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INDUSTRIAL LAND STUDY

VOLUME 1



Economic
Research Consultants

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UNDER INSTRUCTIONS FROM
THE CITY OF CHARLES STURT

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OUR REFERENCE: PA1566 R0089

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EXECUTIVE SUMMARY



The City of Charles Sturt has around 560Ha of Industry zoned land in 22 separate precincts, scattered across much of its domain.

It is over a decade since there was a comprehensive review of this zoning. This study is a precursor to such a review. It considers Charles Sturt's industrial land stock through the prism of:-

- its broader economic and development policy settings;
- the Rezoning Assessment Framework established by the Metropolitan Adelaide Industrial Land Strategy; and
- the development planning and other issues arising from this analysis and assessment.

Industry's economic contribution to the city is clearly important and must be protected. It provides both jobs for the local community and export income for the region, and it has the capacity to remain a vital part of the City's economic make-up for the next generation and beyond.

At the same time however, there are other strategic development planning drivers at work, including population policy and the looming shortage of residential land in metropolitan Adelaide over the next decade, which will result in ongoing pressure for new, higher density models of infill development. Some of this pressure will be on existing industrial land.

Addressing both sides of this strategic equation will require that decisions about the ongoing role of industry in Charles Sturt's economic and social fabric be made "on balance". That balance will need to reflect a blend of policy objectives, some of which will work in favour of continuing industrial use and some of which will not. Where the decision favours industry, then it needs to do so on the basis that it will be able to operate at optimum levels. Where it does not, then it need be no cause for strategic concern, provided its replacement is economically appropriate.

The Metropolitan Adelaide Industrial Land Strategy (MAILS) addresses just this issue and provides a mechanism to guide such decisions. To this end, it defines "Prime Industrial Areas" (PIA's) against a dozen criteria, and reinforces this by also requiring assessment of rezoning potential.

This study refines this approach for application at a regional level. The result is 11 criteria each for determining both whether a particular precinct is a PIA and whether it has rezoning potential. Each of these criteria has then been applied to the 22 separate precincts identified with the Study Area for the purpose.



The analysis suggests that there are:-

- nine or so PIA's, being Hindmarsh, Royal Park, Hendon, Port Road/South Road Corner, Woodville North, Athol Park, West Croydon/Kilkenny, Beverley and Arndale, all of which require not only long term protection, but also long term enhancement of their capacity and capability;
- a handful of precincts with very high rezoning potential, including West Lakes, Seaton and Devon Park;
- several precincts where the long term underlying land use warrants review, including Kidman Park South, Bowden Brompton and portion of Kilkenny; and
- a number of opportunities to fine tune zone boundaries, generally to improve the long term management of residential interfaces.

From a strategic viewpoint, the key planks to any future industrial land development planning strategy might therefore reflect the broad objectives of:-

- preserving the city's industrial capacity and employment levels in appropriate degree, by –
 - continuing to providing suitably zoned land with suitable infrastructure connections for an appropriate range of industrial uses; and
 - enabling industry to operate effectively and efficiently within these zones; and
 - properly aligning the policy provisions of all its commercial and industrial zones;
- facilitating the entry of higher value industrial activities where appropriate;
- achieving improved environmental outcomes on a range of fronts within its industrial precincts; and
- ensuring that, on strategic balance (ie on a triple bottom line basis), land in Charles Sturt is able to be put to its highest and best use, probably including rationalization of some Industry zones – which will mean anticipating and planning for the advent of alternative uses, including both bulky goods and high density housing, in selected and appropriate locations.

The study gives rise to a number of particular planning policy issues, including:-

- the need to provide for the many faces of industry but, at the same time, to lean towards the most economically appropriate industries;
- the substantially low impact nature of much of the City's Industry zoning and the strategic implications and opportunities this gives rise to;
- the inappropriateness of Bulky Goods retailing in Industry zones, and the question of how and where to provide for this still emergent use;
- the failure of Home Industry Policy Areas to produce worthwhile development or economic outcomes – and, in some cases, their tendency to inhibit broader industrial land use outcomes;



- the incongruity of the Industry zone umbrella for dealing with most heritage precincts;
- the degree of mis-alignment between current zoning and the situation on the ground – especially along arterial roads, where non-industrial uses tend to predominate;
- the commonality of land uses between zones, especially between Industry and Mixed Use zones, and the need for a more integrated policy approach;
- the opportunity for the wider application of a more nuanced Mixed Use zone;
- the extent to which community uses are causing industrial capacity to be bled off and the best policy approach to dealing with such uses in the future; and
- the need to address residential interfaces in some areas, either to ameliorate the harshness of existing situations or to avoid repeat performances in the future.

These issues and opportunities are illustrated schematically in the summary maps included at the end of Section 6.3.

Beyond policy, there are infrastructure and programme needs embedded in these findings, including:-

- the need to take decisive action to upgrade transport infrastructure in selected precincts – often to sustain their long term PIA designation;
- the need to develop “strategies for change” to address economic development initiatives, including the attraction of new industry;
- the need to actively intervene in priority precincts so as to catalyse and facilitate industrial renewal on a scale, in a manner and at a rate that might not otherwise be achieved – which will entail masterplanning and case management in some precincts; and
- the need to improve the amenity of many precincts, especially where higher value activities are desired.

For Council, the implications of the report’s findings include that:-

- from an industrial viewpoint, there is no need for any fundamental shift in Charles Sturt’s underlying economic settings, but there is a need (and an opportunity) to modernize its economy in order to sustain current levels of economic activity;
- via this path, there is an opportunity to achieve either increased economic output from the same industrial footprint or the same output from a smaller footprint – with the latter suggesting a consequent opportunity for non-industrial renewal in some sectors;
- more change should be anticipated in desired land use and development patterns over the next decade for both industrial and non-industrial uses, and Council needs to respond accordingly now;
- there will be a need for capital expenditure in a number of industrial precincts, especially if there is to be enhanced transport infrastructure; and
- there will be a need for resources to be applied to pro-actively work on the renewal of priority precincts.



It is recommended that this report be endorsed by Council and that the team engaged to prepare the Section 30 Development Plan Review be instructed to:-

- firstly, regard it as the foundation of its work on this aspect of the Development Plan; and
- secondly, closely consider each and every need and opportunity identified herein because, notwithstanding the need for clear strategic direction, in development planning the devil is ultimately in the detail.

Finally, it is recommended that Council begin a conversation about the non-policy initiatives required to facilitate industrial renewal and modernization, and how it should go about planning both their scoping and their implementation.

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VOLUME 2

PRECINCT REVIEWS

1 INTRODUCTION



1.1 PREAMBLE

The City of Charles Sturt takes in a large slice of Adelaide's original metropolitan area. Geographically, it essentially forms a large triangle, lying primarily atop the River Torrens and extending from its base at the north western corner of the City of Adelaide, to a section of coastline extending from West Beach to Semaphore, in the city's north west.

Along the way, it takes in most of Port Road, which has long been the major arterial link between the city and Port Adelaide. Indeed, until recent years, it was virtually the only such link. However, a combination of a reduced reliance on the port and the opening up of new transport infrastructure, means that the strategic importance of this link has diminished over time.

Concurrently, old manufacturing is relocating and new urban pressures have emerged including, among other things, a diminished land supply for both residential and industrial use in all parts of the Adelaide metropolitan area and increasing pressure for urban consolidation.

As a consequence, commercial opportunities for "higher and better" uses have arisen, leading to pressure on councils such as Charles Sturt to rezone industrial land for other uses, including housing and, especially on main roads, bulky goods. Some of the resultant changes in use are entirely appropriate, while others are not. However, there has sometimes been ad hoc decision making, without full regard for the strategic implications behind individual changes.

Meanwhile, changing community expectations create ongoing interface issues of varying intensity in different parts of the city. Some arise due to legitimate resident concerns. At other times, they arise through encroachment of inappropriate uses too close to existing industry, which is unfair on those industries and, on a broader front, can have adverse economic and employment consequences.

What is now required is a comprehensive review of the entire situation such that appropriate policy positions can be established, recognizing both the valuable contribution that industrial enterprises can and do make to the communities within which they operate, and the desirability of change in some circumstances.

The underlying need is to both explore how best to align Council's strategic planning and its land use planning, including how to deal with any current mis-alignment, and how best to chart the way forward.

At the centre of this review will be the application of the Rezoning Assessment Framework established by the Metropolitan Adelaide Industrial Land Strategy (MAILS). Among other things, MAILS recognizes the pervasive nature of the pressures described above across metropolitan Adelaide generally, and seeks to provide a means whereby planning decisions affected by competing strategic and market forces can be addressed consistently and with some rigour.



The purpose of this report therefore is to address the continuing strategic relevance of Charles Sturt's industrial zones and, where appropriate, to make recommendations for or against change. The objective is to ensure that Council is in a position to fashion a development planning policy that reflects a diversity of views and influences, allows its current industrial land stock to be protected, but to be put to higher and better strategic use where appropriate and ensures that the City's economic base is preserved.

The outcome will be a considered review of the issues at hand, together with first recommendations, as to how Charles Sturt's Industry zoning should be structured for the next 10-20 years, and if and where rezoning to alternative uses should be allowed.

Specifically, the brief is to:-

- **review** and précis relevant strategic plans and other documentation;
- **discuss** the drivers of change and issues arising with Council and State Government officers;
- **undertake** a desk top contextual and situation analysis, including an economic review;
- **inspect** and describe each precinct;
- **undertake** analysis against the MAILES Assessment Framework on a precinct by precinct basis;
- **synthesize** the foregoing into a coherent assessment of the strategic alignment or otherwise of the current industrial land base;
- **prepare** an issues paper on matters arising; and
- **summarize** findings and make recommendations.

The brief is noted to exclude any specific consideration of:-

- industrial uses in non Industry zones, including Mixed Use zones, which can function, in part, as quasi Industry zones and which, as it turns out, are inevitably drawn into the equation; and
- site contamination issues, although there clearly are some which appear to be strategically significant – in Bowden Brompton for example.

A copy of the full brief is included as **Appendix A**.

The report is structured such that:-

- Section 2 provides context and background;
- Section 3 reviews the economic setting;
- Section 4 examines the Study Area itself;
- Section 5 addresses the Rezoning Assessment Framework; and
- Section 6 provides summary discussion, a strategic framework and conclusions.

It has been written by Geoff Hayter, Director, Colliers International Consulting Services, with contributions by:-



- Grazio Maiorano, Director, Urban & Regional Planning Solutions, who provided strategic input on planning matters;
- Barry Burgan, Director, Economic Research Consultants, who addressed economic issues; and
- Alistair Tutte, who oversaw production of GIS mapping by Council staff and who provided interpretation of those maps.

This report is provided by CICS. It has been prepared for **strategic planning purposes** and should not be relied upon for any other purpose or by any person other than **the City of Charles Sturt**. CICS accepts no responsibility for any statements in this report other than for the stated purpose.

1.2 THE STUDY AREA

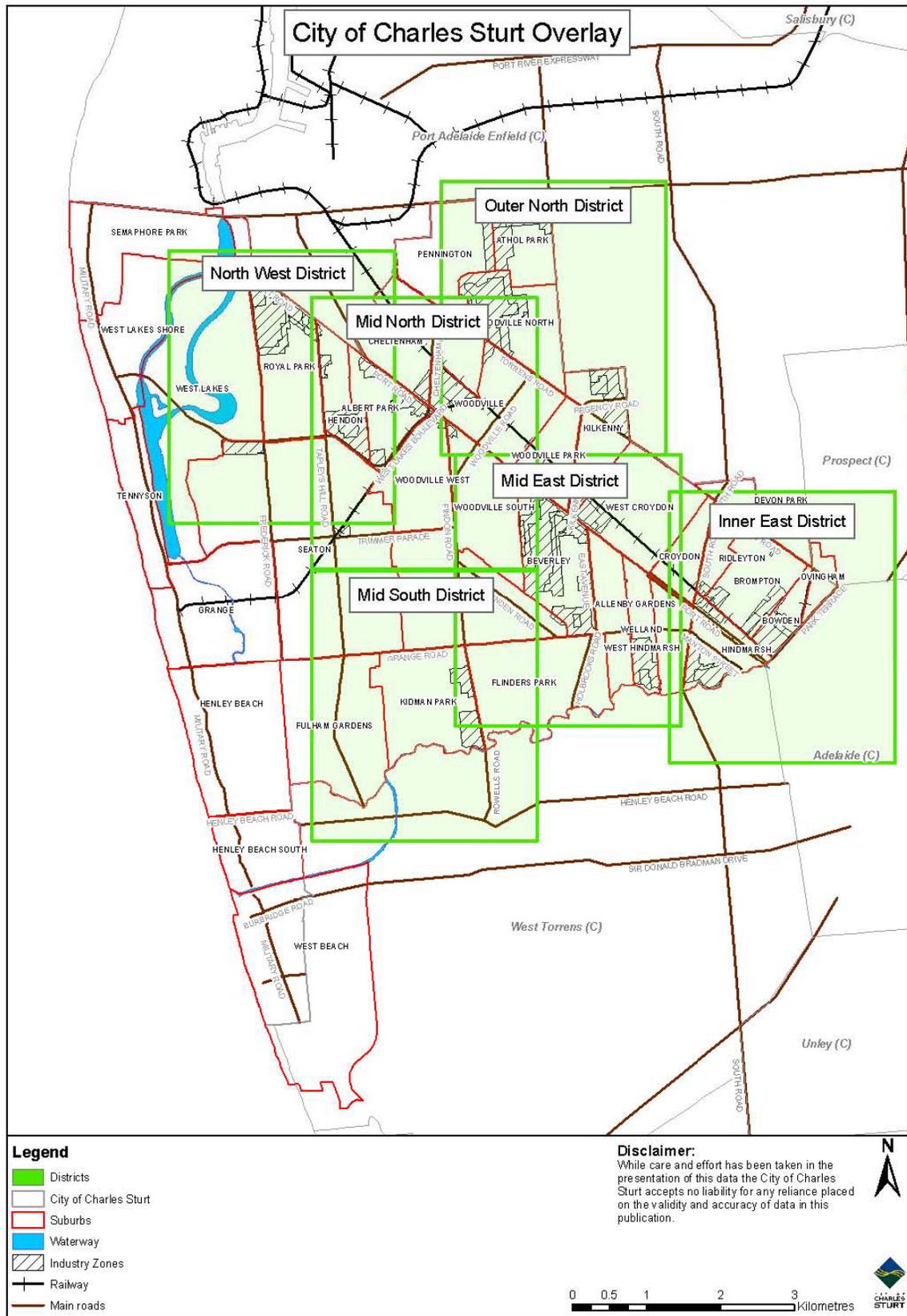
The Study Area is ultimately the City of Charles Sturt, but the focus is on its industrially zoned land. This incorporates a significant slice of north western Adelaide, largely straddling (but not always fronting) Port Road, with additional concentrations north of Torrens Road.

It extends from Grand Junction Road in the north to the River Torrens, and from Royal Park to Hindmarsh – and it adjoins Pt Adelaide Enfield Council to the north, West Torrens to the south and Prospect to the east, with Adelaide at its south eastern corner.

Charles Sturt includes some very significant tracts, such as at Woodville North and Beverly, and some smaller precincts, such as at Kidman Park and Seaton. It also includes precincts close to the city, like Hindmarsh, and precincts closer to Port Adelaide, like Royal Park, each of which has a quite different history and a quite different set of drivers.

For purposes of this report, and to allow an optimal and logical level of finer grained analysis, the Study Area has been divided into six Districts, as illustrated at Figure 1 overleaf.

Figure 1: District Overlay Map





These six districts are:-

- the **North West**, which is adjacent to Pt Adelaide, and extends through parts of Royal Park, the top of Tapleys Hill Road and West Lakes;
- the **Mid North**, encompassing the old Holden and Phillips manufacturing plants and including Hendon, Albert Park, Woodville, Woodville West and Seaton;
- the **Outer North**, comprising land north of Torrens Road, including Croydon Park to the east and Woodville North and Athol Park to the west, plus land at Arndale;
- the **Mid South**, extending from Grange Road to the middle stretch of Charles Sturt's River Torrens frontage at Kidman Park;
- the **Mid East**, which comprises land west of South Road between Port Road and the River Torrens, including Allenby Gardens, Welland, Beverly, West Croydon and Kilkenny; and
- the **Inner East**, which comprises all land east of South Road, including Bowden, Brompton, Ridleyton and Hindmarsh;

As detailed in Section 4, each district comprises between 2 & 5 individual precincts, of which there are 22 in all. Each precinct stands alone, with its own particular characteristics.

Aerial photography of each district, with zoning overlay, is included overleaf as Figures 2 to 7.

Figure 2: North West District



Figure 3: Mid North District



Figure 4: Outer North District

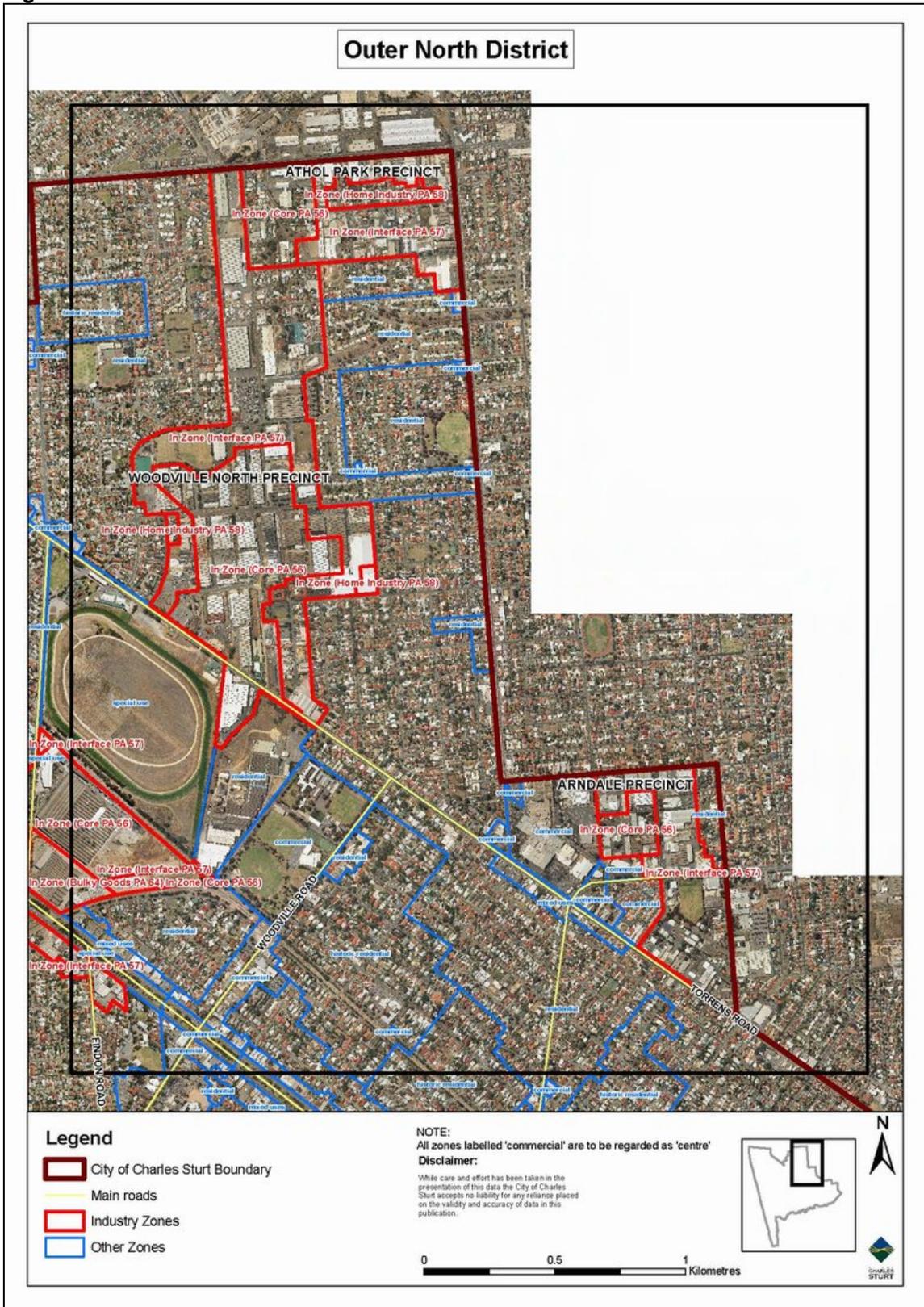


Figure 5: Mid South District

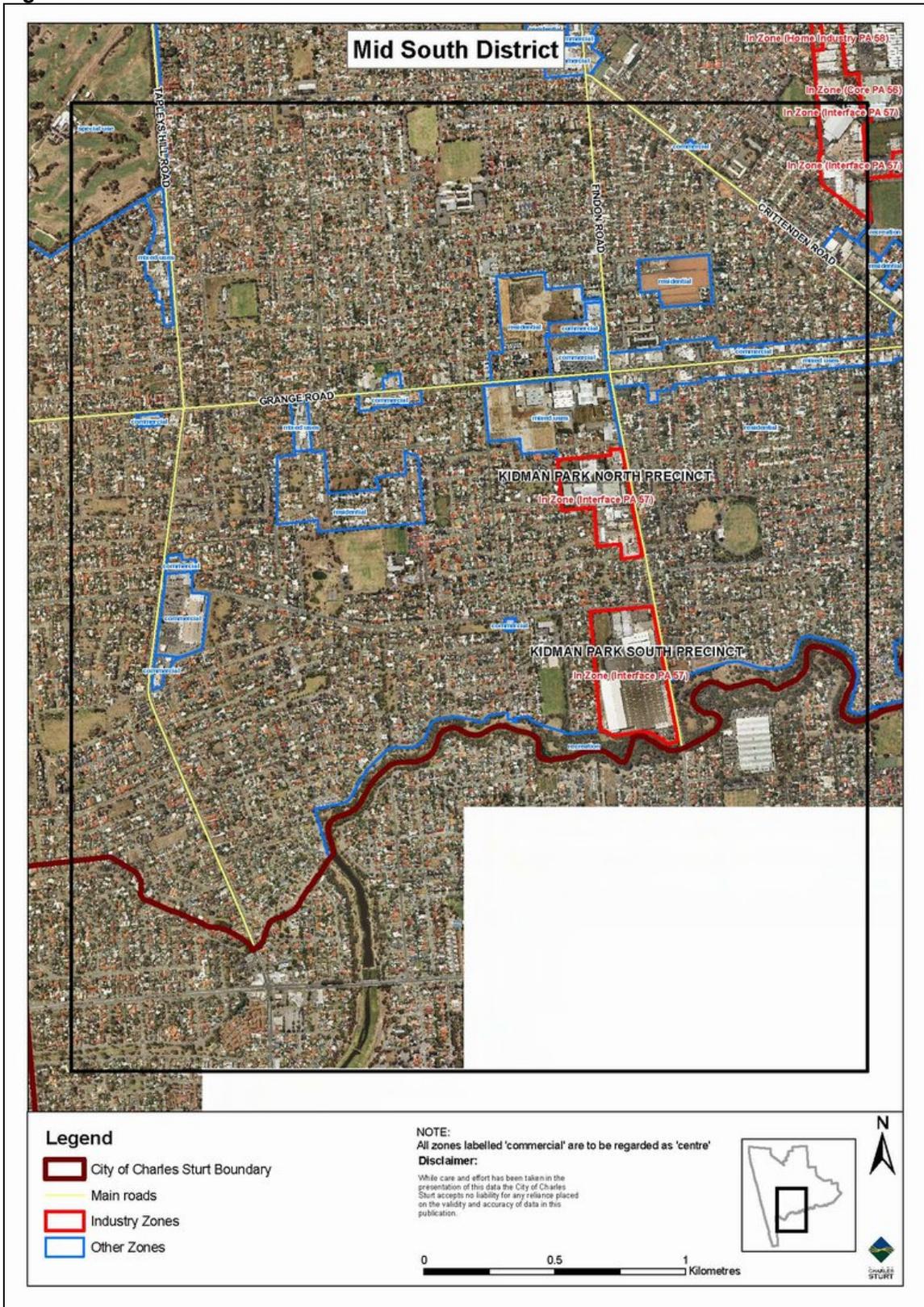


Figure 6: Mid East District

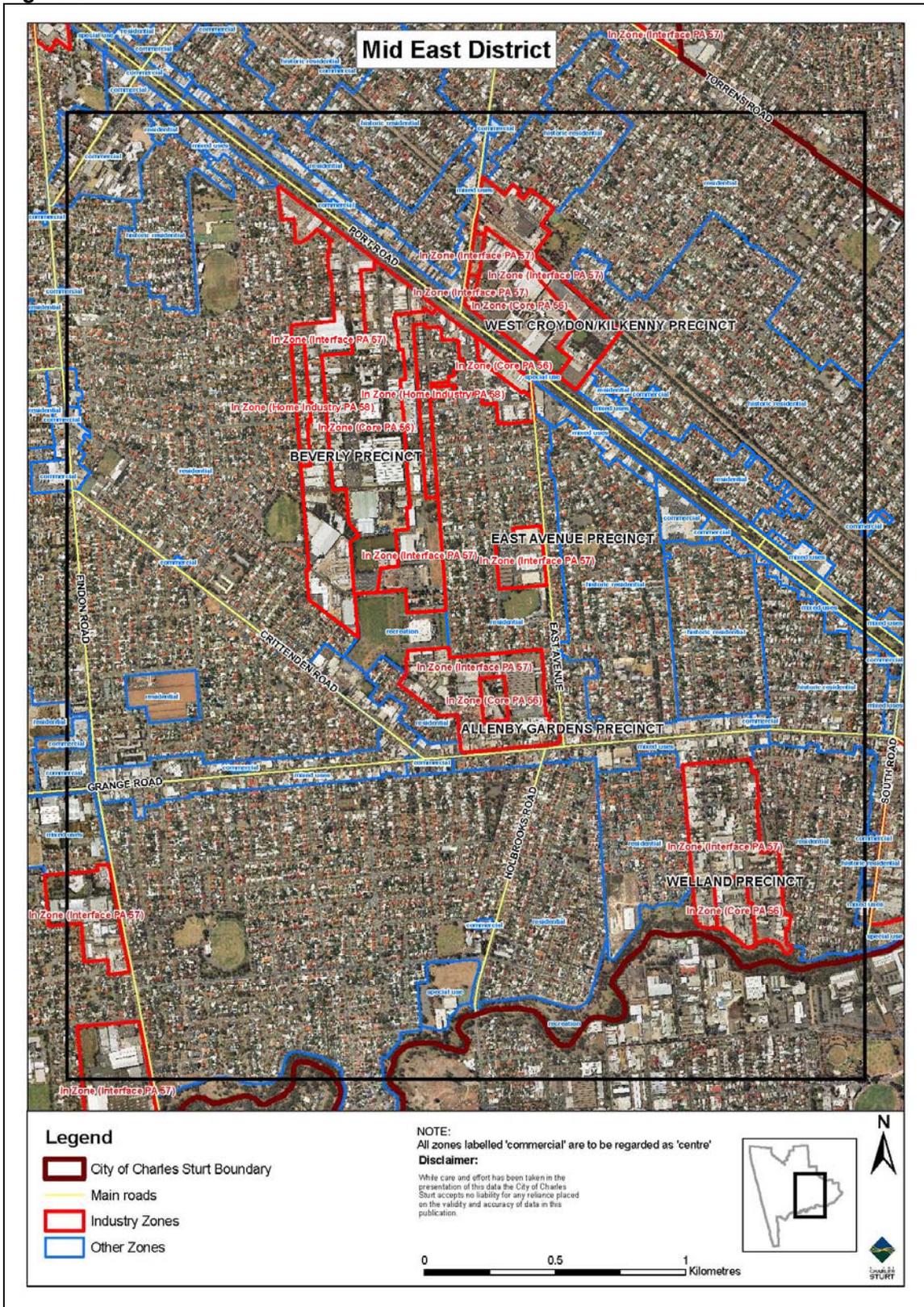
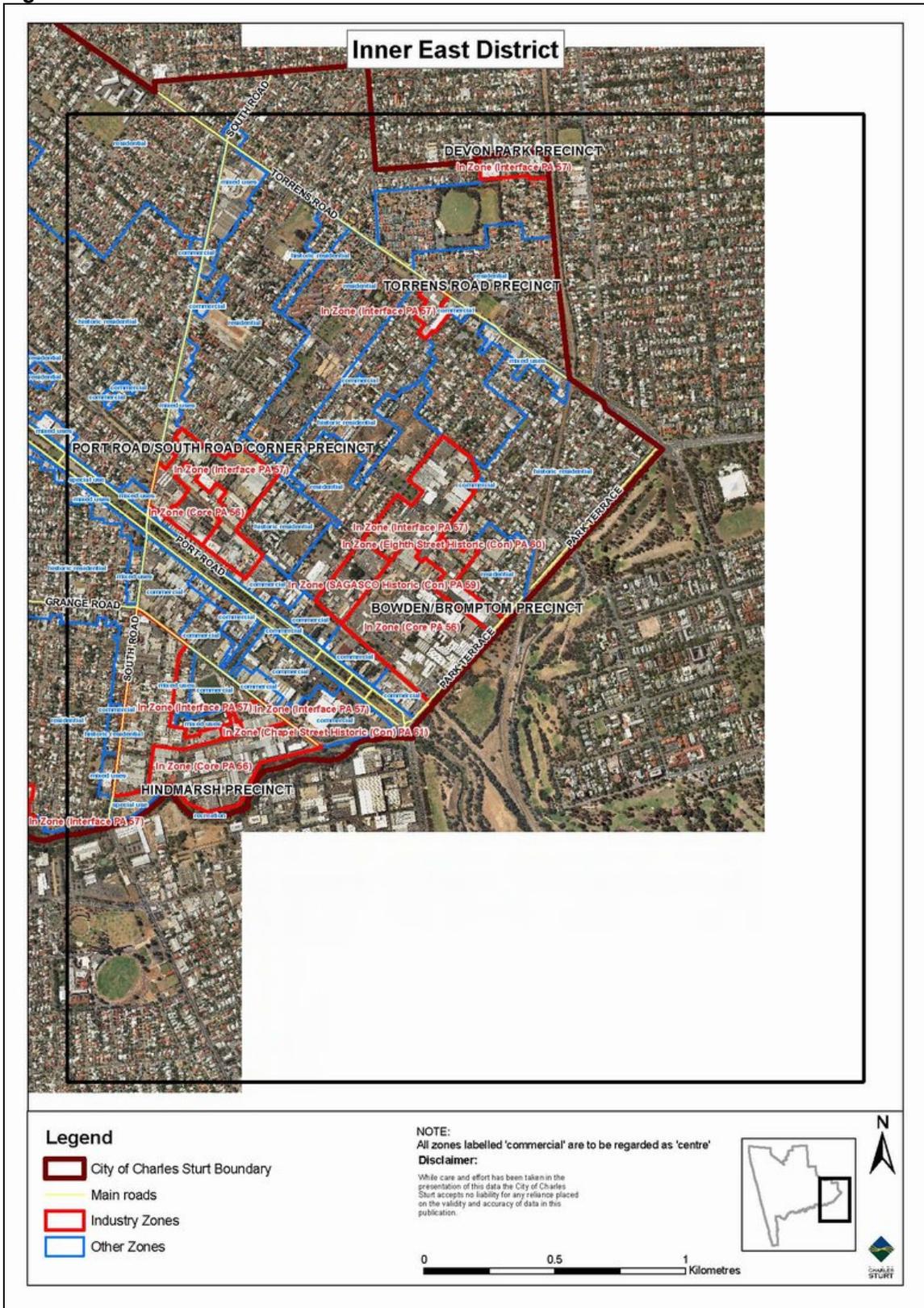


Figure 7: Inner East District





2 BACKGROUND

2.1 STRATEGIC CONTEXT

Charles Sturt's historic context means that much of Adelaide's early industrial heartland developed along the Port Road axis, between the city and its port.

It began with the near city areas around Hindmarsh and environs and along the River Torrens, extending westward to incorporate facilities such as the GMH plant at Woodville in the 1920's and the Phillips' Estate at Hendon in the 1940's, followed by further expansion in the post-war period, as manufacturers such as ACI, Actil, Email, Simpson Pope and Clipsal established themselves, and as infill opportunities were taken up in areas such as Beverly, Kidman Park and Royal Park.

Development finally overflowed the original north western "settled areas" and, in the late 1970's, industrial land began to be released in altogether new areas, such as Regency Park.

This new development was in response to a diminishing supply of (or, more correctly, growing demand for) new industrial land at that time – because areas such as those that now fall within the Study Area were either fully occupied or otherwise unavailable.

With the completion of new transport infrastructure such Cormack Road and other new connections to the east in the 1990's, development began to spill north of Grand Junction Road and into Salisbury. The recent completion of the Port River Expressway and the pending opening up of Gillman and LeFevre Peninsula, will largely complete the infill of the original settled areas. Now, 25 km to the north, Edinburgh Parks is filling rapidly and in 10 years, Burton, Direk and areas along the Northern Expressway will be regarded as prime industrial land.

All the while, old industry has been abandoning its long held sites in the Study Area. At various points, the Gasometer was demolished at Brompton, GH Michells abandoned Hindmarsh and brickmaking stopped at Welland. Phillips & General Motors Holden moved on in the 1980's, John Shearer in the 90's, Sheridan more recently and, soon, Clipsal will be gone as well.

At the same time though, the previous emphasis on traditional manufacturing has been giving way to cleaner industry and higher technologies, and to an increasing emphasis on distribution and services. The result is that elements of the old industrial areas built up before and after WW2 have reached their use by date, and now provide outdated facilities and infrastructure.



Almost universally, the sites these industries have left behind have struggled to find new life as industrial facilities. It is 20 years since Holden pulled out from Woodville and only in the last couple of years has its former site's redevelopment come to full fruition – partly on the back of a bulky goods development. Phillips' former site at Hendon lives on in a low key way, while John Shearer's old site at Kilkenny is largely obsolete and there are unresolved land use issues around the SAGASCO site at Brompton.

Where there has been renewal, it has generally been on the back of a start again approach. Charles Sturt Industrial Estate (CSIE) at Woodville and Dudley Park (in Pt Adelaide Enfield Council) are two examples of areas which have made the transition from old to new on the back of clear felling of old improvements and starting again. New development at CSIE is as good as any in its market in Adelaide, while occupants in Dudley Park now include Ansett Ridgway, Spotless, Balfours and Alcan.

Concurrently, the push towards urban consolidation has introduced new pressures on industrial land in particular, for conversion to both residential and/or commercial uses including, in the latter case, bulky goods – although it has to be said that its effects are not yet fully evident in Charles Sturt's Industry zones. Where they are, it is often as a consequence of a decision by an older industrial enterprise to relocate, leaving behind opportunity for change, to which the development industry responds.

Regardless, this pressure (among other things), is feared to be causing (or to be about to cause) erosion of the city's industrial land bank, which may have adverse effects if it proves to have been strategically inappropriate, noting that:-

- these adverse effects tend to arise over time as a result of cumulative effects, rather than any one change of use,¹ –and this potential needs to be recognized in current decision making, both through the actual loss occasioned and through the precedent established for further erosion; and
- whether or not the effects are adverse depends on circumstances and, where there is change, on what replaces what.

Meanwhile, the development market is in robust condition and continues to seek out and test every opportunity, ebbing and flowing according to prevailing sentiment towards particular locations and market sectors – and often picking off sites at the edges which, individually, are of little strategic consequence but, collectively, can have significant longer term impacts.

The industrial property market in Adelaide has shown itself to be fluid over the last 20 years, having both plumbed the depths and risen to great heights. At present, it is on a continuing 5 year roll, underpinned by strong economic conditions, but also supported by key transport infrastructure projects and by new land releases at the city's northern edges – which, together, are reshaping the city's industrial landscape.

The city's commercial and residential markets are also buoyant, but have been at the top of their cycle for some time. The high density residential market remains fledgling.

¹ Unless they are on the scale of Clipsal's relocation



The Metropolitan Adelaide Planning Strategy anticipates more development on both the industrial and residential fronts and recognizes particular regions as being more or less appropriate for particular land uses, but at a high level. It speaks of urban regeneration, but more in a residential sense than an industrial sense, and appears to regard most of Charles Sturt as a residential growth area.

On the other hand, the Metropolitan Adelaide Industrial Land Strategy (“MAILS”) explicitly recognizes the competing market and strategic forces, although it too has little to say about industrial activity in Charles Sturt. In response to these tensions, it seeks to ensure the preservation of the city’s industrial stocks by requiring that a case be made, against specific criteria, for a change of land use to be approved.

In this regard, it should be said that:-

- firstly, in some instances it is quite reasonable that the higher level objectives of the Planning Strategy should prevail over the more specific concerns of MAILS, notwithstanding that particular regional precincts (or parts thereof) may be quite serviceable industrial land. The Clipsal land, which is likely to be lost to industrial use, is a current example where a case for a higher and better outcome might be arguable, especially if multi storey, high density, mixed use development is proposed in lieu; and
- secondly, it is not axiomatic that any particular piece of industrial land is suited for conversion to alternative use and it is not uncommon to find sites which, for a variety of reasons, including financial, are best retained as industrial land.

Against the rising tide of pressure for redevelopment and renewal however, Charles Sturt needs to have a clear strategy of how its own industrial landscape should shape up over the next 10 to 20 years. To do this, it needs to understand the drivers of industrial demand, the case for the retention of industrial land and the on-ground situation in the individual industrial precincts within its boundaries, including their individual and collective strategic significance. From this, Council will be able to make decisions as to its own planning strategy.

The case for retention of industry zoning revolves around the economic and employment contribution that industrial land makes to its region and to the sustainability of the community within that region (and even to that of its neighbours).

It is noted that, while some industrial development in Charles Sturt is clearly past its use by date in its present form, this is not to say that the land on which it sits should not be “recycled” for alternate 21st century industrial uses – such as is happening with the previously mentioned regeneration of CSIE and Dudley Park, albeit sometimes to relatively lower value uses, and at Bio-innovation Park on the former GH Michells site in Thebarton, on Charles Sturt’s southern boundary. The presence of dysfunctional facilities is therefore a separate issue to the appropriateness of the underlying zoning.

As against this, the case for rezoning revolves around increased economic outputs from alternative uses although, as discussed in Section 6, this is not always as straightforward as it seems. It might also reflect the relative isolation of a particular precinct, severe access or interface issues, or lack of critical mass (but should not create a lack of critical mass).



At a local level, Charles Sturt also has particular Development Plan issues to deal with. These stem from the age of the underlying work on which the current plan is based – the North West Regional Industry Study, in 1994, leading to gazettal of a PAR in 2000 – as well as from the apparent legacy of the way in which the Development Plan itself was ultimately formulated.

Review of the plan is therefore timely from a strategic viewpoint, and is already underway via the application of the Better Development Plans programme to its existing structure.

2.2 REFERENCE POINTS

There are a series of strategic reference points of direct relevance to this study, including:-

- **at a State level**
 - the State Strategic Plan;
 - the Metropolitan Adelaide Planning Strategy; and
 - the Metropolitan Adelaide Industrial Land Strategy.
- **at a local level**
 - the City of Charles Sturt's Strategic Drivers 2002 – 2007;
 - the City of Charles Sturt's Community Plan; and
 - North-West Regional Industrial Development Amendment – Issues Report.

A précis of each, and of its relevance to this study is as follows:-

The South Australian Strategic Plan: 2007

South Australia's Strategic Plan (SASP) seeks to drive State Government policy and budgetary decision making processes. It also seeks to influence local governments by implementing a comprehensive process of 'regionalization'. This will mean developing coordinated approaches to pursuing those Strategic Plan targets that reflect priorities specific to individual regions. Local councils and regional development boards will be central players in this process.

The SASP is underpinned by a number of themes, however, the two most relevant to this study are Growing Prosperity and Fostering Creativity and Innovation. The themes are supported by the following vision statements:

- **“Growing Prosperity** - South Australians want a dynamic economy that is competitive, resilient and diverse. The state's prosperity should benefit all citizens. Our growth will be managed in an environmentally sustainable way. Investors will be drawn to South Australia because of the quality of our workforce, the vitality of our communities, the efficiency of our government, and our reputation for innovation.



- **Fostering Creativity and Innovation** – South Australia has a reputation for innovation in science and in the arts. We understand that our prosperity depends on the imagination, courage, talent and energy of our citizens. We want to reaffirm South Australia as a place that thrives on creativity, knowledge and imaginative thinking. This capacity to do things differently will determine whether we can achieve all our goals for the state’s future.”

A closer examination of the targets associated with these themes indicates that there is a desire to focus on high employment generating industrial activities (as opposed to warehousing), and on innovative and emerging industries, including science, mining and defence related industries.

Metropolitan Adelaide Planning Strategy: 2006

The Planning Strategy presents the South Australian Government's policy directions for the physical development of the state over the next 10 to 15 years. The Strategy is reviewed regularly, and updated at least every five years.

It provides a physical and policy framework to assist in reaching the various targets outlined in the *South Australia’s Strategic Plan* (2004). It is integrated with (and should be read in conjunction with) other specialist plans². Councils are required by the *Local Government Act 1999* to apply a strategic planning approach to all their activities. These activities are collectively referred to as strategic management plans and they describe the goals, objectives and vision that councils have for their communities. The State expects that the policies in the Planning Strategy will underpin the strategic management plans prepared by local government.

When establishing their strategic management plans, councils are required to demonstrate their participation and collaboration with other councils and with State and Federal governments by aligning their objectives with the objectives of these other tiers of government.

Councils’ strategic planning processes therefore have the potential to link the policy and strategy of the State Government, the needs and aspirations of the regions, and planning at the local level.

With respect to the management of commercial and industrial land uses, the Planning Strategy endorses a hierarchy of activity centres and clustering of business and commercial activities in those centres and in other industrial and commercial areas.

It recognises that focusing employment in clusters in key areas has advantages in the provision of public transport services and other shared infrastructure; increases the potential to develop networks and partnerships; and can reduce travel distances to employment areas.

² Including the Strategic Infrastructure Plan for South Australia (2005), the Housing Plan for South Australia (2005), the State Government’s 20 year water strategy, Water Proofing Adelaide (2005), the State Natural Resources Management Plan (2006), Adelaide and Mount Lofty Ranges Initial Natural Resources Management Plan (2006) and South Australia’s Waste Strategy (2005).



The Planning Strategy states that commercial activities, including offices, consulting rooms, personal services establishments, petrol filling stations, motor repair stations, service trade premises, warehouses and business transaction centres, should be focused within activity centres to minimize ribbon development along arterial roads and to provide strong connecting linkages between office development and public transport.

With specific reference to industrial land, the Planning Strategy provides direction on the provision and protection of well-serviced industrial land that meets projected demands in terms of its location, quantity and quality. Industrial land uses include special industry, general industry, light industry, service industry and extractive industries. The Strategy contains four key industry themes, underpinned by supporting policy directions, being:-

- **Focusing on export growth**

Industry and manufacturing play a significant role in establishing South Australia as an export economy, with manufactured goods dominating export earnings and wealth generation for the state, as well as providing significant employment. Service and knowledge-based industries such as biotechnology, bioscience, information technology and education are increasingly important contributors to export income. Local industries and small business are also expected to grow and provide a range of goods and services to meet local demand;

- **Ensuring supply of industrial land**

The supply of industrial land is a critical issue for the Adelaide metropolitan area. It requires the rolling availability of a 5 year supply of “development ready” land and the maintenance of a 15 year industrial land bank, and this should be the net result of a regional development planning policy;

- **Fostering Industry clusters**

Industry clusters can link customers, suppliers and other relationships to increase competitive advantage. Clusters also provide opportunities for industries to benefit from environmental enhancements, such as the use of by-products from other industries and efficiencies in relation to supply chains.

This inter-relationship is often referred to as ‘industrial ecology’, which is linked to the objective of producing little if any, waste³ ; and

³ Instead of waste, residual matter is repeatedly consumed with an emphasis on considering the total life-cycle of products and services, including the path through resource extraction, processing, manufacturing, marketing and distribution, to recovery and disposal. Industrial ecology involves rethinking conventional methods to achieve ‘smarter’, more sustainable production, processes and products.



- **Maintenance of separation distances and/or buffers**

While there is a strong trend towards industries managing their environmental and social impacts, operating hours are being extended and community expectations about the quality of their environment are increasing. To be competitive on an export basis, and maximise return on capital investment, industries are often required to conduct a 24/7 operation. To minimise interface issues, particularly with residential areas, future industrial zone policy should be informed by the Environment Protection Authority's separation distance performance criteria.

Interface issues can be prevented by ensuring incompatible development does not encroach on industrial zones and by managing the nature and intensity of uses at the interface. At an interface, both parties can expect to bear some cost or responsibility for mitigation or management of interface effects and external impacts. This should be determined on a case by case basis. There may also be instances where industrial activities surrounded by incompatible uses are no longer appropriate in those locations.

Supporting the above themes, the "Industrial Land" section of the Planning Strategy promotes several policy directions being:-

- protecting and ensuring a timely supply of well sited industrial land to meet a projected 15 year demand;
- assessing, monitoring and staging industrial land releases and infrastructure provision to support industrial activities;
- consolidating and strengthening key industrial areas to achieve operational advantages and the efficient provision of infrastructure;
- promoting sustainable industrial practices, such as industrial ecology, and facilitating the co-location of businesses that can share their operations; and
- managing and preventing conflicts between industry and other uses.

Metropolitan Adelaide Industrial Land Strategy, Planning SA, April 2007

The Metropolitan Adelaide Industrial Land Strategy relates to the State Strategic Plan and its targets, with:-

- Part 1 giving policy context for land supply over the next 1-15 years, essentially as per the Planning Strategy above;
- Part 2 presenting analysis of demand, supply and infrastructure issues for industrial land; and
- Part 3 setting out the strategy and introducing a Rezoning Assessment Framework for the rezoning of industrial land – for "strategic", "prime" and "undeveloped" areas, – including criteria for such rezoning.

It is a central reference point for this study. Its overall themes are further addressed at Section 3, while the application of the Rezoning Assessment Framework to the Study Area, which sits at the heart of this report, is discussed in detail at Section 4.



City of Charles Sturt Strategic Drivers, 2002-2007

Charles Sturt's Strategic Drivers articulate the principal focus areas for Council in its business and financial planning. As required, it is broadly aligned with the State Strategic Plan, including in the areas of community well being, fostering innovation and creativity and community engagement.

Its key external directions and priorities are to:-

- provide services which respond to community need;
- improve community infrastructure;
- adapt to population growth and demographic change; and
- create high quality public places.

Some of these directions have some relevance to industrial land, but there is a noticeable absence of reference to either the State Strategic Plan objectives pertaining to growing prosperity or expanding opportunity, or to either economic development or industrial renewal.

It is also noted that a review of Council's strategic planning is pending following the preparation of the Community Plan and the Section 30 Development Plan Review.

City of Charles Sturt Community Plan

Sub-titled 'Shaping the Western Suburbs 2027', the Community Plan (which was finalized as this report was being written), is about the long term aspirations of the Charles Sturt community for the area, as expressed in more than 1,300 interviews during an extensive consultation process.

The Community Plan is expected to drive Council's strategic planning over the next decade, with the key strategic directions it sets including:-

- a safe and healthy City that supports vibrant community life;
- an economically prosperous, attractive and functional City; and
- a City which values, protects and enhances the natural environment.

These themes include an economic focus that was absent from the previous strategic plan.

North-West Regional Industrial Plan Amendment Report – Issues Paper, PPK June 1994

Although largely of historical interest, the PPK report is essentially the forerunner to this report. It is of interest for what it tells about what has and has not changed and in the intervening period.



Key problems identified in 1994 included environment and health, transport and traffic conflicts, the poor appearance of much industrial development and inadequate industry monitoring. Of these, and especially at a local level, not much may have changed in the interim, although the level of monitoring and industry practice management may have ameliorated some of the hot spots.

Key issues included:-

- economic matters, although with less of a focus on employment retention than is presently the case;
- environmental matters, primarily relating to public and environmental health and including air quality, noise, traffic and hazardous materials; and
- a range of other matters including under-developed land, contamination, land use conflicts and the like.

2.3 CURRENT ZONING

This section provides preliminary observations on Charles Sturt's Development Plan, having regard to the Metropolitan Industrial Land Strategy, Planning SA's Better Development Plans Project and the range and location of land uses within the Council area.

First, it provides an overview of the current Industry zones, before addressing the underlying question of how industrial land and land uses are defined and exactly what industrial land is and is not.

2.3.1 The City of Charles Sturt Development Plan

The Metropolitan Adelaide Industrial Land Strategy indicates that Local Government plays a significant role in the way industrial land is used and protected. Local Government implements State Government policy by aligning its Development Plans with the Planning Strategy and provides consents for development proposals within and alongside industrial zones. It is also responsible for providing certain infrastructure ahead of new development.

The City of Charles Sturt Development Plan contains Council Wide Industrial Development Objectives and a single Industry Zone. Within the Industry Zone there are seven Policy Areas, being:

- a Core Policy Area;
- an Interface Policy Area;
- a Home Industry Policy Area;
- the SAGASCO, Eighth Street and Chapel Street Historic (Conservation) Policy Areas; and
- a Bulky Goods Policy Area.



A full description of the desired character of each policy area is contained within **Appendix B** and is summarized as follows:-

- **Core Policy Areas** are for intensively developed, high quality, landscaped, 24 hour industrial facilities. High impact industrial uses should locate in this zone, remote from residential areas.
- **Interface Policy Areas** should accommodate a wide range of industrial and service activities but should protect the amenity and safety of adjoining residential areas. They should accommodate activities that do not create any appreciable nuisance, that have minimal off-site impacts, such as noise, air, water and waste emissions, traffic generation and movement and do not have a detrimental impact on the amenity of properties in residential or similar environmentally sensitive zones.
- development in **Home Industry Policy Areas** should comprise housing fronting roads with small scale, low impact industrial uses, such as warehousing or similar industries, located behind the housing in rear yards.
- the **SAGASCO Historic (Conservation) Policy Area** should accommodate a variety of industrial activities that do not create any appreciable nuisance and should also be protected from the encroachment of houses which will reduce the land resource for industry. The historic SAGASCO buildings should be conserved and enhanced by sympathetic new development.
- the **Eighth Street and the Chapel Street Historic (Conservation) Policy Areas** should both develop as intensively developed, high quality, historic inner urban precincts, accommodating a variety of uses such as small offices, consulting rooms, adaptation of historic housing or industry which is suited to an interface environment. Large scale manufacturing and high impact industries are inappropriate.
- the **Bulky Goods Policy Area**, is split into:-
 - the Woodville precinct, which should develop as an intense, high quality, landscaped area. Industry and related operations may operate 24 hours a day. Appropriate activities include bulky goods retailing, service industry, light industry, warehousing and distribution and commercial premises; and
 - the Royal Park location, where appropriate land uses include bulky goods retailing, service industry, light industry, service trade premises, motor repairs, warehousing and commercial premises with associated office and car parking.

Complying and non-complying uses for each Policy Area are summarized at Table 1 overleaf.

Table 1: Industry Zone Provisions: Complying vs Non-complying

Zone & Policy Areas	Industry Zone	Core	Interface	Home Industry	SAGASCO Eighth Street & Chapel Street Historic (Conservation)	Bulky Goods
Complying Development	<i>See policy areas</i>	<ul style="list-style-type: none"> • General Industry • Light Industry • Motor Repair Station • Road Transport Terminal • Service Industry • Service Trade Premises • Store • Warehouse 	Nil	Nil	<ul style="list-style-type: none"> • The demolition of a building, outbuilding or fence on a site which is not listed as a State or Local Heritage Place or a Contributory Place. • Work undertaken within a building or outbuilding on a site, which is not listed as a State Heritage Place, and that does not increase the total floor area of the building or outbuilding and does not alter its external appearance. 	Nil
Non-complying Development	<ul style="list-style-type: none"> • Development of land for the purpose of the processing or treatment of waste, other than for the remediation of that land. • Development of the reception, storage or transfer of waste: (subject to criteria) • Office use or any expansion, addition, alteration or the like, where the resultant floor area exceeds 250 square metres (subject to exception criteria) • Residential development including long and short term accommodation (subject to exception criteria) • Shop or group of shops, or any expansion, addition, alteration or the like, where the resulting gross leasable floor area exceeds 250 square metres, except for bulky goods retail development in Policy Area 64 	<ul style="list-style-type: none"> • Landfill 	<ul style="list-style-type: none"> • Development in the Interface Policy Area for the collection, storage, abandonment or sale of scrap metals, wastepaper, bottles or other scrap materials or goods, or for the collecting, dismantling, storage, salvaging or abandonment of automobiles or other vehicles or machinery, or the sale or other disposal of their parts 	<i>See Industry Zone</i>	<i>See Industry Zone</i>	<i>See Industry Zone</i>



In addition to an Industry zone, the Council's Development Plan also contains a Mixed Use zone, with four Policy Areas⁴. The underlying objective of this zone is that it be of a commercial character with a large number of business, motor trade and showroom premises and a number of industrial activities.

A range of land uses are appropriate, including service uses, offices, commercial, motor trade and low impact industry. Mixed use housing developments should be encouraged. Higher impact uses such as crash repairers and manufacturing should generally be restricted. High traffic generating uses are inappropriate.

Of note for present purposes is the inclusion of these industrial activities, leading to an overlap between the Industry and Mixed Use zones, and the fact that any review of the former which ignores the latter is not addressing the whole industrial land supply.

This and a range of development planning policy issues arise from the nature and application of Charles Sturt's current Industry zoning, all of which are addressed in Section 6.

2.3.2 Industrial Land

Before turning to the specifics of Charles Sturt's industrial use land patterns, it is useful to consider the general question of the definition of industrial land

The Metropolitan Adelaide Industrial Land Strategy states that there are five major types of industrial activity, namely:-

- *traditional, heavy industry that is transportation-dependent*, which usually has an export focus and needs access to rail terminals and sea ports. It also needs to be buffered from competing activities;
- *warehousing and distribution centres*, which generally have low employee density compared to traditional industry, are multi-modal and/or freeway-dependent and tend to be location specific. They are generally located in existing industrial areas or in new locations, especially around major road interchanges;
- *new and emerging industrial uses*, including high-tech, biotech and some specialized manufacturing and research and development activities. They are most productive when adjacent to similar companies and their non-industrial suppliers and support systems. Suitable locations for these activities include many mixed use zones, provided their scale, design and operational characteristics are compatible with surrounding uses;
- *older industrial areas*, which contain ageing businesses, buildings and infrastructure. Because they are generally located in inner suburban areas, they are attractive for redevelopment for higher order (eg product research and development) industrial activity and possibly commercial (such as bulky goods) and residential activity; and

⁴ Including two Historic (Conservation) policy areas and a Findon Urban Village policy area.



- *trade service industries*, which provide trade services such as mechanical repairs, construction and other light industries at a suburban scale and are distributed across the metropolitan area.

As against this, Planning SA's Better Development Plan Library (November 2007) envisages three types of land uses in an Industry Zone, being industry, transport distribution and warehousing.

These land uses are essentially the core types of development and land use envisaged within an industry zone.

Schedule 1 of the Development Regulations 1993, contains the following relevant land use definitions, which cover both these **principal uses** and defined variants:-

- **Industry** means the carrying on, in the course of a trade or business, of any process (other than a process in the course of farming or mining) for, or incidental to:-
 - the making of any article, ship or vessel, or part thereof; or
 - the altering, repairing, ornamenting, finishing, assembling, cleaning, washing, packing, bottling, canning or adapting for sale, or the breaking up or demolition, of any article, ship or vessel; or
 - the getting, dressing or treatment of materials;

and industrial will be construed accordingly;

- *general industry* means any industry other than a service industry, light industry or special industry;
- *light industry* means an industry where the process carried on, the materials and machinery used, the transport of materials, goods or commodities to and from the land on or in which (wholly or in part) the industry is conducted and the scale of the industry does not -
 - detrimentally affect the amenity of the locality or the amenity within the vicinity of the locality by reason of the establishment or the bulk of any building or structure, the emission of noise, vibration, smell, fumes, smoke, vapour, steam, soot, ash, dust, waste water, waste products, grit, oil, spilled light, or otherwise howsoever; or
 - directly or indirectly, cause dangerous or congested traffic conditions in any nearby road;
- *motor repair station* means any land or building used for carrying out repairs (other than panel beating or spray painting) to motor vehicles;
- *public service depot* means land used for storage and operations connected with the provision of public services (including gas, electricity, water supply, sewerage, drainage, roadworks or telecommunication services) by a body responsible for the provision of those services, which are split into major (greater than 8000sqm) and minor categories;



- **road transport terminal** means land used primarily for the bulk handling of goods for transport by road, whether or not the land is also used for:-
 - the loading and unloading of transport vehicles; or
 - the parking, servicing or repairing of such vehicles;
- **service industry** means a light industry in which -
 - goods manufactured on the site (but not any other goods) are sold or offered for sale to the public from the site; or
 - goods (other than vehicles or vehicle parts) are serviced, repaired or restored, and the site occupied for such sale, service, repair or restoration (but not manufacture) does not exceed 200 square metres;
- **special industry** means an industry where the processes carried on, the methods of manufacture adopted or the particular materials or goods used, produced or stored, are likely to:-
 - cause or create dust, fumes, vapours, smells or gases; or
 - discharge “foul liquid or impurities liable to become foul”,
and thereby -
 - endanger, injure or detrimentally affect the life, health or property of any person (other than any person employed or engaged in the industry); or
 - produce conditions which are, or may become, offensive or repugnant to the occupiers or users of land in the locality of or within the vicinity of the locality of the land on which the industry is conducted;
- **store** means use for the storage of goods, where no trade (whether wholesale or retail) or industry is carried on, but does not include a junk yard, timber yard or public service depot;
- **warehouse** means use for the storage of goods and the carrying out of commercial transactions involving the sale of such goods, but does not include any retail use;

These are therefore industrial uses, according to the Development Act. The broad focus is on manufacturing, processing, servicing, storing and transporting, with relatively low levels of public interface. The list provides a reference point for assessing the true nature of the land uses observed during this study – to which end, industrial land might be defined as land that is put to industrial use.

The converse of industry is **non-industry**, and one of the first findings of this study is that there are a number of commercial land uses which find themselves locating within Industry zones, but are not core industrial activities and, as a rule, are excluded from the provisions of Industry zones.

A key driver for the location of these uses appears not to be the underlying industrial zoning but, most commonly, the main road frontage and associated high volumes of passing traffic and potential customers.



Such land uses include:-

- *retail showroom*, being premises used primarily for the sale, display or offer by retail, of furniture, floor coverings, household appliances or electronic equipment for domestic use, but not including premises for the sale, display or offer by retail of foodstuffs, clothing, sporting goods and personal effects goods;
- *service trade premises*, being premises used primarily for the sale, rental or display of basic plant, equipment or machinery used in agriculture or industry, boats, caravans, domestic garages and sheds, motor vehicles, tents, trailers, swimming pools, building materials, landscaping materials or similar bulky articles or merchandise;
- *shop*, being:-
 - premises used primarily for the retail sale or rental of goods, food stuffs, merchandise or materials;
 - a restaurant;
 - a retail showroom; or
 - a personal service establishment,but not including:-
 - a hotel;
 - a motor repair station; or a petrol filling station;
 - a plant nursery where there is no sale by retail;
 - a timber yard;
 - service trade premises; or
 - service industry.

The broad focus in this group is on selling to the public and these uses are, as a rule, included in Centre zones, where there is a high diversity of commercial land uses. Their appearance in Industry zones represents a mixing of land uses, driven by commercial forces.

Then there is Bulky Goods retailing, which presently resides under the industry zoning umbrella. The objectives of this zone are also of a mixed use nature, and include (bulky goods) retailing, service industry, light industry, warehousing and transport & distribution. In its present form, this zone therefore represents a retail/industrial hybrid.

The current Charles Sturt Development Plan contains a Mixed Use Zone, as does Planning SA's, Better Development Plan Project (BDP). The principle objective of the BDP module is that it be a functional and diverse zone accommodating a mix of commercial, community, light industrial, medium density residential, office and small-scale shop land uses.

The forms of development envisaged in the zone are:

- industry, including light industry, warehousing, motor repair station and recycling collection depot;



- retailing, including service trade premises and shop or group of shops where the gross leasable area is less than 250 square metres;
- office and consulting room;
- residential, specifically group dwellings, residential flat buildings and row dwellings; and
- both community and institutional facilities.

The Charles Sturt zone has a similar principal objective to, but varies from the BDP version in some important respects, including the particular focus on low impact industrial uses and the number of objectives relating to amenity.

The Mixed Use zone is therefore a hybrid of the Industry and Centre zones, with residential uses also included, subject to certain provisions – including no encroachment on existing industry.

It is a zone which both reflects reality in some areas and creates opportunity in others. The question for development planning policy is how the hybrid is both defined and applied. As discussed in Section 6, it is a particularly pertinent question for this study, which reveals a depth of need to address this aspect of land use policy in Charles Sturt's current industrial precincts.

The overall need is for there to be a well thought out and integrated application of the Industry Mixed Use & Centre zones, including their overlapping where appropriate, probably via a revised and more nuanced Mixed Use zoning. This would be a transparent approach to the reality of the situation and would also enable Council to better hold the line on “single sector” zoning in areas where mixing uses is not desirable.

2.4 INITIAL VIEWPOINTS

Initial views were sought and issues identified via interview with Council's section heads and, at a State level, with representatives of Planning SA and DTED.

The **key issues** that emerged from interviews with Council staff include:-

- the need to sustain both population and employment levels – noting a recent population decline of 3,000 over the last census period;
- the need to meet the changing needs of industry in a planning sense;
- the inadequacies of sections of the local traffic network for industrial use as against the strength of the immediate regional transport network;
- under-utilization of land in some areas, including fragmentation in particular locations, and issues of the fitness for the purpose of older facilities;
- opportunities for higher and better land uses, especially on arterial roads and, in time, via high density residential infill, potentially including some existing industrial land;
- the need for a cohesive environmental framework; and
- the need to implement and follow through on recent stormwater initiatives.



From a **strategic planning** viewpoint there is also strong interest in the contribution of industry to regional employment and recognition of the need to consider the future direction of industry. Change is seen as needing to be strategic rather than reactive. This suggests a need for a new focus on economic development by Council.

From a **development assessment** viewpoint, recurrent issues include:-

- the interface between industrial and residential areas;
- conflicts between industrial uses - eg food vs other industry at Royal Park;
- inappropriate vehicle interactions;
- old manufacturing moving out and the pressures that this brings for change which is at odds with the current zoning; and
- the need to look at the whole environmental framework from a development planning perspective.

The current structure the **Development Plan** is also seen as being problematic, a situation which is exacerbated by a steady stream of developers knocking on Council's door seeking to either subvert the current plan or to rezone altogether.

Council's pending Sec 30 review will identify issues and implications at the outset of a Development Plan Amendment, including the inter relationship of the Development Plan with Council's Strategic Drivers and the Community Plan, and any future infrastructure implications.

Community planning has been a major undertaking by Council over the last two years and the outcomes will have a lasting effect on all facets of Council's planning, including its Development Plan.

Beyond its general flavour, and focussing on issues effecting industry, the community is indicating that:-

- it values diversity of land use in appropriate measure;
- industry brings value, but that there are issues with interfaces, emissions from old style industry and traffic conflicts;
- there are concerns about non-compliance in some cases, and of the few 'bad apples';
- environmental concerns are often front of mind; and
- the preservation of open space and streetscapes are important to it.

From an **environmental sustainability** viewpoint, opportunities are seen in:-

- the more efficient use of public transport, which has significant potential to change land use patterns; and
- consistent with the Community Plan, initiatives such as a stronger focus on more water and energy sensitive design outcomes.



Environmental health presents few issues for the study, as most environmental issues – including licensing and complaints – are managed by the EPA. Council’s involvement is therefore limited to matters concerning public health, including contamination, which tend to be site specific.

As to **infrastructure & major projects**, current issues are:-

- stormwater management, including the Port Road upgrade; and
- transport infrastructure, which is the more relevant of these two issues to this study and which may require radical solutions in some instances to improve network capacity.

Overall the industrial capacity of Charles Sturt is seen as being constrained by its physical inability to extend its B-Double network much beyond that which already exists. Further some existing B-Double roads are considered to be inappropriately designated given their physical capacity – such as Athol Street at Athol Park.

Local area **traffic management** is an enduring problem, with key issues relating to:-

- inappropriate access routes, requiring ongoing monitoring and managing of the passage of industrial traffic through residential areas, which generally arises as a result of inadequate linkages from industrial to arterial roads - Welland and Beverly being prime examples; and
- large vehicles in small streets, which is frequently insoluble, other than by relocation of the offending enterprise.

One of the problems in the latter regard is that growth tends to attract more and bigger trucks and that the success of an enterprise (or precinct) can result in the failure of the local traffic network.

However, the underlying problem is often a mismatch between the original design and the current use patterns, which makes finding solutions a difficult task, and which may sometimes require decisive action. This can be expensive and can tend towards the too hard basket. For example, the Holbrooks Road connector would solve a number of problems at Beverley, but it has been on the drawing board for years and its construction still appears to be some way off.

There was also discussion of a handful of **specific issues**, indicating that:-

- opportunities within the industrial precincts generally are seen to include:-
 - the introduction of more, higher value industrial activities, including the likes of service industry and defence spin offs;
 - a higher level of mixed uses;
 - higher and better uses being admitted in selected locations, especially along arterial roads, which provide strong transport networks, but are otherwise not taken best advantage of; and
 - more conversion to residential use in selected areas, although timing is an issue;



- along the River Torrens, there are seen as being particular opportunities to link in with the Bio-Science precinct at Thebarton and an opportunity to take better advantage of the river more generally;
- Bulky Goods is not generally seen as appropriate in Industry zones; and
- the jury is out on the appropriateness of Home Industry policy areas, which are scattered across parts of the industrial landscape and need to be reconsidered altogether.

As to **specific precincts**:-

- at Bowden/Brompton:-
 - change is in the air;
 - the situation is made complex by a number of State Heritage items in the SAGASCO precinct;
 - access impacts from the west and the future role of Chief Street both remain to be considered;
 - the impact of further new development on Port Road needs to be considered; and
 - new warehousing is being developed alongside existing developments, resulting in renewal ahead of a clear strategic direction;
- at Welland and Beverley:-
 - there is ongoing conflict with neighbouring uses and users, especially local residents, and the area abounds with traffic issues;
 - fragmentation of ownership presents a challenge for change; and
 - there seems to be strong market interest and there has been a strong burst of new development and development applications in Frederick Street; while
- Woodville North and Athol Park tend to be down graded, with many older buildings, but bigger holdings provide an opportunity for significant industrial renewal.

Discussion with representatives of **DTED and Planning SA** revealed a focus on employment and on the regional economic role the Study Area plays, including as a place of employment for Adelaide's southern workforce.

Growth opportunities are seen as being available in higher value activities, including in the biotech, defence and media sectors, leading to a higher level of local participation in the workforce. Pt Adelaide Enfield Council's planning policies were noted to be generally moving in this direction via more of a light industry profile.

Conversely, opportunities were also seen to rationalize both land use and industry sectors in some districts.

South Road was identified as a particular economic asset, given the connectivity it provides with the rest of metropolitan Adelaide.



There was general consensus that Charles Sturt needs to be moving to more of a mixed use model for land use planning and that this would be consistent with the direction of State planning policy. It was also noted that:-

- many companies involved in higher end activities are recognizing the benefits of being located adjacent to their workforce⁵; and
- achieving strategic objectives on the industrial front will require a renewed burst of work on economic development over the next few years.

2.5 ENVIRONMENTAL MONITORING

The Environment Protection Authority (EPA) has provided data on, firstly, licensed activities and, secondly, complaints received from within the Study Area. Each is considered in turn below.

As to the former, prescribed activities are licensed according to one of eight categories set out in Schedule 1 of the Environment Protection Act.

In Charles Sturt, some 68 authorizations have been issued, as summarized by District in Table 2.

Table 2: EPA Licensed Activities, City of Charles Sturt, July 2007

Category	Activity	North West	Mid North	Outer North	Mid South	Mid East	Inner East	Total
1	Petroleum & Chemical	-	-	1	-	1	1	3
2	Manufacturing/Minerals	-	3	5	-	7	3	18
3	Waste	2	7	6	1	13	8	37
4	Specified Activities	-	-	-	-	-	-	-
5	Animal Husbandry	-	-	-	-	-	-	-
6	Food Production	1	-	1	-	2	1	5
7	Materials Handling	-	-	1	-	-	-	1
8	Other	-	1	1	-	2	-	4
Totals		3	11	15	1	25	13	68

As shown, the principal licensed activities are to do with waste and with manufacturing and mineral processing.

Waste activities primarily involve production of listed wastes, although there are also three transfer stations, two recycling depots and several waste transport businesses.

Manufacturing and mineral processing activities primarily involve powder coating, although there are also a couple of ceramics works, a couple of metal smelters and a couple of concrete batching plants.

There appears to be very little food production involving licensed activities, with those indicated also being widely dispersed.

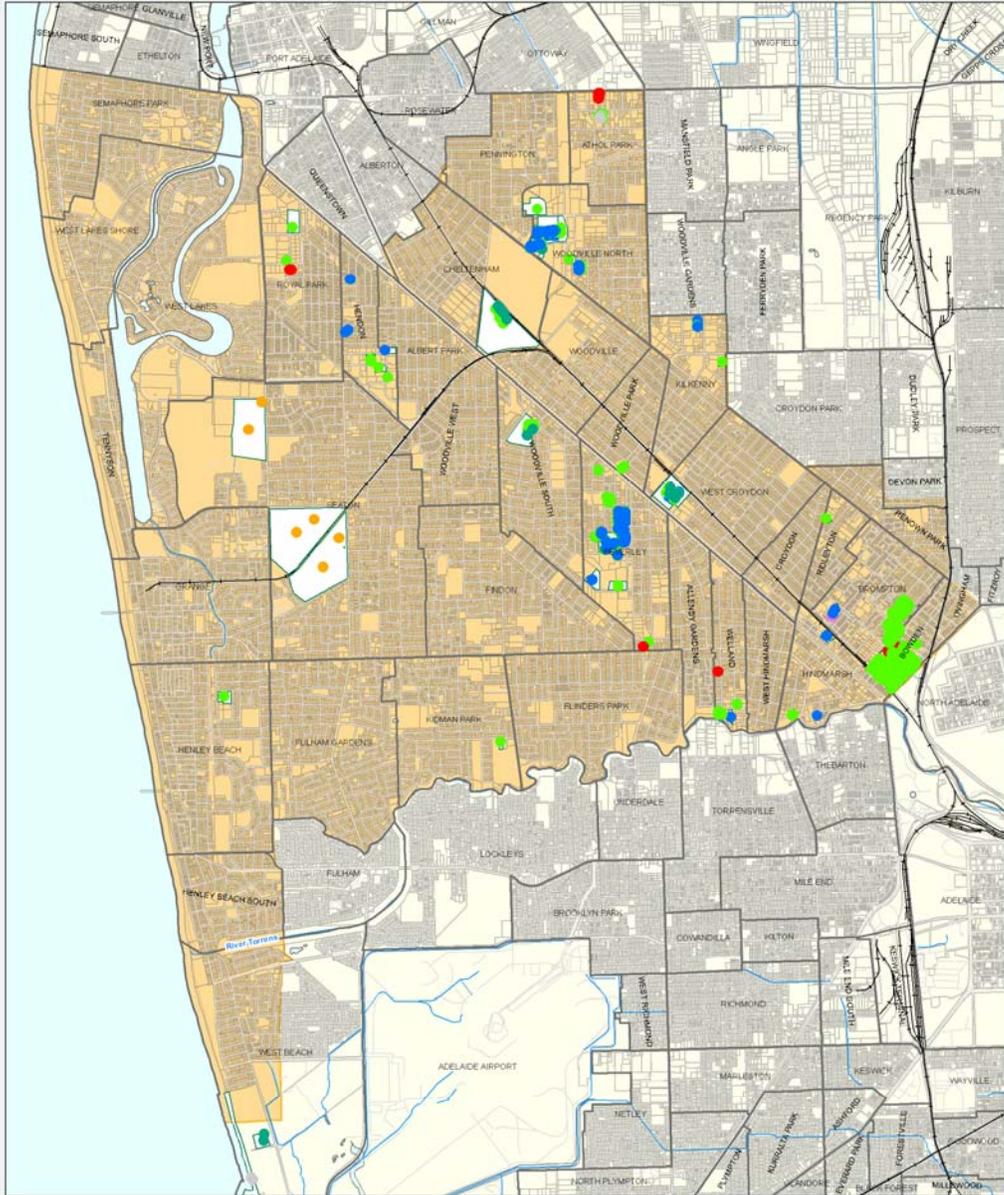
The spatial distribution of these activities is illustrated at Figure 8 overleaf.

Figure 8: Spatial Distribution of EPA Licensed Activities

⁵ Although recent work suggests that this view may not be holding – see Sec 3.5

City of Charles Sturt

Industrial Study - Prescribed Activities of Environmental Significance

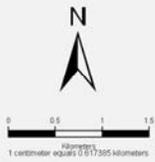


Legend

- Railway Track
- Watercourse
- Authorised Premises
- DCDB - Land Parcels
- Suburbs
- City of Charles Sturt

Schedule 1 - Activities

- Petroleum and Chemical
- Manufacturing & Mineral Processing
- Waste Treatment and Disposal
- Activities in Specified Areas
- Food Production and Animal and Plant Product Processing
- Materials Handling and Transportation
- Other



Produced by: Information Technology
 Environment Protection Authority
 GPO Box 2607 Adelaide SA 5001
 Web: www.epa.sa.gov.au

Data Source: Authorised Premises - EPA
 DCDB Topographic Data - DEH

Projection: Lambert Conformal Conic
 Datum: Geocentric Datum of Australia, 1994

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As shown there are particular clusters of manufacturing and mineral processing at Woodville North and Beverley, and also several clusters of waste treatment and disposed most notably at Bowden, Brompton, West Croydon and Beverley, but also at Woodville North, Hendon and Cheltenham.

Notable by their absence are licenses for food production and associated activities, and for materials handling and transport.

As to complaints, a register of complaints and of the issues they related to over a 10 year period has been examined and is summarized at Table 3. It is noted that the number of complaints has tended to increase over time. Before 1998, total complaints per annum were generally below 100. By 2005 however, this had increased to over 150pa – although it has subsided slightly in the last couple of years.

Table 3: EPA Complaints Register, 1995 – 2006

Frequency of Complaints per Issue	Total Complaints	%	Issues	Average Complaints per Issue
10 or less	82	6%	28	3
11 to 50	353	25%	13	27
51 to 100	319	23%	4	80
101 to 250	337	24%	3	112
>250	317	23%	1	317
Totals	1,408		49¹	29

¹ Under the categories of Air & Noise, Air Quality, Noise, Waste, Water, Marine Pollution, Depot, Other

Table 3 reveals that:-

- of 1,820 complaints, 1,410 (78%) were from the postcodes for the Study Area;
- complaints from within the Study Area covered 49 issues under 8 categories;
- at one end of the scale, 10 or less complaints were received about 28 separate issues; and
- at the other, more than 100 complaints were received about each of 4 separate issues.

Essentially, the worse it gets, the worse it gets. True to the 80:20 rule, a large number of issues attract a small number of complaints (84% of issues attract 30% of complaints) while a very small number of issues attract a very large number of complaints (16% of issues attract 80% of complaints).

The biggest issue – with 608 complaints (or 43% of all complaints) in 10 years – is Air Quality. Of these complaints, 305 (50%) related to odour, with the balance relating to other air quality issues – smoke, fumes, dust, fall out and drift. Of note, some 230 odour complaints (or 75% of odour complaints and 16% of all complaints) were about just 5 incidents, including two with more than 50 complaints each, in West Croydon and Welland respectively.

Beyond Air Quality:-

- noise issues – industrial machines and operations, air conditioners and refrigerated trucks – generated 540 complaints (or 38%); and



- next on the list was building and construction activities, which generated 63 complaints (or almost 5%).

Together, these aforementioned categories account for over 80% of all complaints. However, as further detailed in Table 4, the pattern of complaints for Noise and Air Quality issues is quite different, with only two Noise incidents attracting more than 20 complaints and none more than 35, whereas seven Air Quality incidents attracted more than 70 (and sometimes up to 90) complaints.

Table 4: Noise & Other Air Quality Complaints, by District

	Regarding Noise			Regarding Air Quality		
	Incidents	Complaints	Complaints per Incident	Incidents	Complaints	Complaints per Incident
North West	12	49	4.1	4	14	3.5
Mid North	77	132	1.7	28	80	2.9
Outer North	27	76	2.8	18	71	3.9
Mid South	13	26	2.0	5	10	2.0
Mid East	44	132	3.0	27	303	11.2
Inner East	27	127	4.7	21	130	6.2
Totals	200	542	2.7	103	608	5.9

As shown, there have been twice as many Noise incidents as Air Quality incidents, but a lower overall level of complaints. This suggests that particular noises attract more individual complaints, while any one air quality issue affects more people. The table also highlights noise issues in the Mid North, Mid East and Inner East Districts, and Air Quality hotspots in the Mid East and Inner East Districts.

This review provides a picture of the particular sensitivities that are revealed when inappropriate land uses are required to co-exist. It reveals ongoing issues, but suggests that a substantial percentage of the apparent problem can be dealt with by resolving a small number of issues, which requires case by case management.

On the other hand, the more pervasive problems of odour and industrial noise perhaps underline the need for careful management at the interface. The problem with this is that airborne effects such as these can travel long distances in the right conditions and it may be that a certain amount of each is simply the price of living in an urban environment and of having jobs available for all within a reasonable distance of home.

2.6 LAND ECONOMICS

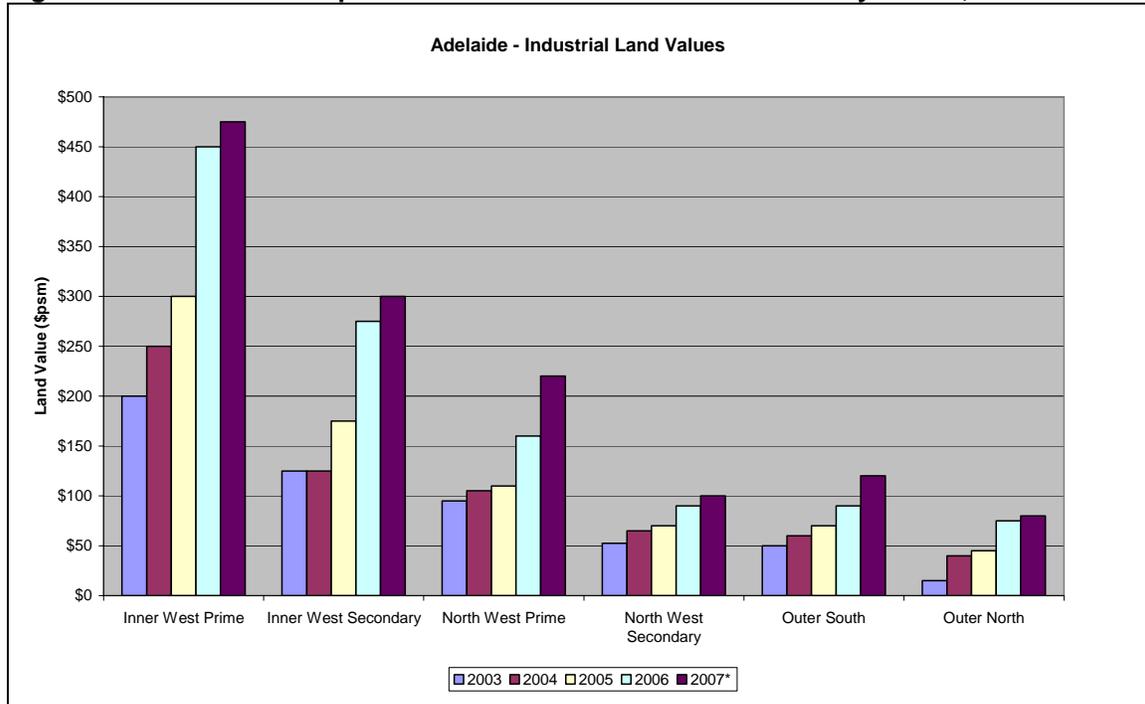
The flip side of planning is land economics and market forces, which are key drivers of property markets. These are what drive decisions by individuals to undertake (or attempt to undertake) particular developments, whether these comply with the current Development Plan or not. Several observations are pertinent.

Firstly, as previously noted, it is not axiomatic that any particular piece of industrial land is suited for conversion to alternative uses and it is not uncommon to find sites which, for a variety of reasons, including financial, are best retained as industrial land.

Secondly, markets will naturally respond to the requirements of new demand, industrial and otherwise, in lieu of old industry, which planning policy needs to anticipate.

Thirdly, land economics have shifted and are continuing to shift significantly in the Study Area. Work recently undertaken by CICS for Planning SA shows that industrial land values within metropolitan Adelaide have soared in the last 5 or 6 years, as shown at Figure 9.

Figure 9: Growth in Metropolitan Adelaide Industrial Land Values by Sector, 2003-07



*Part year only

Source: Colliers International Consulting Services

Charles Sturt’s industrial precincts fall within the Inner West and North West sectors. As shown the value of prime land has increased in the last 5 years from around \$200psm to almost \$500psm and from \$90psm to \$220psm in each sector respectively. In both cases, the increase is well over 100%.

At the same time, residential land values have increased, but not as markedly. The median vacant allotment price in Charles Sturt in 2001 was \$130,000, while in 2007 it was \$200,000, an increase of 85%.

Over the same period, the average price of a vacant residential allotment increased by 67% to \$267,000. Interestingly, the growth is particularly uneven. From 2002 to 2005, the average price rose from \$160,000 to \$292,500, before subsiding in the last two years to its current level, possibly in consequence of smaller allotments being released and/or an increased supply at Westwood and in Bowden Brompton.

Assuming an average allotment area range of 400sqm to 600sqm, the average residential land price in Charles Sturt is in the range \$450 per sqm to \$650 per sqm – as against Industrial values (generally for allotments of up to say 2,500sqm) to the order of \$500 per sqm in the inner west and \$250 per sqm in the north west.



However, while residential land is generally more valuable in its end form, it can also be more expensive to subdivide. The net difference between choices about future land use is, therefore, not always clear cut and can be called either way on individual sites.

Looming large in this debate over the next decade will be affordable and higher density housing, with some of Charles Sturt's current industrial land stock potentially ripe for such development, especially along the Port Road corridor, but also in areas such as Seaton. While such an outcome may not be consistent with MAILS, it may be entirely consistent with either State strategic directions, including the State Strategic Plan and the State Housing Plan, or with Council's broader objectives regarding retention and sustainability of existing population levels.

It is therefore suggested that it will not be too long before selected sites within the Study Area, including some existing industrial sites, will become prospective for much higher densities of residential development than have yet been seen in Adelaide. The Clipsal site is perhaps the prime example of this, with the very real prospect emerging of true multi-storey development – perhaps 8 levels or more, looking back to the city across Park Terrace.

Under this scenario, latent land values for these particular sites may increase dramatically, thus placing even greater commercial (and, therefore, development planning) pressure on them. Within the Study Area, sites situated both along the Port Adelaide rail corridor and on the River Torrens will, in time, be drawn into this debate.

However, this suburban apartment market remains fledgling. While apartment living has taken off in the city, on the coast and now at West Lakes, it has yet to penetrate the suburbs in any great degree. The immediate challenge is to anticipate and provide for its coming.

The net effect is that the commercial development equation has shifted, although exactly how largely remains to be determined on a case by case basis – including site specific answers to questions regarding latent development potential vs. how a given proposal lines up against the Development Plan; its value in existing use, including enterprise value; and the cost to realize any apparent uplift in value.

All of these questions and more need to be answered for each site before the highest and best commercial use – as opposed to either the highest and best permitted use or the highest and best economic use – can be established.

Whilst the commercial equation should not drive planning policy, it will drive the development industry's view of the world and, in doing so, lead to ongoing pressure for change on particular sites and in particular circumstances. In consequence, it will be one of the factors that may play a part in determining future policy positions one way or the other, at the time that those decisions are taken.

However, regardless of whether these strong commercial drivers are evident, policy decisions should be made on "strategic balance" and should reflect broad economic outcomes, as opposed to direct financial outcomes, together with a range of social and environmental influences.

3 ECONOMIC SETTING



Land use zoning commonly creates something of a policy and strategy dilemma for regional governments. On the one hand residential use generally results in more intensive use and, therefore, higher values and higher rates and land tax outcomes. On the other hand however, the continued availability of industrial land also has a number of economic benefits from a regional perspective, including:

- underpinning sustainable communities – providing job opportunities for residents, to keep a balance in terms of employment. This is more of an issue in a metropolitan wide context, or broader region (eg the balance in the southern areas vs the balance in the northern areas) but is also applicable at the local government level;
- managing externalities between properties – zoning industrial land within a coordinated planning system provides for appropriate consideration of interaction between zones, and lessens intrusive outcomes;
- reducing demand on transport systems – by providing industrial land in appropriate areas, the overall transport burden can be reduced with consequent triple bottom line benefits; and
- bringing people into the area for work purposes, who spend money in local businesses, creating further opportunities (and increasing critical mass for local services).

This section of the report provides a summary of the issues in terms of the economic value of providing industrial land within the Charles Sturt region, relative to alternative uses.

3.1 THE METROPOLITAN CONTEXT

From a whole of the metropolitan area context, there is general agreement that over recent years there has been an insufficient supply of “development ready” industrial land to meet either Adelaide’s current or future industrial land needs.

Estimates included in various reports of the annual need for industrial land range from around 50Ha to over 100Ha per annum for the next 20 years. Current vacant land supplies are to the order of 1,000Ha, suggesting that the current zoned vacant land will suffice for between 10 and 20 years, depending on the resolution of sometimes significant site constraints and the State’s growth rate, relative to the type of industry that underpins that growth and its locational requirements.



Further, some of the research suggests the situation is more worrisome than it first appears, with the actual supply being only some 400 hectares. That is, while 1,000Ha or so may be notionally available, only 400Ha can be presently considered as appropriate for competitive industry use⁶. Off-setting this is the capacity for land use to be improved via a greater utilisation on given sites – so as to improve the balance and efficiency of land use.

There is, therefore, general recognition of the need for the creation of additional industrial land to cater for future demand and for existing land to be well utilized, along with resolution as to whether the remainder of the new land available is really suitable for industry's needs.

The non-availability of appropriate and attractive industrial land is seen at the metropolitan wide level as being a deterrent to economic development, through its impact on business costs (directly in the cost of land and indirectly for impacts on transport and other costs), or simply through not having an appropriate land parcel for a specific opportunity. It is also a situation which creates opportunity for “brownfield” sites in established areas.

At the same time, carrying vacant land can come at a significant community cost where either:-

- its purchase has to be financed (ie the holding costs of keeping industrial land – including the cost on debt raised as a consequence of the land purchase); or, alternatively
- it is prevented from conversion to “higher and better economic valued uses” – particularly where there is a land shortage.

These two community costs need to be balanced so as to achieve optimal outcomes.

Identifying the optimal balance of these costs is not an easy task and has been subject to considerable research over an extended period. Moreover, this is not simply an issue of how much zoned land is available, but also of its suitability for use by industry (in terms of the impacts on business costs).

The rezoning of existing industrial land to other uses, and the rezoning of available land for industrial uses, is therefore a major issue for State and Local Government planners.

In response to these issues the State Government released an *Industrial Land Strategy for Metropolitan Adelaide* in March 2007. Consistent with the arguments above the strategy firstly attempts to provide a framework for balanced development and, specifically, sets out 16 actions to provide:

- the ongoing availability of an immediate 400-600 hectare supply of industrial land, with least 400 hectares always being “development ready”, and the remaining area in advanced planning for development. The aim is to ensure industrial land can be developed in a timely and coordinated manner, thereby supporting a competitive business climate;

⁶ Because it is not serviced, is geotechnically poor, is not suitably zoned etc.



- a rolling 15-year “industrial land bank”, identified and protected to ensure a planned supply of industrial land is available to meet future demand on an ongoing basis; and
- existing industrial land is appropriately protected to sustain long-term industrial activities.

The strategy then identifies three Strategic Industrial Areas (LeFevre Peninsula/Gillman, Lonsdale and Edinburgh Parks/DSTO) which – based on their economic importance to the State, significant export function, extent of infrastructure investment and future industrial land supply – should be afforded long term protection from incompatible or competing uses.

Secondly, it sets out an Assessment Framework for identifying Prime Industrial Areas which are of economic importance to the State and which must have protection from rezoning and encroachment.

The Assessment Framework is considered in detail in Section 5 of this report.

3.2 THE REGIONAL PERSPECTIVE

Charles Sturt LGA has been a traditional home for some of the state’s manufacturing industry over the long term – with car manufacturing and white goods operations focussed in the area from the 1950’s to 1980’s. However, with rationalisation of these sectors, the spread of industry activity based around industrial land availability in the area has broadened and changed.

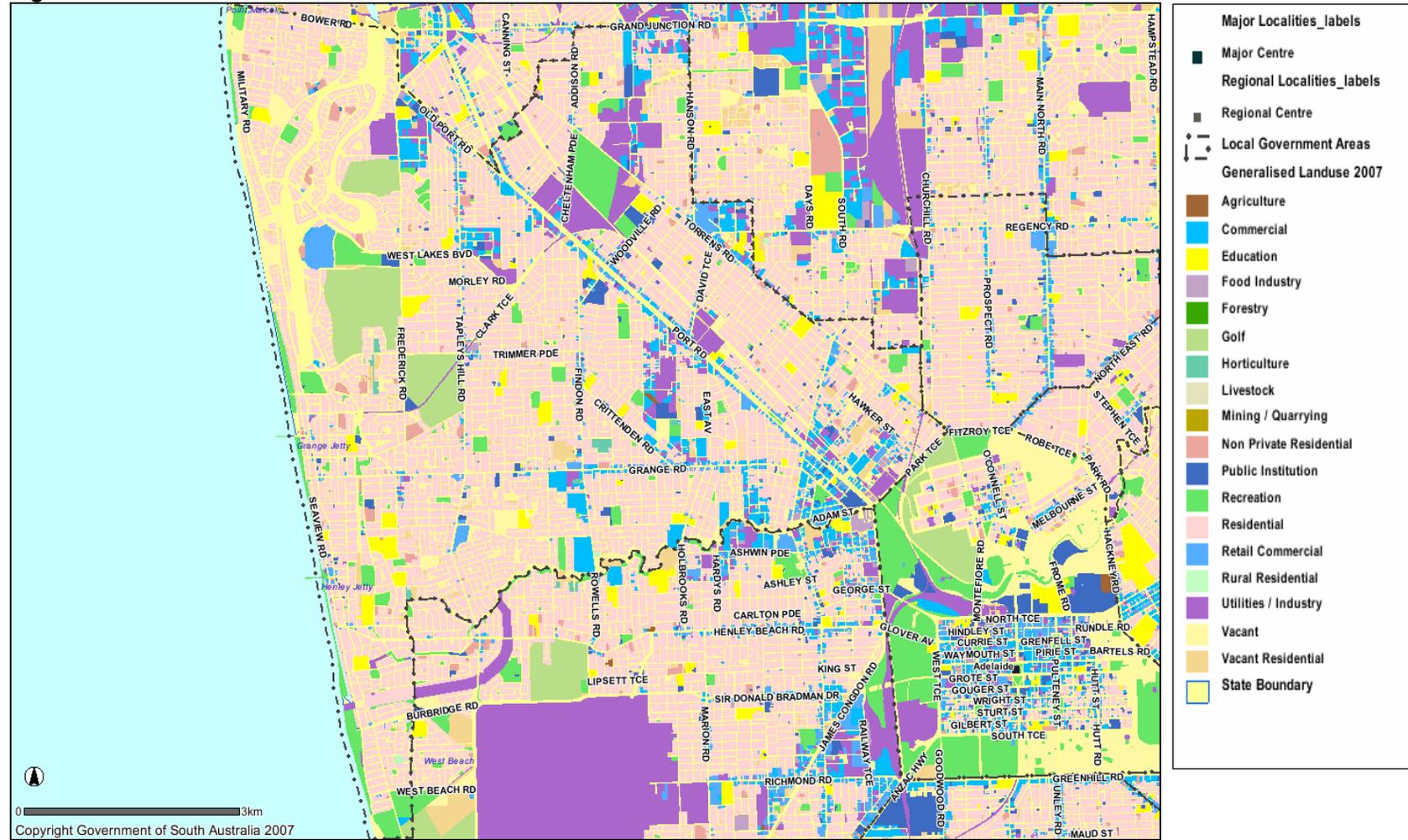
Figure 10 overleaf indicates the land zoned for industrial use in the area. The current area amounts to some 550Ha of available land in the region, with the supply focussed around the Port Road Corridor. Therefore, industrial land in the Charles Sturt Council provides a significant amount of industrial land in the metropolitan area.

The study area offers some significant locational advantages for industry – primarily related to transport access – reflecting its convenient location to both the airport and shipping, and to key road routes.

The major disadvantages of the area in terms of industrial land location are that:-

- there are significant interactions with other uses – with high levels of residential and commercial activity in the area;
- there is limited vacant land, meaning that access for new projects requires transfer of existing use(s) and/or rezoning; and
- the land’s proximity to both the CBD and the coast means that underlying values (and, therefore, opportunity costs) are higher.

Figure 10: Charles Sturt LGA – Land Use



Source: Planning SA Maps

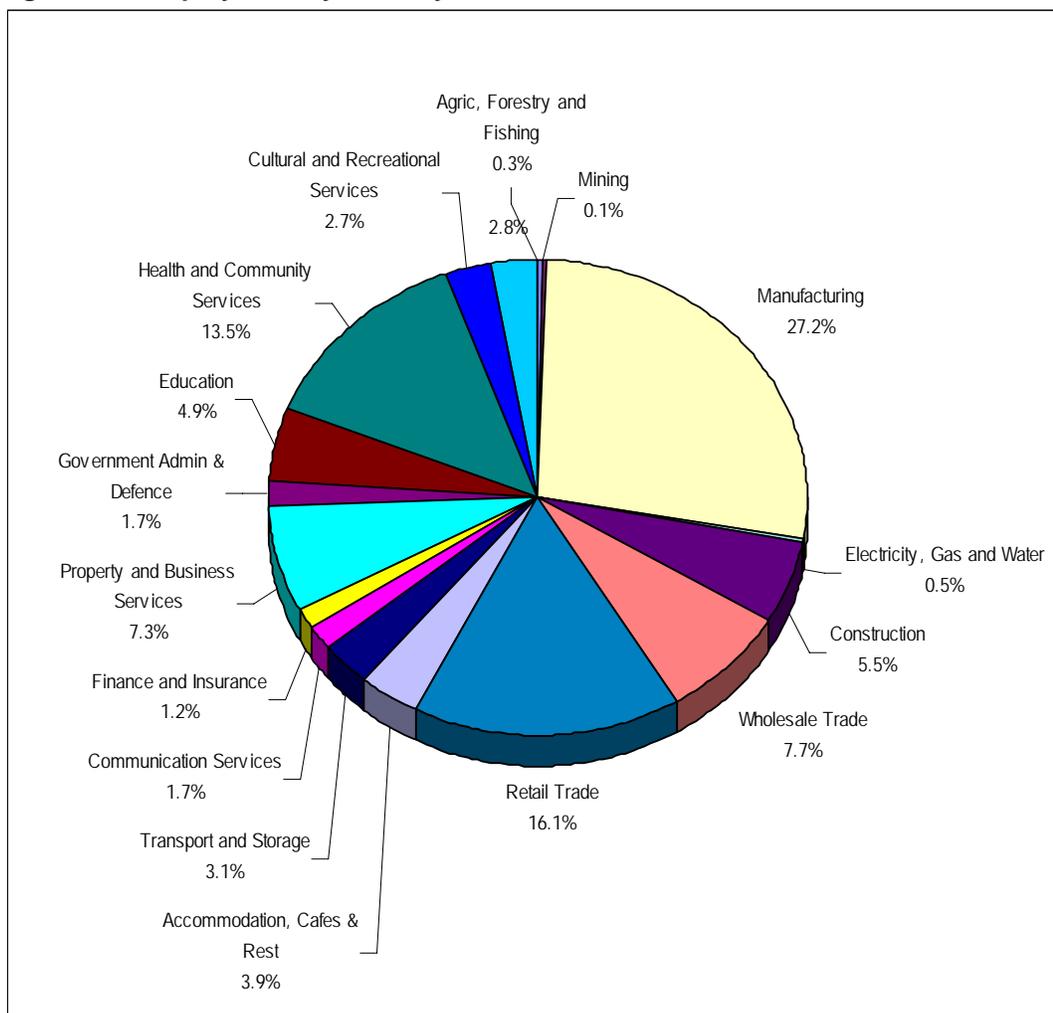
As to employment, total employment in the Charles Sturt Council area in 2001⁷ was 38,000, compared to 41,000 employed residents. This means that the council is slightly in deficit in terms of local employment opportunities versus residents employed.

The breakdown of employment by industry is outlined in Figure 11. The major industries include manufacturing (by quite a margin), wholesale trade, retail trade and health & community services. Manufacturing and wholesale trade are, of course, two of the prime users of industrial land.

It can be further noted that the balance of employment within the region, relative to employment by residents, is positive with respect to manufacturing and wholesale trade (and also health and community services – primarily via the Queen Elizabeth Hospital) and negative on everything else.

This suggests that industrial uses are drawing employees into the Study Area for work, pointing to some level of economic value adding by their presence.

Figure 11: Employment by Industry



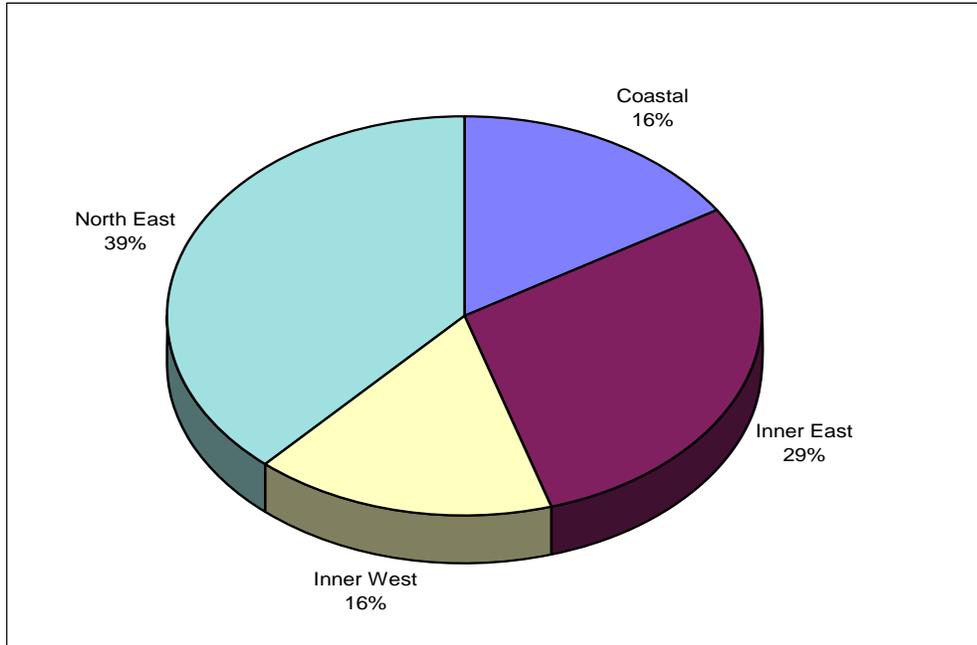
Source: ABS 2001 Census Journey to Work (ie Destination Zone data)

⁷ Based on ABS Census Journey to Work figures. 2006 JTW data will not be available until early 2008.

Figure12 indicates the sub-regional employment structure, noting that:-

- the North East is everything north of Port Road;
- the Inner East is everything east of West Lakes Boulevard/Tapleys Hill Road/Findon Road, between Port Road and the River;
- Coastal is everything west of Frederick Road; and
- the Inner West is the balance, being the central sector of the city.

Figure 12: Employment by Geographic Sector



Source: ABS 2001 Census Journey to Work

As shown, the North East precinct (Woodville North, Athol Park, etc) is the dominant geographical area – again linked to the location of industrial land along Port Road – followed by the Inner East (Beverley, Hindmarsh, et al).

Table 5 illustrates the share of total metropolitan employment actually contributed within Charles Sturt, and the sub regions.

Table 5: Proportion of Metropolitan Employment by Industry Sector in Charles Sturt

	Coastal	Inner East	Inner West	North East	Total
Agriculture, Forestry and Fishing	0.7%	0.8%	1.0%	0.5%	3.0%
Mining	0.2%	1.6%	0.2%	0.5%	2.4%
Manufacturing	0.2%	4.1%	2.2%	8.3%	14.8%
Electricity, Gas and Water Supply	0.3%	0.6%	0.3%	4.1%	5.4%
Construction	1.5%	3.5%	1.9%	4.2%	11.2%
Wholesale Trade	0.6%	5.0%	3.1%	3.8%	12.5%
Retail Trade	2.4%	2.0%	1.6%	3.0%	8.9%
Accommodation, Cafes and Restaurants	4.0%	1.0%	0.8%	1.5%	7.4%
Transport and Storage	1.2%	2.1%	1.8%	2.0%	7.0%
Communication Services	0.3%	2.5%	3.8%	0.8%	7.5%
Finance and Insurance	0.8%	0.7%	0.5%	0.7%	2.7%
Property and Business Services	1.1%	1.7%	0.8%	2.2%	5.8%
Government Administration and Defence	0.3%	0.8%	0.2%	1.7%	3.0%
Education	1.5%	1.2%	0.8%	1.9%	5.5%
Health and Community Services	1.5%	4.0%	0.8%	2.7%	9.0%
Cultural and Recreational Services	4.2%	2.0%	2.0%	1.9%	10.1%
Personal and Other Services	1.7%	1.4%	0.8%	1.9%	5.8%
Non-classifiable economic units	1.1%	2.6%	1.9%	3.2%	9.0%
Not stated	2.1%	1.8%	1.5%	4.4%	9.7%
Sector Total	1.4%	1.4%	1.4%	3.3%	8.7%

Source: ABS 2001 Census Journey to Work

As shown:-

- the top 3 sectors in terms of employment significance in the City of Charles Sturt are Manufacturing, Wholesale Trade & Construction, with Cultural & Recreational Services the only other category over 10%;
- the top 3 employment sectors by region are:-
 - Coastal
 - Cultural & Recreational
 - Accommodation, Cafes & Restaurants
 - Retail Trade
 - Inner East
 - Wholesale Trade
 - Manufacturing
 - Health & Community Services
 - Inner West
 - Communication Services
 - Wholesale Trade
 - Manufacturing
 - North East
 - Manufacturing
 - Construction
 - Electricity, Gas & Water Supply

The data confirms that Charles Sturt is a significant employer in terms of manufacturing, construction, wholesale trade and health & community services. It is less significant in other areas of services, particularly education and business services.

With a somewhat different industry classification structure, Table 6 indicates the underlying employment in Charles Sturt, including changes between 1996 and 2001.

Table 6: Employment by Industry Sector in Charles Sturt – 1996 and 2001 ('000)

	1996	2001	Percent Change
Agriculture	102	76	-25%
Forestry	3	0	-100%
Fishing	38	37	-3%
Coal, crude petroleum mining	3	0	-100%
Other mining	26	24	-8%
Food and beverage manufacturing	728	556	-24%
Wood and paper manufacturing	1,205	1,234	2%
Machinery and Equipment	4,481	4,291	-4%
Metals, metal products	923	755	-18%
Non-metallic minerals	559	576	3%
Other manufacturing	2,342	2,747	17%
Electricity Gas Water	248	192	-23%
Wholesale trade	3,699	2,832	-23%
Retail Trade	5,151	5,717	11%
Construction	1,966	1,886	-4%
Transport and storage	678	992	46%
Communication	622	610	-2%
Finance and business services	2,746	2,929	7%
Public administration and defence	560	586	5%
Education	1,248	1,451	16%
Other Community Services	4,569	4,480	-2%
Entertainment, recreation, pers services	2,503	2,943	18%
Total	34,400	34,914	1%

Source: ABS 1996 and 2001 Census Journey to Work

This data again confirms the significance of manufacturing and health in the region, but indicates quite significant falls in more traditional manufacturing employment areas, such food & beverages (24%) and metal products (18%), offset by growth in “Other” manufacturing (17%).

It is interesting to note that machinery and equipment has remained stable, suggesting that falls in employment in motor vehicles and white goods have been replaced by other areas, such as scientific and electronic equipment – which supports anecdotal evidence of the changes that are occurring (but more detail would be necessary for confirmation).

There is also a substantial fall in wholesale trade (23%), possibly reflecting rationalization of this sector, or that wholesale trade is shifting to land with lower value (and therefore cost) and those uses being replaced by higher value uses. Concurrently however, transport and storage has risen 46%, which appears a somewhat contradictory result.

Table 7 shows the inter-relationship between where people live and where people work in the Charles Sturt context.

Table 7: Local Government Areas of Residence for Workers in the City of Charles Sturt, 2001

Local Government Area		Number	Percent (%)
1	Charles Sturt (C)	12,191	32.6
2	Port Adel. Enfield (C)	4,967	13.3
3	Salisbury (C)	3,509	9.4
4	West Torrens (C)	2,322	6.2
5	Tea Tree Gully (C)	2,269	6.1
6	Onkaparinga (C)	2,107	5.6
7	Marion (C)	1,796	4.8
8	Playford (C)	1,045	2.8
9	Mitcham (C)	1,023	2.7
10	Campbelltown (C)	917	2.5
	Other areas	5,269	14.1
Total workers in the City of Charles Sturt		37,415	100.0

It reveals that 33% of workers in the Council area also live in the area, that a further 20% live in the adjacent northern and western councils of West Torrens and Port Adelaide Enfield and that almost 10% live in Salisbury.

Overall:-

- 52% of the workers in Charles Sturt live within either Charles Sturt, Pt Adelaide Enfield or West Torrens;
- 21% commute from the northern and eastern suburbs of Salisbury, Tea Tree Gully, Playford and Campbelltown; and
- 13% commute from Onkaparinga, Marion or Mitcham.

3.3 ECONOMIC STRUCTURE OF NORTH WESTERN ADELAIDE

Given the working patterns of Charles Sturt residents, it is also worth looking at the broader region. Defining the north western region as the LGA's of Charles Sturt, Port Adelaide Enfield and West Torrens, this region provides (in 2001) total employment of 120,100 people. This compared to 100,100 employed residents and, therefore, the region can be considered to be in net surplus in terms of the underlying demand for and supply of jobs.

Table 8 overleaf illustrates employment shares by industry and, again, it is noted that there are relatively high proportions of industrial employment in the region, particularly for transport & storage, manufacturing, electricity and wholesale trade.

Table 8: Proportion of Metropolitan Employment by Industry Sector in North Western Adelaide

	North West Region	Charles Sturt	% of Region
Agriculture, Forestry and Fishing	9.3%	3.0%	32.3
Mining	14.8%	2.4%	16.2
Manufacturing	44.8%	14.8%	33.0
Electricity, Gas and Water Supply	46.8%	5.4%	11.5
Construction	33.6%	11.2%	33.3
Wholesale Trade	48.8%	12.5%	25.6
Retail Trade	24.6%	8.9%	36.2
Accommodation, Cafes and Restaurants	17.7%	7.4%	41.8
Transport and Storage	52.3%	7.0%	13.4
Communication Services	24.5%	7.5%	30.6
Finance and Insurance	15.9%	2.7%	17.0
Property and Business Services	17.2%	5.8%	33.7
Government Administration and Defence	12.7%	3.0%	23.6
Education	18.5%	5.5%	29.7
Health and Community Services	20.4%	9.0%	44.1
Cultural and Recreational Services	20.8%	10.1%	48.6
Personal and Other Services	27.9%	5.8%	20.8
Non-classifiable economic units	29.5%	9.0%	30.5
Not stated	28.8%	9.7%	33.7
Totals	27.5%	8.7%	31.6

As shown, Charles Sturt accounts for around 32% of regional employment, ranging from almost 50% of cultural and recreational services to less than 20% for several categories including, it is noted, transport and storage. For manufacturing, construction, wholesale trade and retail trade, Charles Sturt contributes between 25% and 35%, broadly in line with the regional average.

3.4 IMPLICATIONS FOR EMPLOYMENT PATTERNS

Analysis suggests that the north western region of Adelaide is a significant focus for manufacturing activity and, to a lesser extent, wholesale trade activity and employment in metropolitan Adelaide. This is also true for Charles Sturt specifically, but less so. Some change in the industrial structure in the region is noted – with employment in some of the more traditional areas declining and, to some extent, being replaced by newer types of manufacturing employment.

There are two major implications from an industrial land strategy viewpoint, being that:-

- firstly, the North West region is historically a significant contributor of both industrial land and manufacturing employment in metropolitan Adelaide. Therefore, in making zoning decisions (particularly as regards rezoning) the broader implications (in terms of the role of the region as an employment “provider” for the broader metropolitan area) must be considered; and
- secondly, from the Charles Sturt perspective, there is an apparent trend to swing away from the traditional manufacturing employment bases to newer forms, which is undoubtedly linked to:-
 - pressures on Australian manufacturing overall, with increased competition for lower value product, requiring local industry to find niches in higher value, knowledge based manufacturing, often requiring less land than that which has been displaced; and

- the demand for seaside and inner city areas has seen the development of higher underlying land values in the area, resulting in better value in alternative use and higher costs for industrial use, making it less attractive for traditional manufacturing.

3.5 BALANCING BENEFITS AND COSTS

Given this review of employment outcomes and issues, the challenge for Charles Sturt is the need to balance the demand in the region for higher value uses, against its role in providing for a sustainable (local and state wide) and enduring economic environment for existing and future industry.

Some of these issues were picked up in a report by Hudson Howells – *Industrial Land - An Economic Analysis of Alternative Uses*, prepared for the Department of Trade & Economic Development in June 2006. This study noted that underlying value of industrial land is jointly influenced (in the Adelaide case) by proximity to the CBD and access to major transport nodes. The influence of the proximity to the CBD (a major finding of the broad literature) suggests that an opportunity cost argument is dominant – in that land's underlying value is influenced by the highest value use possible (including intensification of industry), while access to transport provides cost and logistical benefits to industry.

Further, the study involved a survey of current manufacturing firms – which were asked to rank the most important location decision factors in terms of their existing locations. The responses, in priority order, were:-

- access to staff and labour;
- proximity to customers;
- access to requisite electricity distribution capacity;
- access to high speed broadband; and
- proximity to suppliers.

However, respondents were also asked if they intended to relocate and, if so, the most important location factors in terms of relocation choice. In priority order, the most frequent responses were:-

- access to high speed broadband;
- proximity to customers;
- access to electricity distribution capacity;
- access to staff and labour; and
- proximity to suppliers.

These findings are consistent with an observable shift in industry development to more knowledge and capital intensive activity. So, issues that are more relevant to traditional manufacturing, such as access to labour are less important, while issues that are probably more relevant for higher value industry, such as access to broadband, are more important – and are trends which are likely to continue to be reinforced into the future.

Charles Sturt is therefore in an interesting position as far as industrial land supply goes. Its traditional manufacturing employment base has been put under “pressure” by growth in the metropolitan area overall, and via the growth in land values in the area – which is related to the increase in demand for other uses in the area, again including higher intensity industrial uses.

It is clear that, as the metropolitan area continues to grow and the value of land in alternative uses increases, traditional industrial land holdings will come under increasing pressure for conversion to higher value uses, where the ‘rents’ are more commensurate with the value of the land. This is not inconsistent with the needs of knowledge and capital intensive industries and certainly encourages a better mix of higher value land uses – possibly combining residential, commercial, industrial and other uses – which become more compatible because higher value industry is less likely to have the same externality effects on surrounding uses. In the inner metropolitan areas, this might translate into a greater move towards mixed use developments

The importance of an appropriate industrial land supply cannot be understated for development of a sustainable community. A shortage of suitable industrial land will potentially impede economic development by increasing not only the cost of the land itself, but also costs like transport and access to labour, or by meaning that certain firms will simply not establish within the state or region due to the non-availability of suitable land.

Land use and industry ratios suggest that the provision of one hectare of land used for industrial purposes will, on average, sustain 120 jobs and, in so doing, generate a value added contribution to Gross State Product of around \$10 million. This is particularly important for industrial areas in terms of employment outcomes in their region, and for Councils where industrial land access can become a bottleneck for development.

Further, in considering sustainable communities, and the need for residents to also have employment options, the local job outcomes can be of importance.

From a broader state perspective, the Hudson Howells paper indicatively concluded that every 10% reduction in relative industrial land costs would result in an order of magnitude saving for the industrial sector of some 0.2%. Savings in other operational aspects would also be possible through providing land in “suitable” locations – with the report suggesting that the value of turnover in these sectors would increase by 4% in real terms and that the wage and salary incomes and returns to capital generated would be of the order of \$200 million, supporting the creation of the order of 2,000 new jobs through this improved competitiveness. This supports the point that it is important from a state context that there are reasonable supplies of appropriate industrial land available (thus keeping costs manageable).

From a Charles Sturt perspective, the provision of industrial land in the area allows for support of jobs and, based on the employment to land ratio, every hectare supports an average of around 50 direct jobs (as against 120 jobs per Ha noted above, which includes the indirect and flow on effects – and which are smaller in smaller regions, due to leakages of activity outside of the region).

However, it is not just a matter of providing land, but rather the way in which the land is focussed in terms of use and, of course, interaction with the community around it. A key conclusion therefore is that there will be a natural move towards higher value, higher knowledge based industry in the Charles Sturt area.

In other words, it is likely that traditional industry will move out because of:-

- the implications of higher potential land values;
- interface issues around more intensive alternative uses (retail, commercial and residential); and
- more appropriate options, with better transport connections being opened up elsewhere, including LeFevre Peninsula, Salisbury, Edinburgh Parks and environs along the planned Northern Expressway – and, to this end, the Industrial Land Strategy sets the priorities, which generally do not include the Charles Sturt area.

As traditional industry moves out, alternative uses will move in, and it is suggested that the region focus on attracting this base of higher value, higher knowledge based industry. Such industry will:-

- fit better with adjacent uses, current and future;
- benefit from the adjacency, via access to commercial activity; and
- fit better with higher land values per se – with the possible benefit of both greater intensity of labour content and higher average wages, and the economic benefits that this brings.

Further, it is noted that as land parcels from other uses becomes available, the conclusion of the above is that mixed uses would probably be the most appropriate planning arrangement – with a portion allocated to industry, but focussed on higher value, less intrusive industrial activities.

However a line of some sort has to be drawn to ensure that land which is released by this process is retained in industrial use in sufficient degree, firstly to ensure no net loss of employment and, secondly, to maximize the opportunity for employment growth. These matters are further discussed in Section 6.

In conclusion, industry has a clear role to play in Charles Sturt, and there needs to be a focus on attracting replacement industry for old manufacturing. In an economic sense however, the reduced aggregate land requirements of these new industries required to sustain current output may allow either expansion of overall industrial output from the same footprint, or conversion of some land to appropriate alternative use without adverse effects on overall industrial employment.

4 STUDY AREA REVIEW

Each district within the Study Area has been subject both to desk top review and to detailed on ground inspection, as a precursor to its strategic assessment. This section provides an overview of the findings of this work.

The desk top review covers GIS mapping⁸ of:-

- demographics, utilizing 2006 Census data, including profiles on age, household income and employment by industry sector. These profiles reveal a high level picture of the surrounding population and provide both social and economic context to the review;
- Land Use Codes, sourced from the Valuer General, at a high level for non industrial uses and at a finer grained level for industrial uses, illustrating the actual on-ground situation as against the current zoning;
- ownership patterns, drawn from Council's own databases, with a focus on identifying consolidated ownerships of 1Ha or greater, in order to reveal something of the prospectivity for either renewal and/or intensification of existing industrial uses; and
- infrastructure provision, including high level opportunities and constraints.

Notes from on-ground inspection are encapsulated in pro-forma District summaries in Section 4.2, drawn from individual precinct reviews and covering:-

- the underlying zone structure;
- the general form of development;
- access arrangements;
- principal land uses;
- a sample of significant occupiers and ownerships;
- interfaces, particularly with residential zones, but also with commercial zones and main roads, where the interfaces are of different and more positive character; and
- needs and opportunities, which are 'at first glance' and are subject to the formal review undertaken at Section 5, but which give some initial insight into the current situation in each case.

The resultant mapping is at a whole of council level for demographic and labour force data, and at a district level for land use codes. The whole of Council maps are included at **Appendix C**, while the district level maps are included at **Appendix D**.

The original inspection notes for each precinct are included in Volume 2 of this report. Although superseded by Section 4.2 as regards some of the initial observations, they include a wealth of material on current disposition of land use patterns in each precinct.

⁸Capital Value to Site Value ratios were also mapped, using the 2007 Valuer General's assessment. However, for technical reasons, it proved not possible to generate meaningful information and so the results are not presented.

4.1 OVERVIEW

The overall study area is as illustrated at Figure 13 overleaf and previously in figures 2 to 7. It is configured as detailed at Table 9.

Table 9: Study Area Configuration

District/Precinct	Area (Ha)	% of Total Area	No. of Assessments	Avg Size of Assessment (sqm)
North West				
Royal Park	50.7	9.1	225	2,250
Tapleys Hill Road	3.1	0.6	32	950
West Lakes	10.4	1.9	4	26,030
Mid North				
Cheltenham	28.9	5.2	44	6,570
Albert Park	20.5	3.7	166	1,230
Hendon	30.2	5.4	64	4,720
Seaton	1.9	0.3	12	1,560
Outer North				
Woodville North	83.8	15.1	143	5,860
Athol Park	59.0	10.6	261	2,260
Arndale	27.1	4.9	90	3,010
Mid South				
Kidman Park South	12.9	2.3	4	32,120
Kidman Park North	7.9	1.4	33	2,380
Mid East				
West Croydon/Kilkenny	23.5	4.3	66	3,560
Beverley	76.2	13.7	479	1,590
East Avenue	3.8	0.7	12	3,150
Allenby Gardens	16.8	3.0	102	1,650
Welland	20.6	3.7	199	1,030
Inner East				
Hindmarsh	25.3	4.5	242	1,040
Bowden/Brompton	35.3	6.4	458	770
Port Road/South Road Corner	14.6	2.6	123	1,190
Torrens Road	1.6	0.3	19	830
Devon Park	2.4	0.4	25	940
Totals	556.5	100.0	2,803	1,980

As shown:-

- only three precincts individually comprise more than 10% of stock – being Woodville North, Athol Park and Beverley;
- the five largest precincts – Woodville North, Beverley, Athol Park, Royal Park and Bowden/Brompton – contribute 55% of total industrial land;
- the five smallest precincts – Tapleys Hill Road, Seaton, East Terrace, Torrens Road and Devon Park – each comprise less than 1% of total stock and, in total, contribute only 2.3% of total stock;
- the number of assessments in any individual precinct ranges from under 10 to almost 500;
- the average assessment size is just under 2,000sqm, but there are twelve precincts with an average size of less than 2,000sqm and only five precincts with an average size of more than 4,000sqm (including, most noticeably, West Lakes and Kidman Park South).

Further analysis of this data reveals that: of the “special purpose” policy areas:-

- Bulky Goods covers 5.4Ha (excluding Royal Park), or 1.0% of stock;
- Home Industry covers a total of 14.1Ha, or 2.5% of stock; and
- Heritage Conservation Areas cover 4.7Ha, or less than 1% of stock.

It also reveals that:-

- 335Ha, or 60% of all Industry zoned land is zoned Interface;
- there are eight precincts zoned entirely as Interface⁹, and a further seven precincts where more than 70% is zoned this way¹⁰; and
- there is only one precinct where more than 50% of the total area is zoned Core Industry, being Woodville North.

There is further discussion of this underlying zoning structure in Section 6.

Data from the 2006 Census provides a picture of the resident population in each part of the City of Charles Sturt. Whole of Council mapping illustrates that:-

- there is an apparent gradation in **average age**, with older average ages in the north-western part of the Council area and conversely, most other industrial precincts being located in relatively youthful areas;
- there are higher concentrations of people in the **manufacturing labour force** north of Torrens Road and south of Port Road. In particular, there are higher concentrations in and around the industrial precincts of Athol Park/Woodville North, Beverley and Hindmarsh. In the western and southern parts of the Council area, concentrations are generally low (below 20%);
- there are lower and more dispersed concentrations of **transport and storage labour**, which do not appear to have any particular locational relationship to any particular industrial precincts; and
- there are concentrations of medium to high **average weekly household incomes** west of Frederick/Tapleys Hill Road and along the southern edge of the Council area, with a band of medium-level income households between Port and Torrens Roads. Generally, industrial precincts are situated in areas of low household incomes.

Regional infrastructure is illustrated at Figure 14 overleaf.

As to **transport infrastructure**, almost all precincts are located on or bisected by DTEI roads, with Welland, Devon Park and, post Clipsal, most of Bowden/Brompton being the exceptions. The big gap in the DTEI network is the Holbrooks Road connector, as discussed in Section 6.2.2.

All precincts except those at West Lakes, East Avenue and Devon Park also appear to have access to B-Double trunk routes.

⁹ Tapleys Hill Road, West Lakes, Seaton, Kidman Park South & North, East Terrace, Torrens Road and Devon Park.

¹⁰ Albert Park, Athol Park, Arndale, Allenby Gardens, Welland, Port Road/South Road Corner.

Figure 14: City of Charles Sturt Infrastructure



However, access to a B-double trunk route does not, under current regulations, give access to properties situated close to but not actually on those routes. At Beverly, for example, properties fronting Port Road have B-double access, but properties down Pope Street (or any other street within this precinct) do not.

This situation clearly warrants review, as there are a several circumstances where either a B-double designation could be argued for and would add value to a precinct, such as Royal Park¹¹, or where the current regulations are possibly being flouted, which is an inappropriate approach to traffic management.

The local area traffic network is also problematic. While areas such as Royal Park are well served by local roads, these tend to be the exception to the rule. In areas such as Allenby Gardens and Bowden/Brompton, the local road network is simply not fit for industrial purposes. At Seaton and Devon Park, industrial access is via residential streets. At Woodville North and Beverly, functionality and/or legibility are frequently sub-optimal.

Further review of transport infrastructure issues and of opportunities for improvement of the local road network is required as part of any strategy to improve the functionality of Charles Sturt's industrial precincts.

As to rail, the Study Area has no rail freight connections, but includes both the Port Adelaide and Grange passenger rail lines.

Broadband connectivity is an important consideration, but is assumed to be available to all who want it.

Regional facilities within the study area include:-

- Queen Elizabeth Hospital;
- Charles Sturt Civic Centre;
- Arndale Shopping Centre;
- Adelaide Entertainment Centre;
- Powerhouse Stadium; and
- Hindmarsh Stadium.

Scattered around its perimeter are the Adelaide CBD, Port Adelaide Regional Centre, West Lakes Mall, West Lakes Stadium and five golf courses. It is proximate to both Adelaide Airport and the Port of Adelaide.

The Land Use Code maps show that Service Trades and Wholesale Trades tend to dominate in many precincts, there being:-

- little or no manufacturing in Albert Park, Athol Park, Kidman Park North & South, East Terrace, Allenby Gardens, Welland, Hindmarsh and Bowden Brompton (excluding Clipsal); and
- modest levels of manufacturing in Royal Park, Arndale and Beverley (until Electrolux departs).

¹¹ Noting that even Frederick Road does not have B-double designation

The greatest concentrations of manufacturing are at Woodville South, West Croydon/Kilkenny and Port Road/South Road corner.

The maps also show significant penetration of non-industry uses, especially on Port Road at both Royal Park and Albert Park, Arndale (south) and Beverley, and to a lesser extent on Tapleys Hill Road at Hendon, Grand Junction Road at Athol Park, Grange Road at Allenby Gardens and South Road at Hindmarsh.

Finally, there is noted to be a significant degree of residential use in Athol Park, Beverley, Welland and Hindmarsh, as further addressed in Section 6.

The Study Area also has several **regional interfaces**, where it abuts another Council area, including:-

- residential interfaces at Royal Park, Athol Park, Arndale, Kidman Park South and Devon Park; and
- industrial interfaces at Athol Park (to Ottoway and Wingfield) and along the River Torrens, at Welland (to Torrensville) and Hindmarsh (to Thebarton).

4.2 DISTRICT REVIEWS

This section provides an overview of each precinct in each of the six districts identified for purposes of this study. These notes are distilled from individual precinct reviews and, in turn, are distilled into district summaries in Section 5.3.

It is noted that there is continued reference to a “Main Road Policy Area” in these notes. This is a generic reference for present purposes to an identified need for a mixed use type zone on a number of main roads, as more fully discussed in Sections 2.3 and 6.

4.2.1 NORTH WEST DISTRICT

Precincts: Royal Park, Tapleys Hill Road, West Lakes

Coverage: Adjacent to Pt Adelaide and West Lakes, taking in the suburbs of Royal Park, West Lakes and portion of Hendon

Outer Boundaries: Tapleys Hill Road, Old Port Road, West Lakes Boulevard, Frederick Street

Key Facilities: West Lakes, Pt Adelaide and Riverside Golf Course all adjacent

Significant Occupiers:

- Royal Park Motor Traders Association (training facility), Custom Coaches, Chevron Glass, Schenker Logistics, Pacific Marine, Old Port Rd Medical & Dental Centre

- Tapleys Hill Road Hendon Self Storage, Metsteel
- West Lakes SANFL

Land Uses: Include manufacturing, warehousing, service trades, commercial, retail, education, community and recreation

Ownership Patterns: There are a couple of ownerships greater than 2Ha at Royal Park, including the Motor Traders Association. The West Lakes Industry precinct is in the consolidated ownership of the SANFL and the Minister for Administrative & Information Services.

The **Royal Park Precinct** is a significant industrial node with good access and a generally good standard of development. By way of comment:-

- the western node generally presents well as an industrial estate, while the eastern node is of a much lesser standard, with several sites ripe for redevelopment;
- very few vacant premises are evident;
- there are some sizeable vacant land parcels in the northern corner;
- the Old Port Road frontage is primarily given over to non-industrial use, as will become even more the case now that a small area has been zoned for Bulky Goods and if the proposed Bulky Goods development which precipitated this rezoning proceeds; and
- land fronting Tapleys Hill Road, including derelict houses on Dixon Street, warrants consideration as to its future zoning, especially if the bulky goods proposal proceeds.

As to needs and opportunities:-

- the precinct clearly needs to be retained as an industrial area;
- there is a need to ensure that the former Royal Park High School site is not lost to industry; and
- there is a need to review the Bulky Goods Policy Area near the corner of Old Port Road and Tapleys Hill Road, which is limited in scope and creates a piecemeal approach in its present configuration – and a likely future pressure point for additional bulky goods development; while
- opportunities include -
 - rezoning the whole of the Old Port Road/Tapleys Hill Road corner for Bulky Goods;
 - rezoning the balance of the Old Port Road frontage as a Main Road policy area; and
 - rezoning of land south of Dixon Street, from Home Industry to either Industry or Residential, but probably the former so as to remove a street front interface.

The **Tapleys Hill Road Precinct** is a small stand-alone industrial node which warrants complete review of its current zoning. By way of comment:-

- this is something of a remnant industrial precinct, limited in its extent;
- there are two principal occupiers only;
- there is little to differentiate much of it from the adjoining mixed use and centre zones;
- the residential interface on the eastern boundary is especially unattractive; and
- future zoning should anticipate the eventual relocation of Metsteel and the renewal of the southern end of the precinct, where many improvements are approaching obsolescence.

As to needs and opportunities:-

- there is a need to improve the Paqualin Street interface; while
- opportunities include
 - rezoning to a Main Road policy area to better reflect the precinct's latent commercial potential; and
 - rezoning to Residential along Paqualin Street to improve this interface.

In the **West Lakes Precinct** the current zoning is redundant while Football Park remains where it is and there will be higher and better uses than industrial if Football Park ever moves.

There appears to be both a need and an opportunity to rezone this precinct to Recreation (or other appropriate zone) to reflect likely long term use and ownership.

4.2.2 MID NORTH DISTRICT

Precincts:	Cheltenham, Albert Park, Hendon and Seaton
Coverage:	Encompasses the old Holden and Phillips manufacturing plants at Woodville and Hendon and the surrounding district, taking in the suburbs of Hendon (part only), Albert Park, Woodville, Woodville West and Seaton
Outer Boundaries:	Tapleys Hill Road, Trimmer Parade, Woodville/Findon Road, Pt Adelaide rail line
Key Facilities:	QEH, Charles Sturt Civic Centre and Cheltenham Racecourse

Significant Occupiers:

- Cheltenham AI Automotive, Boral Timber, Radio Rentals, Bunnings (new), Jehovah's Witnesses
- Albert Park Coates Hire, Caststone, Southern Egg Co, Portside Mitsubishi, Peer Technical Education College
- Hendon SA Film Corp, Reece Plumbing, Leitzke Doors, Integrated Electronic Solutions
- Seaton Balfours (vacating at the time of writing)

Land Uses: Include manufacturing, warehousing, retailing, education and community

Significant Ownerships: There are a limited number of ownerships of greater than 2Ha, including ISPT, which owns Charles Sturt Industrial Estate, and Sabco Developments (and another), who control two large parcels fronting West Lakes Boulevard at the southern end of Hendon.

The **Cheltenham Precinct**¹² is almost fully and largely newly developed to modern warehousing, with mixed commercial activities along the Port Road frontage. By way of comment:-

- significant recent redevelopment in this precinct has set the scene for its land use patterns for the next generation; and
- with the completion of the current developments (one being Bunnings), there will be very little industrial land use fronting Port Road.

As to needs and opportunities:-

- there is a clear need to retain the underlying industrial capacity; and
- there is a need to resolve the correct strategic framework for the Bulky Goods policy area; while
- the principal opportunity is to rezone the western Port Road/Cheltenham Parade triangle as a Main Road policy area to better reflect its actual and likely future use.

The **Albert Park Precinct** is centred on that section of Port Road opposite the Cheltenham precinct, and its land use patterns reflect this main road frontage. By way of comment:-

- there is only a low level of true industrial land use along Port Road and a complete rethinking of this zone appears warranted;

¹² Which is actually in Woodville, but is so called in order to readily identify its location to the casual reader – being bounded as it is by Cheltenham Cemetery and Cheltenham Racecourse, and separated from the rest of Woodville by rail lines.

- the balance of the precinct is of little broader industrial significance and may be best suited to service industry and service trades;
- there are minor opportunities to rationalize some boundaries on the southern side so as to bring isolated sites within the commercial/industrial land use loop;
- the old cold storage facility (and indoor cricket arena) on Murray Street has an additional frontage to Glyde Street which warrants review in anticipation of the eventual demise of what appears to be a very aging facility; and
- the residential interface along the southern side could be significantly improved.

As to needs and opportunities:-

- there is a need to recognize the current zoning mis-alignment; while
- opportunities include
 - rezoning the Port Road frontage as a Main Road policy area, including all land east of West Lakes Boulevard, to reflect the on-ground situation;
 - extending the Industry zone along the full length of Jervois Street to improve the long term interface with the adjoining residential zone;
 - rezoning the Glyde Street frontage to Residential in anticipation of eventual obsolescence of the existing cold store; and
 - undertaking streetscaping along the southern interface to improve local amenity.

The **Hendon Precinct** is a sizeable and cohesive industrial estate, well located and with significant redevelopment potential. By way of comment:-

- it comprises a relatively self contained industrial precinct with significant main road frontages;
- there appears to be a strong cluster of electronics related companies in residence;
- there are several large vacant properties (up to 7,000 square metres), with another of this size pending when SA Film Corp vacates;
- the precinct is generally reasonably well buffered from surrounding precincts;
- the fragmented ownership and the level of existing industrial development make conversion to a non-industrial use unlikely in the foreseeable future;
- there appear to be commercial opportunities for significant renewal in parts of the precinct, probably involving wholesale demolition of older buildings;
- there is very little industrial use per se on the Tapleys Hill Road frontage; and
- the dilapidated southern end may warrant consideration for conversion to residential use, which may be more congruent with the adjoining neighbourhood than new industrial development.

As to needs and opportunities:-

- the precinct needs to be retained as an industrial node; while
- opportunities include

- rezoning of the Tapleys Hill Road frontage as a Main Road policy area; and
- consideration of rezoning the dilapidated southern block as Residential.

The **Seaton Precinct** is a single enterprise zone, accommodating a Balfours factory which was being vacated as this report was being written.

With the departure of Balfours, this isolated industrial pocket will become ripe for rezoning to an alternative use and redevelopment. There is therefore both a need and an opportunity to rezone to Mixed Use or other appropriate zone and, in particular, an opportunity for high density residential development behind the Trimmer Parade frontage, adjacent the Seaton Park Railway Station.

4.2.3 OUTER NORTH DISTRICT

Precincts:	Woodville North, Athol Park and Arndale
Coverage:	Land generally north of Torrens Road, with a principal western node and a smaller eastern node, and taking in the suburbs of Croydon Park, Woodville North and Athol Park
Outer Boundaries:	Torrens Road, Hanson Road/Addison Avenue, Grand Junction Road, Cheltenham Parade
Key Facilities:	Arndale Shopping Centre
Significant Occupiers:	
• Woodville North	ROH, Email, Clyde-APAC, Tecalemit-Cooper Standard Automotive, Carter Holt Harvey, Islamic Arabic Centre (& Al Khalil Mosque), Woodville Hockey Club
	Also noted is Viscount Plastics, on the southern side of Torrens Road, abutting this precinct.
• Athol Park	Amcor, Cameron Storage, Mannheim Fowler, Vietnamese, Polish and Islamic Community Clubs
• Arndale	Volvo Penta, Cutler Brands, Kilkenny Castings
Land Uses:	Include manufacturing, warehousing, service trades, retailing, community and recreation
Significant Ownerships:	There are a number of ownerships greater than 2Ha in Woodville North, Pennington and Athol Park. Principal among these are Arrowcrest Group (ROH), the Dyda Group and the City of Charles Sturt at Woodville North, and three private companies with substantial interests along Glenroy Street.

It is noted that the Sheridan site, on Torrens Road, was rezoned Residential as this report was being written and so is excluded from consideration.

The **Woodville North Precinct** comprises a series of large and generally older manufacturing facilities and is home to a number of significant enterprises. By way of comment:

- the Torrens Road frontage is entirely forgettable and is not being taken advantage of to anything like its full capacity – especially given the nature and scale of development pending opposite on the Cheltenham Racecourse and Sheridan sites;
- the Home Industry Policy Areas are not working, in that
 - the eastern node comprises portion of the main Electrolux warehouse; and
 - the western node appears to be in straight residential use;
- the accessibility of the interior of the precinct is problematic because of the inadequacies of Audley and Glenroy Streets against modern industrial standards;
- opportunity may exist to address this via a new access point off Torrens Road into Sheffield Street and to improve the width and standard of the northern end of Audley Street, noting that some land acquisition would be required to effect these improvements;
- there appear to be significant vacancies in the precinct, with a number of signs offering either lease “as is” or design and construct opportunities of up to 20,000 square metres;
- many of the older sheds will struggle to find new occupiers and should arguably be demolished to make way for new buildings – as is occurring at the Charles Sturt Industrial Estate; and
- the western residential interfaces need to be addressed, with the Carlton Road residential interface in particular being quite brutal.

As to needs and opportunities:-

- there is a clear need to retain the precinct’s industrial capacity, but to also improve its functionality, especially as regards access; and
- there is a clear need to address the residential interfaces; while
- opportunities include
 - rezoning Torrens Road frontage as a Main Road policy area;
 - rezoning Home Industry areas to Residential (western side) and Industry (eastern side);
 - rezoning of the western playing fields as Recreation and the balance of the Northgate Avenue frontage as Residential to secure the best long term interface;
 - considering reconfiguration the Torrens Road access point to connect with the western end of Sheffield Street;
 - considering the widening of the northern section of Audley Street;

- facilitating the complete redevelopment of the big old manufacturing facilities into modern industrial premises; and
- addressing the residential interfaces, especially in the west.

The **Athol Park Precinct** abuts Woodville North and comprises a mixture of larger transport & distribution warehouses and smaller warehouses & workshops, interspersed with remnant residential development. By way of comment:-

- the creation of Hanson Road as the central access point to the Port River Expressway transforms the strategic dynamic for this precinct;
- instead of being somewhat remote and hard to get to, the precinct is now as accessible as any industrial land in north-west Adelaide;
- the current configuration and presentation do not do this new-found status any justice;
- with one exception, the Hanson Road frontage comprises a series of low value, obsolete properties which are ripe for redevelopment;
- the Grand Junction Road frontage comprises a small number of larger facilities, generally of good average quality;
- the zoning of the whole north-eastern section along Athol and Lavinia Streets (between Glenroy and Hanson) needs rethinking – including the fact that the precinct is predominantly zoned Interface because of buffering around the Home Industry policy area;
- the Home Industry zone appears problematic and to be an impediment to efficient land use, site aggregation and redevelopment;
- a bulky goods development has apparently been proposed for the Hanson Road corner, but the suitability of such use is not clear cut at first glance and requires further consideration in a whole of study area context;
- heavy vehicle access needs to be improved, noting in particular the potential to widen Glenroy Street¹³, which would require land acquisition from only two owners on its western side (but would require relocation of power lines); and
- Westwood abuts the eastern and southern boundaries, bringing new residential development and a new residential population to adjoining parts of the precinct.

As to needs and opportunities:-

- there is a clear need to retain the precinct's industrial capacity and to improve its existing access and amenity; while
- opportunities include
 - rezoning of Grand Junction and Hanson Road frontages as Main Road policy areas;
 - eliminating the Home Industry policy area and rezoning as Core Industry, together with the surrounding Interface area;

¹³ Which links across Grand Junction Road at its northern end to Eastern Parade – and, from there, directly into Port Adelaide.

- actively encouraging site consolidation;
- reviewing any Bulky Goods potential in its broader context;
- considering the widening of both Glenroy Street and the eastern throat of Athol Street;
- rezoning the western end of Millicent Street to Residential; and
- undertaking streetscaping to improve amenity.

The **Arndale Precinct** sits alongside the Arndale Shopping Centre and provides generally good average quality warehousing, interspersed with some older manufacturing – although the southern node (below Torrens Road) includes a number of non-industrial uses. By way of comment:

- the precinct’s adjacency to Arndale Shopping Centre gives the northern node a particular character and strong commercial prospectivity;
- Challa Gardens Primary School takes up most of the southern node and largely destroys its integrity as an industrial precinct – noting also the TAFE campus on Humphrey Terrace;
- in consequence, the zoning of this southern node warrants rethinking; and
- the residential interfaces are generally untidy.

As to needs and opportunities:-

- there is a clear case for retaining the existing industrial capacity, but less so to the south; while
- opportunities include
 - north of Regency Road, taking better advantage of the precinct’s proximity to Arndale regional centre;
 - south of Regency Road, rezoning to Mixed Use/Main Road policy area;
 - banning trucks from Hassell Street; and
 - improving the northern residential interface, which runs along a Council boundary.

4.2.4 MID SOUTH DISTRICT

Precincts:	Kidman Park South, Kidman Park North
Coverage:	Abuts the middle stretch of Charles Sturt’s River Torrens frontage, taking in the suburb of Kidman Park.
Outer Boundaries:	River Torrens, Findon Road, Grange Road, Frogmore Terrace
Key Facilities:	Nil
Significant Occupiers:	
• Kidman Park South	Independent Grocers (IGA), Research Laboratories of Australia

- Kidman Park North ECH, Central Logistics

Significant Ownerships: Much of the District is in aggregated ownership, especially at its southern end.

Land Uses: Include manufacturing (research labs and food), warehousing, commercial (data centre), service trades and recreation.

The **Kidman Park South Precinct** is almost a single enterprise zone, with the IGA warehouse taking up perhaps 80% of the precinct. By way of comment:-

- the precinct is currently fully developed and fully occupied, although the improvements are aging and of sub-optimal design;
- it has extensive frontage to a very attractive section of the river and is generally surrounded by good quality residential development;
- future land use will be up for grabs if and when IGA relocates, but not before;
- if the future use were industrial, then it would most likely become a higher density multi-user site, with consequent implications for industrial traffic entering into the area; and
- the land appears to be highly prospective for future residential development.

As to needs and opportunities:-

- there appears to be a need to recognize a higher long term value of this precinct, including potential for high density residential use along the river; while
- opportunities include giving consideration to
 - the best time to rezone the entire precinct to Residential; and
 - rezoning vacant land on Valetta Road as Residential immediately.

The **Kidman Park North Precinct** is less cohesive, comprising a series of mixed use and generally smaller developments than its southern counterpart. By way of comment:-

- the precinct provides a curious mixture of industrial and commercial premises and uses, with no particularly identity or character; and
- there is little to differentiate this precinct from the adjoining Mixed Use zone to the north, which includes a number of industrial uses (and a single street of housing).

As to needs and opportunities, there is no need to preclude the continuation of industry, but there is an opportunity to relax the overall policy setting and by rezoning the precinct as a Main Road policy area – possibly via integration with the adjoining Mixed Use zone.

4.2.5 MID EAST DISTRICT

Precincts: West Corydon/Kilkenny, Beverley, East Terrace, Allenby Gardens and Welland

Coverage:	Comprises land to the west of South Road, generally on or between Port Road and the River Torrens, taking land in the suburbs of Allenby Gardens, Welland, Beverly, West Croydon and Kilkenny
Outer Boundaries:	South Road, River Torrens, Findon Road and the Pt Adelaide rail line
Key Facilities:	BASA Stadium (the Powerhouse), the Beverly Centre, (Council depot)
Significant Occupiers:	<ul style="list-style-type: none"> • West Croydon/Kilkenny Australian Glass Co, Bianco, Kilkenny Primary School, • Beverly Electrolux (until 30 June 2008), Nylex, Toro Australia, Adrad, Precision Components Aust, Exacto Plastics, Thermal Ceramics, Spicers Paper, Dulux, Lynnair Logistics, Royal District Nursing Society, Halfway Hotel, Venetto Club • East Terrace Recall • Allenby Gardens Century Manufacturing, • Welland Crown Locations, Apex-Fenner
Significant Ownerships:	<p>A number of ownerships greater than 2Ha are indicated, including:-</p> <ul style="list-style-type: none"> • Coles Myer in Beverly • Nylex Properties and Electrolux in Beverly • ACI Operations in West Croydon • John Shearer in Kilkenny
Land Uses:	Include manufacturing, warehousing, retail, commercial, education, community and recreation

The **West Croydon/Kilkenny Precinct** lies north of Port Road and is centred on the existing Ol glass factory and the former (now derelict) John Shearer site, although it also spills north of the rail line. By way of comment:-

- the Bianco and John Shearer sites are ripe for redevelopment;
- the current Industry zone is problematic
 - north of the rail line, given poor access arrangements and proximity to passenger transport corridor; and
 - east of the glass factory, given the presence of Kilkenny Primary School and the nature of the eastern interface;
- buffering for the glass factory will be an issue in any change of zoning; and
- Aroona Road, which divides the glass factory from the John Shearer site, provides good additional access at the western end, but is too narrow for industrial use.

As to needs and opportunities:-

- there is a clear need to recognize and protect the ongoing operation of the glass factory;
- from this starting point, there is also a need to recognise the latent industrial potential of the John Shearer site and to consider the desired future use of land north of the rail line;
- opportunities include
 - rezoning of the old and largely run-down precinct north of the rail line for high density residential use, although there will be issues to be addressed, including retention of adequate buffering for the glass factory;
 - widening Aroona Road to improve access to the glass factory and to future development on the John Shearer site; and
 - reviewing the zoning of the eastern end to ensure the most appropriate policy setting in all the circumstances.

The **Beverley Precinct** lies to the south of Port Road and is a very substantial industrial node. By way of comment:-

- it will still be an industrial precinct in 20 years;
- the precinct is made difficult to operate in because of a desperate lack of good access and resultant traffic constraints;
- the departure of Electrolux in June 2008 will be the end of an era and will provide the opportunity for the start of another;
- neither Home Industry zone is fulfilling its purpose;
- the Charles Street Home Industry zone, largely owned by DTEI, is substantially derelict and should be cleared to improve local appearances and perceptions;
- neither William nor Ledger Streets have any role as an industrial access route; and
- the Holbrooks Road connector will be of great benefit and should be anticipated, but probably not within a decade.

As to needs and opportunities:-

- there is a clear need to recognize and protect the long term industrial capacity;
- there is also a clear need to provide better access, noting a current proposal to create a one way loop on Charles and William to provide short term improvement to current arrangements; while
- opportunities include
 - rezoning the western Home Industry policy area to Residential to resolve any long term interface issues;
 - rezoning the eastern Home Industry policy area to “future road” to prevent its redevelopment;
 - rezoning the Port Road frontage as a Main Road policy area;

- widening and reconstructing Charles Street as far as Toogood Avenue to provide new access arrangements to the precinct as a whole, notwithstanding the current proposal;
- precipitating demolition of DTEI owned properties along Charles Street and short term beautification of this corridor; and
- working with the owner of the Electrolux site to ensure the best strategic outcomes from its redevelopment as regards both access and land use.

The **East Avenue Precinct** is a small discrete and long established industrial node with minimal external impacts and limited capacity for change in the near term. Its needs and opportunities are few.

The **Allenby Gardens Precinct** sits at the corner of Grange Road and East Avenue and, by virtue of the corridor for the Holbrooks Road connector and the departure of a major occupier, is a precinct in transition. By way of comment:-

- this is a relatively discrete precinct;
- there are generally low value improvements to the south and west;
- the division created by the corridor provides opportunity to give separate consideration to the eastern and western sides of the precinct;
- the departure of Coles Myer creates opportunity to rethink the desired future use of the eastern side, which could be either industry, mixed use or residential;
- the unknown timing of the connector road creates uncertainty, but the corridor is fixed and the road should be anticipated at some point; and
- William Street access is poor and needs either widening and upgrading or, possibly, supplanting via the reconfiguration of existing precinct access using the southern end of the connector corridor.

As to needs and opportunities:-

- there is a need to:-
 - recognize the division created by the connector corridor and proceed accordingly; and
 - improve access to each node (west and east), both from Grange Road and within; while
- opportunities include:-
 - reviewing the zoning on the eastern side to ensure the most appropriate future zone which, on balance, is probably Industry¹⁴ – possibly under a Mixed Use umbrella, including on Grange Road;
 - rezoning the western side to Mixed Use with an Industry focus, as part of a strategy to attract higher value uses; and
 - considering the creation of new precinct access points, possibly from the future road corridor.

¹⁴ Because the economic “value add” is not clear from conversion to residential use, unless perhaps as a retirement village.

The **Welland Precinct** sits to the south of Grange Road and, although a fragmented precinct in a somewhat secondary industrial location, is home to a large number of smaller enterprises. By way of comment:-

- it is a moderately sized precinct housing a plethora of small and medium sized businesses;
- fragmented ownership and level of investment will ensure the precinct's ongoing industrial use;
- it has no particular character or identity and is not generally well presented;
- uses near the riverfront are generally low value;
- Musgrave Street is especially run down; and
- there are still a number of residential properties within the precinct.

Its needs and opportunities are few but include:-

- giving consideration to the desired long term future of the area adjacent the river and the development planning policy implications;
- considering a shift to a mixed use approach across the whole precinct to encourage higher value land use outcomes, including high value industrial uses; and
- improving the immediate environment by undertaking additional streetscaping.

4.2.6 INNER EAST DISTRICT

Precincts: Hindmarsh, Bowden/Brompton, Port Road/South Road Corner and the Northern Precincts of Torrens Road and Devon Park.

Coverage: Comprises all land east of South Road, taking in the suburbs of Bowden, Brompton, Ridleyton, Hindmarsh

Outer Boundaries: South Road, River Torrens, Park Terrace, Hawker Street

Key Facilities: Adelaide Entertainment Centre, Hindmarsh Stadium

Significant Occupiers:

- Hindmarsh Gaganis, National Storage, Macmont, Sarah Constructions, Meals on Wheels
- Bowden/Brompton Clipsal (short term), Detmold, Origin, Conroys, Kennett
- Port Rd/South Rd Industrial Engineers & Springmakers, AlSCO, Readymix, Molnar Engineering, Orana, Croation Club,
- Torrens Road Nil
- Devon Park Pernod Ricard Pacific

Land Uses: Include manufacturing, warehousing and community

Ownership Patterns: No ownerships of greater than 2Ha are indicated on mapping, although there appear to be several approaching this size

The **Hindmarsh Precinct** is a well defined area wrapped around the Hindmarsh Stadium, with a long term industrial future but warranting review of its current zoning in several respects. By way of comment:-

- the Port Road/South Road/River Torrens triangle comprises a discrete and well buffered near city commercial industrial precinct;
- there has been significant redevelopment in recent years, notably along Adam and Richard Streets, and on parts of South Road;
- notwithstanding, there are significant areas which are ripe for redevelopment, including along Adam Street and Bacon Street, and on South Road;
- the Thebarton Bio-Sciences Precinct is emerging strongly on the southern bank of the river, opposite River Street;
- there is little to differentiate land uses on the northern and southern sides of Manton Street, even though they are covered by completely different zones;
- the existing Interface policy areas appear to be of little practical effect;
- it would make sense to extend the Mixed Use zone around Hindmarsh Stadium along its southern face to Manton Street;
- the Chapel Street Historic Conservation policy area is not congruent with an Industry zone; and
- the amenity of the area is generally low.

As to needs and opportunities:-

- the precinct's underlying industrial capacity clearly needs to be preserved; and
- there needs to be a rethink of current zoning and of the need to provide an integrated planning outcome for the whole Hindmarsh triangle below Port Road; while
- opportunities include:-
 - rezoning all land abutting the eastern side of Hindmarsh Stadium to Mixed Use, consistent with the western side, to pick up the latent value of the interface;
 - rezoning land along Manton Street, including along its northern side (although this is outside the study area), to the same zone because, although currently in different zones, the whole street is being put to the same, largely industrial use and because its arterial road frontage so close to the city gives it a particular character;
 - rezoning the Chapel Street Historic (Conservation) policy area within the adjoining Mixed Use zone;

- rezoning the South Road frontage as a Main Road policy area;
- eliminating the Interface policy areas altogether;
- considering the best future use for the River Street node, south of Adam Street – imagine a footbridge to the Bio-Sciences precinct; and
- undertaking streetscaping where required.

The **Bowden/Brompton Precinct** is an area in transition following the decision by Clipsal to relocate and its long term future warrants review in anticipation of further relocations. By way of comment:-

- the departure of Clipsal and the likely conversion of this site – comprising perhaps a third of the whole precinct – to high density residential and commercial uses, will fundamentally change the situation in this precinct;
- this change will present both opportunities and challenges;
- the presence of a small number of large occupiers means that a similar scenario is quite plausible in other parts of the precinct – especially if Detmold was to relocate;
- even if Clipsal were not relocating, the overall standard as an industrial precinct is sub-optimal, especially given its near city location, with very little modern development in evidence, poor internal access for large vehicles and significant areas of apparently under-utilized (and sometimes contaminated) land;
- given that Clipsal is relocating, then were its site to be retained as industrial land, the existing facility would probably best be clear felled and the entire site masterplanned, including a new road layout;
- if, on the other hand, it is not retained as industrial land, then the industrial outlook for the whole precinct will be greatly diminished because it will lose critical mass and will be largely hidden way, with poor access; and
- the impending departure of Clipsal therefore provides a timely catalyst for a complete rethink of the current zoning.

As to needs and opportunities:-

- there is a need to anticipate the rezoning of Clipsal land to non-industry uses, including residential, in the short term; and
- there is need to reconsider the desired future use and character of the balance of the zone in light of this; while
- opportunities include:-
 - rezoning Eighth Street Historic policy area to Residential, to provide a more congruent policy setting for this cluster, regardless of other changes; and
 - considering the rezoning of the entire precinct to either Mixed Use and/or for high density Residential.

The **Port Road/South Road Corner Precinct** is a prominent and well located industrial node which is likely to see a degree of renewal over time. By way of comment:-

- the precinct is a long established Industrial area;

- there has been some renewal, but its land use and built form are often reflective of the past, which may be quite different to the desired future character;
- there are access difficulties, although the roads are generally not as narrow as in Bowden;
- it is largely isolated from Port and South Roads by a narrow band of Commercial (Port Road) and Mixed Use (South Road) zoning;
- it is home to several very significant business operations, including some which occupy entire blocks;
- some relocations are possible in the medium term – eg the Readymix batching plant;
- there is opportunity for renewal along Scammell and McGuinness Streets; and
- current residential renewal to the east presages a changed future environment in and around this precinct.

As to needs and opportunities:-

- there is a need to recognize several significant existing businesses, but also the precinct's prominence and its near city location – and to consider development planning policy objectives accordingly;
- opportunities might be explored to improve accessibility; and
- while consideration might be given to rezoning land south of the rail line as Main Road policy area (consistent with the approach proposed on much of Port Road), there is a strong counter argument because the Port Road frontage is already zoned Commercial and the precinct presently has a very industrial character, is very well buffered and should arguably remain in industrial use – on the basis of which it might even be that the Commercial and Mixed Use zones on the perimeter should revert to Industry.

The **Northern Precincts** – Torrens Road and Devon Park – are remnant industrial nodes, largely based on existing occupancies and appearing to warrant review of current arrangements. By the way of comment:-

- both precincts are pocket-sized and, therefore, of limited economic significance;
- both are surrounded by residential development;
- in the case of Brompton North, a Mixed Use zone may facilitate higher value land use outcomes without comprising existing development or businesses; and
- in the case of Devon Park, consideration might be given to rezoning for residential use in anticipation of the eventual relocation of Pernod Ricard.

As to needs and opportunities:-

- there is a need to provide a more flexible policy setting at Torrens Road and to anticipate relocation at Devon Park; and
- the opportunities are:-
 - to rezone Torrens Road precinct as a Main Road policy area; and
 - to rezone Devon Park as Residential.

5 REZONING ASSESSMENT

5.1 METHODOLOGY

As discussed in Section 2.3, the Adelaide Metropolitan Industrial Land Strategy includes, at Section 7, a Rezoning Assessment Framework (RAF) . Its purpose is to “provide guidance” in assessing rezoning applications.

The brief for this study requires the application of this assessment framework to the City of Charles Sturt’s industrial zones.

Central to the RAF is the concept of “Prime Industrial Areas” (PIA’s).

PIA’s are a step below “Strategic Industrial Areas”¹⁵, (of which there are none in Charles Sturt) and, according to the strategy, “must have protection from rezoning and encroachment”.

A **Prime Industrial Area** is initially defined via assessment against twelve criteria, variously concerning:-

- its **location** relative to other industry, and to freight routes, supply chains, labour pools and infrastructure; and
- the level of **opportunities and constraints** regarding such things as potential to accommodate local services, 24 hour operations and/or expansion of existing operations, together with the nature of interfaces with other uses and local access arrangements.

The RAF then provides **criteria under which land may be suitable for other uses** – and, therefore, have rezoning potential, including that:-

- it is not a Prime Industrial Area;
- it is no longer conducive to industrial use;
- there are compelling reasons for allowing an alternative use; and
- the change will not impact adversely on existing industry.

A first observation is that the RAF requires proponents of individual rezoning proposals to thread a relatively fine needle. It does this via the imposition of criteria which, by both their nature and the manner of their operation, effectively work both ends of the field. To this end, it asks the twin questions of whether land is suitable for ongoing industrial use and whether there is a good reason for change.

In this way, the strategy ensures that industrial supply does not needlessly leak away, while at the same time, allowing an “escape clause” that permits suitable land to be released for higher and better uses.

¹⁵ These being LeFevre Peninsula/Gillman, Lonsdale and Edinburgh Parks/DSTO

However, it is suggested that successfully arguing the case for change is probably likely to be easier and to have a greater chance of success than successfully arguing the suitability (or lack thereof) for continuing industrial use.

A second observation is that, as written, the framework is directed at a much more localized level than what is required for this study. It anticipates individual rezoning applications and speaks in terms of whether “the land” offers potential for on-site expansion of existing businesses, or provides sufficient space for parking and turning industrial vehicles, or has minimal (or no) adjoining use constraints.

These criteria (by way of example) cannot be definitively applied to whole precincts, where there may be dozens of businesses and properties at varying stages of their respective life cycles, and interfaces which stretch over several kilometres. Using the Beverly precinct as an example, there are areas where each of these are a problem and areas where they are not, even though they are all part of the same precinct.

For present purposes, the methodology applied has therefore been to adapt the criteria to the circumstances.

To this end the RAF criteria have been rewritten somewhat to enable their application at a broader regional level, with several site specific lines of enquiry deleted altogether. An original version (as per MAILS) is included at **Appendix E**.

Even then, this regionalized version will sometimes elicit a reasonably clear cut response – eg is this precinct “well located in relation to freight connections and other important road and/or rail networks?” (Criteria (f)) – and sometimes a much less clear cut response – eg does the precinct have “minimal or no adjoining use constraints?” (Criteria (j)).

Each aspect of the assessment is outlined below, while the results are presented in Section 5.2.

There are 11 revised **Prime Industrial Area criteria**, designated (a) to (k), as described below. The context for addressing them is a methodology which seeks to determine the extent to which the precinct is well aligned in each instance. The question, therefore, is always “is it?” or “does it have?”. The criteria are:-

- (a) being **adjacent to other industrial precincts**, which provides general observation on connectivity and critical mass;
- (b) having a good **relationship to supply chains**, noting that with Port Road as its spine, and South Road at its western end, the Study Area is well connected to a wide range of supply lines and it is difficult to say that one precinct is better than another. Hindmarsh may be closer to the CBD, but Athol Park has direct access to Grand Junction Road and is very close to the Port;
- (c) having **potential to accommodate expansion**, which will primarily apply to major users, because small operators are generally more mobile. Where such users exist, this potential then depends on;
 - whether these larger businesses want to expand in the first place;

- if so, whether expansion in-situ is the best option; and
 - if so, whether there is reasonable prospect of expansion in-situ, which is often problematic in fully developed, tightly held locations – although not to say, as it turns out, that there are not plenty of opportunities in Charles Sturt;
- (d) having a good **relationship to skilled labour pools**, which will be best applied on a Study Area wide basis (or even wider) given that travel distances across western Adelaide are not great. Analysis beyond this is made difficult by the absence of fine grained data on the specific skills either demanded in or available to particular precincts;
- (e) having good **infrastructure connections**, which first need to be applied at a district level, but which can also be reviewed at a precinct level;
- (f) having good **freight connections**, related primarily to arterial roads, including designated B-Double routes;
- (g) being **suitable for small industry**, which will be best applied at a precinct rather than a regional level, although a regional solution needs to be demonstrated in the final analysis;
- (h) providing adequate **parking and manoeuvring** capacity, which is essentially a precinct level issue;
- (i) having capacity for **24 hour operation**, which can only be considered on a precinct by precinct basis but even then, may vary from one part of a precinct to another and according to the specific use – right down to the orientation of an individual development and the types of vehicles and machinery in use;
- (j) having an absence of **adjoining use constraints**, which are as for 24 hour operation; and
- (k) having **unconstrained vehicle access and exit**, which relates primarily to a precinct's connectivity to the freight network.

Each precinct within each district has been scored 1, 2 or 3 for each criteria, to provide a first “on balance” view of the situation. A precinct scores:-

- 1 if it is clearly not well aligned to the criteria;
- 2 if it is aligned to the criteria, but with some qualifications; and
- 3 if it is clearly well aligned to the criteria.

The supplementary question of whether or not a precinct is a Prime Industrial Area is its rezoning potential, which is a separate matter to its PIA designation.

However, the focus in this second step analysis is on opportunities for substantive change to the underlying land use, rather than opportunities to largely continue existing use but to modify current policy settings (including any shift from Industry to Mixed Use zoning, which is addressed separately elsewhere). In a practical sense, it generally means a switch from Industry to Residential.

For assessment purposes, it is assumed that such change does not have to cover the whole precinct, but that it must affect a significant portion – not less than, say, one third.

Whether an industrial precinct is or is not a PIA, and whether there are compelling benefits to be had through change of zone and/or use, is an issue that again needs to be addressed in an “on balance” manner against agreed criteria.

These **criteria for rezoning potential**, drawn partly from MAILES but otherwise established specifically for this study, are that:-

- (a) it is **not a Prime Industrial Area**;
- (b) it is **no longer conducive to industrial use**, which requires the assumption of an inability to clear fell existing obsolete improvements – as has happened with great success at Charles Sturt Industrial Park at Woodville;
- (c) there are **compelling reasons for change**, which might be economic, or which might reflect an inability to resolve access and interface issues;
- (d) change **will not impact adversely on the continuing operation** of existing industry, which will be a significant issue in many potential rezonings because of changes to (ie generally diminution of) existing buffers;
- (e) there is **substantial pre-existing conversion to alternative use**, noting that this excludes the issue of main road zoning, which does not involve the prohibition of future industrial development and is addressed elsewhere;
- (f) there is **high level commercial prospectivity** in alternative use, which takes a developer’s view of the situation and reflects the potential for commercial upside, “if only the zoning were changed”;
- (g) there is **high level economic prospectivity** in alternative use, which essentially disregards current zoning and imagines “what might be” from a more strategic viewpoint – such as potential transit oriented development sites along the Port Road/Port Adelaide rail corridor, and proximity to other infrastructure, like arterial roads and regional shopping centres – and needs to be differentiated from commercial prospectivity, which is related more to the potential for development profit;
- (h) is in immediate **proximity** (within say 400m) to a railway station or regional open space;
- (i) only a **small number of land owners** are affected;
- (j) it would resolve a **residential interface issue**, existing or potential; and
- (k) it is an **isolated pocket** of industrial use, with only a low level of connectivity to other industrial development.

Each precinct has been scored as per the methodology applied to the previous criteria, with the higher score applying where there is strong alignment with the criteria and vice versa.

The two assessments – a precinct’s PIA designation and its rezoning potential – are then offset against one another to ascertain the degree of consistency between them and to discern any apparent inconsistencies.

Lastly, the RAF addresses the circumstance where non-industrial land may be suitable for **rezoning to industrial use**. This is a rare occurrence in Charles Sturt, as it is only imaginable on large tracts of open land, of which there are few in the Study Area and even fewer likely to be given over to industrial use.

This question therefore relates primarily to opportunities to fine tune existing Industry Zone boundaries, one way or the other, and is addressed separately in Section 5. For present purposes, the potential for such change in given precincts is simply noted as yes or no, with a brief comment on the circumstances.

5.2 REZONING ASSESSMENT

The six districts and 22 precincts defined by this study are described at Section 4, while the rezoning assessment criteria are described in Section 5.1. This section applies the criteria to the individual precincts.

As per the preceding discussion, the analysis covers:-

- assessment as against the Prime Industrial Area criteria;
- assessment of the rezoning potential, which refers to the potential for a fundamental change of a precinct’s underlying land use policy; and
- identification of potential for the variation of existing Industry zone boundaries.

It needs to be acknowledged at the outset that the scores ascribed are subjective and that they are always applied “on balance”. They have however been subject to peer review within the study team.

It is also noted that in the case of criteria (b) & (d) – being relationship to supply chains and skilled labour pools respectively – all precincts have been ascribed a default score of 2 because, given the range of enterprises operating in each, it is almost impossible to make a judgement as to the overall position.

The assessment of Prime Industrial Areas is detailed in Table 10 overleaf. The table is colour-coded such that strong alignment is shown as green and poor alignment is shown in red.

Table 10: Prime Industrial Area Assessment Matrix

District/Precinct	Prime Industrial Land Assessment											Total
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	
North West												
Royal Park	3	2	2	2	2	3	2	3	3	3	3	28
Tapleys Hill Road	2	2	2	2	2	3	3	1	2	2	2	23
West Lakes	1	2	1	2	2	1	1	1	1	2	2	16
Mid North												
Cheltenham	3	2	1	2	2	2	2	2	3	3	3	25
Albert Park	3	2	2	2	2	3	3	2	2	2	2	25
Hendon	2	2	3	2	2	3	3	3	3	2	3	28
Seaton	1	2	1	2	2	1	2	1	1	1	1	15
Outer North												
Woodville North	3	2	3	2	2	3	2	2	3	3	2	27
Athol Park	3	2	3	2	2	3	3	2	3	2	2	27
Arndale	2	2	2	2	2	3	3	3	2	2	3	26
Mid South												
Kidman Park South	1	2	1	2	2	2	1	3	1	2	3	20
Kidman Park North	1	2	1	2	2	2	2	2	2	2	3	21
Mid East												
W Croydon/Kilkenny	3	2	3	2	2	3	3	2	3	2	2	27
Beverley	3	2	3	2	2	3	3	1	3	2	3	27
East Terrace	2	2	1	2	2	2	1	2	1	2	3	20
Allenby Gardens	2	2	2	2	2	3	2	1	2	2	2	22
Welland	2	2	1	2	2	2	3	2	2	2	2	22
Inner East												
Hindmarsh	3	2	3	2	2	3	3	2	3	3	3	29
Bowden/Brompton	3	2	2	2	2	3	3	1	1	2	1	22
Port Rd/South Rd Cnr	3	2	3	2	2	3	3	2	3	3	2	28
Torrens Road	1	2	1	2	2	3	2	1	1	2	2	19
Devon Park	1	2	1	2	2	1	1	2	1	1	1	15

Score: 1 Not well aligned 2 Qualified alignment 3 Well aligned

Criteria

- (a) being adjacent to other industrial precincts
- (b) relationship to supply chains
- (c) potential for expansion or renewal
- (d) relationship to skilled labour pools
- (e) infrastructure connections
- (f) freight connections
- (g) suitability for small industry
- (h) parking and maneuvering capacity
- (i) capacity for 24 hour operation
- (j) absence of adjoining use constraints
- (k) unconstrained vehicle access and exit

As shown (and against a total possible score of 33), the total Prime Industrial Area scores range from a low of 15 (Seaton and Devon Park) to a high of 29 (Hindmarsh).

Overall, the precincts can be grouped into 3 clusters, as described below.

Those at the top end – with a score greater than 25 – are suggested to be Prime Industrial Areas, as described in MAILS.

There are nine top end precincts being, in order:-

- Hindmarsh (score 29);
- Royal Park, Hendon and Port Road/South Road Corner (28);
- Woodville North, Athol Park, West Croydon/Kilkenny & Beverley (27); and
- Arndale (26).

The middle ranking precincts – score 20 to 25 – serve a clear industrial purpose, without necessarily being regarded as Prime Industrial Area.

There are also nine precincts in this group, being:-

- Cheltenham & Albert Park (25);
- Tapleys Hill Road (23);
- Allenby Gardens, Welland & Bowden/Brompton (22);
- Kidman Park North (21); and
- Kidman Park South & East Terrace (20).

Finally, precincts at the bottom end – score less than 20 - are clearly not Prime Industrial Areas and are arguably best suited to an alternative (ie non industrial) use in the longer term.

The four bottom ranking precincts are:-

- Torrens Road (19);
- West Lakes (16); and
- Seaton & Devon Park (15).

There are perhaps no real surprises in these initial rankings but, as first observations on the outcome of the analysis:-

- if the top tier precincts are to be recognized as Prime Industrial Areas for the longer term then, firstly, the current zoning still generally warrants review and revision and, secondly, there will have to be some significant improvement to the transport infrastructure in some areas in order to sustain the designation;
- the middle ranking precincts include a number where current industrial capacity can and should be retained and protected, but where it is currently either on a scale which does not warrant a Prime Industrial Area designation or where a less industrially focussed zone (eg Mixed Use) may be more appropriate for all or part of the precinct; and
- the bottom precincts appear to warrant early consideration for rezoning to alternative use, current occupiers and operations notwithstanding in some cases.

The rezoning potential assessment is detailed on Table 11. Precincts with a high rezoning potential are shown in green, while those with a low rezoning potential are shown in red.

Table 11: Rezoning Potential Assessment Matrix

District/Precinct	Rezoning Potential											Quotient ¹	Boundary Change Opportunity			
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)		Total	A/B	(a)	(b)
North West																
Royal Park	1	1	1	1	1	1	1	1	1	1	1	11	2.55	y	-	
Tapleys Hill Road	2	2	3	2	1	2	1	1	3	3	3	23	1.00	y	-	
West Lakes	3	3	3	3	3	3	2	1	3	2	3	29	0.55	-	-	
Mid North																
Cheltenham	2	1	1	1	1	1	2	3	3	1	1	17	1.47	-	-	
Albert Park	2	2	1	1	1	1	1	2	1	1	1	14	1.79	y	y	
Hendon	1	1	1	1	1	1	1	2	1	1	2	13	2.15	y	-	
Seaton	3	3	3	3	1	3	2	3	3	3	3	30	0.50	-	-	
Outer North																
Woodville North	1	1	1	1	1	1	1	1	1	2	1	12	2.25	y	-	
Athol Park	1	1	1	1	1	1	1	1	1	2	1	12	2.25	y	-	
Arndale	1	1	1	1	2	2	1	1	1	1	2	14	1.86	-	-	
Mid South																
Kidman Park South	3	2	3	2	1	3	2	1	3	2	3	25	0.80	y	-	
Kidman Park North	2	2	1	2	1	1	1	1	2	1	2	16	1.31	-	-	
Mid East																
W Croydon/Kilkenny	1	1	2	2	1	2	2	3	3	2	1	20	1.35	y	-	
Beverley	1	1	1	1	1	1	1	1	1	1	1	11	2.45	y	-	
East Terrace	2	1	2	2	1	2	1	1	3	2	2	19	1.05	-	-	
Allenby Gardens	2	2	2	1	1	2	1	1	2	2	2	18	1.22	y	-	
Welland	2	2	3	1	1	2	2	1	1	2	2	19	1.16	-	-	
Inner East																
Hindmarsh	1	1	1	1	1	1	1	2	1	1	1	12	2.42	-	-	
Bowden/Brompton	2	2	3	1	1	3	2	3	2	3	1	23	0.96	y	-	
Port Rd/South Rd Cnr	1	1	1	1	1	1	1	3	1	2	1	14	2.00	-	-	
Torrens Road	3	2	1	2	1	2	1	2	2	1	2	19	1.00	-	-	
Devon Park	3	3	3	3	1	3	2	2	3	3	3	29	0.52	-	-	

¹PIA Score/Rezoning Score

Score: 1 Not well aligned 2 Qualified alignment 3 Well aligned

Criteria

- | | |
|---|-------------------------------------|
| (a) not a Prime Industrial Area | (g) high economic prospectivity |
| (b) not conducive to industrial use | (h) proximity to railway station |
| (c) compelling reasons for change | (i) small number of affected owners |
| (d) no adverse impacts on existing industry | (j) to resolve an interface issue |
| (e) pre-existing non industrial development | (k) isolated pocket |
| (f) high commercial prospectivity | |

As shown (and also against a total possible score of 33), the scores range from 11 (Royal Park and Beverley) to 30 (Seaton).

Overall, the precincts can again be grouped into 3 clusters.

Those scoring greater than 25 are suggested to have clear potential for rezoning. There are three such precincts, being:-

- Seaton (score 30); and
- West Lakes and Devon Park (29).

The middle scoring precincts – 20 to 25 – may have some such potential, but less so. There are four such precincts being:-

- Kidman Park South (score 25);
- Tapleys Hill Road and Bowden/Brompton (23); and
- West Croydon/Kilkenny (20).

The remaining fifteen precincts scored less than 20 and demonstrate no immediate apparent case for rezoning, with eight scores of less than 15. The precincts in this group are:-

- East Terrace, Welland and Torrens Road (19);
- Allenby Gardens (18);
- Cheltenham (17);
- Kidman Park North (16);
- Albert Park, Arndale, Port Road/South Road Corner (14);
- Hendon (13);
- Woodville North, Athol Park, Hindmarsh (12); and
- Royal Park, Beverley (11).

Of the middle group in particular, West Croydon/Kilkenny reflects the opportunity north of the rail line, while the alternative use potential of Kidman Park South and Bowden Brompton is highlighted. Of the bottom group, the low score for Allenby Gardens is noted, given its current transitional moment.

If these two assessments are then considered together, it is first noted that:-

- Prime Industrial Areas occupy nine of the bottom 10 spots on the rezoning potential list, suggesting low prospectivity for change of underlying land use in these precincts; and
- of the top 5 in the rezoning list, four are in the bottom 5 on the PIA assessment, suggesting high rezoning prospectivity in the lesser industrial pockets.

This is reflected in the quotients calculated for the PIA score over the rezoning score, with:-

- Royal Park, Hendon, Woodville North, Athol Park, Beverley, Hindmarsh and the Port Road/South Road corner all showing a quotient of between 2.0 and 2.5;
- West Lakes, Seaton, Kidman Park South, Bowden/Brompton and Devon Park all showing a quotient of less than 1.0; and
- the balance falling in between, but with Tapleys Hill Road, Cheltenham, Kidman Park North, West Croydon/Kilkenny, East Terrace, Allenby Gardens, Welland and Torrens Road all falling below 1.5.

In other words, there appears to be not only little inconsistency, but also a reasonably strong correlation between the outcomes for the two facets of the assessment.

The interesting inclusions in the “less than 1.00” quotient group are Kidman Park South and Bowden/Brompton, with this result reinforcing the potential for longer term change of use in higher value locations.

Bowden Brompton warrants particular comment. Clipsal’s relocation is now a given and a change of zoning to non-industrial uses appears imminent – although it must be acknowledged that this is not a foregone conclusion.

As the rezoning assessment reveals, the precinct has its merits as an industrial location, primarily on the back of its location on the very edge of the CBD, but these merits are greatly diminished by poor access and narrow roads – which present a real challenge to resolve and which, as previously noted, probably warrant a “start all over again” approach on the Clipsal land.

However, the assessment also reveals the latent non-industrial potential of the precinct, again on the back of its near city location, but also its public transport connections and parklands frontage. Further, it could be argued that either outcome – industrial or non-industrial – is supported by the State Strategic Plan.

If the Clipsal site is rezoned as anticipated, then continuation of purely industrial land uses in this precinct in the long term will become quite problematic because it will be greatly diminished in terms of its critical mass.

However, even if the presently mooted zoning changes were not to materialize, the precinct clearly has potential beyond its current land use configuration and activity levels, and its future warrants complete review regardless.

Of the in-between group, the number below 1.5 is also interesting and points to the potential for ongoing commercial and development pressure in many Industrial precincts.

Finally, Table 11 also identifies opportunities to fine tune an Industry zone boundary, such that industrial land at the interface converts to a non-industrial/commercial use or vice versa. As previously described, this is a separate issue from consideration of rezoning entire precincts, although it includes a couple of relatively large areas that fall under the “one third of the precinct” requirement in the previous assessment.

As shown, there are a number of such opportunities, including:-

- at Royal Park, the Dixon Street Home Industry policy area, which could change to either Residential, although this may perpetuate an interface issue, or Mixed Use;
- at Tapleys Hill Road, where the creation of a residential frontage to Paqualin Street on the eastern boundary would resolve an existing interface issue;
- at Albert Park, where the Glyde Street frontage should arguably change to Residential;
- at Hendon, where improvements on the somewhat separate southern end of the precinct are at the end of their economic life and which therefore warrants review of its desired future use – which might be either industry or residential;

- at Woodville North, where the Finsbury Reserve and Woodville Hockey Club might be zoned Recreation, and the balance of the Northgate Avenue frontage might be zoned Residential, all to resolve a longer term interface issue;
- at Athol Park, where the Millicent Street node might become Residential because the current zoning is totally misaligned with actual land use and looks likely to remain so – although long term adverse impacts on adjoining industry would have to be considered;
- at Kidman Park South, where vacant land on Valetta Road might be zoned Residential immediately, if there is no wider change in this precinct;
- at West Croydon/Kilkenny, north of the rail line, where the current Industry zone is arguably no longer appropriate and where opportunity exists for a high density residential node – as previously noted;
- at Beverley, where
 - the western Home Industry policy area on Ledger Street might revert to Residential because it would provide a better long term interface, and
 - the eastern Home Industrial policy is now largely a future road reserve, which should be removed from the industrial land stock altogether, with the balance of the zone reverting to Industry; and
- at Bowden/Brompton, which in light of the Clipsal relocation and although middle ranked in the Prime Industrial Area assessment, includes sectors – such as its northern end – which could be rezoned Residential (or other appropriate mixed use zone).

Two opportunities are identified to move the other way – ie from non-Industry to Industry.

The first is a change from a Residential zone to Industry zone at Jervois Street, Albert Park, where minor adjustments to the existing boundary around one or two allotments could change a street frontage interface to a (preferred) rear boundary interface, and take best advantage of the West Lakes Boulevard corner, which is a somewhat hostile residential location – perhaps even extending south for a few lots.

The other is Manton Street, Hindmarsh where land on the northern side of Manton Street might be brought into the Industry zoning loop via a Mixed Use/Main Roads policy area (as opposed to the current District Centre zone), consistent with the southern side of the street – subject to a broader review of the whole Hindmarsh triangle below Port Road.

5.3 SUMMARY REVIEW

The foregoing analysis can be reduced to a summary review of the six industrial districts as follows, with Prime Industrial Areas shown in bold:-

- North West District
 - **Royal Park** is the closest that Charles Sturt has to a purpose built industrial precinct and needs to be protected, although the Old Port Road frontage is

developing a largely non-industrial character, especially at its eastern end which needs to be recognized in planning policy;

- the Tapleys Hill Road precinct is a remnant industrial pocket. Beyond two principal occupiers, There is little to differentiate much of it from surrounding commercial development. There is also a harsh interface to the adjoining Residential zone to the east. It appears to warrant a mixed use policy approach, while the interface issue should be addressed; and
- the zoning of the West Lakes precinct is redundant in its current context and warrants complete change.

- Mid North District
 - the redevelopment of Charles Sturt Industrial Estate sets the scene for the continued industrial use of the Cheltenham precinct for the next generation;
 - current zoning notwithstanding, there is very little industrial development fronting either side of Port Road, either in Cheltenham precinct or the Albert Park precinct, both of which appear to warrant a mixed use approach in some degree;
 - the **Hendon** precinct is a tightly defined precinct which and appears both well suited to industrial use and to have significant renewal potential, although there is potential for change to residential use at the southern end; and
 - the zoning of the Seaton precinct will become redundant with the relocation of its single significant occupier and appears to warrant rezoning for high density residential use, possibly within a mixed use policy framework.

- Outer North District
 - together, **Woodville North and Athol Park** represent a very sizeable industrial precinct which will undergo a period of significant change as a consequence of both Hanson Road's new role as a Port River Expressway connector at its northern end and the pending redevelopment of Cheltenham Racecourse and the former Sheridan site at its southern end;
 - the precincts include a number of significant enterprises, but also large areas of old factory space which is ripe for industrial renewal;
 - the Home Industry policy area in Athol Park appears to be an impediment to the efficient operation and development of the precinct and should be removed;
 - access and interface issues are prevalent across the precinct and substantive change is needed on both fronts in some areas, including improvements to the existing road network; and
 - the **Arndale** precinct abuts Arndale Shopping Centre, which gives it enduring commercial and industrial prospectivity, although the southern portion of the precinct is largely lost to industrial use and appears to warrant a new approach.

- Mid South District
 - at Kidman Park South, the “Associated Co-op Grocers zone” will endure for as long as the current owner remains in occupation, beyond which its relative (industrial) isolation and its (very attractive) River Torrens frontage will ensure pressure for conversion to residential use – which should perhaps be recognised in planning policy sooner rather than later; and
 - Kidman Park North is quite ad-hoc in its form and is little different from the adjoining Mixed Use zone on Grange Road, with which it might best be integrated.
- Mid East District
 - is arguably Charles Sturt’s industrial heartland, but is subject to some severe constraints and warrants review of desired long term land use outcomes in several areas;
 - **West Croydon/Kilkenny** is home to one of the city’s largest manufacturing operations and precincts, which must be protected. There is opportunity for both significant industrial renewal on the John Shearer site and high density residential development north of the Port Adelaide rail line, subject to resolution of interface issues;
 - **Beverly** is one of the city’s larger industrial precincts and is severely constrained by access and interface issues, but presents opportunities for large scale renewal following the departure of Electrolux, including enhancement of the road network and a renewed policy approach generally;
 - transport infrastructure is a major issue in this precinct and needs to be improved as a matter of urgency – as does its overall presentation;
 - the East Terrace precinct is a tightly defined area which does not warrant any change at present;
 - Allenby Gardens is a small industrial node which should remain as such, but which is in transition mode following the relocation of its largest occupier (Coles Myer) and its bisection by the Holbrooks Road connector corridor;
 - it therefore warrants review of its underlying policy settings, possibly with a view to a less industrially focussed outcome to the east – although an economist may argue (as does this review) for retention of its underlying industrial capacity, and that Allenby Gardens is part of a larger industrial cluster in this District;
 - transport infrastructure is again an issue in this precinct, especially on its western side; and
 - Welland is something of an accident of history which now cannot be easily undone, but which nonetheless warrants review of desired future land use outcomes adjacent the River Torrens, and which may warrant more of a mixed use approach to encourage higher value uses over time.
- Inner East District
 - provides a riot of mixed uses and occupier and warrants complete review in some areas;

- **Hindmarsh** remains highly prospective as an inner city industrial area and is ripe for further renewal;
- this is particularly the case along its western flank and also along the River Torrens, where circumstances are changing with the development of the Bio-Science precinct on the opposite bank;
- there is opportunity for more of a mixed use approach along the northern flank and for a more integrated policy approach out to Port Road;
- in the Bowden/Brompton precinct, north of Port Road, the relocation of Clipsal is a forerunner of great change, but the current zoning warrants review regardless;
- the precinct includes a number of significant industrial businesses, many of which occupy entire blocks, with four street frontages, but is a sub-optimal;
- industrial location, especially as regards access and the local road network;
- development planning in this precinct needs to anticipate more such relocations and to give consideration to desired future land use outcomes when they occur – possibly resulting in more of a mixed use approach – as is arguably appropriate in a near city location with parklands frontage;
- the **Port Road/South Road** precinct is a complex mosaic of uses – (some of which at first appear incongruent with a near city location), and will be heavily affected by the proposed South Road tunnel, but it is nonetheless a vibrant and well buffered industrial node which needs to be protected from more encroachment; and
- both remnant northern “pocket” precincts – Torrens Road and Devon Park – warrant review of current zoning, but for different reasons.

Beyond the situation in individual districts, several initial observations are also able to be made regarding the Study Area as a whole, viz;

- Charles Sturt clearly includes a number of Prime Industrial Areas, as defined by MAILS;
- some have significant access and interface issues to be addressed, but these do not detract from their latent industrial capacity;
- the current Industry zoning configuration is neither transparent nor, in every case, enabling of industry, and needs to be rethought by the pending Development Plan Amendment;
- there are significant renewal opportunities in some precincts, including Hendon, Woodville North, Athol Park, Beverley and Hindmarsh;
- there is a sense that better value might be achieved from areas such as Welland and Allenby Gardens;
- Industry zones on main roads – especially Port Road – have generally failed to produce industrial land use outcomes and need a complete rethink – perhaps moving towards a mixed use “Main Road policy area” approach, as discussed below;
- the Home Industry policy area appears to have largely failed and should arguably disappear altogether;



- Heritage Conservation policy areas within the Industry zones should arguably be removed to more congruent underlying zones – eg Residential in the case of Eighth Street at Bowden and Mixed Use in Hindmarsh;
- there are several examples of remnant pockets of Industry zoning which have a higher and better latent use, and which should be removed from the Industry zoning regime altogether – including Seaton, West Lakes, Devon Park and, arguably, Kidman Park South; and
- some of Charles Sturt's industrial areas are of a particularly undistinguished character and a plan for improving the amenity of both the public and private domain appears to be warranted.

These matters and more are all addressed in Section 6.

6 ADDRESSING THE FUTURE

6.1 STRATEGIC OBJECTIVES

Charles Sturt is home to a number of substantial industries and businesses which are important to both the regional and state economies, and it will maintain an industrial capacity for the next generation and more.

From an economic viewpoint, industrial land provides the base upon which significant contributions to Charles Sturt's "Gross Council Product" are built. Not the least of these is the employment generated for local and regional populations.

However, this is not to say that all existing industrial uses are contributing as high a level of economic output as what alternative uses might – including both higher order industrial uses and residential uses. Nor is it to say that apparently lower value industrial facilities are economically inappropriate in every instance (although some are) because the activity within might be of significant economic value.

Replacing an old factory with a new warehouse – or with bulky goods – will not necessarily increase economic output if the existing occupier is actually a thriving enterprise. Such businesses *could* relocate, but their economic contribution would be lost to the immediate region, unless replaced with something of equal economic value. Some of the engineering workshops in the Inner East District are an interesting case in point.

Conversely, replacing old warehousing or other low intensity industrial uses may well be a good idea from an economic viewpoint and, at the point where such opportunities arise, there will always be choices about how the future is shaped and about how best strategic value is extracted for the long term.

On balance, the loss of manufacturing industry will have greater employment ramifications than the loss of large scale warehousing – for example the closure of Clipsal will result in the loss of more direct jobs per hectare than the closure of the Coles Myer warehouse at Allenby Gardens.

Arguments about the loss of industrial land per se can therefore cloud the underlying economic issue regarding loss of enterprise, although the ongoing loss of old industry is a well established trend.

Against this, new modes of manufacturing are capable of producing higher value outputs from a smaller footprint, so the loss of a large manufacturing or warehousing facility may have a lesser (or even positive) consequence if it is replaced by several higher technology and higher value enterprises. Service trade industries may also have a similar effect, noting the value adding nature of many such enterprises and the fact that service trades are often overlooked (in favour of manufacturing and warehousing) in discussions about industrial activity.

The loss of particular industrial enterprises may therefore present opportunity for wider renewal, as with the Electrolux land at Beverley at present. The question then becomes how to attract new enterprises, which may well require renewal of development planning policy, but will also go beyond this to economic development policy and to infrastructure issues.

In a similar vein, conversion of industrial land to residential use may make economic sense if it is replaced with high density attached housing or apartments, but not if it is replaced with low density detached housing. There is a strategic balance to be struck between these two policy settings – industrial and residential – if both employment and population targets are to be met.

Looking to the future, it follows that what is appropriate, and where, is not always immediately apparent and does not necessarily conform to a general rule. The issue is that significant renewal opportunities on old industrial sites frequently bring on the question of the highest and best future use and whether this is industry or something else. The problem is that these questions tend to arise suddenly, one site at a time, and are often therefore required to be answered in isolation on a case by case basis.

Further, the economics of the equation change over time, including:-

- the economic health of significant individual businesses, because business matters rather than property development opportunities generally drive relocation decisions, which can therefore appear out of the blue to the wider community;
- underlying land values which, while not necessarily significant in themselves, can act as a catalyst for individual development proposals, especially in particularly high value locations; and
- development economics, as development becomes more dense or as new districts and new markets open up – noting however, that short term financial returns from development activity need to be distinguished from the longer term economic effects of such projects, which are often cumulative and only emerge over time.

The challenges are to respond both regionally and ahead of the fact, so as to ensure the preservation of industrial capacity where appropriate, but to anticipate and allow change where it is inevitable and/or desirable.

These underlying issues and tensions were not strongly reflected in Council's previous Strategic Plan, which focused more on community services and the residential population than on industry or economic matters. The inclusion of economic objectives in its new plan will provide strategic underpinning for the policy directions necessary to achieve the best "on balance" outcomes on this front.

Council's Community Plan, on which the new Strategic Plan is based, has also sent a loud and clear message that the community expects improved environmental outcomes across the board over the next decade.

From an industrial viewpoint, this will manifest itself in:-

- the better management of interfaces between non compatible uses – like industry and housing;
- an increasing focus on water and energy management, including stormwater management and both water and solar sensitive design; and
- improved urban environments, including better streetscaping through a greater focus on urban design standards – which will be a necessary precursor to attracting higher value uses.

Overall therefore, industrial land is not the economic be all and end all, but it is a relevant and ongoing part of Charles Sturt's land use and economic mix, as and where appropriate.

As to its broader strategic industrial settings, Charles Sturt's development planning policy needs to reflect, among other things:-

- the enduring nature of industry in many parts of the city and the need for it to be protected;
- the variety of industry types to be accommodated;
- that old manufacturers are continuing to move out, creating opportunities for renewal for both industrial and residential uses;
- that new manufacturers are moving in and need to be encouraged to do so, creating opportunity to step up the value of some of the older inner ring areas;
- a general move in development planning to more of a mixed use model in appropriate circumstances;
- a general need for improved environmental outcomes, including both environmental performance and the amenity of its industrial areas;
- the need to balance population and employment objectives in appropriate degree;
- increasing urban infill pressures and changing housing models, which are creating (or will create) opportunities for high density residential development in selected locations, including some existing industrial sites; and
- an increasing reliance on public transport in the longer term.

It also needs to recognize that there are clearly some significant variances between the current Industry zone structure in Charles Sturt and the on ground situation within these zones. In consequence, the current zoning is not achieving its broad policy objectives in many areas, whether because:-

- the combined activities of the market and local business have pushed particular precincts in unintended directions (which are at odds with intended development plan outcomes);
- the current zone configuration can be argued to be sub-optimal; and/or
- things have changed more generally since the zoning was put in place a decade or more ago.

Additional to providing better policy underpinning for existing development and land use, there are also a number of strategic opportunities for Charles Sturt, including:-

- improving the functionality and performance of Prime Industrial Areas, which will entail initiatives beyond just development planning policy, including -
 - improving the local road network in key areas, as regards both increased B-double designations and specific infrastructure upgrades – good access being a fundamental requirement of industry;
 - facilitating the renewal of priority precincts via both masterplanning and the deployment of resources to pursue the implementation and realization of those masterplans; and
 - improving streetscaping and presentation generally, especially in precincts targeted for higher value activities;
- sustaining industrial employment, but rationalising aggregate industrial land use, in appropriate degree;
- the greater use of Mixed Use zoning to facilitate higher value industrial activity in selected locations;
- planning for the advent of transit oriented developments via new policy settings in selected areas; and
- extracting greater value from frontages to both arterial roads and the River Torrens.

Finally, Council also has an obligation to both oversee and facilitate development within as clear and simple a development planning framework as it is able to achieve, and to strike the appropriate balance between, on the one hand, strategically appropriate uses from a whole of community viewpoint and, on the other, allowing commercial needs and opportunities to be reasonably and expeditiously met, with a reasonable degree of certainty.

From an industrial viewpoint, the rise of the Bulky Goods sector is a very visible case in point. There is real commercial demand for this use and there needs to be a proper planning policy in place so as to both enable such development to occur and ensure a clear, strategic response to the ongoing stream of individual and often non-complying proposals.

Changes to the Development Plan are therefore required to reflect both strategic shifts in desirable land use outcomes over the last 10-15 years and the various shortcomings of the Industry zone in the current Development Plan. In this regard, it is suggested that Council needs to revisit the whole question of the underlying zoning in many precincts (or parts thereof) and to provide a more cohesive and strategically appropriate policy framework for both existing and anticipated activities.

The challenge for Council is to catch the shifting strategic wind while still enabling its industrial sector to flourish, by providing clear and workable development planning policy – including protection from inappropriate encroachment – and by removing impediments to efficient operation.

The key planks to any future industrial land development planning strategy might therefore reflect the broader objectives of:-

- preserving the city's industrial capacity and employment levels in appropriate degree, by –
 - enabling industry to operate effectively and efficiently;
 - providing suitably zoned land with suitable infrastructure connections for an appropriate range of industrial uses; and
 - properly aligning the policy provisions of all its commercial and industrial zones;
- facilitating the entry of higher value industrial activities where appropriate;
- achieving improved environmental outcomes on a range of fronts within its industrial precincts; and
- ensuring that, on strategic balance (ie on a triple bottom line basis), land in Charles Sturt is able to be put to its highest and best use, probably including rationalization of some Industry zones – which will mean anticipating and planning for the advent of alternative uses, including bulky goods and high density housing, in selected and appropriate locations.

These directions are consistent with – although not directly aligned to – the key themes of the Metropolitan Adelaide Planning Strategy¹⁶, and with the broad objectives of MAIIS.

6.2 ISSUES AND DISCUSSION

Both policy and non-policy issues arise from this study. Each is considered in turn below.

6.2.1 Development Planning Policy Issues

A number of key development planning issues emerge. These include:-

- ***The Many Faces of Industry***

The word “industry” covers a multitude of uses – from old and sometimes heavy manufacturing on a large scale to small, clean manufacturing; from large scale warehousing to smaller premises occupied by the outer reaches of the distribution network; from suppliers to service providers; and from concrete batching plants to waste disposal and recycling facilities.

While traditional manufacturing activities may be on the decline, other sectors are ongoing and/or growing, including:-

- smaller scale, higher value manufacturing;
- transport & logistics (including general warehousing), at both a wholesale and a retail level;

¹⁶ Including, specifically, focussing on export growth, developing industry clusters and maintenance of separation distances between incompatible uses.

- light industry and service industry; and
- increasingly, high technology companies, working in areas including bio-science and defence.

At a regional level, each needs to be represented in appropriate degree in “whole of Council” structure planning, and the resultant development planning policies. However, when individual sub-regional precincts are considered, there will be the opportunity to make choices to encourage one type of industry over another. A key task of this study, and of subsequent policy work, is to tease out how these various forces and influences should and do interact.

Some precincts are more suited to use by specific industry types and/or sectors than others, whether by virtue of their location, their accessibility, their size or other factors.

Further, Charles Sturt does not necessarily have to cater for every requirement, because some uses are actually better met elsewhere – among them being, arguably, large scale warehousing, which can be of a relatively lower economic order. In this regard, the solution needs to be viewed at a regional level.

In a policy sense, Charles Sturt may therefore choose to provide for and target growth in manufacturing (both existing and new), in small end distribution & transport and in service trades – ie the higher end, more intensive uses – and to be less encouraging of large scale warehousing and storage facilities, including road transport terminals and the like. Again, outcomes are always on balance, but some fine tuning on the desired future character front for individual precincts might provide additional guidance to policy.

To illustrate:-

- the Royal Park, Hendon, Woodville North, Athol Park and Cheltenham precincts are all prime areas for large scale industrial uses and for uses with external impacts, including both manufacturing and warehousing;
- Arndale, Kidman Park North, Hindmarsh and Port Road/South Road are variously suited to high order transport & distribution activities, trade services and high value manufacturing; and
- non-descript inner ring areas like Allenby Gardens and Welland might be targeted for high value manufacturing in an effort to extract greater economic value than appears to be realized at present.

One of the issues arising from this discussion is allotment size and, in particular, the minimum allowable lot size in particular locations.

There is no definitive answer to this question, which arises time and again because developers frequently want to create smaller lots than are envisaged by the Development Plan.

The nub of the problem seems to be that there is no limit to this desire, largely because there is a bigger market for lower value properties than there is for higher value properties, especially in buoyant economic times. Against this, there must be a limit to how small industrial blocks can become, before undesirable outcomes begin to emerge – including inefficiency of parking and access arrangements and sub-optimal urban design outcomes from “cheek by jowl” development.

This review prefers a precautionary approach, via the maintenance of limits on sub-divisibility. The objective would be to encourage more clustering of attached buildings (where smaller premises are required), rather than a plethora of individual detached premises¹⁷. Just where the appropriate threshold lies is open for discussion, but is perhaps around 2,000sqm.

Whatever the approach to these various issues, the many faces of industry need to be recognised in the planning policy solutions that are ultimately expressed by Charles Sturt’s Development Plan.

- ***Interface Policy Area***

Following on from the preceding analysis and discussion, it is interesting to reflect on the present configuration and application of the Interface policy area, as against the Core Industry zone. From a strategic viewpoint, the use and configuration of Interface policy areas has resulted in there being:-

- firstly, an almost rote application, frequently leaving nothing more than a small Industry zone at the centre of a precinct, surrounded by a large swathe of Interface land; and
- secondly, a largely low impact industrial policy setting across the whole city, noting that 60% of Charles Sturt’s industrial land is zoned this way.

Interface policy areas seek to constrain industrial activity in some degree by applying low impact criteria for entry. These frequently reflect EPA separation guidelines, which frame their actual configuration – although not consistently it sometimes appears.

In essence, they replace what used to be called Light Industry, while the current Core Industry zone replaced what used to be referred to as General Industry¹⁸. In this old parlance, and as illustrated by the analysis at the top of Section 4.1, it means that Charles Sturt has a preponderance of Light Industry zoning over General Industry zoning.

There are significant Core Industry zones at Royal Park, Woodville North, Athol Park, Hendon, Cheltenham, Beverley, West Croydon/Kilkenny, Bowden Brompton (Clipsal site only) and Hindmarsh, together with minor Core nodes at Albert Park, Arndale, Allenby Gardens, Welland and Albert Park.

¹⁷ Smaller freeholds can be created post-development via the creation of Community Titles.

¹⁸ Both of these old definitions still being current under the Development Regulations 1993

Beyond this however, Charles Sturt is largely zoned for industrial uses which have low external impacts and low level transport infrastructure demands. While this is not a problem per se – and may even be advantageous in some circumstances – the widespread extent of its application needs to be clearly recognized in Council’s strategic thinking and planning.

Adherence to EPA guidelines may frequently give little room to move and so this particular aspect of the current zoning may simply be a given for an inner metropolitan Council like Charles Sturt.

If the Interface zone boundaries can be relaxed in favour of a Core Industry zone in particular precincts, then well and good because it will allow less constrained industrial use. If on review however, the present approach is still seen to be generally appropriate, then consideration needs to be given as to how to turn it to some strategic advantage – like attracting higher value uses..

Finally, the application of the Interface zone and its interaction with surrounding zones, also leads to some undesirable and/or anomalous results. Hence:-

- at Athol Park, the northern end of the precinct, including the Grand Junction road frontage, which sits opposite major industrial facilities in PAEC, is zoned Interface because of its proximity to the Home Industry policy area and should revert to Core Industry once the Home Industry designation is removed;
- a much larger portion of Hindmarsh than appears necessary is zoned Interface for no apparent reason; and
- in areas such as Albert Park and Allenby Gardens, it may be better to delete the Core Industry zone altogether and focus the entire precinct on low impact uses.

- ***Bulky Goods Policy Framework***

Charles Sturt has two Bulky Goods policy areas within its Industry zone, at Woodville and Royal Park, with ongoing pressure for more. It also has some bulky goods activities in Mixed Use zones, such as on Port Road.

Bulky Goods is essentially a retail land use and, therefore, does not appear to be appropriately located within the Industry Zone. At the moment, planning policy is being driven by built form rather than by land use.

Being only a quasi-industrial use, Bulky Goods may be more appropriately accommodated in a Centre zone or a Mixed Use zone. Viewing bulky goods proposals through the prism of requiring a Centre zoning (and therefore being excluded from the Industry zone) would shift the very nature of the debate and would make it harder to argue the case for ad-hoc change in individual precincts.

It would also allow (and require) that Council identify and rezone sufficient land to meet the reasonable demand for (and opportunity presented by) this sector, which remains on a growth path. Conversely, it would strengthen Council’s hand in resisting inappropriate proposals in inappropriate locations.

The unresolved question in this debate is where Bulky Goods should be located, if not in Industry zones – which are attractive in the first place because of the low entry price which, ironically, may reflect the relatively low value nature of the use.

The answer probably lies in drawing on several sources, including existing Centre & Mixed Use zones (where plausible) and possibly some Industry land, although the economic case remains to be made.

If Charles Sturt was to pursue this line then, of its Industry zoned land:-

- the Royal Park Bulky Goods Policy Area might be expanded out to Tapleys Hill Road to take up the whole eastern end of this precinct; and
- areas such as the Torrens Road frontage of the Woodville North precinct, the southern half of Arndale and the John Shearer site at Kilkenny might be candidates for rezoning – notwithstanding their Prime Industrial designations.

The only alternative is to reject bulky goods within Charles Sturt altogether, which probably means ongoing pressure from developers and which therefore risks ad-hoc outcomes as a result of this pressure over the longer term.

It follows that the city's Centre & Mixed Use zones may also need to be partly drawn into any comprehensive Industry rezoning, so as to resolve this pressure point once and for all.

- ***Home Industry Policy Areas***

On-ground review suggests that the Home Industry policy areas are not delivering desired outcomes in that either:-

- the opportunity has not been taken up where available; or
- where it has, the outcome is frequently of a secondary nature.

Home Industry policy areas can also result in expanded Interface policy areas to maintain separation distances, as at the northern end of Athol Park.

In the view of this study, this zone should be dispensed with altogether. In the short term, the few working examples need not suffer adverse impacts because existing use rights protect their position. In the longer term, there will be better and more efficient use of available industrial land.

- ***Heritage Conservation Policy Areas***

As alluded to in several of the precinct reviews, the existing Heritage (Conservation) policy areas cover on-ground situations which generally have little or no connection to industrial land use and should be reassigned to more appropriate adjoining zones.

- ***Mis-alignment of Land Uses with Zone Objectives***

On-ground review indicates that there is frequently a mis-alignment between actual land uses and the desired objectives of the Industry Zone. This is particularly the case along arterial roads – especially Port Road – where the horse has often bolted and the result is that there are multiple instances of non-industrial uses located in Industry zones, including a range of uses that may not necessarily be envisaged by the relevant Policy Area.

Retailing and service trade premises, including motor vehicle related uses, are especially prevalent. Crash repairs are also prevalent and present an interesting policy requirement, being an industrial use which frequently seeks high exposure.

This overall mis-alignment will simply have to be recognised in a development planning sense by a policy re-alignment to a “Main Road policy area” or similar.

A mixed use approach is probably more appropriate than current arrangements and is further discussed below.

It needs to be noted that the Metropolitan Adelaide Planning Strategy envisages many of these uses clustering in activity centres, partly as an antidote to ribbon development on main roads. This study is therefore somewhat at odds with the Planning Strategy in this regard. However, there seems little alternative, other than to accept the mis-alignment, which seems less than ideal.

In a similar vein to this arterial road issue, the current land use at West Lakes is widely at variance with the current zoning, and likely to remain so well into the future. Change seems appropriate.

- ***Commonality of Land Uses between Zones***

As a corollary to the issue of mis-alignment, it is often difficult to clearly differentiate the categories of land uses within different zones, and most especially as between Council's Mixed Use and Industry zones. That is, there appears to be a high level of on-ground commonality between the two, and it appears that the Industry zone's objectives in particular are frequently not the core driver of the reason why particular land uses exist in particular locations.

There are both industrial uses to be found in Mixed Use zones and non-industrial uses found within Industry zones, especially retail uses, up to and including Bulky Goods.

It therefore appears appropriate that any review of Industry zoning be extended to cover the Mixed Use zone. This would better allow both the totality of the industrial land supply to be addressed and for a properly integrated planning policy to be established, with clear and logical differentiation between these two zones.

- ***Mixed Use Zones***

Mixed Use zoning is finding greater acceptance in contemporary planning as a means of both enlivening and capturing greater value from individual developments and precincts.

On balance, it is generally seen as a positive in appropriate locations, because it is true that there can be symbiotic relationships between both residential and non-residential users, when the formula is properly applied.

On the flip side, getting it wrong can have the long term consequences that ultimately come from inappropriate mixing of uses.

From Charles Sturt's point of view – and this is already partially reflected in the current Development Plan – there is a matrix of potential uses to be considered, including industrial, commercial, retail and residential uses.

As between residential and non residential, there is a need to constrain some adjoining uses in some degree, with these constraints generally being greatest on industry. As between “commercial” (office, retail, etc) and residential, there is less need for these constraints to be applied.

The extra aspect to this particular analysis is arterial roads, where the “Main Road Policy Area” previously referred to needs to be given effect. This will require an “on balance” approach, because not all arterial road frontages necessarily warrant change but, as identified in the precinct notes, there are many that do. The objective in this instance will not be to preclude industry, but rather to include a range of other permissible uses, often retrospectively.

In applying the resultant land use and policy matrix, several potential mixed use policy blends emerge, each providing for differing degrees of particular uses. They include a greater or lesser degree of:-

- industry, perhaps by the exclusion of a specific range of activities with clear external impacts, including certain EPA licensed activities;
- retail showroom, small scale retailing and commercial activities, coupled with higher level industrial activities (to sustain the value of the location), but a low level of residential use given the likelihood of a lower general level of amenity; and
- residential development, which demands low impact neighbouring uses and may take a quite restrictive position on industry, but which might be quite open to non-industry retail and commercial uses.

This approach might give rise to three policy areas, being:-

- Mixed Use (Industry), where activities that are congruent with industry can co-exist with industry;
- Mixed Use (Retail), where the emphasis is on non-residential uses, including low scale retailing, commercial offices and industry, although perhaps not closing the door completely to residential use; and

- Mixed Use (Residential), where compatible non-residential activities which can co-exist with medium to high density residential use are allowed and where there is likely to be a low level of traditional industry.

The appropriate zone from this Mixed Use menu can then be applied in the appropriate circumstances.

To this end, Mixed Use (Industry) may be the best solution for current Industry zones on selected arterial roads, where the need for a Main Road policy area has previously been identified.

Deriving the policy levers necessary to give effect to this approach is beyond this brief, but warrants careful consideration, not only in terms of how to describe desired outcomes and how best to actually achieve them, but also in terms of identifying and preventing undesirable outcomes.

- **Community Uses**

A number of Community uses are scattered throughout the Study Area, as detailed in Table 12.

Table 12: Community Uses in Industry Zones

District	Church	Fitness Centre	Function Centre	Community Club	Playing Fields	Reserves	Schools	Notes
North West District								
Royal Park		1		1				Zest Fitness Centre, Bosnian Club
West Lakes					1			SANFL
Mid North District								
Cheltenham	1							Jehovahs Witness
Port Road South					1			Indoor Cricket
Hendon	2	1						
Outer North District								
Woodville North	1				1	1		Islamic Arabic Centre and Al Khalil Mosque; Woodville Hockey Club; Finsbury Reserve
Athol Park				3				Vietnamese, Polish & Ishlan Clubs
Arndale			1				1	Humphries Tce; Challa Gdns PS
Mid South District								
Kidman Park North		1						Viva Fitness
Mid East District								
West Croydon/Kilkenny							1	Kilkenny PS
Beverly				1	1			Venetto Club - comm. club & playing fields
Allenby Gardens				1				Flinders Park Community Centre
Welland			1	1				Riverbank Function Centre; Corinthians Society
Inner East District								
Port Rd/South Rd Cnrr				1				Croatian Club
Totals	4	3	2	8	4	1	2	

As shown there are 8 community clubs, 4 churches, 4 playing fields, 3 fitness centres, 2 function centres, 2 schools and 1 reserve. Several of these facilities occupy areas in excess of 2Ha.

These uses appear to be located in Industry zones because of the availability of cheaper land and/or by default, because they did not necessarily fit into another zone.

A clear policy position needs to be developed for such uses, which are causing an appreciable loss of industrial capacity.

A potential policy response could be based on the City of Salisbury Places of Worship PAR, authorized in 2007. This PAR recognized the need to accommodate land uses that require large and relatively inexpensive sites, while not significantly impacting on quality industrial localities.

The resultant policy lists these community land uses as non-complying developments within their “Prime Industrial Areas” (perhaps read “Core Industry in the present context), while allowing them to occupy land at the edges of these Prime Industrial Areas (read Interface policy areas), thereby acting as transitional buffers to more sensitive adjoining land uses, including residential uses.

- ***Residential Interfaces***

Within the context of historic development patterns, the physical residential interfaces appear, by and large, to be reasonably well managed across the Study Area – although there are some which are harsh, to say the least, and which warrant special attention.

However, noise and odours remain the biggest issues. Both can be difficult to manage at the best of times and need some level of ongoing policy intervention – although, irrespective of Development Plan policy guidelines relating to new developments, existing industrial operations must continue to comply with existing provisions, including all relevant EPA requirements.

Local area traffic management is apparently an enduring problem in residential areas, but the solutions are primarily of a non policy nature.

More generally, policies on land use and built form might include setting physical interfaces up so that, wherever possible, the interface is to a direct boundary abutment rather than a street frontage, and by creating improved buffers wherever possible.

There are also a large number of remnant pockets of residential use scattered throughout the Study Area. Why this should be so is unclear. In some instances (eg Millicent Street at Athol Park) the will of the people perhaps needs to be recognized by reversion to residential zoning, although the risk is that this would simply compound the broader interface problem. In most instances however, to do anything other than to hold the line with the current Industry zoning would be to invite future trouble.

All of these issues need to be considered in some detail in the preparation of the pending Section 30 Review and Development Plan Amendment.

6.2.2 Non-Policy Initiatives

Beyond changes to the policy framework, there are also related non-policy issues arising from this study, including transport planning, the need for there to be “strategies for change” and amenity issues.

Transport planning is fundamentally linked to land use planning and, in several parts of Charles Sturt, there is a fundamental mismatch between the two. In other words industry needs good access which, in parts of Charles Sturt, is not currently available.

It is beyond this brief to address individual opportunities to improve local area accessibility or permeability, although issues have been identified in a number of precincts, including Woodville North, Athol Park, Beverley, Allenby Gardens and Bowden/Brompton.

As discussed in Section 4.1, firstly, the current B-double network needs to be reviewed as regards providing access for properties without frontage to a trunk route, where appropriate. This would be a relatively quick, low cost and value adding exercise.

Beyond this, several key opportunities for improvement have been identified, albeit at a cost. Each would represent a strategic, long term initiative aimed at enabling the better operation and the improved prospectivity of older Prime Industrial Areas. They include:-

- at Woodville North and Athol Park:-
 - the creation of a new southern entry to Woodville North, via Sheffield Street, as an alternative to widening the southern section of Audley Street;
 - the widening of the central section of Audley Street and Glenroy Street, including via removal of some old industrial facilities through the central section¹⁹;
 - improvement of the linkage between the northern end of Glenroy Street and Eastern Parade, probably involving realignment of their junction, so as to improve access to Pt Adelaide; and
 - the resolution of issues on Athol Street, either by widening its eastern throat, or by facilitating relocation of the few businesses along it requiring B-double access²⁰;
- at Beverley, where the best outcome would be the construction of the Holbrooks Road connector, which now comprises the southern end of the Hanson Road connection to the Port River Expressway, and which connects directly to the airport to the south.

As discussed elsewhere, Hanson Road’s status as one of only three connection points to the Expressway will change transport dynamics in the north west over the next five years. The Holbrooks Road connector would plug the western suburbs directly into this conduit and would be of particular benefit to areas such as Beverley and Allenby Gardens.

¹⁹ Subject to agreement with current owners, and as a catalyst for change.

²⁰ Alternatively, all B-doubles could be directed to enter the precinct via Glenroy St, with the B-double designation to be removed from the eastern end of Athol St.

In lieu of any indication of this project commencing within 5 – 10 years however, Council is proposing to reconstruct William Street and Charles Road, as a one-way clockwise loop. Toogood Avenue and William Street south of Toogood Avenue are to remain two-way roads.

At the same time, Council should precipitate the early demolition of the largely derelict DTEI properties along the connector route, to improve the amenity of the whole precinct

Beyond this, Council might consider a more comprehensive transport solution by actually building “Stage 1” of the connector. This would entail the widening and reconstruction of Charles Street as a two lane road²¹, to industrial standard as far south as Toogood Avenue, thus providing a new easterly access route to the whole precinct.

At the same time, it would allow Council to work with the owner of the Electrolux site (which has extensive frontage to Charles Street) to improve the permeability and the prospectivity of both the Electrolux site itself and the precinct as a whole²².

- at Allenby Gardens, a similar approach could be adopted at the southern end of the connector corridor; and
- at West Croydon/Kilkenny, via the widening of Aroona Street, which runs between the glass factory and the John Shearer site.

Some of these suggestions will require land acquisition and will come at a significant capital cost. Some could become conditions of development approval for the adjoining land (such as Aroona Street). Where they do come at a cost, it is suggested that there will be an opportunity to argue the value added nature of the exercise, and to use it as a catalyst for the facilitation of broader change and renewal within these precincts.

Improvements to the serviceability of these precincts is crucial to their long term survival. A strong partnership will be required between Council and the Department of Transport Energy and Infrastructure to allow them to compete with road transport access provided in new industrial estates being established in the northern fringes of the Adelaide metropolitan area.

There is then the question of **strategies for change**, and of how to actually facilitate the best on-ground outcomes in individual precincts because, in isolation, changes in development planning policy will not result in startling changes at precinct or enterprise level. To this end, there is suggested to be both:-

- an economic development aspect, wherein longer term strategies are required to encourage and enable specific sectors and enterprises to grow and/or to relocate in Charles Sturt; and
- a direct facilitation role, wherein priority precincts and/or opportunities are identified and strategies for precinct renewal are developed to facilitate the realization of these opportunities.

²¹ To DTEI standards and in a manner that allows it to become part of the DTEI road in due course.

²² An alternative approach would be to upgrade and extend Pope St through the Electrolux site to Alfred St, which would achieve the same strategic outcome.

Economic development is a separate subject again, but its mention, together with consideration of a “case management” approach for selected precincts, is highly relevant to this report.

Hence, at Woodville North (for example), improvements to the transport infrastructure might be tied in with attempts to facilitate wholesale renewal of obsolete facilities. The role of the case manager would be to work from within Council to develop this thinking, to raise awareness and to negotiate desired outcomes with affected parties where appropriate, especially with key land owners.

Some masterplanning of priority precincts might be undertaken to better articulate the means of realizing change, and to assist in securing “buy-in” from affected parties. This will need to be much more than an exercise in urban design, as it will give rise to economic issues, including what’s in it for landowners to invest in any redevelopment.

Adequate resources will obviously need to be applied if Council is serious about making a difference on this front.

Finally, **amenity issues** are also worthy of consideration especially in light of Council’s Community Plan and in light of the need to improve perceptions in selected precincts as part of a strategy to attract higher value uses and users.

There are a range of opportunities to improve amenity, ranging from better buffering of poor residential interfaces, to more streetscaping (including enforcement of development approval conditions regarding landscaping), to better urban design outcomes more generally.

From an urban design perspective, it might mean encouraging more clustering of smaller facilities, rather than stand alone buildings – perhaps by controlling land division below a certain size.

In summary then, a range of initiatives, policy related and otherwise, are required to ensure that Charles Sturt both configures its industrial land stock to ensure optimum outcomes over the medium to long term and that, where short term opportunities exist, they are considered and acted on strategically and expeditiously.

6.3 FINDINGS AND RECOMMENDATIONS

The principal findings of this review are that:-

- Charles Sturt has a substantial stock of Prime Industrial Areas, the ongoing availability and proper functioning of which need to be protected and enhanced;
- by virtue of its current Development Plan and, in particular, the widespread application of the Interface zone, the city is largely set up for low impact industry;

- this overall character is well aligned to the needs of many higher value manufacturers and so presents opportunity to capture new industry and to renew old industrial sites;
- while industrial land makes a valuable economic contribution to its region, not all industrial land needs to be protected and more economically or socially strategic uses can be contemplated where appropriate;
- although high value residential use may be of greater economic value than low value industrial, the reverse is equally true;
- industrial land renewal can therefore equally apply to renewal for industrial use as it can to renewal for residential use, via change to higher order industrial use;
- just as Charles Sturt clearly has a number of Prime Industrial Areas, there are also clearly several precincts which are either already gone from or are about to be lost to the broader industrial sector, or where the opportunity for inter-generational change should be recognized and anticipated, and where planning policy should be adjusted to reflect this new reality;
- industrial development planning policy generally needs to be simplified and clarified, including by:--
 - a comprehensive review of Interface policy areas, with a view to their rationalization and their more coherent application;
 - the re-assignment of Bulky Goods to a Centre or Mixed Use zone – and review of the overall requirements of the Bulky Goods sector;
 - deletion of the Home Industry Policy Area;
 - the re-assignment of Heritage Conservation Policy Areas to more congruent underlying zones; and
 - a conscious (as opposed to a default) position on community uses;
- there needs to be a spread of industry across the city but, in several locations, this might quite reasonably focus on higher value activities and, by implication, be less favourably disposed to lower value activities such as large scale warehousing;
- there needs to be change to the current Industry zoning regime on arterial roads, not to exclude industry, but to permit a wider range of higher value uses – often retrospectively;
- there needs to be better integration in Council's Development Plan between all commercial and industrial zones, but especially between the Industry and Mixed Use zones;
- there is an opportunity to re-shape the existing Mixed Use zone so as to anticipate and better provide for a likely increase in this form of development over time, including Mixed Use (Industry);

- a number of residential interfaces need to be addressed, either in a policy and/or design sense; and
- there needs to be anticipation of strategic shifts in the desired future use and character of some precincts, both in consequence of the supplanting of new industry for old and in anticipation of an increasing level of high density residential infill.

In addition to planning policy changes, there is a need for work on other fronts, including:-

- improvements to local transport infrastructure, primarily to improve connectivity to arterial roads, which would better enable several of the Prime Industrial Areas to sustain this designation over time;
- both a need and an opportunity for leadership on Council's part in articulating a desire future for priority precincts and by actively seeking to facilitate these outcomes – including at Woodville North/Athol Park, West Croydon, Beverley, Welland and Hindmarsh; and
- improvements in the overall amenity of Charles Sturts' industrial lands, both in response to community wishes and as part of strategic shift to higher value industry, for which appearances are becoming increasingly important.

Political will, a renewed focus on economic development, precinct master planning and case management will all be needed to make things happen.

The inclusion of economic development objectives in Council's strategic planning provides a framework for the implementation of initiatives aimed at industrial renewal and modernization, which will be required if there is to be appreciable change within a reasonable period.

In conclusion, the purpose of this study is to inform Council's pending Section 30 Development Plan Review which, in turn, is a precursor to a Development Plan Amendment. Its task was not to argue or to judge, but to look and to point. To this end, it has identified policy, infrastructure and programme issues, and has suggested a way forward for each.

It has also identified a multitude of needs and opportunities, and signals a substantial redrawing of the structure and configuration of Charles Sturt's Industry zoning. These findings are summarized at Figures 15 to 20 overleaf, which schematically show:-

- the city's Prime Industrial Areas and its Other Industrial Areas;
- precincts where Home Industry zones should revert to Industry;
- precincts where a "Main Road Policy Area" appears to be clearly required;
- opportunities for fine tuning the boundaries of existing zones, generally to resolve residential interface issues;
- opportunities for key transport infrastructure improvements; and
- precincts which present rezoning potential, either in whole or in part, and whether for industrial or non-industrial use.

For Council, the implications of the report's findings include that:-

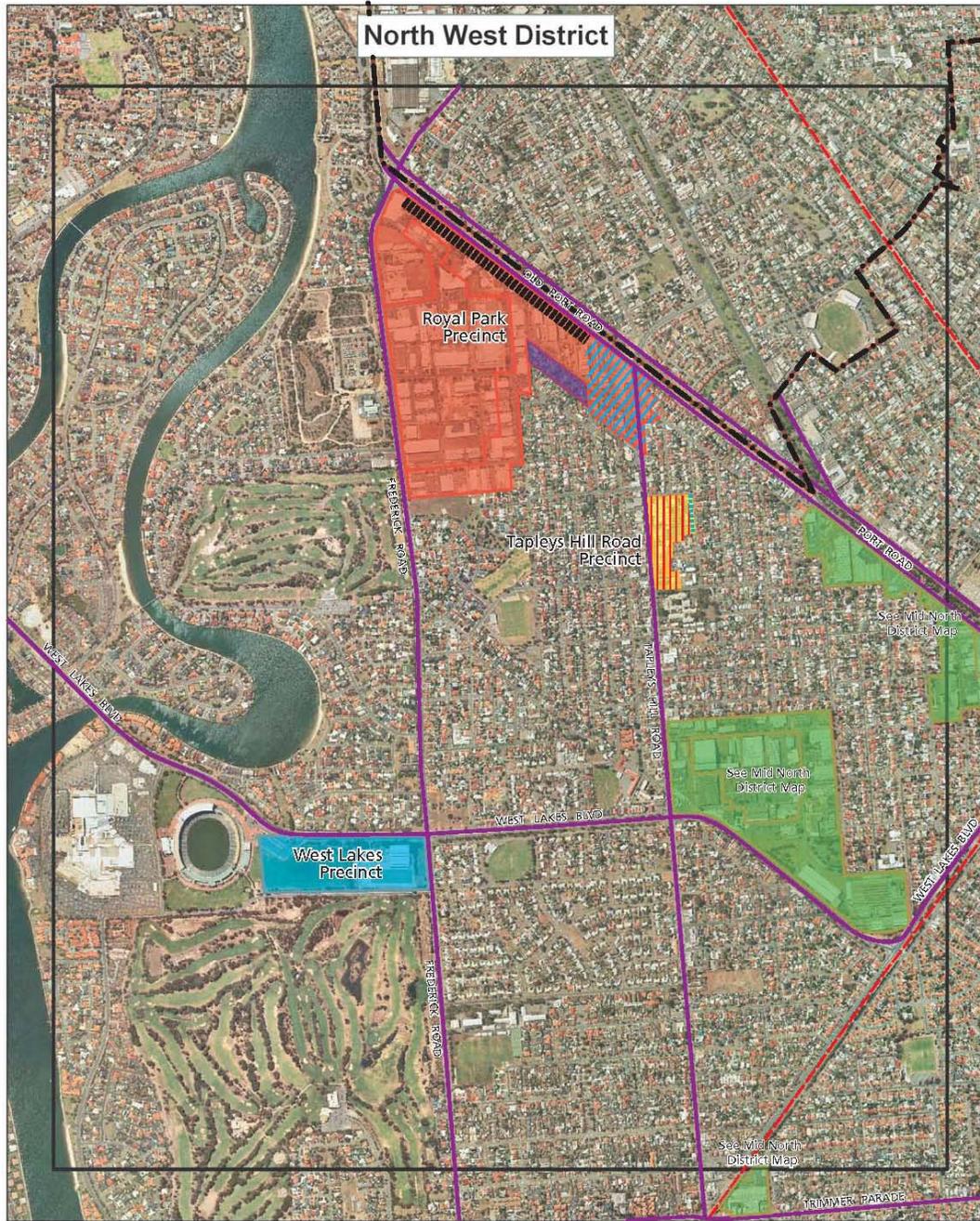
- from an industrial viewpoint, there is no need for any fundamental shift in Charles Sturt's underlying economic settings, but there is a need (and an opportunity) to modernize its economy in order to sustain current levels of economic activity;
- via this path, there is an opportunity to achieve either increased economic output from the same industrial footprint or the same output from a smaller footprint – with the latter suggesting a consequent opportunity for non-industrial renewal in some sectors;
- more change should be anticipated in desired land use and development patterns over the next decade for both industrial and non-industrial uses, and Council needs to respond accordingly now;
- there will be a need for capital expenditure in a number of industrial precincts, especially if there is to be enhanced transport infrastructure; and
- there will be a need for resources to be applied to pro-actively work on the renewal of priority precincts.

It is recommended that this report be endorsed by Council and that the team engaged to prepare the Section 30 Development Plan Review be instructed to:-

- firstly, regard it as the foundation of its work on this aspect of the Development Plan; and
- secondly, closely consider each and every need and opportunity identified herein because, notwithstanding the need for clear strategic direction, in development planning the devil is ultimately in the detail.

Finally, it is recommended that Council begin a conversation about the non-policy initiatives required to facilitate industrial renewal and modernization, and how it should go about planning both their scoping and their implementation.

Figure 15: North West District – Summary Findings & Opportunities



- Prime Industrial Area
- Other Industrial Area
- Main Road
- Railway
- Main Road Policy Area
- Mixed Use (Industry) Zone
- Possible Zone Boundary Adjustment
- Council Boundary
- Home Industry Zone revision
- Rezoning to alternative use
- Possible rezoning to alternative use
- Area covered on another District Map

CHARLES STURT INDUSTRIAL LAND STUDY
North West District



Figure 16: Mid North District – Summary Findings & Opportunities



- Prime Industrial Area
- Other Industrial area
- Main Road
- Railway
- Main Road Policy Area
- Possible Zone Boundary Adjustment
- Council Boundary
- Potential rezoning to alternative use
- Possible rezoning to alternative use
- Area covered on another District Map

CHARLES STURT INDUSTRIAL LAND STUDY
Mid North District

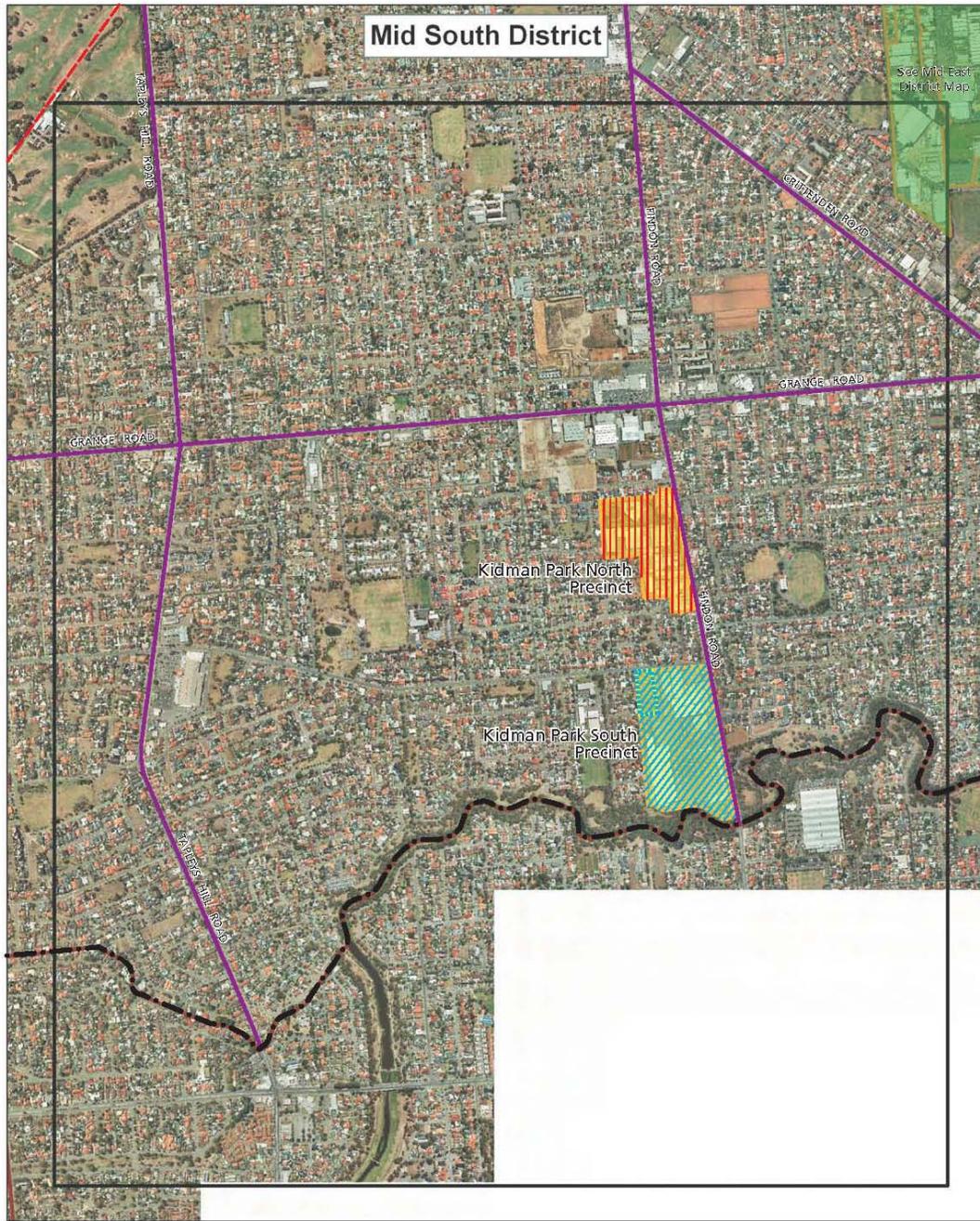
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Figure 17: Outer North District – Summary Findings & Opportunities



Figure 18: Mid South District – Summary Findings & Opportunities



- Prime Industrial Area
- Other Industrial Area
- Main Road
- Railway
- Main Road Policy Area
- Mixed Use (Industry) Zone
- Possible Zone Boundary Adjustment
- Council Boundary
- Possible rezoning to alternative use
- Area covered on another District Map

CHARLES STURT INDUSTRIAL LAND STUDY
Mid South District

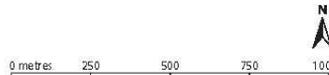
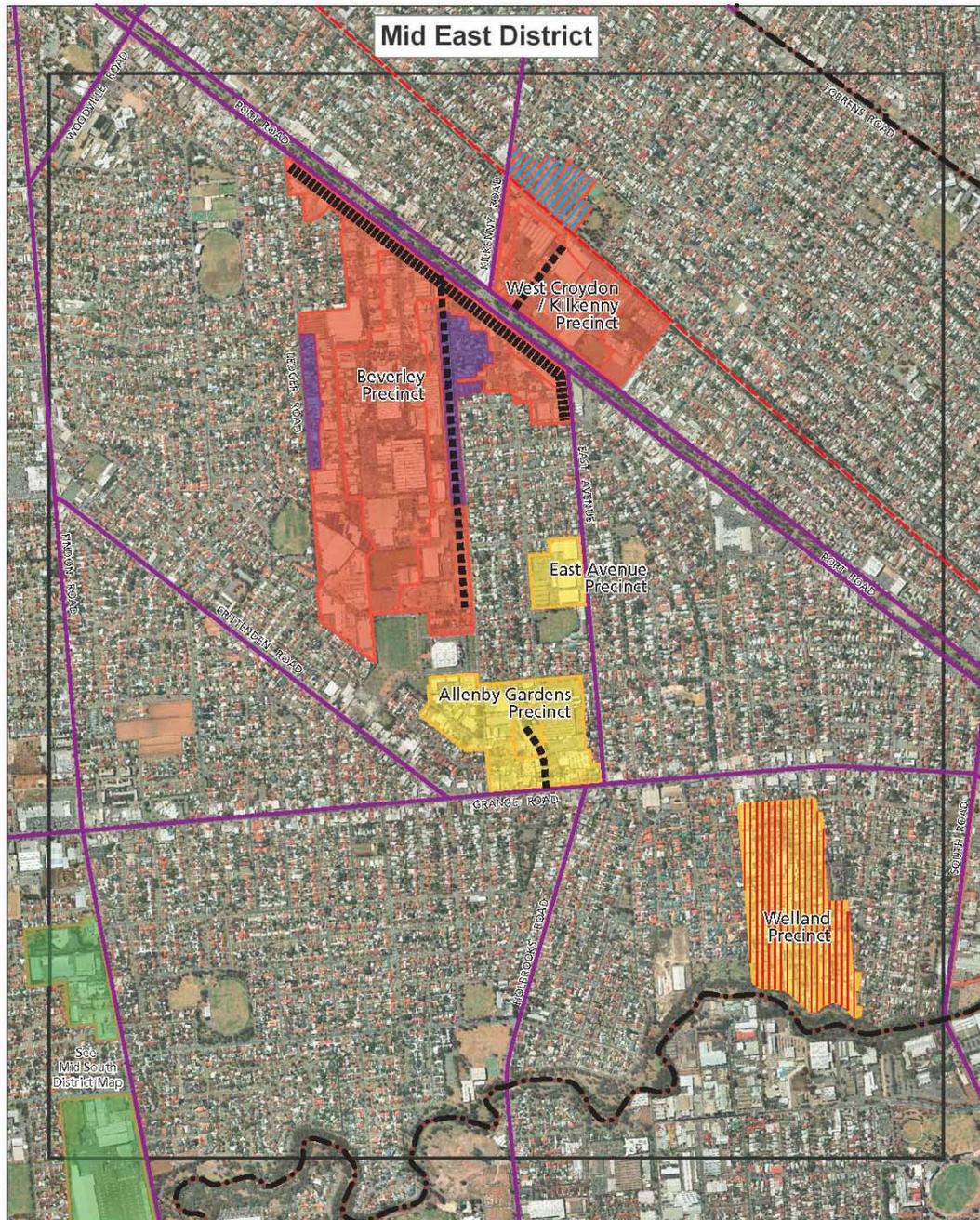
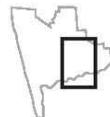


Figure19: Mid East District – Summary Findings & Opportunities



- Prime Industrial Area
- Other Industrial Area
- Main Road
- Railway
- Main Road Policy Area
- Mixed Use (Industry) Zone
- Enhanced transport connections
- Council Boundary
- Home Industry Zone reversion
- Rezoning to alternative use
- Possible rezoning to alternative use
- Area covered on another District Map

CHARLES STURT INDUSTRIAL LAND STUDY
Mid East District



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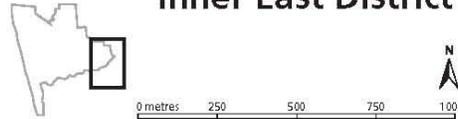


Figure20: Inner East District – Summary Findings & Opportunities



- Prime Industrial Area
- Other Industrial Area
- Main Road
- Railway
- Main Road Policy Area
- Mixed Use (Industry) Zone
- Council Boundary
- Rezoning to alternative use
- Possible rezoning to alternative use
- A Clipsal Site

**CHARLES STURT INDUSTRIAL LAND STUDY
Inner East District**



APPENDIX A

THE BRIEF

APPENDIX B

REVIEW OF CURRENT DEVELOPMENT PLAN POLICY REVIEW

APPENDIX C

**WHOLE OF COUNCIL GIS
MAPPING**

APPENDIX D

**DISTRICT LEVEL GIS
MAPPING**

APPENDIX E

ORIGINAL REZONING ASSESSMENT FRAMEWORK