods uses on large amalgamated sites along Princes Highway, although it is noted that bulky goods is not a particularly high employment generator. However, existing under-utilised businesses and vacant sites would hire even less employees. We consider support for 'mid-sized' retail offerings will continue i.e. building (e.g. Reece, paint supplies), automotive parts (e.g. Repco) and home improvement.
- While it is noted that industrial uses find other locations more attractive (both further west where large sites / cheaper land is available and close to the airport / port around Mascot / Alexandria), it is considered there is some future potential opportunity for multi-storey office warehouse development on key large sites with frontage to Princes Highway. Such uses, however, may not be able to successfully compete with more established locations or with residential uses.

Threats

- What is a development opportunity for one use may be considered a threat for another use. If residential uses are the highest and best use, then some of the employment uses may be pushed out. Jones Lang LaSalle consider the current cluster of automotive uses (specifically showrooms and associated areas) as likely to remain and not mutually exclusive to residential uses. Under this situation, sites can potentially be developed with high exposure areas developed for show room and quieter areas developed for residential uses. While we do not consider the market (in 2012) currently ready to adopt this typology, we see potential over the life of the strategy. These comments were generally reflected in our discussions with automotive industry business owners.
- For other employment uses, the question is "is this evolving change in land use dynamics reasonable or not?" While the loss of employment along the Princes Highway corridor would mean a loss of employment in this sector, residents may create demand for a range of other uses not currently provided for.
- With the exception of the automotive sector, it can be argued that all other uses compete with stronger markets within close proximity. This does not mean there is no room for such uses in the study area, but it may limit the opportunities in the short to medium term.

3.7 Implications for the Future Land Use Framework

A more flexible and balanced planning structure should be adopted that responds to the changing structure of employment uses and the demand for new residential and mixed use areas. This approach can:

- Account for softening / west movement of manufacturing and blue collar jobs with cheaper larger and superior infrastructure;
- The requirement for commercial / office users preference to be located in defined centres (e.g. Sydney, Mascot); and
- The limited demand for 'high street' or 'secondary retail' due to issues with both access and poor passing foot traffic.

It should be recognised that the study area is part of a broader precinct that has significant employment opportunities. In the immediate area Rockdale, Mascot, Kingsford Smith Airport and Port Botany are expected to provide employment opportunities. Cooks Cove, once developed, is located in close proximity to the study area. The transport infrastructure the study area enjoys (rail) also means that easy access to other key employment areas (e.g. Sydney, North Sydney, etc.) is available.

In addition, the development of residential uses will provide demand for some employment uses in both the immediate and broader area.

Given the fragmented nature of the landholdings, it is important to provide adequate incentives to amalgamate sites. Most importantly it is essential not to overburden sites with unviable restriction.

It is likely the study area will change much more dynamically compared to other corridors, but changes still take time. There is value in ensuring development of sites with good accessibility and high amenity precedes development of more marginal sites.

► Probable Types of Development

The land uses that may reasonably be developed within the Princes Highway Corridor includes:

- Higher intensity car showrooms with potential for ground floor showroom / first floor workshop;
- Higher intensity industrial uses (inclusive of strata development) that may include a mid of office space (10% to 25% office);
- Higher intensity industrial uses without office area;
- Small footplate retail (around train station). Examples may include cafés, post office, hair dresser, real estate offices etc;
- Larger floorplate retail facing Princes Highway (building / auto / home improvement supplies, fast food pad sites); and
- Residential (with a preference for sites away from the Princes Highway but close to centres / rail facilities).

4.0 Planning for Centres and Corridors

The Princes Highway Corridor study area is not only land along a road corridor, but can also be described as land surrounding public transport nodes at Arncliffe and Banksia Railway Stations. This section considers the relevant strategies and policies that guide development along major road corridors and around public transport nodes.

This section also includes a number of case studies that identify approaches to development along road corridors. The case studies are a mix of local (O’Riordan Street), interstate (Gold Coast Rapid Transit Corridor) and international (Auckland Liveable Arterials Plan) examples.

4.1 Introduction

There are numerous strategies that have previously been undertaken and apply or are relevant to the Princes Highway Corridor study area.

These strategies include objectives and priorities that provide a planning framework that guide the role and future development of the Corridor. The objectives, actions or directions of the relevant strategies are outlined below and have been taken into account in the preparation of the Strategy.

The key planning controls and policies applicable to the Strategy area are included in the following documents:

- Metropolitan Plan for Sydney 2036, NSW Department of Planning, 2010
- Draft South Subregional Strategy, NSW Department of Planning, 2007
- Rockdale Local Environmental Plan 2011
- Rockdale Development Control Plan 2012
- Rockdale Urban Strategy 2010

The current planning controls have been addressed in preparing the Strategy, however, the Strategy is not limited by the framework stipulated in these documents.

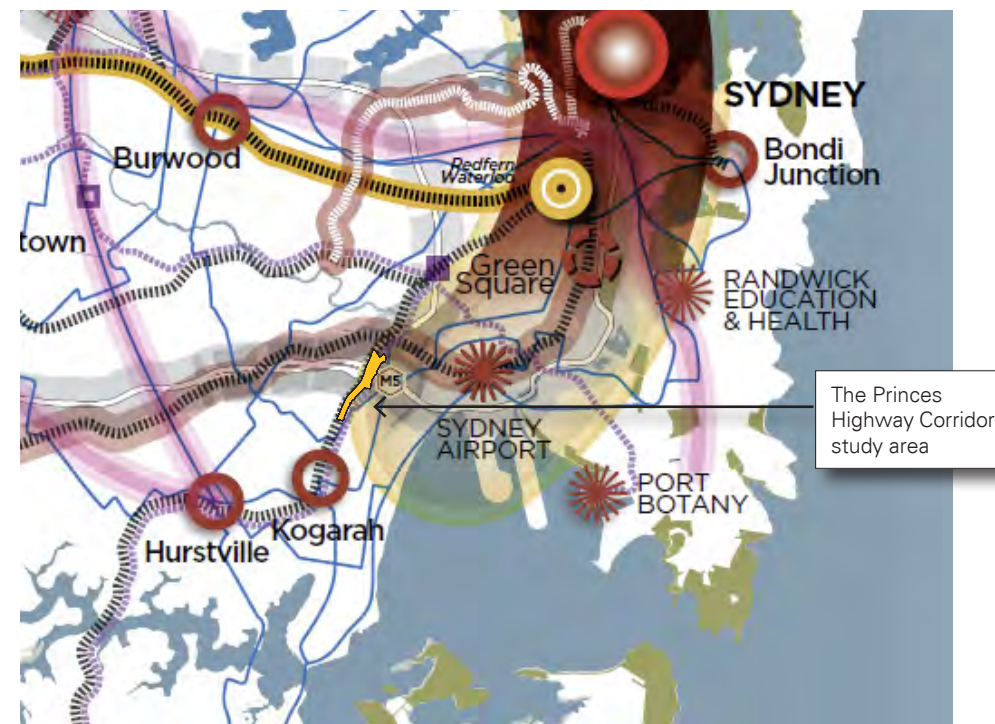
Other relevant information, policy and guidelines which have been reviewed include:

- Development Near Rail Corridors and Busy Roads – Interim Guideline, NSW Department of Planning, 2008
- Beyond the Pavement, Roads and Traffic Authority, 2009
- Sydney Regional Environmental Plan No. 33 – Cooks Cove
- DCP No. 58: Arncliffe and Banksia Town Centres
- DCP No. 62 : Wolli Creek (Part 1 & 2)
- DCP No. 64: 213 Princes Highway and Wardell Street, Arncliffe
- DCP No. 83: ‘EFCO Site’ (104-128 Princes Highway, Arncliffe)

There are also a number of previous studies that have been in reference to the Princes Highway Corridor study area. This work includes:

- Economic Sustainability of Highway Business Zone in Arncliffe and Rockdale, Hill PDA, 2002
- Princes Highway Study and draft Princes Highway Development Control Plan, NSW Department of Infrastructure, Planning and Natural Resources – Urban Design Advisory Service (‘UDAS’), 2002-2004
- Urban Design Study for 161-179 Princes Highway & 26-42 Eden Street Arncliffe (NSW Department of Housing properties), 2005

4.2 Metropolitan and Regional Planning Framework



Princes Highway in the context of the Global Economic Corridor, Metropolitan Plan



Princes Highway in the South Subregion, Draft South Subregional Strategy

► Metropolitan Plan for Sydney 2036

The *Metropolitan Plan for Sydney 2036* was prepared by the NSW Government to manage growth and identify a vision for Sydney to 2036. The Metropolitan Plan is based on a series of actions and objectives guiding the planning industry and growth.

Key actions or objectives relevant to the Princes Highway Corridor Strategy are:

- Growing and Renewing Centres
 - » Locate at least 80% of all new homes within the walking catchments of existing and planned centres of all sizes with good public transport.
 - » Focus activity in accessible centres.
 - » Plan for centres to grow and change over time.
- Growing Sydney's economy
 - » Plan for 760,000 new jobs, with half planned for Western Sydney focusing on cities and centres.
 - » Support high growth and high value industries through clustering.
- Transport for a connected city
 - » Target development around existing and planned transport capacity.
- Housing Sydney's population
 - » Plan for 770,000 additional homes with a range of housing types, sizes and affordability levels for a growing and ageing population.

► Draft South Subregional Strategy (2008)

The *draft South Subregional Strategy* provides strategic direction for growth in Princes Highway to 2031, along with the rest of the Rockdale LGA, and the Marrickville, Canterbury, Kogarah, Hurstville and Sutherland LGAs. The Strategy identifies a number of key directions to guide growth, building onto those in the Metropolitan Plan, including:

- retain strategic employment lands, and
- identified and investigate renewal areas for the south.

The *draft South Subregional Strategy* also allocates new housing and employment targets to be provided in the Rockdale LGA, which are:

- 7,000 new dwellings, and
- 13,000 new jobs.

The *Rockdale City Urban Strategy 2010* indicates that the *RLEP 2011* provides sufficient development potential to accommodate the required increase in dwellings and employment. This assumes the jobs along Princes Highway are retained on land zoned IN2 and B6.

The *draft Subregional Strategy* also implements a centres hierarchy characterising each centre type. The existing centres in the Princes Highway Corridor study area are a Village (Arncliffe) and a Neighbourhood Centre (Banksia). To the north of the study area, Wollie Creek is classed as a Village, and to the south, Rockdale is a Town Centre. The centres hierarchy and classification is discussed below in **Section 4.3**.

The *draft Subregional Strategy* identifies Princes Highway as a potential 'Enterprise Corridor'. Enterprise corridors are defined as "areas which provide low cost accommodation for a range of local and regional services, including start-up offices, light industrial, showrooms, building supplies and retail, which benefit from high levels of passing traffic (over 50,000 vehicles per day). They provide a valuable buffer between residential development and the road."

The role of Princes Highway as an Enterprise Corridor, the role of the centres along the railway line and the ability to provide new employment and housing opportunities will be addressed as part of this Strategy.

4.3 A Centres Based Approach

The distinct strategic advantage the Princes Highway Corridor study area has over other metropolitan corridors is its proximity to the centres of Rockdale, Banksia, Arncliffe and Wolli Creek and accessibility to the four Illawarra line rail stations and an East Hills line rail station (Wolli Creek). To be effective, the Princes Highway Corridor Strategy needs to optimise the full potential role of these centres and their rail stations.

Planning for Centres at the Metropolitan Level

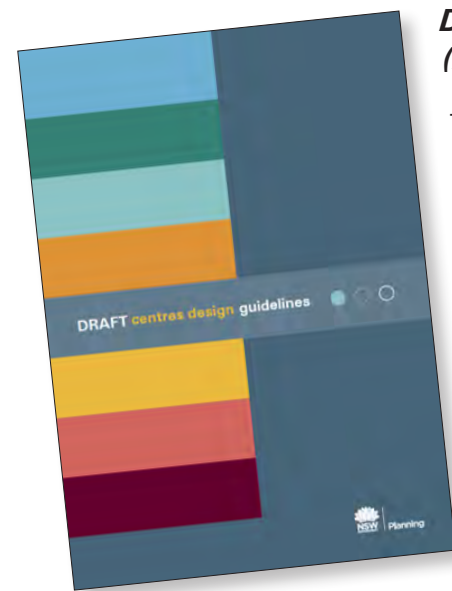
Planning for the growth and renewal of metropolitan centres has been a key element in the shaping of the metropolitan area and a primary long term policy direction for the planning and growth of the Sydney Metropolitan Area. Planning policy and guidance for metropolitan centres is provided through a combination of the *Metropolitan Plan for Sydney 2036*, a recent discussion paper, titled 'Sydney over the next 20 years', *draft Subregional Strategies*, a *Draft Activity Centres Policy* and the *Draft Centres Design Guidelines*.

The *Metropolitan Plan for Sydney 2036* defines a centre as a place where varying concentrations and combinations of retail, commercial, civic, cultural and residential uses are focused around transport facilities.

The key elements of the centres approach are:

- concentrating activity in accessible centres;
- managing out-of-centre development to maximise the economic and social advantages of clustered activity;
- making provision for the growth and renewal of existing centres;
- planning for new centres to emerge in appropriate locations;
- focusing State interest and involvement in the success of Global Sydney, the Regional Cities, Major and Specialised Centres;
- influencing the distribution and scale of land uses to improve transport choice and boost active transport and public transport use;
- locating 80% of new housing within walking catchments of centres;
- providing a diversity of settings for a wider range and density of housing; and
- concentrating commercial activity and job destinations in centres to achieve agglomeration, productivity benefits and improve workforce access.

In May 2012, the NSW Department of Planning and Infrastructure released a discussion paper, titled 'Sydney over the next 20 years', on the future planning for Sydney Metropolitan Area. Whilst the paper notes that centres are the building blocks of Sydney and the clustering of activity in centres reduces urban sprawl and is effective for business and activities, it then poses the question as to whether centres are the right places for new housing, jobs and transport.



Draft Centres Design Guidelines (not NSW Government policy)

The *Draft Centres Design Guidelines* were released by the NSW Department of Planning and Infrastructure in 2011 to provide a suite of best practice design principles for the urban renewal of existing centres and the design of new centres throughout New South Wales. The guidelines build upon the Metropolitan Plan for Sydney 2036 and the draft sub regional strategies.

The intent is for the *Draft Centres Design Guidelines* to work in conjunction with the *Draft Activity Centres Policy* and amplify the metropolitan and regional planning framework. Both the *Draft Centres Design Guidelines* and the *Draft Activity Centres Policy* remain 'draft for discussion' and do not represent NSW Government policy.

The *Draft Centres Design Guidelines* address a wide range of strategic to detailed planning and design issues associated with the renewal of centres, many of which are relevant to the future revitalisation of Arncliffe and Banksia, as well as Rockdale and Wolli Creek. The principles that relate to urban structure, activity and urban form are relevant to the future planning and design of the above centres and the Princes Highway Corridor study area. The Princes Highway Corridor Strategy seeks to incorporate the relevant planning design principles.

The *Draft Activity Centres Policy* was initially exhibited by the NSW Department of Planning in 2009, and further redrafted in 2010, following a review of submissions.

The term "activity centre" is adopted in this policy to describe a broad range of mixed use centres and to differentiate these centres from "shopping centres" which are often owned and operated by a single owner and which may form part of an activity centre.

The Draft Policy aims to:

- promote a network of activity centres that cater for the needs of business and places where people want to live, work, learn, play and visit;
- provide sufficient flexibility within the planning system so that it can accommodate demand for a broad range of uses to help encourage investment and facilitate competition; and
- provide guidance on how to manage broad scale expansion of dynamic business sectors.

The amended *Draft Activity Centres Policy* establishes six key planning principles to guide future development in and around activity centres and to provide for the emergence of new centres:

1. Commercial development should be located in activity centre;
2. Activity centres should be able to grow and new activity centres form in a manner that is consistent with relevant and up to date regional or sub-regional strategies;
3. Market determines need for development;
4. The supply of development should accommodate market demand;
5. Activity centres should support a range of uses and contribute to a competitive market; and
6. Activity centres should be well designed, sustainable and integrated with surrounding uses.

For existing activity centres, the draft policy notes that centres should facilitates future market demand through more flexible zoning and increased densities with consideration to increased floorspace ratios and height limits to allow for the growth or an increase in zoned land.

► **Future growth of Princes Highway centres**

The *draft Subregional Strategy (2008)* classifies Rockdale, Banksia, Arncliffe and Wolli Creek as local centres in the following subcategories shown in the table below and in **Figure 23** opposite.

CENTRE	SUBREGIONAL CLASSIFICATION (2008)	DESCRIPTION	POTENTIAL FUTURE CLASSIFICATION
ROCKDALE	Town Centre	One or two supermarkets, community facilities, medical centre, schools, etc. Contain between 4,500 and 9,500 dwellings. Usually a residential origin than employment destination.	Town Centre
BANKSIA	Neighbourhood Centre	One or a small cluster of shops and services. Contains between 150 and 900 dwellings.	Village
ARNCLIFFE	Small Village	A small strip of shops and adjacent residential area within a 5 to 10 minute walk. Contains between 800 and 2,700 dwellings.	Village
WOLLI CREEK	Village	A strip of shops and surrounding residential area within a 5 to 10 minute walk contains a small supermarket, hairdresser, take-away food shops. Contains between 2,100 and 5,500 dwellings.	Town Centre

As indicated in the draft Activity Centres Policy, there should be the capacity for existing centres to grow in a manner that is consistent with sub-regional strategies. The future growth and urban renewal potential of the Princes Highway Corridor study area in part focuses in these local centres, is likely to result in a need to change the centre classification to reflect an emerging growth role. The table also indicates potential future classification of the four centres that assumes renewal and increased residential and working populations.

In 2010, Rockdale City Council prepared a *Capacity Analysis and Built Form Study* which addresses the future development capacity and built form for key centres in Rockdale. The study includes projected development capacity for the corridor centres of Rockdale, Banksia, Arncliffe and Wolli Creek.

Over the next 10-20 years it is anticipated that Rockdale will continue to grow and consolidate as a town centre. Council is currently preparing a Master Plan to guide the revitalisation and future growth of the Rockdale Town Centre and it is expected that there will be significant new investment in the town centre. Wolli Creek will continue growing and will develop into a village with a high quality, high density living, and recreation environment with an emerging working environment.

Arncliffe Small Village and Banksia Neighbourhood Centre sit between the Rockdale Town Centre to the south, and Wolli Creek Village to north. The future growth and renewal of Arncliffe and Banksia will therefore be influenced by the growth occurring at Wolli Creek and urban renewal at Rockdale and the investment these centres will attract.

Arncliffe has the potential to grow and consolidate into an urban village that provides a mix of residential, retail and business uses. The growth of Banksia will be strongly influence by the urban renewal and growth occurring at the other centres with and outside the corridor which are less environmentally constrained in terms of aircraft noise, traffic noise, flooding and land fragmentation. Banksia will therefore continue to be a predominantly business area and an employment destination centre. In the long term Banksia neighbourhood centre has the potential to develop into a larger village centre, piecemeal development should be avoided as good urban form and amenity outcomes will not be achieved.

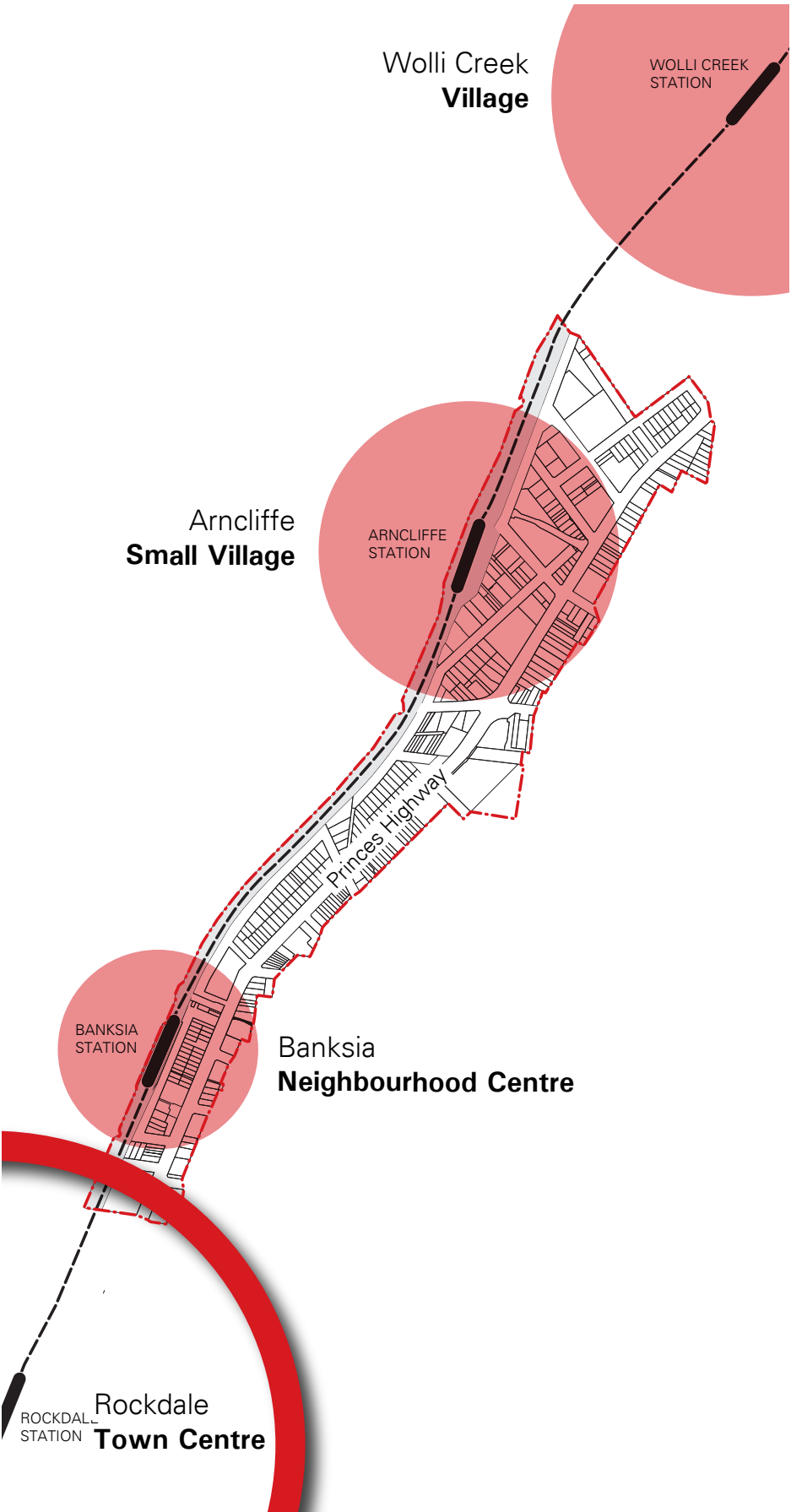


Figure 23 – Centres Hierarchy in the Study Area

4.4 Planning and Designing for Corridors

Sydney's metropolitan corridors, in concert with its centres, are undergoing variable pressures for change and renewal. As no metropolitan corridor is alike, the emerging pressures for metropolitan / regional growth and change will affect different corridors in different ways. In some corridors, the rate of change might be slower and incremental, whilst in others, the rate of change might be relatively rapid. Depending upon the metropolitan and subregional context of the corridor, this in turn can then lead to different policy responses at the local level.

Metropolitan enterprise corridors are generally areas in various stages of transition and have unique requirements depending upon specific circumstances. Whilst often defined and planned for as linear elements, a 'one size fits all' approach for corridors is not appropriate. The dynamics of a particular corridor and its rate and scale of change will vary depending upon the local and sub-regional role of the corridor, its transport role and connectivity, its redevelopment potential and its 'area of influence'.

The character, function and role of corridors will change along their length. Typically, a journey along a corridor is characterised by a 'pulse' of activity when the road passes through centres and edge of centre support areas or through key intersections, often followed by transition areas of lesser intensity of activity characterised by business, industrial, residential and environmental land uses or areas undergoing renewal areas.

► The Movement Economy and Changing Land Uses

Regional arterial roads have traditionally played a strong role in Sydney's metropolitan movement economy. The movement economy is a dynamic relationship between the accessibility and connectivity of urban places, their pedestrian and vehicular movement and the distribution of land uses and activities. The Princes Highway is a traditional example of the linear movement economy, reflected in the important role it plays in regional traffic movements in Southern Sydney. Typically movement-seeking land uses such as retail, commercial and service related businesses migrate to movement-rich road corridors and streets, producing multiplier effects, which attract even more land uses. In centres, the urban structure and shape generates movement and encounters between people, producing activity and trade, whereas in residential areas movement and activity are more controlled.

Whilst the purpose of a metropolitan enterprise corridor is to provide flexible land use controls to provide land for support activities that benefit from high levels of exposure and can provide a buffer to more sensitive uses.

As areas associated with corridors that are in transition from former industrial uses, the corridors themselves are becoming zoned for mixed use thereby permitting residential uses. In some metropolitan corridors, depending upon the anticipated impact on local centres, some Councils restrict retail uses, whilst others view retail uses as appropriate and are permitted.

Within the Wolli Creek to Rockdale Town Centre section of the Princes Highway, the traditional structure and mix of uses associated with the movement economy are being challenged and transformed by pressures for urban renewal. This in turn is impacting upon the future mix of land uses in the Princes Highway Corridor study area.

► Parramatta Road Corridor - Demonstrating Differing Policy Responses

The Parramatta Road corridor commences at Broadway in the City of Sydney and passes through nine Council areas on its way to Parramatta. The character of the road is diverse and ever changing. The current planning frameworks for five of the local councils that manage significant parts of the inner to middle ring sections of the corridor (Leichhardt, Marrickville, Ashfield, Burwood and Strathfield) present examples of differing policy, land use and built form responses along the same corridor:

- Leichhardt Council and Marrickville Council have adopted a mixed use approach to the corridor, permitting residential and retail uses along the corridor. This approach is consistent with the street edge built form character of this section of the road;
- Ashfield Council has adopted a business focussed planning framework that does not permit residential uses along the corridor. This policy response reflects the limited public transport available along the Ashfield section of the corridor;
- Burwood Council has adopted a mixed use planning framework that permits business, residential and retail uses. This policy response reflects the greater availability of public transport in the area – both bus and rail.
- Strathfield Council has also adopted a mixed use planning framework that permits a mix of business, residential and retail uses. This policy response reflects a greater availability of public transport, both bus and rail, and the change in traffic demand on Parramatta Road as a consequence of commencement of the M4 motorway.

The various approaches to planning along a corridor of similar nature have been considered as part of this Strategy.

► Local Activity Clusters

In some corridors, sector specific local activity clusters can be identified. Activity clusters are relatively easy to comprehend, but are market dependant and notoriously difficult to plan for.

The ‘Renovators Destination’ on Victoria Road, Drummoyne presents relevant example of an edge of centre cluster that provides both a business support area to the local centre of Drummoyne and a sub-regional sector based business cluster. The Banksia (southern) section of the Princes Highway close to Rockdale Town Centre has similar characteristics and presents an opportunity for growth of centre support business.

On many metropolitan corridors, the car sales and motor services industry have been traditional businesses, either in clusters or linear strips. However, ongoing changes to the structure and operation of the car sales and motor services industry and a weaker economy are impacting viability across the industry.



Part of ‘Renovators Destination’, Victoria Road at Drummoyne



Motor services cluster on the Princes Highway at Wolli Creek, just outside of the study area

► Case Study: O’Riordan Street Mixed Use Cluster

An example of a successful car sales/motor services and retailing cluster is at O’Riordan Street in Alexandria, north of Gardeners Road. It provides a good example of a former industrial / business area that has undergone gradual revitalisation over the past 10-15 years and emerged and as a busy mixed use cluster of motor service uses, bulky goods and retail activities. The O’Riordan Street area demonstrates a mixed use approach to urban renewal that combines a mix of showrooms and retail at ground level and commercial uses above, as well as bulky goods centres and home furnishings in larger premises. The O’Riordan Street public domain has been improved and now complements the new active street edge buildings which in turn promote greater walking and cycling.

For the Princes Highway Corridor Strategy, the successful clustering of motor service activities and supporting retail services with some supporting commercial uses on O’Riordan Street provides a useful best practice precedent.



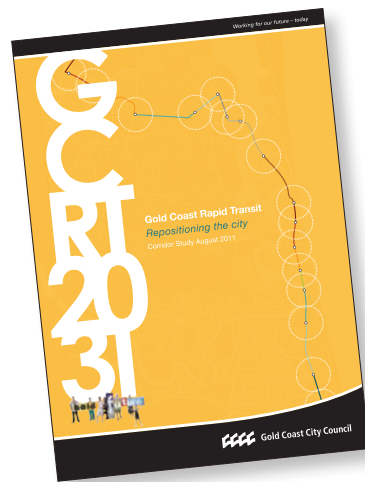
Motor services cluster, O’Riordan Street Alexandria



Busy road frontage, O’Riordan Street Alexandria



High quality public domain, O’Riordan Street Alexandria



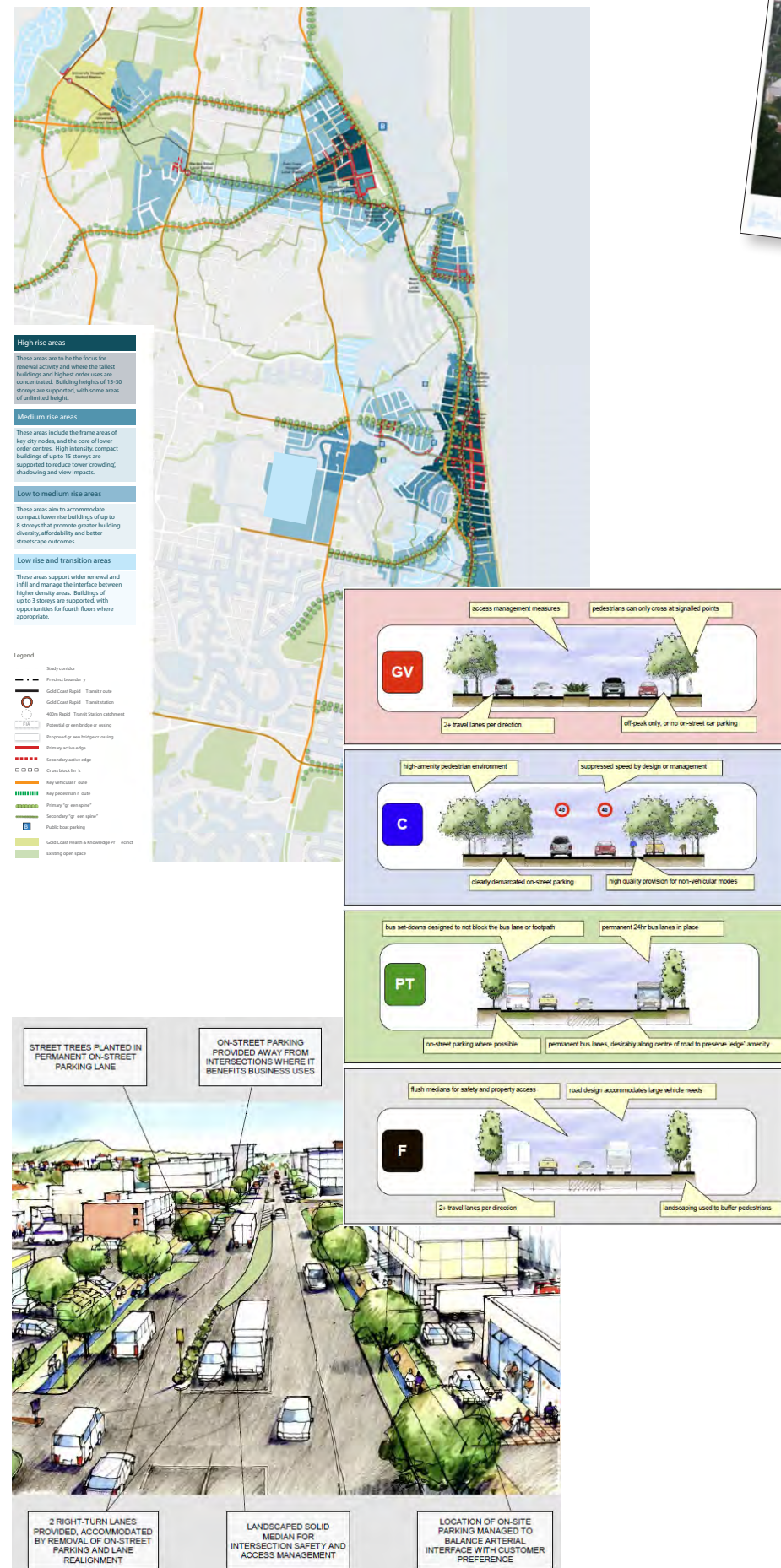
► Case Study: Gold Coast Rapid Transit Corridor Strategy (2011)

The South East Queensland Regional Plan establishes a clear policy to intensify transit oriented development (TOD) around major public transport nodes or corridors. The Gold Coast Rapid Transport (GCRT) project is a significant public transport initiative and will be the first light rail project in Queensland. It is envisaged to be the catalyst for new investment and development on the Gold Coast.

The GCRT project introduces nine strategic ideas to reposition the city, which are supported by a comprehensive corridor wide urban design framework:

1. Realise a bold future for one of Australia's most distinctive and vibrant cities
2. Reconnect discrete urban communities
3. Re-engage the city with its blue edges and water rich context
4. Provide greater choice for access and mobility
5. Challenge the trend of traffic dominated streets
6. Streets for people and a greener Gold Coast
7. Design buildings to foster 'street life' and distinct character
8. Create genuine communities
9. A resilient and sustainable city

The GCRT project is a relevant precedent for the Princes Highway Corridor Strategy as it demonstrates the broader city wide benefits of an integrated public transit and urban design strategy that seeks to re-envisage and restructure the urban form of the Gold Coast. The focus of the GCRT is on both the establishment of a public transit corridor and the more sustainable growth and revitalisation of local centres. The Princes Highway Corridor Strategy is characterised by both of these elements - a linear public transport corridor and existing local centres, but lacks the effective integration of these.



Source: Gold Coast Rapid Transit Corridor Study, 2011



► Case Study: Liveable Arterials Plan, Auckland City Council

Auckland City Council's *Liveable Arterials Plan* sets out a city wide arterial street management and development framework for the next 25 years. The *Liveable Arterials Plan* establishes a street functionality and network framework that will best enable good land use and development decisions, in the context of large-scale urban

form changes over the next 25 years. The *Liveable Arterials Plan* seeks to ensure an adaptable, reasoned and balanced view in the management of Auckland's arterial network and one that equitably responds to the needs of all user groups and looks to the long-term prosperity of the City.

The *Liveable Arterials Plan* is a 'systems based network approach' that moves away from the conventional hierarchical approach to road planning. The systems / network approach seeks to integrate land uses and the movement network to stimulate choice, connectivity, and convenience by:

- Reducing vehicle kilometres travelled;
- Increasing pedestrian crossing opportunities;
- Avoiding excessive intersection treatments (widths / grade separations etc.);
- Allowing land uses to more effectively interface with arterial roads.

The plan developed four Arterial Segment types to manage these roles and the conflict within the network:

- General vehicle emphasis (GV)
- Community emphasis (C)
- Passenger Transport emphasis (PT)
- Freight emphasis (F)

Auckland's *Liveable Arterials Plan* demonstrates the benefits of a holistic city / metro wide approach to planning and designing integrated transport networks. The approach taken seeks to guide the role, function and character of arterial roads at metropolitan and local levels and is considered a useful precedent for the Princes Highway Corridor study area. The Princes Highway is an example of a corridor of differing character that is experiencing various pressures and demand for urban renewal and transport, and will undergo changes to its role and character as these pressures come to fruition.

4.5 Centres and Corridors: Conclusion

► The Princes Highway Corridor Opportunity

The Princes Highway Corridor Strategy is a unique metropolitan corridor project. It is characterised by and has the significant advantage of parallel rail and highway infrastructure, in the form of the Illawarra Rail Line and Princes Highway respectively. The corridor project is also at a confluence of planning and transport policy frameworks at metropolitan, regional and local levels.

Parts of the Princes Highway Corridor study area are experiencing pressures for urban renewal and change, both within the corridor itself and within its immediate area of influence. The key locational, infrastructure and economic growth drivers generating pressure for urban change and renewal in the corridor are:

- Proximity and ease of access of the area to Sydney CBD, the Southern Sydney growth area and the 'Global Arc' as defined in the Metropolitan Plan 2036;
- Proximity, ease of access and growth profile of Sydney Airport as a 'Specialised Centre' and its importance as a significant employment hub;
- Proximity, ease of access and growth profile of Port Botany as a freight and employment activity hub;
- Level of connectivity to the metropolitan motorway and arterial network;
- Significant urban renewal of well located and connected former industrial lands both within and close to the corridor, in areas such as Wolli Creek, the Bonar Street Precinct and the proposed future development of Cooks Cove; and
- The amenity and attractiveness of the local area to residents, specifically the convenience of access to Sydney CBD, Sydney Airport and local beaches and parks.

These significant sub-regional growth pressures are redefining, challenging and changing the traditional land use activities, urban structure, movement patterns and built form of the Princes Highway Corridor study area and its adjoining areas.

The Princes Highway Corridor Strategy presents an opportunity to guide and manage the future changes that are likely to occur in the corridor. The complexities of the corridor mean that the strategy is defined by the integration and implementation of key metropolitan planning policy platforms for Centres and Corridors.

► Centres growth and Corridor revitalisation

The Princes Highway Corridor Strategy has the potential to positively integrate a range of metropolitan, regional and local planning policy directions, whilst responding to local issues raised by communities.

It presents an opportunity to capitalise on existing infrastructure assets and implement metropolitan and regional planning and transport policies that seek to:

- Integrate transport and land use planning and increase public transport usage
- Renew and revitalise corridors by focussing development to maximise infrastructure
- Focus activity and diversity in accessible centres
- Renew and revitalise existing centres along rail corridors
- Plan for centres to grow and change over time
- Strengthen the economic and employment role of the corridor at local, regional and metropolitan levels.

The Princes Highway Corridor Strategy is in effect a hybrid project that addresses the two key policy platforms of:

- Centres growth and renewal – that focuses potential for future growth in population, employment and retail activity on the existing rail based centres of Rockdale, Banksia, Arncliffe and Wolli Creek, with Banksia and Arncliffe playing dual roles in both centres growth and corridor revitalisation.
- Corridor revitalisation – that balances the existing employment role of the corridor and the need to increase employment opportunities with the pressure for development of sites for mixed / residential uses.

This focus on more active local centres and a revitalised highway corridor will deliver an area characterised by a greater diversity of land uses, consistent with the character of medium to high density mixed use / residential area. The gradual change to a broader mix use of land uses will also gradually change the economic and employment profile of the corridor, resulting in less traditional corridor employment uses and more support based employment uses servicing the growing residential community.

► Managing corridor change over time

Research and analysis of corridors, both in Sydney, in other state capitals and overseas, demonstrates that they change slowly and incrementally, often with uneven and fragmented development patterns. There is a need to acknowledge the dynamics of long-term urban change in the Princes Highway Corridor study area, whilst managing short to medium term incremental growth change.

The revitalisation of the Princes Highway Corridor study area and renewal of its local centres requires an integrated strategic vision that can manage its potential for change, growth and development for the next 20 years whilst balancing the emerging shorter to medium term market demands.