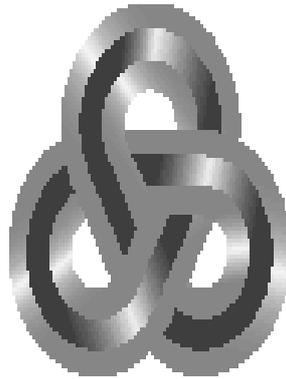




National
Economics



Australian
Local
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State of the Regions 2008-09

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STATE OF THE REGIONS
2008-09

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Preface: The accumulated insights of *State of the Regions* reports

Core objectives

The core objectives of the *State of the Regions* (SOR) reports (of which this is the eleventh) are to:

1. present the latest statistical indicators (for this report to 2007-08) describing how Australian regions are performing;
2. analyse trends in equality and inequality between Australian regions;
3. make suggestions for the policy implications of current Australian regional performance;
4. steadily expand the indicators used to measure regional performance;
5. describe the reality of regional economics;
6. assist local government to understand their own region and compare performance with other regions; and
7. to provide local government with useful planning tools.

The 2008-09 SOR builds on the accumulated knowledge of previous SORs to provide a coherent framework for analysing, and for improving the understanding of regional development. The reports also provide a base of accumulated knowledge and insights which can assist with planning and policy development. SOR reports identify a region's economic development issues as well as assessing the effectiveness of policies in removing roadblocks to regional economic development.

The benchmarks used in SOR are derived from the concept of convergence and divergence. In order to understand the forces of divergence and convergence in economic performance, successive reports have developed a list of **Stylised Facts**.

Stylised Facts are "facts" which, in relation to a specific driver, influence regional development, and describe its most probable effects. The "facts" do not apply to all regions.

Each successive SOR report, either, adds to the list of **Stylised Facts**, and/or, adds additional validation to the operation of the "facts". This 2008-09 SOR report adds further evidence to reinforce previous conclusions as to the nature of the facts. Accordingly, the **Stylised Facts** of previous SOR reports have been summarised with additional supporting evidence.

The Stylised Facts

Introduction

Over the years the conclusions of the successive SOR reports have been summarised as stylised facts. These conclusions do not apply to all regions and LGAs, but apply in the majority of LGAs and regions.

In general the stylized facts have been determined from Census data. The 2006 Census results have been used in this year's SOR.

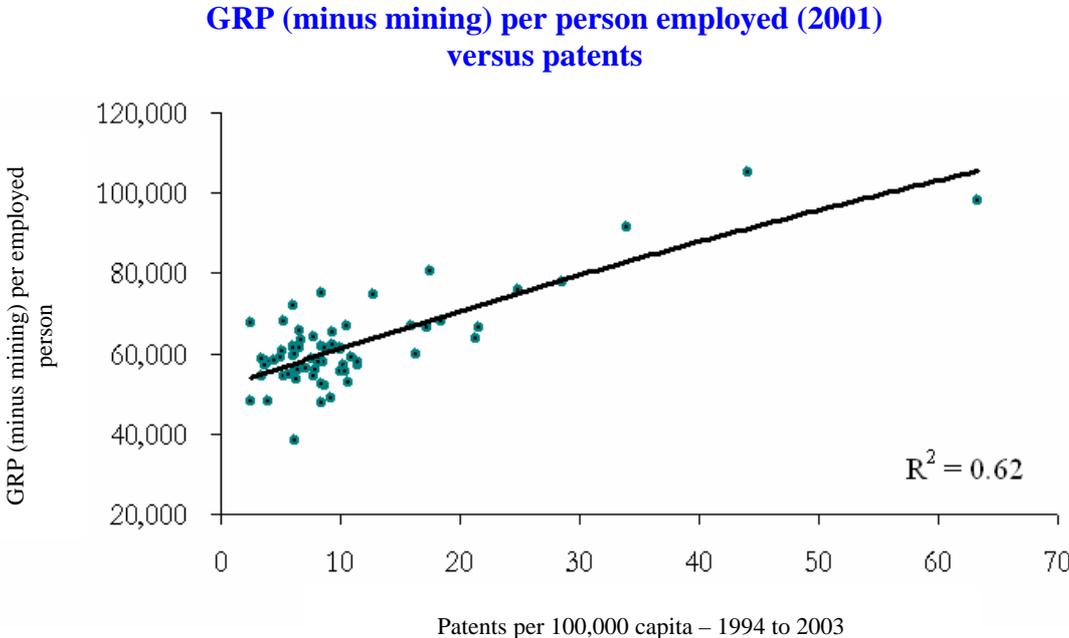
Stylized Fact One

High-income economies, apart from those with a unique and extensive natural resource base, now depend on sustained innovation as the core driver of long-term economic growth.

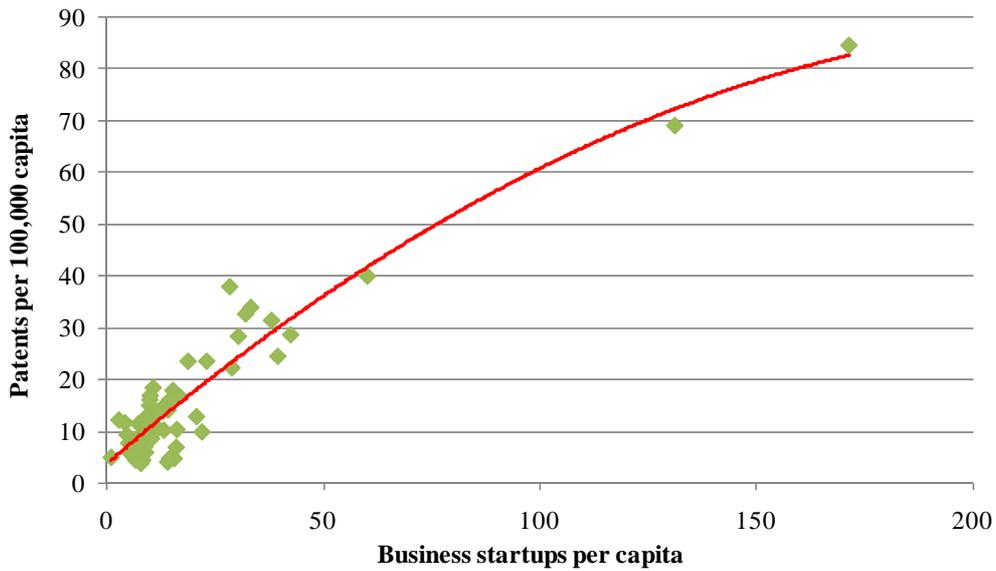
Stylized Fact Two

The capacity to innovate depends on knowledge and networks at the regional level. Most high-income countries which have maintained sustained growth have done so because they have established successful knowledge based regions.

The figures below demonstrate the relevance of this Stylized Fact in Australia. One indicator of capacity to create knowledge and innovation is patent activity. The figures below show that there is a good correlation between the economic success of a region measured in terms of non-mining gross regional product per person employed and patent activity. The data in the figure is for the regions of this report.



High Tech business startups versus patents per 100,000 capita

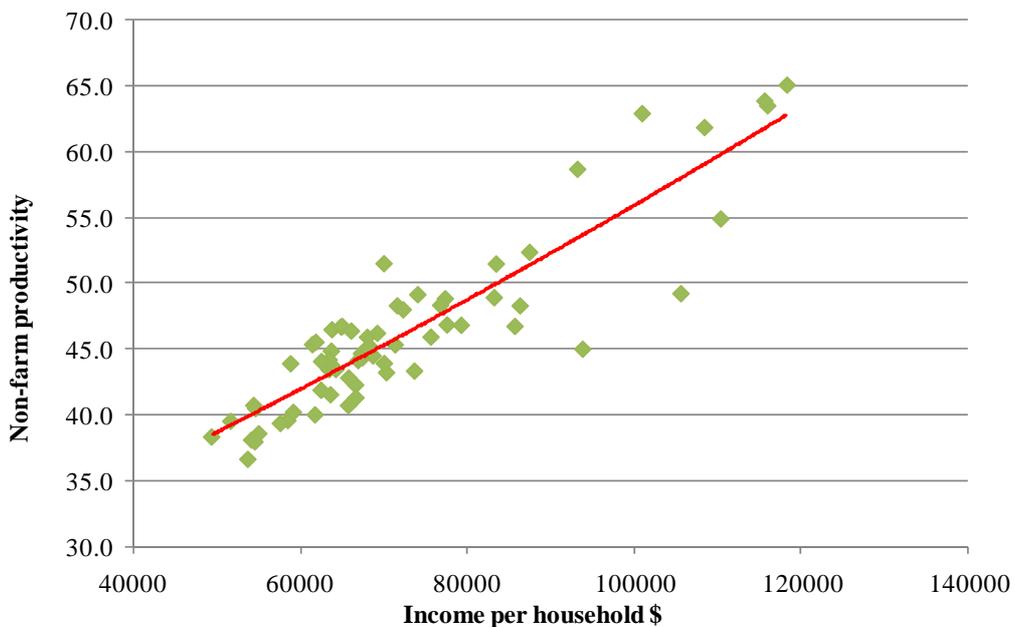


Stylised Fact Three

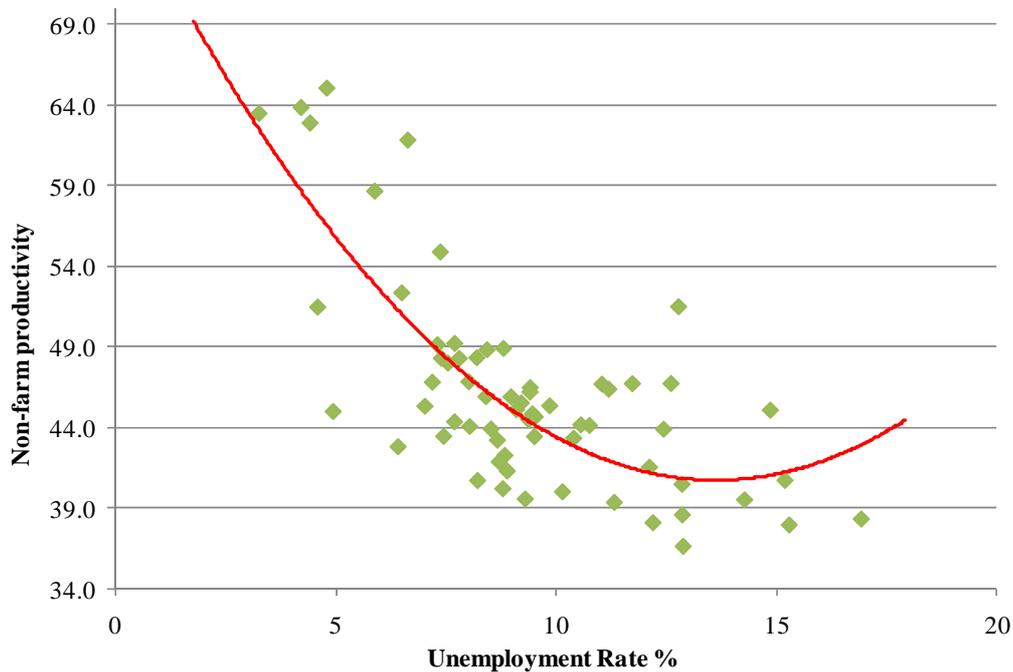
Regions with high productivity have high household incomes and low unemployment rates

The two figures below provide strong support for the stylised facts.

Non-farm productivity versus average household income 1998-2008



Non-farm productivity versus unemployment rate 1998-2008

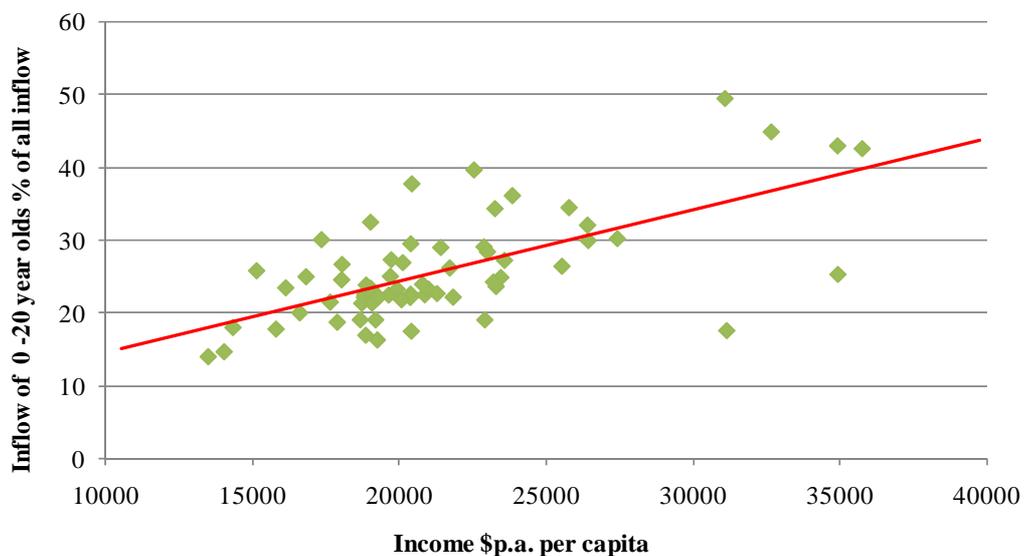


Stylised Fact Four

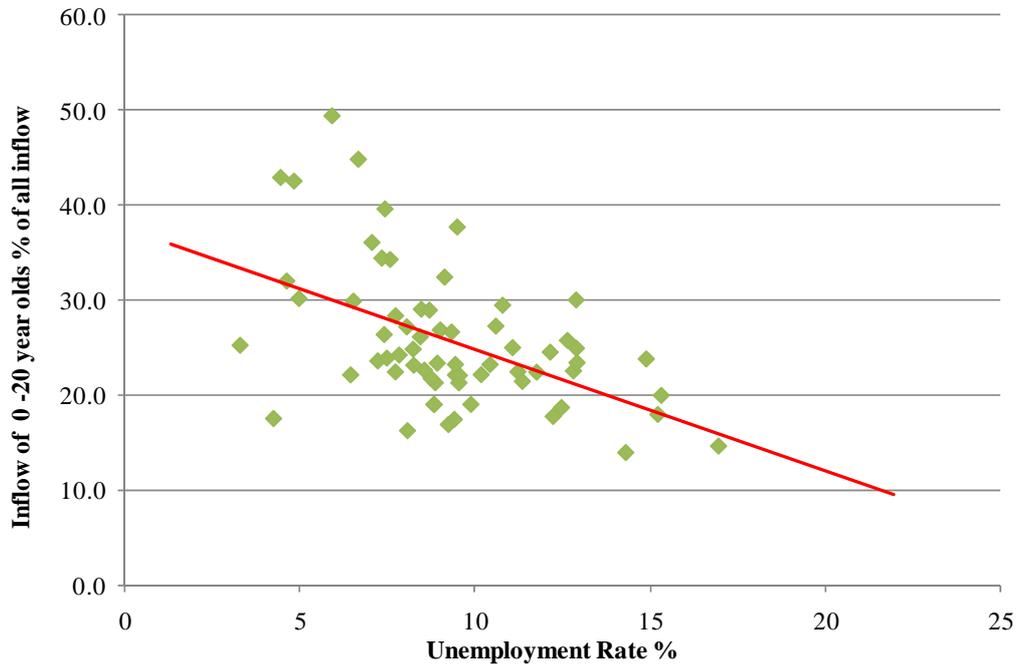
The young are leaving low-income, high unemployment regions and migrating to high-income, low unemployment regions.

The following two figures provide the support for this stylised fact.

Inflow 0-20 year olds per cent of all inflow versus wages and business income 1998-2008



Inflow 0-20 years per cent of all inflow versus unemployment rate 1998-2008

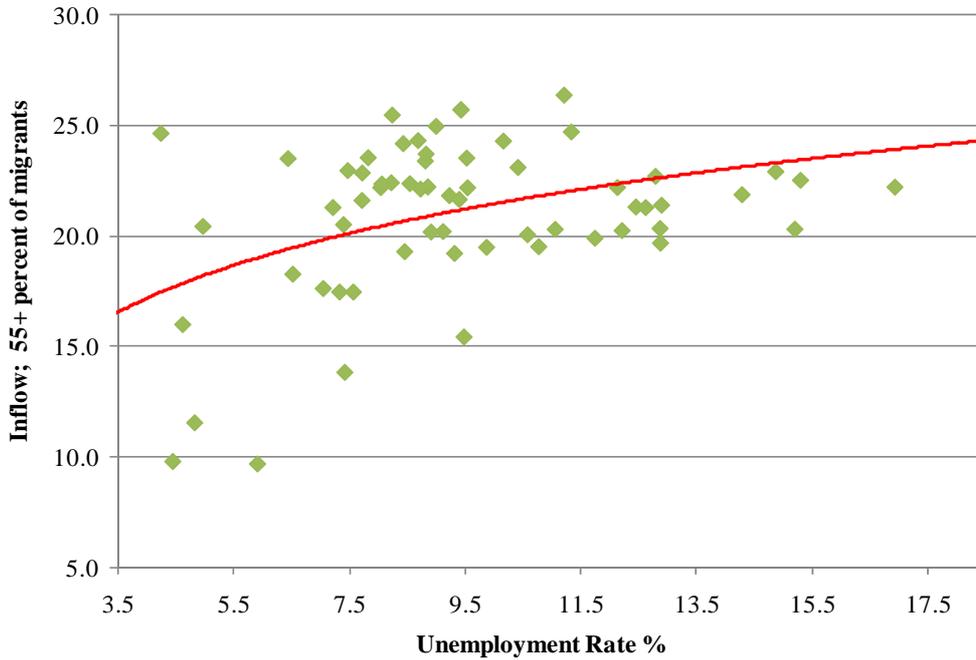


Stylised Fact Five

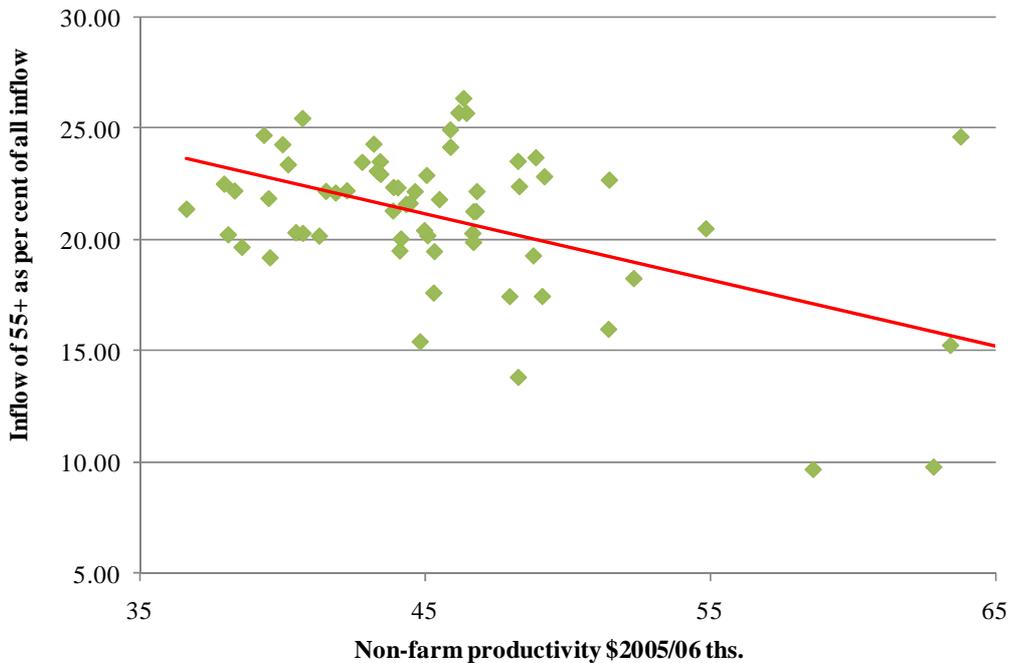
The old are leaving high-income (high cost regions) and low unemployment rate regions and migrating to low-income (low cost) and high unemployment regions.

The following two figures provide empirical support for this stylised fact.

**Inflow of 55+ per cent of all inflow versus unemployment rate
1998-2007**



**Inflow 55+ as per cent of all inflow versus non-farm
productivity 1998-2008**



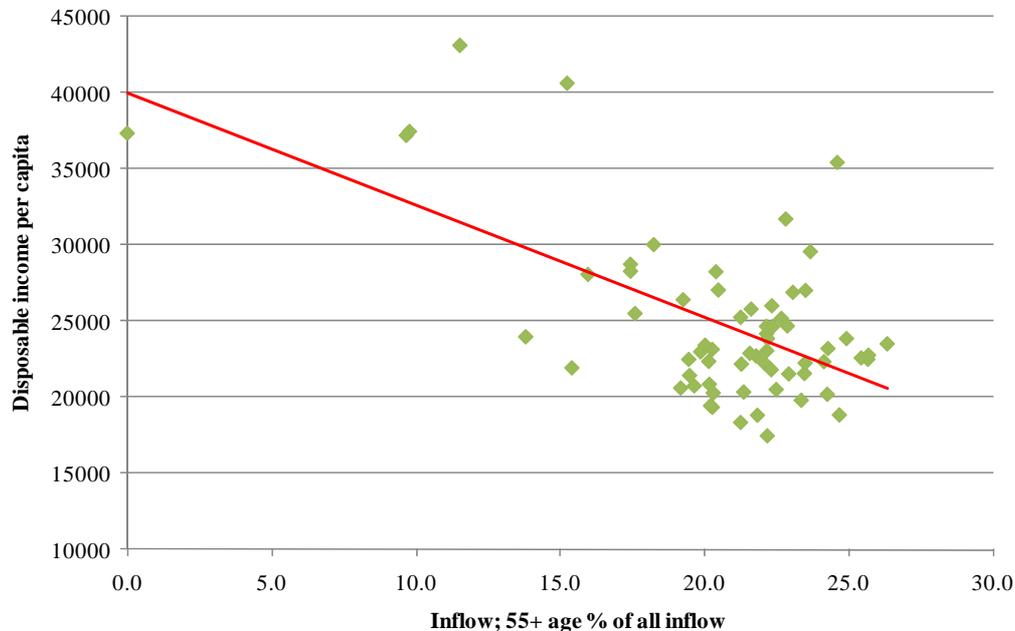
Stylised Fact Six

Low productivity regions are rapidly ageing, while high productivity regions are ageing relatively slowly.

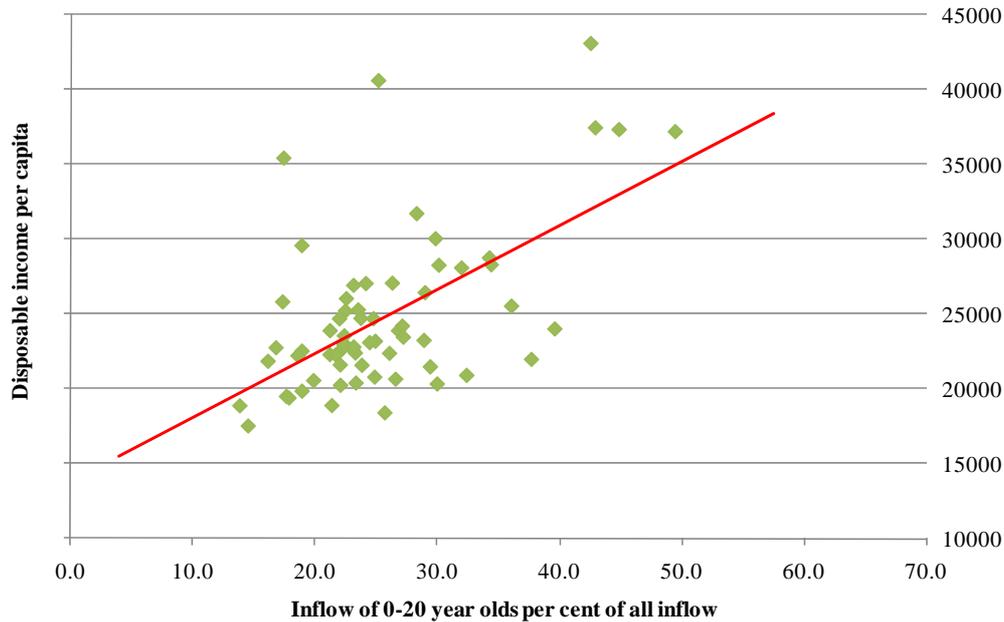
Because of the strong correlation between income and productivity, high productivity regions have low rates of decline in the share of population aged under 24 and slower rates of increase in the share of population aged over 55 (see the following two figures).

A corollary to stylised fact six is that low productivity/high unemployment regions may be locked into a vicious cycle of rising unemployment and rapid ageing. Currently this mechanism is being blunted by high levels of construction activity spreading across the nation. When the building cycle turns down, rapid ageing and rising unemployment could quickly return to these regions.

Average disposable income per capita 1998-2008 versus inflow of age 55+ per cent of all inflow



Average disposable income per capita 1998-2008 versus 0-20 year old inflow as per cent of all inflow

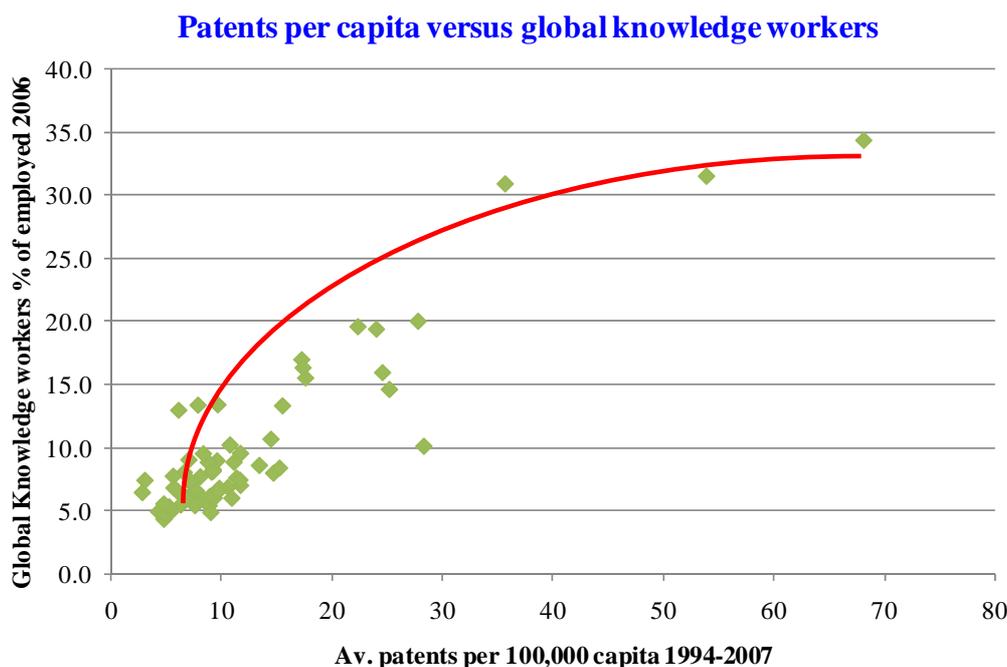


Stylised Fact Seven

Successful knowledge based regions have a high concentration of highly skilled (scientists, engineers, etc.) global knowledge workers. These workers tend to migrate to regions with scale and diversity of social and community infrastructure and cultural and lifestyle choices.

The figure below shows the strong relationship between global knowledge worker concentrations and knowledge creation (that is, patent activity). The 2002 SOR also showed a high correlation coefficient between community infrastructure/lifestyle choice and concentrations of global knowledge workers across Australian regions.

The following figure shows the clear link between patents (and hence business productivity), therefore the inferred high correlation between high technology start-ups and the presence of global knowledge workers.



Stylised Fact Eight

The regional centres which have contributed strongly to the improved economic performance of the rural regional group have had high employment growth relative to population growth. This, in turn, has occurred in provincial cities that:

- maintained a population growth rate in excess of 0.3 per cent per annum;
- developed diversified lifestyle and cultural choices for residents;
- concentrated on attaining large-scale production in selected non-mining, non-agricultural industries; and
- developed inter-regional export capacity in business and/or education services.

Stylised Fact Nine

Regions are successful because enterprises in them are successful. To assist enterprises to grow, policy must explicitly focus on developing and strengthening the emerging flexible entrepreneurial supply lines of industry clusters on which knowledge based economies are founded.

Policies to establish a successful regional economy require complex policy strategies involving a whole of government approach. Important components are policies designed to strengthen the networks that link the institutions, organisations, enterprises and key personnel within regions and to strengthen regional supply chains.

Stylised Fact Ten

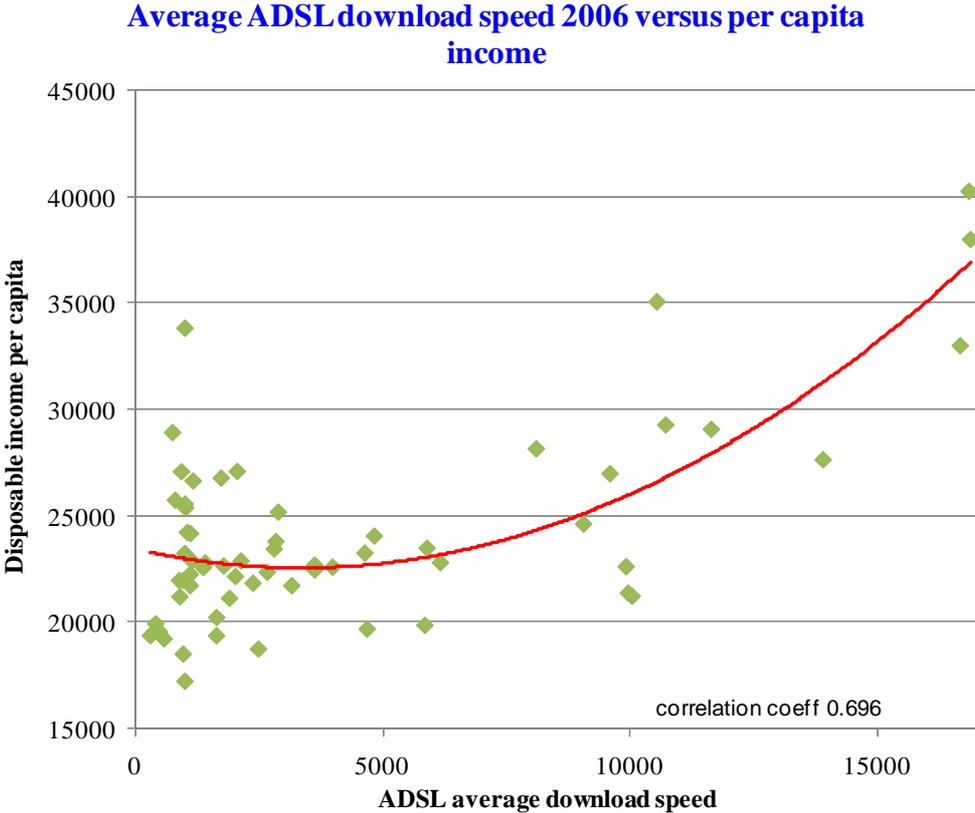
Unfortunately, current policies to encourage regions to develop and increase their productivity are acting perversely. They are imposing barriers preventing low productivity/high unemployment regions from increasing productivity.

Example 1

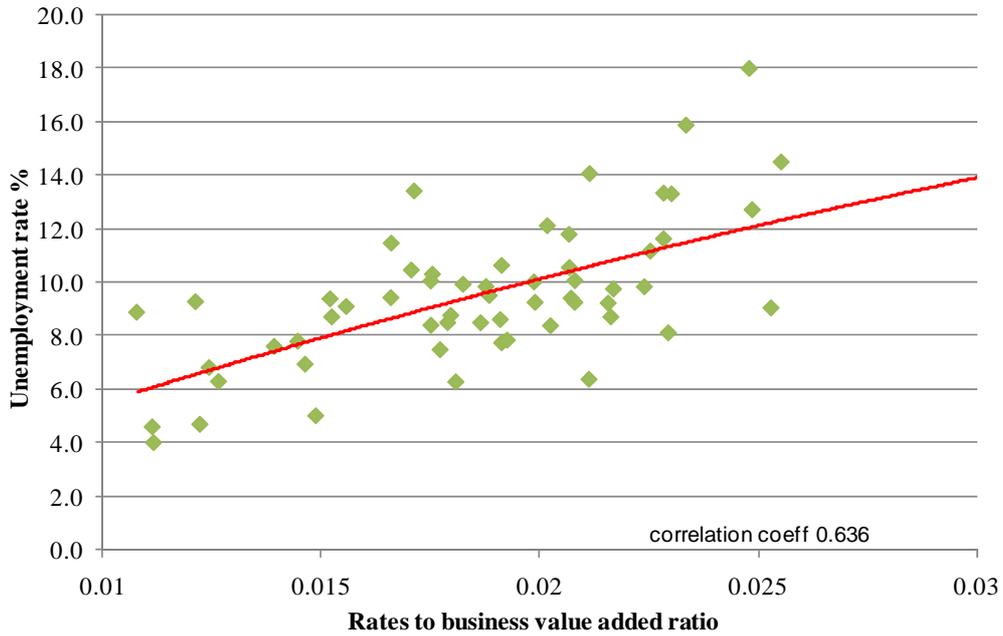
Lagging regions have poor access to quality telecommunications infrastructure, preventing efficient Internet usage and, therefore, reducing the possibilities for exporting and attracting high technology firm start-ups.

The following two figures show that in mid 2006 average download speeds available to households and firms by industry was highly positively correlated with household income per capita and negatively correlated with NIEIR unemployment rate.

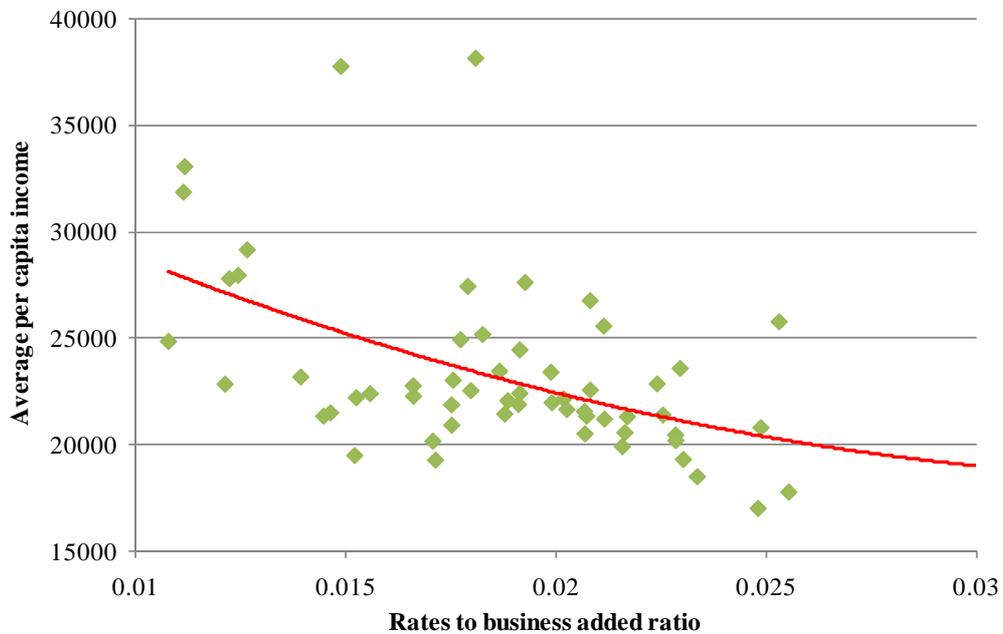
This report estimates that if download speed differentials are not equalised, the cost the lagging regions will be \$2.7 billion in 2005 prices in foregone gross regional product and 30,000 employment positions will be lost.



Rates to business value added ratio average 2001-2005 versus unemployment rate



Rates to business value added ratio average per capita income 2001-2005 versus average per capita income



Stylised Fact Eleven

High levels of debt apply generally to all regions.

Australia has one of the highest debt to income ratios in the world. High debt to income ratios apply to all regions with the highest debt ratio being concentrated in the middle and outer suburbs of the metropolitan areas and the provincial cities which currently have, or did have, a strong manufacturing base.

In any economic contraction, it will be the high debt to income regions that will disproportionately bear the cost of an adverse macroeconomic environment.

Stylised Fact Twelve

Wealth is distributed unequally across Australian cities.

Those households with the highest wealth in Australia are concentrated in central metropolitan regions with almost double the wealth of households in non-metropolitan regions.

Stylised Fact Thirteen

The costs of climate change (enhanced water security costs, loss of production and carbon prices) will fall disproportionately on non-metropolitan regions. Non-metropolitan region households will have up to double the cost of climate change, compared to metropolitan regions, with only a quarter to half the capacity of metropolitan regions, in terms of income and wealth, to absorb the additional costs of climate change.

Executive summary

E.1 Introduction

This is the 11th *State of the Regions* (SOR) and this report again adds to the accumulated knowledge of the previous SOR reports in the critical area of climate change. In Chapter 5 *Reaping two whirlwinds*, the report brings together the financial crisis and the economic implications of climate change ‘At the time of writing (October 2008) the returning whirlwinds are mere dust devils compared to what is to come’.

The Report explains the underlying factors that have created the global financial crisis and discusses the economic implications of the Federal Government’s emissions trading scheme known as the *Carbon Pollution Reduction Scheme* and the Garnaut Climate Change reports and their findings. At the local government and household level, the report considers the impact of the emissions trading scheme on households because of rising energy costs as well as highlighting a range of strategies which can be used by local government to assist their communities in adapting to climate change. The report includes Local Government case studies which showcase a selection of these council strategies. The Report also provides some insights into the ways in which Germany and the United Kingdom are responding to climate change and the policies and actions that result.

The state of Australia’s households is examined. Topics explored include household wealth and debt, the baby bounce, migration patterns and employment.

The Regional Telecommunications Independent Review Committee Report 2008, *Framework for the Future*, was tabled in the Federal Parliament on 15 October 2008. This SOR reviews what progress has been made towards creating an equitable broadband service throughout Australia as well as considering progress over the last 12 months towards more effectively enabling the knowledge economy. The distribution of patent activity is considered in this context.

An extensive appendix of regional indicators underpins the findings in the main report and forms a valuable economic analysis of the state of Australia’s regions.

The report demonstrates a troubling convergence of factors that will have an impact on regional economic development. Coming together, as they now appear to be doing, these factors in combination are likely to have a much greater impact on regional economic development than would otherwise have been the case. These factors include the following.

1. The impending costs of climate change and the further costs of greenhouse gas emissions abatement.
2. The global financial crisis.
3. The record highs in household debt.
4. The lack of progress in developing a National Broadband Network.
5. The likelihood that, in Australia, the knowledge economy has failed to spread outside of the existing knowledge-intensive regions.
6. In terms of the migration flows, the tendency for young adult Australians to avoid the knowledge-intensive regions and head north and west to resource and lifestyle regions or perhaps overseas to knowledge-intensive regions in other countries, while young adults from overseas (including overseas returned Australians) are seeking their future in the knowledge-intensive regions in Australia. These trends indicate increasing divergence between the cosmopolitan knowledge-intensive core-city regions and the relatively poorly-educated periphery.

7. The need to convert the economy to a low carbon emissions future will require a greater level of investment and a greater commitment to research and development and to innovation.
8. The resource based regions, which are vulnerable to the global downturn and to falling demand for emissions intensive commodities, and the rural regions, which are vulnerable to the impacts of climate change, are likely to experience ongoing difficulties.

Australia's regions defined

Readers of past SOR reports should note that the regions and zones have been reclassified. The reclassification is presented in Appendix 1 of this report. As with the adjustments to the original 1998 classification made in 2001, three prior judgements informed the changes – regions should end at State/Territory boundaries, they should not split local government areas and they should be contiguous areas with a reasonable likelihood of internal interaction.

For this report, regions have been defined by their relationship to the knowledge economy, reflecting the finding that this relationship is now dominant as a determinant of regional economic prospects. Each region is given a zone membership. The six revised zones are *Knowledge-intensive regions, Dispersed Metro, Independent City, Lifestyle regions, Resource Based and Rural*. Zone memberships are classified in Appendix 3 of this report. The zones are described more fully in Appendix 1.

E.2 Previous SOR reports in the context of the current economic crises

To readers of earlier SOR reports, the events of September-October 2008 would have come as no surprise. For more than a decade National Economics has argued that the continued pursuit of a so-called neoliberal policy agenda in the United States and Australia would result at best in these countries facing a lengthy period of slow economic growth. At worst, they could face depression, defined as a national fall in GDP so large (that is, at least 5 per cent) that the immediately prevailing level of GDP is not restored for at least five years (Brain 1999; page 206).

The neoliberal or extreme free market policy agenda is one where the State plays a largely passive role, with many of the key decisions that determine the direction and quality of a country's economic development and its consequences being left to the market. Since the mid 1990s this regime has dominated policy making in Australia.

In the book 'Beyond Meltdown' (Brain 1999), National Economics correctly predicted the 2001 downturn in the world economy, and expected that recovery would occur to 2006, although it would be "unsatisfactory". That is, for Australia and the United States at least it would be achieved by over reliance on credit growth, which would lead to a post 2006 meltdown. This has occurred for the United States and, as this SOR argues, could still occur in Australia. Meltdown is a word used in this Report to mean an economic crisis, including a falling exchange rate and problems in the banking sector that leads to severe recession or depression.

To avoid this outcome '*Beyond Meltdown*' and previous SORs have strongly argued that the only solution was to broaden government control of the economy away from narrow reliance on interest rate policy to involve the use of all policy instruments available to governments (tax rates, public expenditures, exchange rates, industry policy, mandated fund flows – superannuation – fund allocation policy, financial regulations, infrastructure investments etc.) to pursue explicit objectives in terms of export growth, import replacement, the household savings ratio, industry profitability, infrastructure investment levels, high technology start-ups, knowledge economy infrastructure, regional development, convergence of productivity and income between Australian regions etc.

Sadly, the messages of past SORs have been largely ignored and the consequences must now be faced. The solution lies in implementing the policy agenda expressed in previous SORs. The core change in national policy is that Australia's government must become more like the successful countries, previously called the Corporatist States or State Capitalist economies of North Asia and Continental Europe. To successfully navigate the very dangerous currents that are now running, like the State Capitalist economies Australia will have to adopt a policy approach where strategic objectives are explicitly defined in terms of social, security, export, output, cost, investment, etc. targets with the means (that is, the application of policy instruments) then designed to mobilise whatever resources are required to achieve the objectives.

In this context climate change along with the arms race in the Asia Pacific region and the aging of the population will all have to be incorporated within a policy framework designed to ensure Australian economic and environmental survival as well as maintain national security.

E3 Climate change

In the year since the last SOR report, the scientific consensus on climate change has converged towards a much more stringent global target for greenhouse gas emissions. Not only is climate change now expected to be more rapid than previously thought (with a particular risk of increases in sea level) but the atmospheric concentration of greenhouse gases at which dangerous climate change is expected has been revised downwards. Indeed, the consensus is homing in on a global atmospheric CO₂ target of 350 parts per million (ppm) or less. This is less than the current concentration, which has risen from around 250 ppm since mankind began the large-scale burning of fossil fuels in the industrial revolution.

Amidst global alarm, negotiations are taking place on national targets for greenhouse gas emission abatement. As a rich country with high per capita emissions, Australia must expect a stringent target, requiring a rapid and substantial reduction in emissions. At worst the Australian requirement will be a common world per capita standard and at best something like 80 per cent below current levels by 2050. As the IPCC projections of the consequences of global warming become more dire over the next decade, the consequences of opting out will simply be a trade and financial embargo. This response will have to take place at the same time as Australia steers its way through the financial crisis.

E4 Financial crisis

The factors which precipitated financial crisis in the United States included the following.

1. Vigorous development of unregulated financial intermediaries which supposedly managed risk, but in fact hid it.
2. A large government deficit, financed by overseas borrowing.
3. A high level of household borrowing, leading to over-indebtedness.
4. A land boom, resulting in unaffordable.
5. A large balance of payments deficit.

Australia has avoided the first two of these problems, but has experienced numbers 4 and 5, and its only difference from the United States as regards household indebtedness is that over-indebtedness is less concentrated in the low income groups. A resulting difference is that, whereas the United States balance of payments deficit has largely been financed by government borrowing, in Australia much of the borrowing has been done by the banks. Australia's over-indebted households, and its over-priced land, have been emphasised in past SOR reports.

In view of these resemblances, both overseas and domestic investors have switched from over-optimism to pessimism on Australian economic prospects. Pessimism is a dangerous thing in economics. It tends to be self-fulfilling, in that a sudden carefulness brings reduced expenditures, which mean reduced incomes, and before long the economy is spiralling into recession.

The fact of the matter is that the majority of Australia's gross international debt is held by the banking system and if the increase in these holdings is allowed to continue at the same rate as over the past decade, then eventually a point will be reached where a catalyst (e.g. international recognition of Australia's CO₂ exposure, or growing difficulty of the banking system to roll over the debt), will trigger an exchange rate-banking system-economic meltdown as per Iceland in October 2008.

What can be done?

We can now see that Australia faces a crisis in economic policy of some magnitude. The list of policy instruments with potential application to Australia's current predicament includes the following.

- Monetary policy: not just the manipulation of short-term interest rates, but quantitative controls over financial system lending. This will involve not only controls over banks, but over the whole financial system, including non-bank financial intermediaries.
- Fiscal policy: government expenditures (service provision, social security, infrastructure), taxation, government borrowing – including, importantly, government borrowing overseas.
- Trade policy, including the fostering of exports and import-competing industries (which will make demands on monetary and fiscal policy), and regulation of the market for foreign exchange.
- Wages policy – in conjunction with trade policy and fiscal policy (both social security and taxation).
- Savings policy, particularly as applied to households, whose low savings rate is an important component of the present crisis. This will involve aspects of monetary policy (interest rates, availability of credit); fiscal policy (tax and social security treatments) and wages policy.

We have already argued that emissions abatement must be part of the response to the current financial crisis, if only because it is a pressing need. Two more pressing reasons must now be mentioned.

- Australia currently has very high emissions per capita. If we are to convince our creditors that we are a nation worthy of their continuing investment, a credible plan to reduce emissions must be part of our response to the crisis. If not, they will leave us to respond by ourselves, which would mean an immediate switch from the current balance of payments deficit to a surplus – a turnaround guaranteed to cause financial meltdown.
- More positively, emissions abatement gives Australia an opportunity to invest in growth industries. Australia was notable for its absence from the burst of information technology investment which occurred in the last few decades of the twentieth century, and as a result is an importer of a wide range of high-value manufactured goods. The world is about to see a burst of emissions-abatement technologies, and it is not too late to get in at the beginning – though doing so will involve much more sophisticated industry policy than Australia has managed over the past few decades.

The second point reflects a fundamental judgement that Australia's problems are due to failure to keep itself technologically up to date. Since a major driver of economic prosperity is up to date technology, Australia should not be surprised to find itself falling behind. This fundamental failing was, however, hidden over the past couple of decades by a flood of credit, which enabled households to increase their standards of living even though incomes were constrained by outdated technologies.

The importance of saving

The diagnosis that Australia is in trouble because of excess debt – chiefly household debt and overseas debt – directs attention to the process by which debt is created. If it is a policy aim to reduce indebtedness, then savings have to increase. Either income has to go up or, if this cannot be arranged, consumption has to fall.

If we assume that, in present circumstances, income increases are an unlikely source of savings to reduce household indebtedness, the available source is a cut in consumption. NIEIR estimates that a cut of around 8 per cent from 2007-08 income levels would be required for Australian households to stabilise and begin to reduce their debt. The initial distribution of consumption reductions to increase savings is likely to be by indebted households, who will be required to keep up their interest payments and capital repayments without taking on any more new debt. The report includes a map of the incidence of such households, which will be familiar to readers of previous reports which have identified regions at risk from high household debt. However, as more general measures to increase the savings rate take effect, reductions in consumption will spread across all regions.

Reductions in consumption spending result in reductions in retail sales and hence in employment. If employment is to be maintained, the resources thus released have to be absorbed into other activities, hence the importance of investment in improving Australia's trade competitiveness and also investment in greenhouse gas emissions abatement. Much of this investment will be private, but governments will have a role in ensuring that funds are available and also in providing required infrastructure.

E.5 The macroeconomics of climate change

A companion study to this SOR report commissioned by the Brotherhood of St Laurence (2008) will be available in December. The Brotherhood of St Laurence report quantifies the difficulties Australia will have in maintaining economic stability and the economic cost of climate abatement policies. While the study does not disagree with Treasury's analysis of the costs of CO₂ abatement policies, this is only on the basis that the optimal approach to climate change policy will be taken and the appropriate macroeconomic response implemented. If this is not done, then in the context of the current vulnerability of the Australian economy, the cost of CO₂ abatement policies will be considerable.

In order to minimise the macroeconomic cost of CO₂ abatement policies, as this SOR makes clear, CO₂ permit pricing will be but one of many instruments that will have to be employed. These instruments will include regulation of the type of equipment available to Australian consumers, mandating of the electricity plant supply merit order, building energy efficiency retrofit strategies, investment allowances for industry to facilitate adoption, and a specific role for local government, etc.

This report rejects the Treasury's modelling conclusion that the pricing of emissions is a necessary and sufficient condition for efficient CO₂ abatement. At any given CO₂ price the efficient adjustment of the economy will require almost total reliance on complementary measures.

This report points out that the Treasury conclusion in regard to the efficiency of CO₂ pricing is based on the use of a model that uses implausible assumptions that guarantees the conclusion. Specifically, the Treasury modelling assumes:

- (i) aggregate investment decisions are made at the macro level independent of the conditions prevailing in any given industry;
- (ii) economies of scale and scope and market growth expectations are not relevant in either the industry investment decision or industry energy efficiency outcomes; and
- (iii) lower capital intensity technology selection can be made without affecting Australia's competitiveness or energy efficiency.

What in fact Treasury is assuming is that there are no economies of scale at the plant level. This ignores the fact that plants ten times the size of the current Australian plant can be built in China, at considerable gain in energy intensity and price efficiency.

Finally, the Treasury analysis assumes investors are stupid and take only current prices and costs in evaluating investment returns over the 20 to 50 year life of units.

In this context it is appropriate to dismiss the Treasury analysis as designed to produce conclusions which argue against a whole of government approach to climate change. Not only is Treasury wedded to outdated neoliberal ideology but it stands accused of supporting policies which hinder the adoption of all-of-government (including local government) approaches – perhaps because these threaten its status.

The present report does not oppose emissions trading – though as against auctioning it argues in favour of sale of permits at a fixed price, initially perhaps lower than market expectations (say \$20 a tonne of CO₂) but rising fairly promptly to the region of \$40 a tonne. However, the important point is that emissions trading has to be supplemented by a wide variety of complementary measures, as well as compensatory measures for those households and regions most adversely affected. An activist approach is even more essential in the present climate of financial crisis, where Australia will be sore pressed to maintain full employment without debt use of the complete range of policy instruments listed in Section E4.

E.6 The state of Australian households

Employment and unemployment

Table E.1 Macro indicators unemployment, employment growth, real household disposable income (per cent)					
Zone	NIEIR unemployment rate (%)			Employment growth (% p.a.)	Real household disposable income (% p.a.)
	2006	2007	2008	2006-2008	2006-2008
Knowledge-intensive	5.4	5.0	4.6	2.9	6.5
Lifestyle	11.6	10.9	10.0	3.4	5.4
Dispersed Metro	7.1	6.8	6.5	2.5	4.4
Independent Cities	9.3	8.9	8.2	3.0	3.7
Resource Based	9.0	8.5	9.0	2.4	-2.4
Rural	9.1	8.6	8.7	2.2	2.0
National	7.5	7.0	6.7	2.7	4.5

- ❑ The NIEIR unemployment rate, derived from welfare service data, continues to show higher unemployment rates than the headline unemployment figures because its rate includes individuals on a range of allowances not included in the headline rate. Over the past year the largest reductions in the NIEIR unemployment rate occurred in the Lifestyle and Independent City zones, while NIEIR unemployment rate was starting to move up in the Resource based and Rural zones.
- ❑ All zones have experienced growth in the size of the workforce, with a significant increase in the annual growth of the workforce in the Resource-Based Zone since 2006.
- ❑ Between 2006 and 2008 the rate of workforce growth was remarkably similar between the Zones, but there were divergences in the rate of growth of population of workforce age. The implication is that the workforce participation rate has changed, falling in the Knowledge-intensive Zone and rising elsewhere, particularly in the Lifestyle, Independent City and Rural zones. This reverses the pattern observed from 2000 to 2006, and therefore might be interpreted as cyclical.
- ❑ The employment results for all zones for the period 2006-2008 were quite strong, but the outlook, is unfortunately, not nearly so rosy.
- ❑ Employment growth has tended to mirror workforce growth. Reflecting the resource boom, employment grew strongly in the Resource Based Zone. Growth in employment in the Lifestyle Zone (construction, services, cafes etc) continued to perform well. Independent Cities and the Knowledge-intensive Zone also performed well – the problem in the latter being that quite rapid employment growth fell well behind very rapid growth in working-age population. A possible explanation would be that student numbers grew.
- ❑ Trends in wages and salaries are closely tied to those in employment, the difference lying in changes in average earnings per employee. Average earnings per employee increased more rapidly than the national average in the Knowledge- Intensive, Resource Based and Lifestyle Zones. The rate of growth in wages and salaries decreased when compared to the previous period of 2003-2006 for all Zones except for the Resource Based Zones. In the Independent Cities and Rural Zones average earnings per employee followed national trends.

Migration and population

ABS data shows that, for 2007, women aged 30-34 years had the highest fertility rates for all age groups with 126.6 babies per 1,000 women and that fertility in women aged 35-39 was the highest since 1950 with 68.1 babies per 1,000 women. The number of babies born in Australia in 2007 was actually 19,300 more than in 2006, representing the highest actual number of births ever registered in Australia. The population, however, also increased over this period, boosted by in-migration, so the baby bounce, as a percentage of population, remains similar to the previous year. In-migration is still an important factor in maintaining Australia's working age population.

Within Australia, during the period 2001-06 established migration patterns continued. Retirement migration continued, with the most-favoured destinations along the Queensland coast north of Brisbane. Similarly working-age migration continued to the job-rich resource regions and to the metropolitan outer suburbs.

The most intriguing pattern was the tendency for young adult Australians to avoid the knowledge-intensive regions and head north and west to resource and lifestyle regions, while young adults who were overseas five years ago are seeking their future in the knowledge-intensive regions. These trends indicate increasing divergence between the cosmopolitan knowledge-intensive core city regions and the relatively poorly-educated periphery.

Table E.2 Actual and projected population growth (per cent per annum)				
Zone	Annual growth 1997-2002	Annual growth 2002-2007	Annual growth 2008-2010	
Knowledge	1.2	1.5	2.1	
Lifestyle	1.8	1.8	1.2	
Dispersed	1.4	1.4	1.6	
Independent	1.1	1.2	1.1	
Resource	0.3	0.7	1.4	
Rural	0.7	0.9	0.9	
National	1.2	1.4	1.5	

Household debt and wealth

- ❑ Dispersed Metro Zones still have the highest household liabilities in terms of dollars per household although the annual rates of growth of debt accumulation are now lower than in the Knowledge-intensive and Lifestyle Zones.
- ❑ The Dispersed Metro Zone was early to take off in the land boom, and now has limited capacity to absorb further debt.
- ❑ Households in the Knowledge-intensive Zone have accumulated debt at a faster rate than in other regions reflecting high property values, the higher salaries of knowledge workers and a greater capacity to borrow.
- ❑ The average value of financial assets per household is the highest in the Knowledge-intensive Zone.
- ❑ Lifestyle regions had the highest annual growth rate in the value of financial assets of any zone but this is from the lowest base of all zones.
- ❑ The value of financial assets in Resource Based regions has grown the slowest.
- ❑ The Rural Zone has the second highest level of financial assets per household. This is mainly a reflection of larger land holdings and the success of some regional centres. When debt is taken into account (see Table E3) the Rural Zone slips further down the ranking.
- ❑ When the SOR zones are compared, the annual growth in the value of household assets in the Lifestyle Zone (9.4 per cent) is not far below the growth in household liabilities (10.3 per cent). The gap is much greater in the Knowledge-intensive Zone, with the value of household assets increasing by an average of 7.4 per cent per annum, well below liabilities which have been increasing by 13.1 per cent per annum.
- ❑ Nationally, the household debt to gross income ratio continued to increase. Some of the largest increases occurred in previously low-debt regions, reflecting lenders' strategies to target these regions for more loans.
- ❑ Although there has been some convergence, the distribution of household wealth continues to be unequal with large differentials in household wealth across regions. What stands out is not only the general increase in household wealth but that many regions have seen a doubling, since 2001, in their debt service ratio and household debt to gross income ratio, placing increasing stress onto household finances.

Table E.3 Debt and wealth in Australian regions				
Zone	Household debt to income ratio		Wealth per household	
	2008	Percentage change 2001-2008	2008 (\$'000)	Percentage change 2001-2008
Knowledge-intensive	1.4	79.3	689.2	22.8
Lifestyle Regions	1.7	53.7	353.2	26.4
Dispersed Metro	1.7	44.5	454.4	17.9
Independent Cities	1.5	43.3	397.6	24.9
Resource Based	1.3	32.7	435.3	19.5
Rural	1.4	29.7	429.7	30.5
National	1.5	50.9	501.2	22.0

E.7 Climate change: the potential role of councils

The only role that Garnaut explicitly recommends for local government is, significantly, not concerned with emissions abatement, but with the amelioration of the effects of climate change. The role he envisages for local government is that of preventing urban development in coastal areas at risk of damage from storm surges, and constructing defensive works. However, complementary measures are required if the financial incentives generated by emissions trading are to be effective. This means that there is a great deal that local government can contribute to a national program of emissions abatement. The opportunities include the following.

- ❑ Opportunities for low emissions electricity generation are often site-specific. Governments can improve the economics of generation at these sites by ensuring that they are well-connected to the bulk transmission grid, arranging for new construction if necessary. Local government can assist with site acquisition and is well-practised in adjudicating land use conflicts.
- ❑ Carbon sequestration and storage depends on piping the captured CO₂ to sequestration sites. Garnaut argues that governments should assist with the planning and construction of these pipelines.
- ❑ Emissions reductions in transport depend on infrastructure availability. Local government is obviously at the centre of local transport policy.
- ❑ The design of new urban settlements, and the retrofitting of old ones, can affect both their vulnerability to future climate change and the opportunities of residents to reduce their emissions. Once again, local government is central.

The local government case studies highlight the following opportunities.

- ❑ Adaptation strategies are an increasingly important mechanism for managing future climate change impacts, and for local government, adaptation strategies require that buildings and land planning are regulated to the highest possible environmental protection standards. Councils have the capacity to pressure state governments to ensure the best possible regulatory framework which should be to world best practice standards.
- ❑ Close attention to building regulations and building efficiency regulations can bring big benefits in reducing carbon emissions. The most advanced building codes include all the aspects of a buildings energy use including lighting, installed equipment and appliances as well as renewable energy options.

- ❑ Mitigation strategies are an important component of local government action in the face of climate change and require councils to engage the community. The opportunities for carbon offsets and conservation and environment remediation need to be understood by the community.
- ❑ Local government requires a strong framework of environmental protection policy and regulation from State and Federal Governments. Local government cannot go it alone and needs a level playing field that encourages joint actions and effective and realistic funding arrangements.
- ❑ That best practice in imposing environmental protection regimes will provide opportunity for Australian businesses in both domestic and export markets. There will be a global shift of jobs to green industries as new market opportunities open up. First mover advantage and technological knowhow will be important drivers.
- ❑ There is a need to act now to avoid greater costs of remediation in the future.

E.8 Patents and knowledge intensity

Patent applications were one of the indicators taken into account in defining knowledge-intensive regions, and it is not surprising to find that these regions as a whole have very much higher patent application activity than the rest. At the opposite extreme, the resource based regions have low patent application rates. The need for advanced technology to exploit the resource base should make for high patent application rates, but the lack of research facilities and talent in the resource regions means that their research and development is carried out elsewhere.

The lack of progress in developing a National Broadband Network has slowed the rate of diffusion of the knowledge economy which has largely failed to spread outside of the existing knowledge-intensive regions. The finding that there is now a tendency for young adult Australians to avoid the knowledge-intensive regions and head north and west to resource and lifestyle regions or perhaps to knowledge-intensive regions in other countries suggests that a policy framework, including all levels of government, to strengthen the knowledge economy has become a matter of urgency.

As broadband services in Australia improve and become more equitable in terms of their distribution because of improved telecommunications infrastructure, opportunities to create new products and services, that use the Internet as their delivery channel, will increase. This is not to say that these businesses will be in the ICT sector, but instead to suggest that they will use ICT to facilitate global supply chain activity and the delivery of goods and services to the end user. Perhaps the global financial crisis will create a level playing field in terms of providing more regions opportunity to invest in and develop knowledge economy businesses. There will need to be an associated effort from the investment community as well as a strengthening of Australia's knowledge-intensive regions.

E.9 Telecommunications update

The Regional Telecommunications Independent Review Committee Report 2008, *Framework for the Future*, was tabled in the Federal Parliament on 15 October 2008. An extract from the report states:

'The importance of regional Australia and its industries to our overall national wellbeing underscores the importance of adequate telecommunications services to regional, rural and remote parts of Australia. Increasingly telecommunications services are not only an end in themselves for achievement of equity, but also critical enablers in equitable availability of other services. We therefore support a policy and regulatory environment that promotes competition, innovation and investment in telecommunications for regional areas, supported by effective measures to protect consumers. The ultimate aim of any such approach is to establish fairness and equity for all Australians'.

SOR asks the questions, what progress has been made towards creating equitable broadband service delivery across the nation and has there been progress towards more effectively enabling the knowledge economy since the 2007 SOR?

The answers are complex but can be summarised. There has been some improvement in broadband speeds although these improvements have been patchy. The wait for the National Broadband network continues for yet another year and although telecommunication costs are reducing, these reductions have not been enough to really stimulate a new telecommunications knowledge economy of products and services that are in general use. Progress towards achieving Telstra's suggested reduction of emissions through the use of telecommunications also appears to be slow. The multiplicity of delivery systems/channels and great variations in speed across channel types and regional variations in speeds and access make accurate estimates of the costs of lost opportunities in ICT extremely difficult.

Last year's SOR identified \$3.2 billion and 33,000 jobs lost to Australian businesses in 12 months due to inadequate broadband infrastructure and the possibility of an estimated \$40 to \$50 billion in savings from e-health/e-medicine and smart networks over 10 years. There were also lost opportunities to reduce greenhouse emissions because of the failure to implement knowledge economy advances to health related transport and failure to introduce smart grids to reduce energy consumption. There is no reason to assume any improvement in these numbers for 2008.

Australia now has a new generation mobile network with the opportunity for upgrades in technologies. Australia also has a business community and households that are keen to benefit from opportunities provided by improved telecommunications across the Nation. To what extent the rapid uptake of wireless and mobile broadband in Australia is a symptom of the lack of a high speed national broadband fibre network is a matter of speculation. The issue is that wireless broadband services in Australia are still relatively expensive and the cost of these services could constrain the development of businesses delivering services via broadband.

What continues to be extremely frustrating is that demand for improved telecommunications is manifest, while the underlying outcome of many years of misplaced telecommunications policy has led to the stalling of investment in high speed broadband telecommunications infrastructure. Today, the weakness of the Australian dollar combined with the impact of the global financial crisis will bring upward pressure on the costs of building the national broadband network. The outcome of the Federal Governments Request for Proposal (RFP) documentation in relation to the National Broadband Network will no doubt lay bare the years of misconceived telecommunications policy.

E.10 Construction

The analysis in Chapter 1 shows that construction expenditure for 2009 is forecast to decline to close to the average annual real construction expenditure levels of the period 1998-2002, representing a significant slowing across the total construction sector from the highs of 2007-2008.

It should be noted that although the projections for construction activity were prepared on the basis of the latest official data, it is likely that the current financial crisis will result in a significant cancellation or postponement of projects that have approval, but not yet commenced production, as well as the termination of work on projects currently under construction as finance supply ceases. That is, the construction decline at the national level is likely to be significantly greater than forecast.

E.11 The regional impact of CO₂ abatement policies

The report examines the impact of household focused CO₂ abatement strategies, including equipment replacement, household retrofit, fuel substitution etc. It will be possible to reduce household non-transport CO₂ emissions by 25 per cent by these measures. However, as the Report makes clear, it will take a high carbon price to force the savings. Complementary measures will be critical for success.

At the industry level a \$50 a tonne carbon price will result in additional costs (taking into account the direct and indirect, or multiplier feed through of CO₂ pricing) of around \$8,000 per employed person for resource regions, \$4,000 for industrial regions and \$2,000 or less for commercial or knowledge intensive region.

E.12 Benchmarking Australian and Chinese regions

Next year's SOR will also include a section that compares and analyses the competitiveness of Australia's regions and will provide an opportunity to assess how regions in China and Australia are creating economic advantage and increased competitiveness.

Reference

P.J. Brain (1999), *Beyond Meltdown: The Global Battle for Sustained Growth*, Melbourne, Scribe.

PART ONE

THE REGIONAL ECONOMIES

1. The state of Australia's households

1.1 Introduction

The first *State of the Regions* (SOR) report was published in 1998 and indentified the negative impact of household debt saturation. The first chapter in the 2007 report focussed on the growth of household debt. This year's SOR report also highlights the impact of this debt burden on households at a time of turmoil in global financial markets and increasing costs of climate change (Chapter 9). Chapter 1 also summarises a selection of zone indicators covering household debt, the value of household assets and a range of other household indicators as well as documenting recent births and the construction industry.

Readers of past SOR reports should note that the regions and zones have been reclassified; the detail of the reclassification is presented in Appendix 1 of this report. In brief, before the 2008 reclassification of regions, adjustments were made to the original 1998 classification (which divided Australia into 58 regions) in 2001. The 2001 changes increased the number of regions to 64, as well as making a number of boundary changes. Two prior judgements informed the changes – regions should end at State/Territory boundaries, they should not split local government areas and they should be contiguous areas with a reasonable likelihood of internal interaction. These principles remain as foundations for the present classification, and mean that many of the 2001 regions remain unchanged. However, the number of regions in this report has increased to 65.

For this report, regions have been defined by their relationship to the knowledge economy, reflecting the finding that this relationship is now dominant as a determinant of regional economic prospects. Each region is given a zone membership. The six revised zones are *Knowledge-intensive regions*, *Dispersed Metro*, *Independent City*, *Lifestyle regions*, *Resource Based* and *Rural*. Zone memberships are classified in Appendix 3 of this report. The zones are described more fully in Appendix 1.

1.2 Debt and wealth

Previous SOR reports have highlighted the link between financial deregulation and increasing levels of household debt. A link between household borrowing and the purchase of properties was also indentified. As the land boom fades into memory and property prices fall, the wisdom of creating a financial system that allowed, even encouraged, household debt to increase at an average of 9.4 per annum nationally since 2001 must be questioned. This is particularly so considering the value of average household financial assets has increased by 6.7 per cent per annum (and house prices are now falling), demonstrating that household wealth accumulation has not kept pace with debt accumulation. What this means to the economy more broadly is that, in the coming months, Australian households will have limited capacity to spend on goods and services – debt service must come first. This comes at a time when the financial crisis is having an impact on the value of household assets and on the capacity to borrow, and as the costs of climate change on households are becoming evident.

1.2.1 Estimating regional indebtedness

Though the burden of household debt at the regional level could be measured using various indicators, for present purposes we choose a simple indicator which is extensively used by lenders in the assessment of credit-worthiness, namely the ratio of debt-servicing costs to annual household disposable income. In other words, we answer the question: how many years of income would be required to extinguish the debt, if all income after tax and compulsory superannuation deductions was spent on debt reduction? In a sense this is a rather extreme measure, since very few people are in a

position to devote their whole incomes to debt reduction, but it gives a good indication of the burden of debt servicing in relation to income.

Data on household indebtedness is not collected at the regional level, and the incidence of debt must therefore be estimated. The National Economics estimates presented in this report derive fundamentally from Census 2006 data supplemented by tax data. Our estimates rely on correlations between variables available from these regional sources and the (unobserved) debt-service ratio, which is constructed by estimating average debt per household and dividing this by an estimate of average disposable income per household. This basic methodology is unchanged from last year's SOR report.

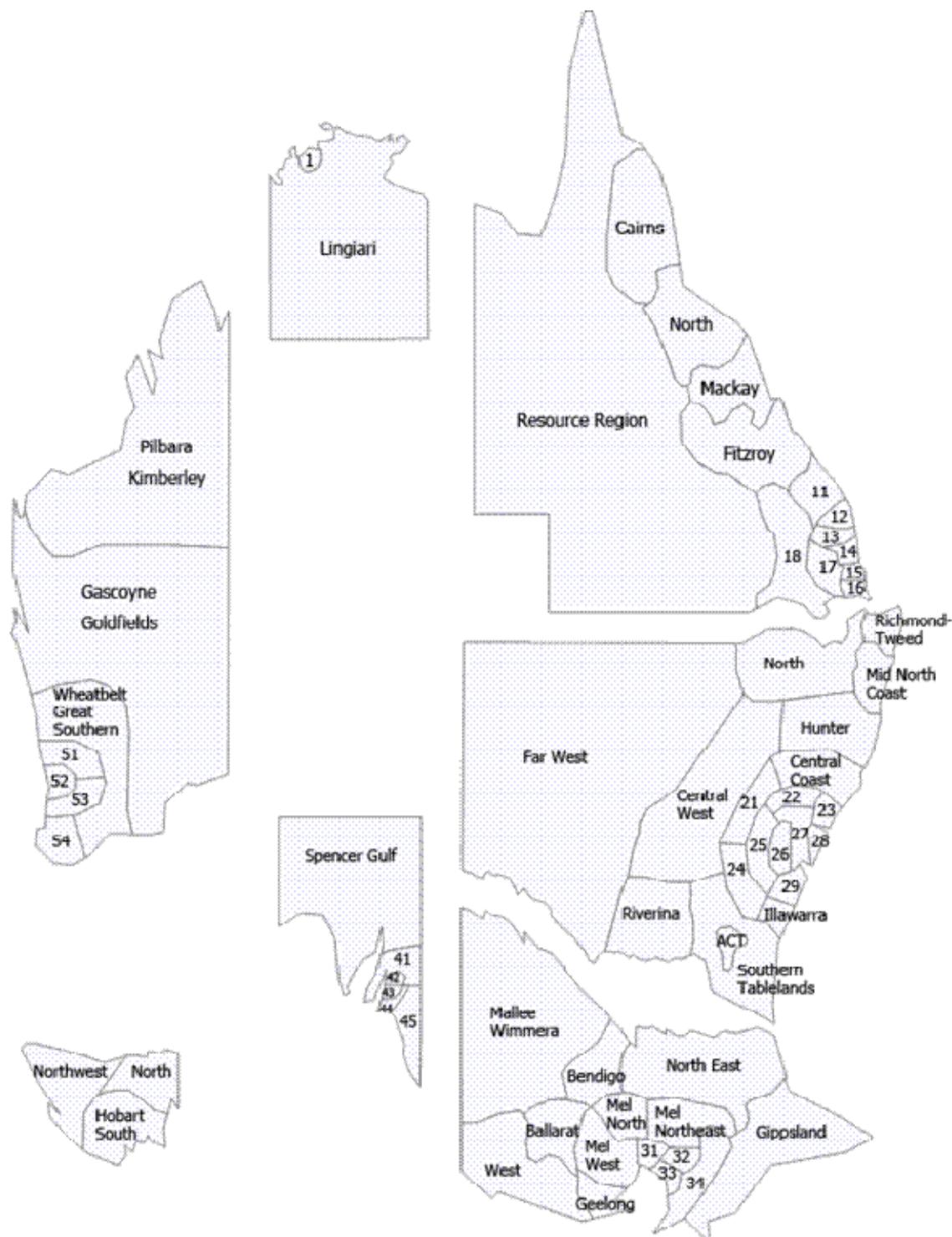
The correlations used to estimate average household debt have been derived from the ABS Household Expenditure Survey, which includes measures of household disposable income, household debt and a complete range of census variables. The correlation coefficients are given in Table 1.1, along with a rough estimate of the contribution of each driver to the final estimate of average household debt. The following will be noted.

- ❑ The coefficients for the constant and for the age of household heads are all high and significant, but in practice largely cancel out and contribute little to the final estimate. (The constant is the same for every region by definition, and the estimates for age of heads vary little due to these ages being similar in all regions).
- ❑ By far the largest contribution to the estimate of indebtedness comes, as one would expect, from the average mortgage per household, as reported in the Census. Note that this is not the average mortgage per mortgagee, but the average across all households in each region.
- ❑ The next most significant contribution comes from household disposable income, higher income regions being prone to borrow more. (In terms of our final indicator, this effect tends to cancel out when we divide by household disposable income to calculate the debt-service ratio.)
- ❑ Regions with high proportions of resident landlords tend to borrow more heavily, reflecting borrowing to finance investment housing. The dwellings financed by such borrowing are not necessarily in the same region.
- ❑ Other significant relationships are that regions where households have large numbers of young children borrow more, those with high employment ratios also borrow more, borrowing tends to be higher where rents and house prices are higher, and also tends to be higher in areas with high proportions of flats. (This last relationship is probably a corrective, allowing for borrowing by renters, who by definition do not have mortgages). Other things being equal, borrowing tends to be less in regions where households are larger.

The denominator of the debt service ratio, household disposable income, has been estimated from Census income data, with deductions for income taxes and superannuation from tax data. As for debt levels, Census income has been adjusted upwards to National Accounts concepts. This involves both adjusting for under-statement in the Census returns and inclusion of items not covered by the Census question, such as the imputed rent (less depreciation) of owner-occupied housing and the return on superannuation assets.

A reasonably accurate all-Australia estimate of the debt service ratio is available from the National Accounts, and this has been used to benchmark the present estimates.

Key map of regional locations



- | | | | |
|-----------------------|------------------------------|---------------------------|------------------------|
| 1 - Darwin | 21 - Sydney Outer West | 31 - Mel Central | 51 - Perth Outer North |
| 11 - Wide Bay Burnett | 22 - Sydney Outer North | 32 - Mel East | 52 - Perth Central |
| 12 - Sunshine Coast | 23 - Sydney Northern Beaches | 33 - Mel Mid South East | 53 - Perth Outer South |
| 13 - Moreton Bay | 24 - Sydney Outer Southwest | 34 - Mel Outer South East | 54 - Peel South West |
| 14 - Brisbane City | 25 - Parramatta - Bankstown | | |
| 15 - Brisbane South | 26 - Sydney Old West | 11 - Mid North Riverland | |
| 16 - Gold Coast | 27 - Sydney Central | 42 - Adelaide North | |
| 17 - West Moreton | 28 - Sydney Eastern Beaches | 43 - Adelaide Inner | |
| 19 - Darling Downs | 29 - Sydney South | 44 - Adelaide South | |
| | | 45 - Mallee South East | |

Table 1.1 Drivers of regional household debt

Variable	Coefficient	Typical contribution (%)
Constant	-27350	0
Average mortgage per household	0.992	55
Average persons per household	-1032	3
Average age of household heads <65	1576	0
Ditto, squared	-19	0
Average age of household heads >64	258	0
Av. no. of children aged <15 per household	2733	3
Av. no. of dependents 15-24 per household	-3633	1
Average number employed per household	1456	2
Average household disposable income	11.1	14
Ditto, squared	.0021	3
Average business income per household	-7.4	0
Average pension income per household	-13.4	0
Average interest income per household	-12.6	0
Proportion of farm households	-4792	0
Average rent per household	28.5	2
Average landlord income per household	52320	9
Value of owner-occupied housing per household	.0468	7
Proportion of stand-alone dwellings	-2117	1

Source: National Economics estimates from the Household Expenditure Survey.

1.2.2 Trends in household indebtedness

Dispersed Metro Zones still have the highest household liabilities in terms of dollars per household although the annual rates of growth of debt accumulation are now lower than in the Knowledge-intensive and Lifestyle Zones. The Dispersed Metro Zone was early to take off in the land boom, and now has limited capacity to absorb further debt. The Dispersed Metro Zone includes Melbourne West, Melbourne North, SEQ Brisbane South and Sydney Outer West. In a number of Dispersed Metro regions local manufacturing employment has been replaced by residents commuting to the metro core, allowing households to link to the knowledge economy. The Dispersed Metro Zone contains a mix of older established suburbs and newer outer developments. Financial deregulation and the associated encouragement from banks may have meant that households in the more established parts of the Dispersed Metro Zone refinanced their properties while the mortgages on the urban fringe of this zone are mostly newer.

Households in the Knowledge-intensive Zone are accumulating debt at a faster rate than in other regions reflecting high property values and the higher salaries of knowledge workers.

Of note is the continuing and relatively high level in the growth of debt in Lifestyle regions. Levels of household debt continued to increase in inner and the more fashionable metropolitan regions with the average value of household liabilities in Sydney Central increasing from \$67,000 in 2001 to \$205,000 in 2008 with a debt service ratio of 22 per cent. For Sydney Northern Beaches average household liabilities rose from \$69,000 in 2001 to \$235,000 in 2008 with a debt service ratio of 20 per cent, rising from just 8 per cent in 2001. In the other Sydney regions debt service ratios are high with Sydney Old West at 27 per cent and Sydney Outer South West at 31 per cent in 2008.

Similar rises in debt levels occurred for Central Melbourne, where average household liabilities rose from \$47,000 in 2001 to \$162,000 in 2008. In SEQ Brisbane City average household liabilities rose from \$55,000 in 2001 to \$152,000 in 2008 while in Darwin average household liabilities rose from \$60,000 in 2001 to \$140,000 in 2008. Canberra household liabilities rose from \$77,000 in 2001 to \$158,000 in 2008, generating a relatively low debt service ratio of 17 per cent.

Table 1.2 Value of household liabilities (\$'000)			
	2001	2008	Annual growth 2001-2008 (%)
Knowledge-intensive	67.7	160.4	13.1
Lifestyle	62.6	124.7	10.3
Dispersed Metro	92.8	164.9	8.6
Independent Cities	72.9	129.2	8.5
Resource Based	83.4	111.7	4.3
Rural	78.9	119.7	6.1
National	78.9	148.3	9.4

1.2.3 Trends in household wealth

Comparing households' financial liabilities with their level of financial assets shows yet again that indebtedness grew more rapidly (9.4 per cent) than the value of financial assets (6.7 per cent). These figures are taken from before the period that the global financial crisis began to make its mark on the value of household financial assets and the situation can now be assumed to be worse than stated here.

The average value of financial assets per household is the highest in the Knowledge-intensive Zone. Lifestyle regions have the highest annual growth rate in the value of financial assets of any zone but this is from the lowest base of all zones and probably reflects the in-migration of retirees who bring with them the asset wealth which they had accumulated in metro regions during their working lives. The value of financial assets in Resource Based regions has grown the slowest, probably reflecting that the fly in, fly out, workforce is resident elsewhere. The Rural Zone has the second highest level of financial assets per household. This is mainly a reflection of larger land holdings and the success of some regional centres.

When the zones are compared, the annual growth in the value of household assets in the Lifestyle Zone (9.4 per cent) is not far below the growth in household liabilities (10.3 per cent). The gap is much greater in the Knowledge-intensive Zone, with the value of household assets increasing by an average of 7.4 per cent per annum, well below liabilities which have been increasing by 13.1 per cent per annum.

Table 1.3 Value of financial assets per household (\$'000)			
	2001	2008	Annual growth 2001-2008 (%)
Knowledge-intensive	217.7	359.1	7.4
Lifestyle	111.1	208.9	9.4
Dispersed Metro	137.8	218.8	6.8
Independent Cities	152.9	242.2	6.8
Resource Based	260.1	312.9	2.7
Rural	216.2	318.8	5.7
National	175.2	276.6	6.7

From the Household Wealth map the wealthiest households are in Sydney Central and Sydney Eastern Beaches where wealth per household rose from \$1,129,000 to \$1,381,000 (2005/6 prices). High average household wealth is also reported in Sydney Northern Beaches, Sydney Outer North, Sydney South, Melbourne Central, Melbourne East, Brisbane City, ACT, Adelaide Inner, Darwin and Perth Central.

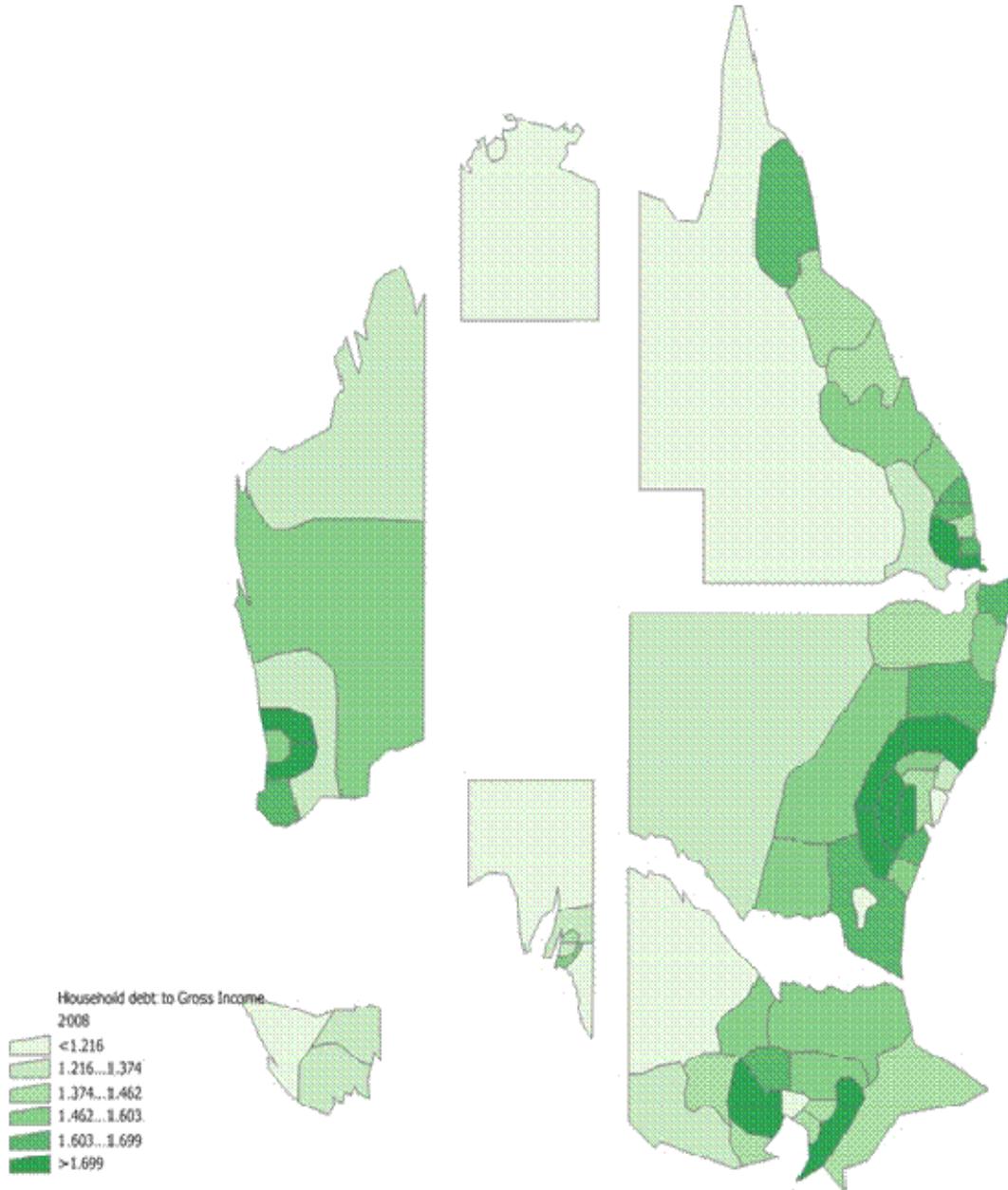
In Perth Central, wealth per household rose from \$271,000 in 2001, to \$723,000 in 2008 with the debt service ratio increasing from 12 per cent in 2001 to 24 per cent in 2008. Perth Outer North's wealth per household increased from \$189,000 in 2001 to \$404,000 in 2008 while the debt service ratio rose to 31 per cent, amongst the highest in the nation. The household debt to gross income ratio for Perth Outer North rose from 1.32 in 2001 to 2.15 in 2008. In WA Pilbara Kimberley the growth in household wealth was relatively subdued but the household debt service ratio still rose from 15 per cent in 2001 to 21 per cent in 2008.

Nationally, the household debt to gross income ratio continued to increase. Some of the largest increases occurred in previously low-debt regions, reflecting lenders' strategies to target these regions for more loans. In the Australian Capital Territory the household debt to gross income ratio rose to 1.16. In NT Lilingiari this ratio is now 1.02 and in NT Darwin it has risen to 1.22 from 0.63 in 2001. In TAS Hobart South, the household debt to gross income ratio is 1.35 and the debt service ratio has climbed to 20 per cent of household income. Adelaide inner, where wealth per household has grown from \$436,000 in 2001 to \$628,000 in 2008, now has a household debt service ratio of 19 per cent and a household debt to gross income ratio of 1.3. In SEQ Brisbane City wealth per household has grown from \$354,000 in 2001 to \$528,000 in 2008 with the household debt service ratio now at 22 per cent with the household debt to gross income ratio climbing from 0.75 in 2001 to 1.5 in 2008. As an example from the Lifestyle Zone, in QLD Wide Bay Burnett average wealth per household rose from \$184,000 in 2001 to \$244,000 in 2008. Debt service ratios in QLD Wide Bay Burnett were also relatively high at 24 per cent.

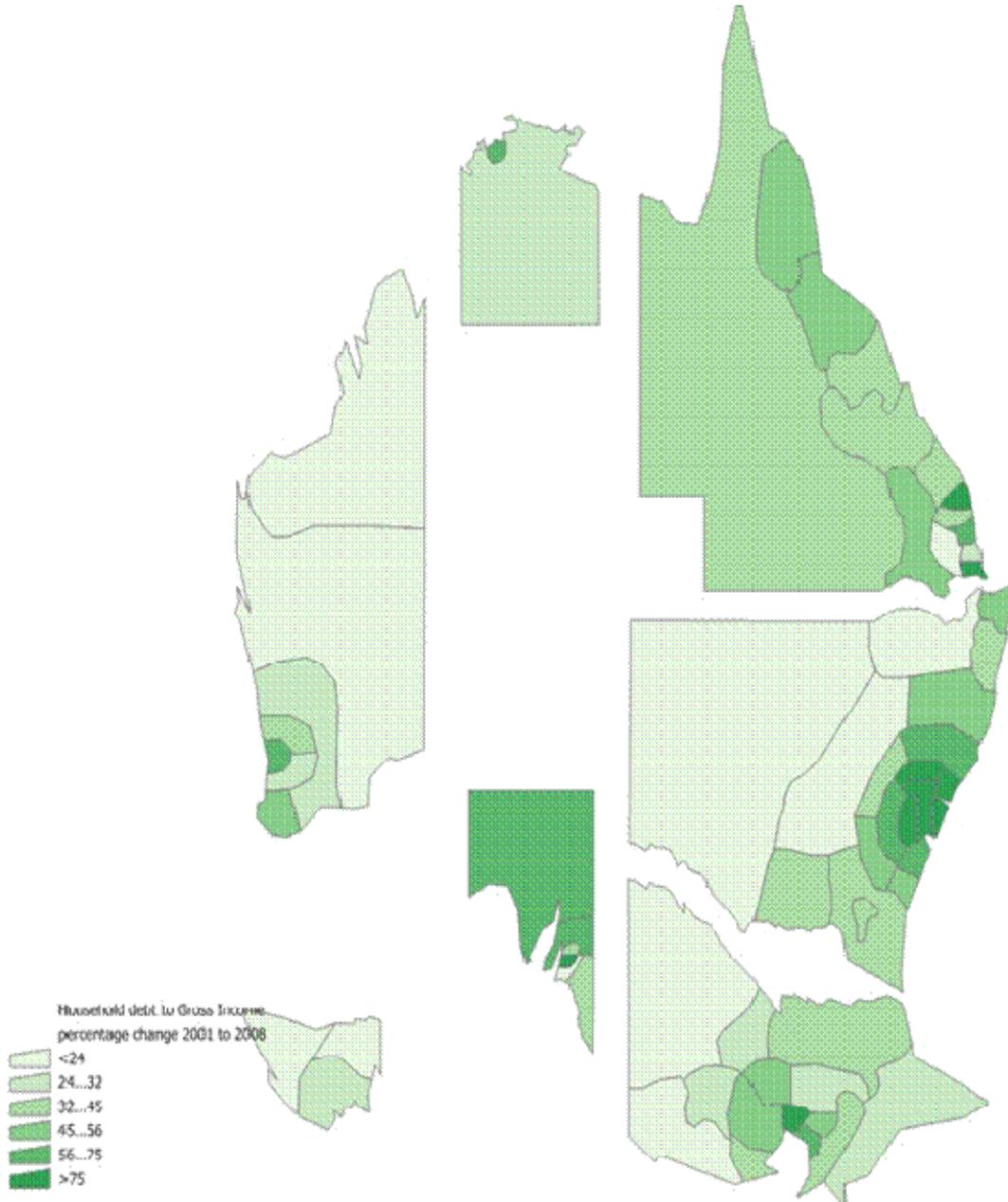
Melbourne Central wealth per household rose from \$668,000 in 2001 to \$849,000 in 2008 with a debt service ratio of 18 per cent and a household debt to gross income ratio of 1.24. Sydney Central wealth per household rose from \$753,000 in 2001 to \$820,000 in 2008 with a debt service ratio of 22 per cent and a household debt to gross income ratio of 1.53. The comparison between Melbourne Central and Sydney Central is interesting in that household wealth in Melbourne Central is now higher while the ratios in Melbourne are more favourable, providing inner Melbourne households with greater resilience to the difficult times ahead and a greater capacity to spend.

Although there has been some convergence, the distribution of household wealth continues to be unequal with large differentials in household wealth across regions. What stands out is not only the general increase in household wealth but that many regions have seen a doubling, since 2001, in their debt service ratio and household debt to gross income ratio, placing increasing amounts of stress onto household finances.

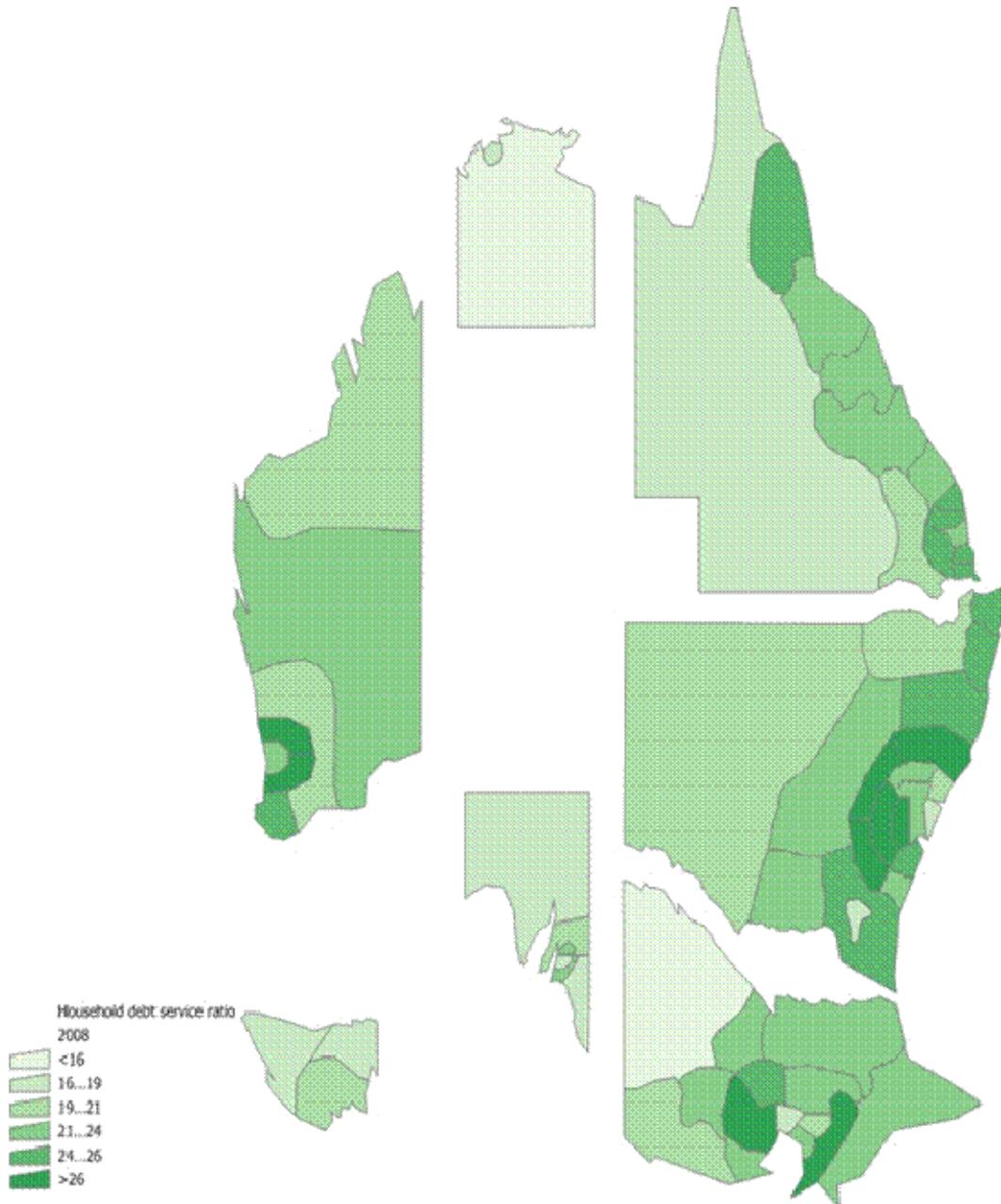
Household debt to gross income – 2008



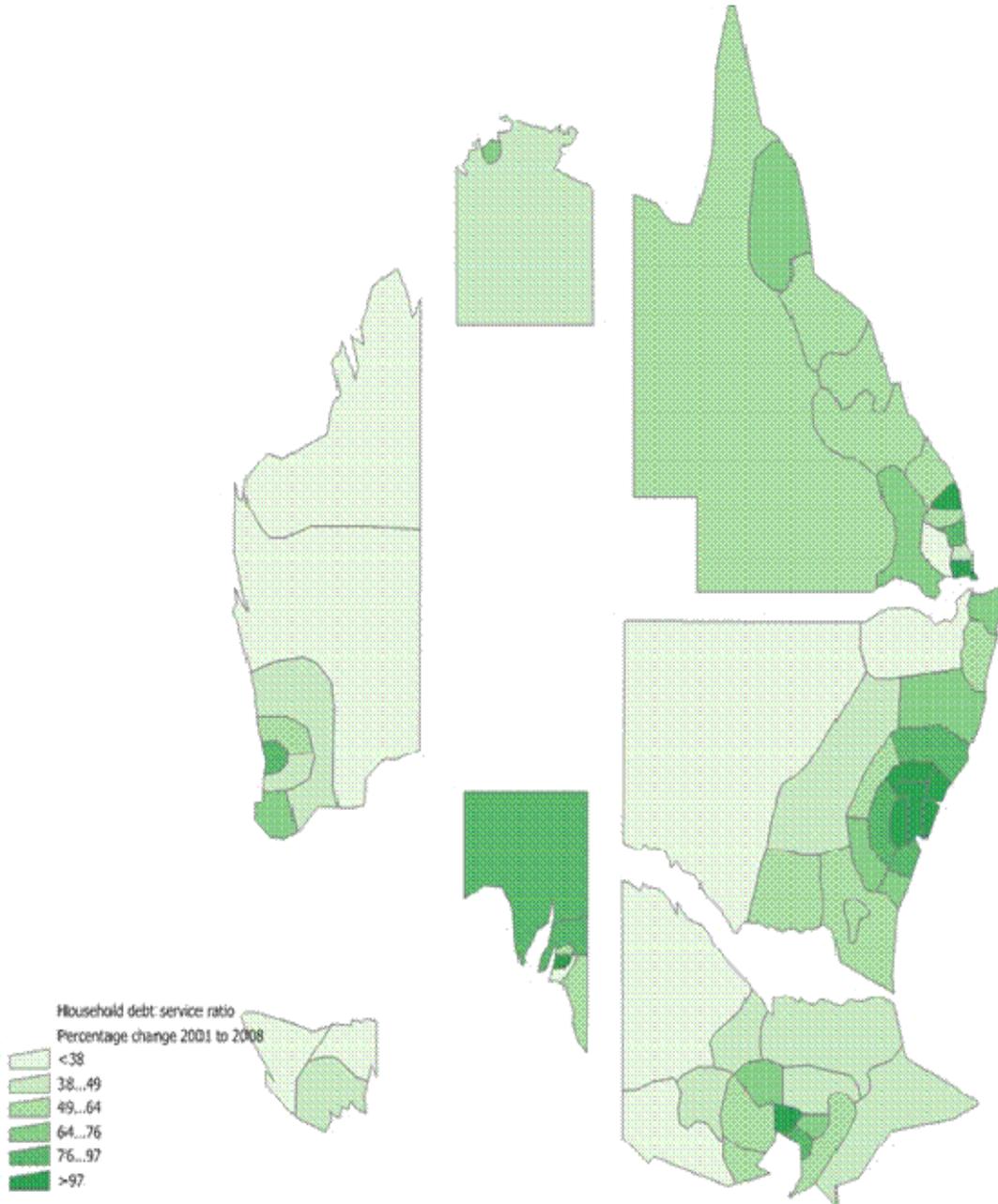
Household debt to gross income – percentage change 2001 to 2008



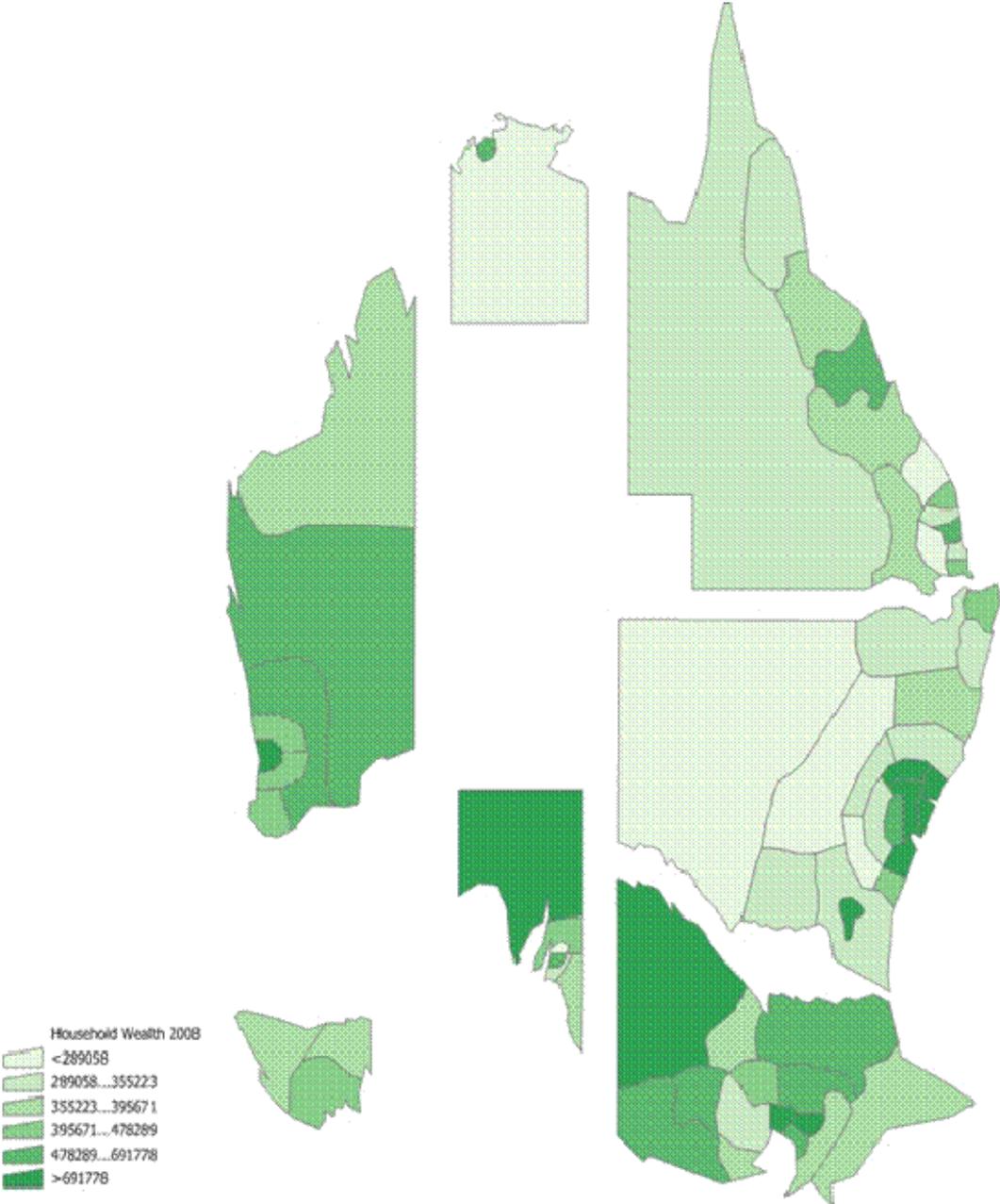
Household debt service ratio – 2008



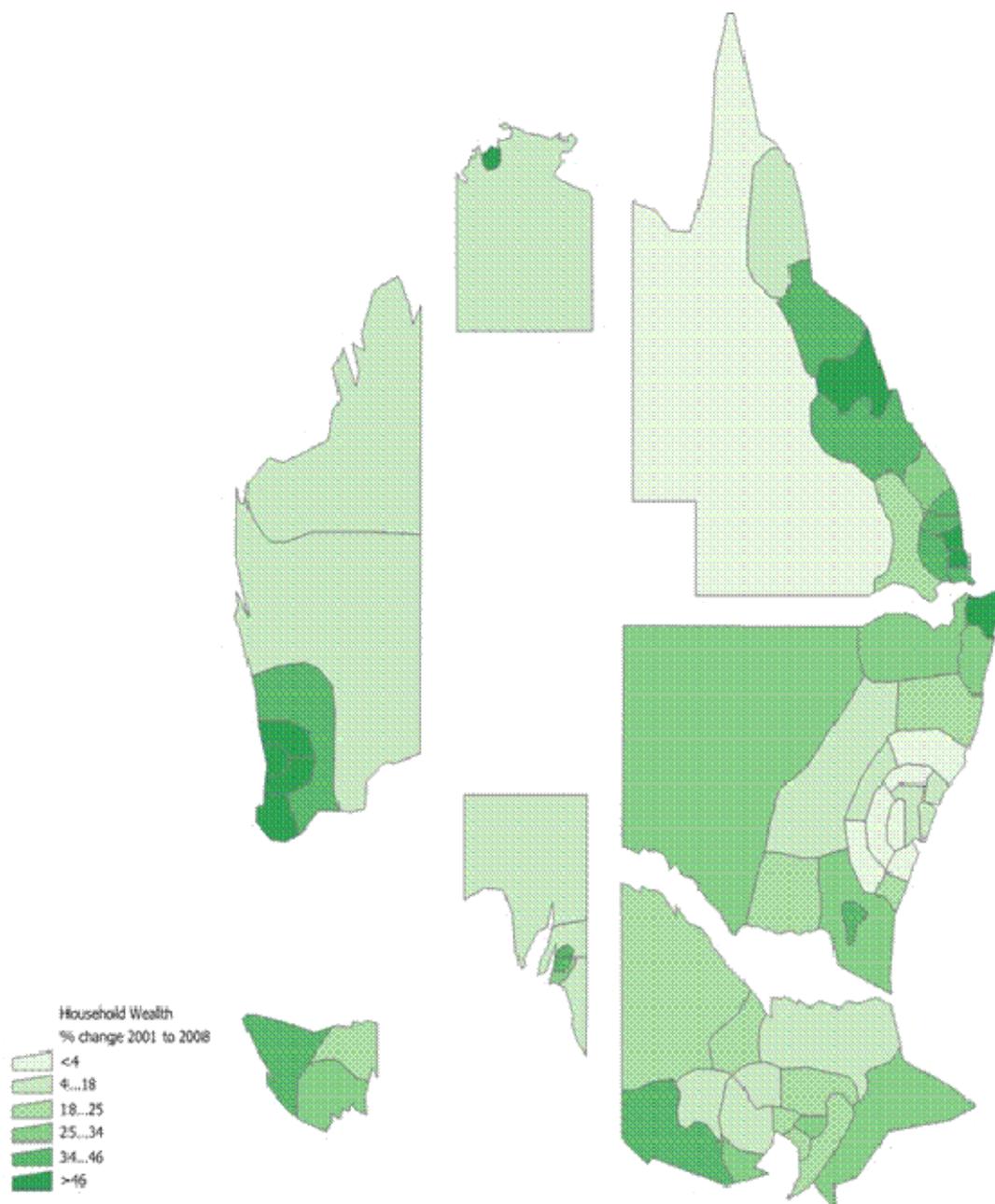
Household debt service ratio – percentage change 2001 to 2008



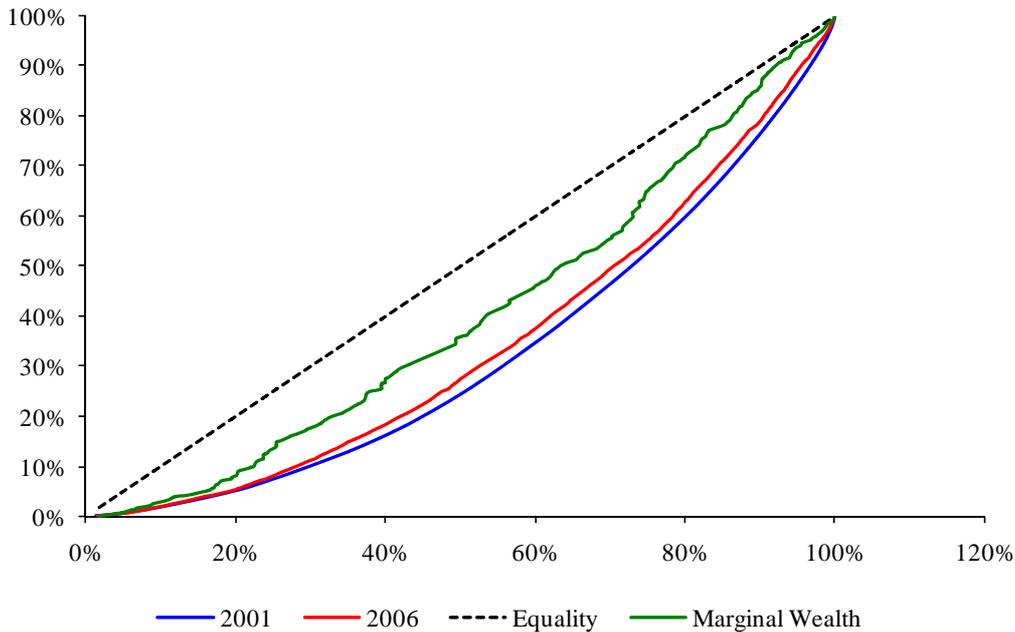
Household wealth – 2008



Household wealth – percentage change 2001 to 2008



Lorenz curves - Wealth (LGA)



The Lorenz curve demonstrates the inequality of distribution of household wealth and shows household wealth distribution to be slightly less unequal in 2006 because of the rising levels of debt in the wealthier suburbs of Australia's major cities.

1.2.4 Trends in incomes

The relationship between debt servicing costs and the cash flows from which they are to be paid, namely household incomes, is of great significance. This is because, if interest payments on debt and other obligations such as repayment of principal cannot be met, default occurs. The current financial whirlwind has increased the risk of debt repayment obligations not being met, mainly due to loss of employment. A look at employment data is therefore required.

Population of working age

The size of the working age population increased most in the Knowledge-intensive Zone and least in Lifestyle regions and Rural regions. Knowledge-intensive regions have attracted new migrants to Australia as well as people from elsewhere in the country. The 55 plus age group continue to migrate to Lifestyle regions while younger families and households wanting commuter access to Knowledge-intensive regions, but not able to afford to live in this zone directly, are locating to the Dispersed Metro Zone.

Table 1.4	Working age population growth (annual growth – per cent)		
	2000-2003	2003-2006	2006-2008
Knowledge-intensive	2.59	1.85	3.68
Lifestyle	2.37	1.42	0.06
Dispersed Metro	1.91	1.16	2.47
Independent Cities	1.52	0.80	0.82
Resource Based	0.36	0.46	2.08
Rural	0.74	0.34	-0.59
National	1.87	1.19	2.08

The decline of the working age population in the Rural Zone is a reflection of the corporatisation and increasing scale of farms. There is a decline in the number of family farms because of consolidation, a process that sees families moving off the land to live in local towns. The use of greater levels of technology and more intensive farming practices are further reducing the need for full time labour as are the economics of drought and climate change, which increase the likelihood that young people will move off the farm to seek work in other regions.

The growth in the itinerant workforce, particularly as labour on larger farms, is interesting. The town of Robinvale, in VIC Mallee Wimmera, is located between the Murray River towns of Mildura and Swan Hill. Proximity to the river and to water supply for irrigation has made Robinvale an important centre for various forms of agriculture with a developing strength in horticulture. In the last seven or eight years the town has undergone considerable social change largely because of the development of the horticultural sector, some of it in the form of managed investment schemes. The development has occurred in a period of increasing labour shortages, because of competition for itinerant labour, particularly from the resource boom States of Queensland and Western Australia. This has reshaped the workforce in Robinvale so that it is now the most ethnically diverse town in rural Victoria, attracting as many as 40 different nationalities to work in the agricultural sector. The development of the horticulture industry has meant work is now available in Robinvale for 10 months of the year. Therefore, while workers still come and go, more are staying for longer periods each year and anecdotal evidence suggests that some are even electing to settle in the town. This provides an example contrary to the general trend of decline for the smaller rural-service towns.

Workforce

All zones have experienced growth in the size of the workforce, with a significant increase in the annual growth of the workforce in the Resource-Based Zone since 2006.

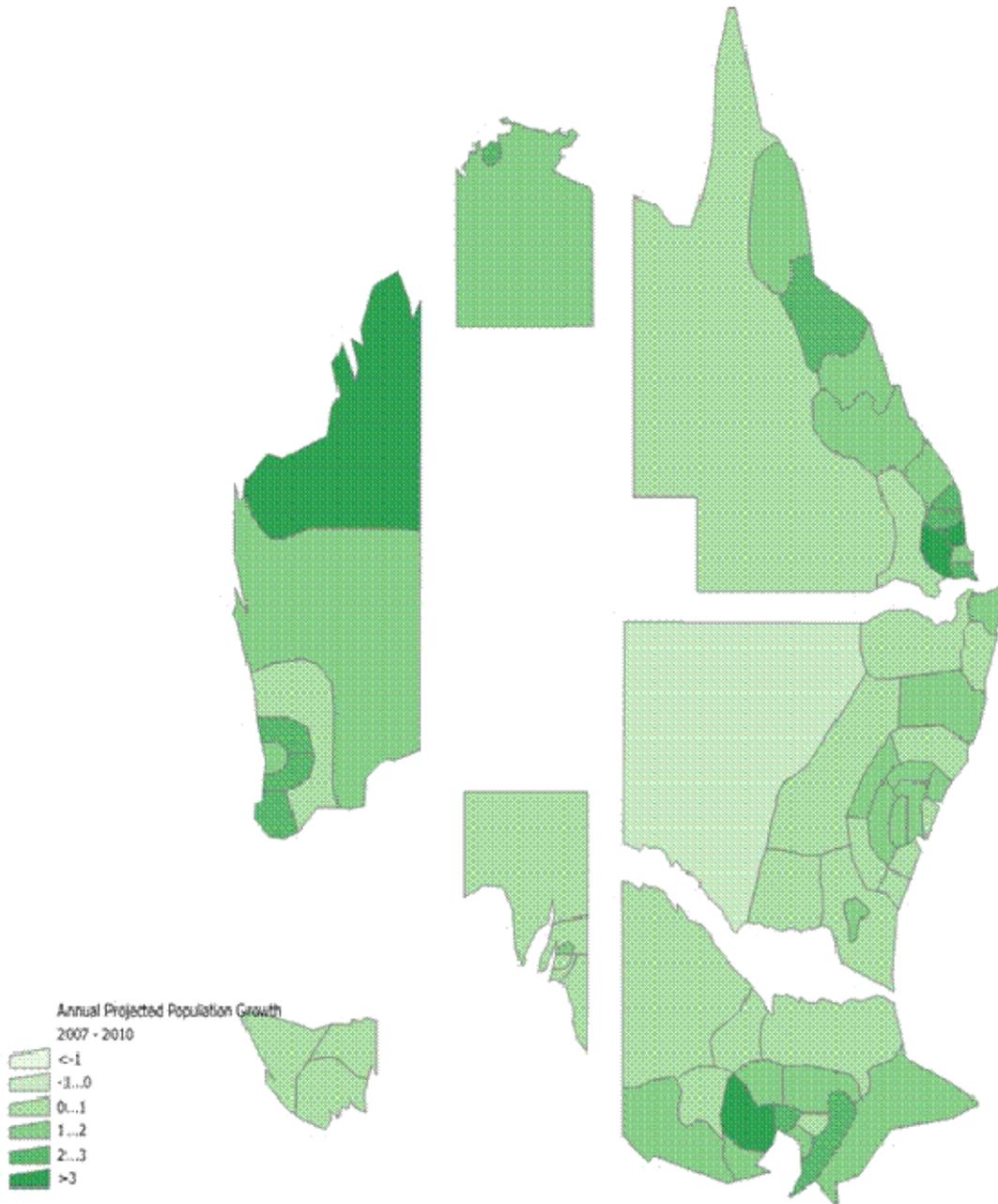
There are interesting differences between Tables 1.4 and 1.5. Between 2006 and 2008 the rate of workforce growth was remarkably similar between the Zones, whereas there were divergences in the rate of growth of population of workforce age. The implication is that the workforce participation rate has changed, falling in the Knowledge-intensive Zone and rising elsewhere, particularly in the Lifestyle, Independent City and Rural zones. This reverses the pattern observed from 2000 to 2006, and therefore might be interpreted as cyclical. It is, however, surprising that a resources boom should not increase workforce participation in the resource based regions. This appears to be because the resource based regions attracted as many people from the rest of the country as they were able to employ.

Table 1.5 NIEIR workforce (annual growth – per cent)			
	2000-2003	2003-2006	2006-2008
Knowledge-intensive	1.2	2.2	2.5
Lifestyle	3.2	2.4	2.5
Dispersed Metro	1.5	1.9	2.2
Independent Cities	1.5	1.8	2.3
Resource Based	0.9	0.7	2.4
Rural	2.0	1.6	2.0
National	1.5	1.9	2.3

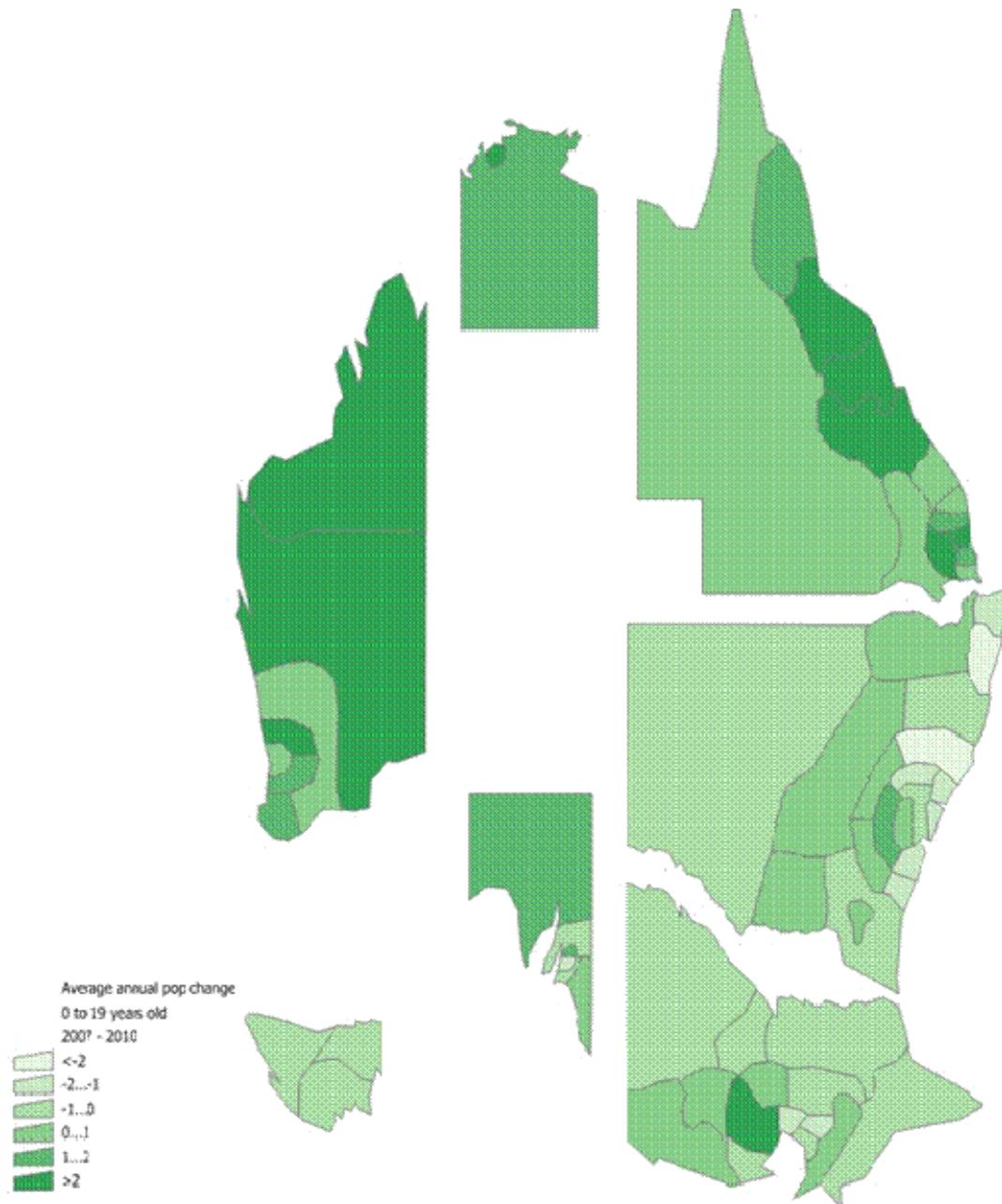
Employment growth has tended to mirror workforce growth. From Table 1.6 rural employment growth has remained stable. Any longer term implications of drought and climate change were not yet apparent at the zone level. Reflecting the resource boom, employment grew strongly in the Resource Based Zone. Growth in employment in the Lifestyle Zone (construction, services, cafes etc) continued to perform well. Independent Cities and the Knowledge-intensive Zone also performed well – the problem in the latter being that quite rapid employment growth fell well behind very rapid growth in working-age population. A possible explanation would be that student numbers grew. The employment results for all zones for the period 2006-2008 were quite strong. As will be explained in Chapter 9, the outlook is unfortunately not nearly so rosy.

Table 1.6 NIEIR employment (annual growth – per cent)			
	2000-2003	2003-2006	2006-2008
Knowledge-intensive	1.7	2.8	2.9
Lifestyle	4.0	3.1	3.4
Dispersed Metro	1.8	2.3	2.5
Independent Cities	1.8	2.3	3.0
Resource Based	1.4	1.1	2.4
Rural	2.2	2.0	2.2
National	1.9	2.4	2.7

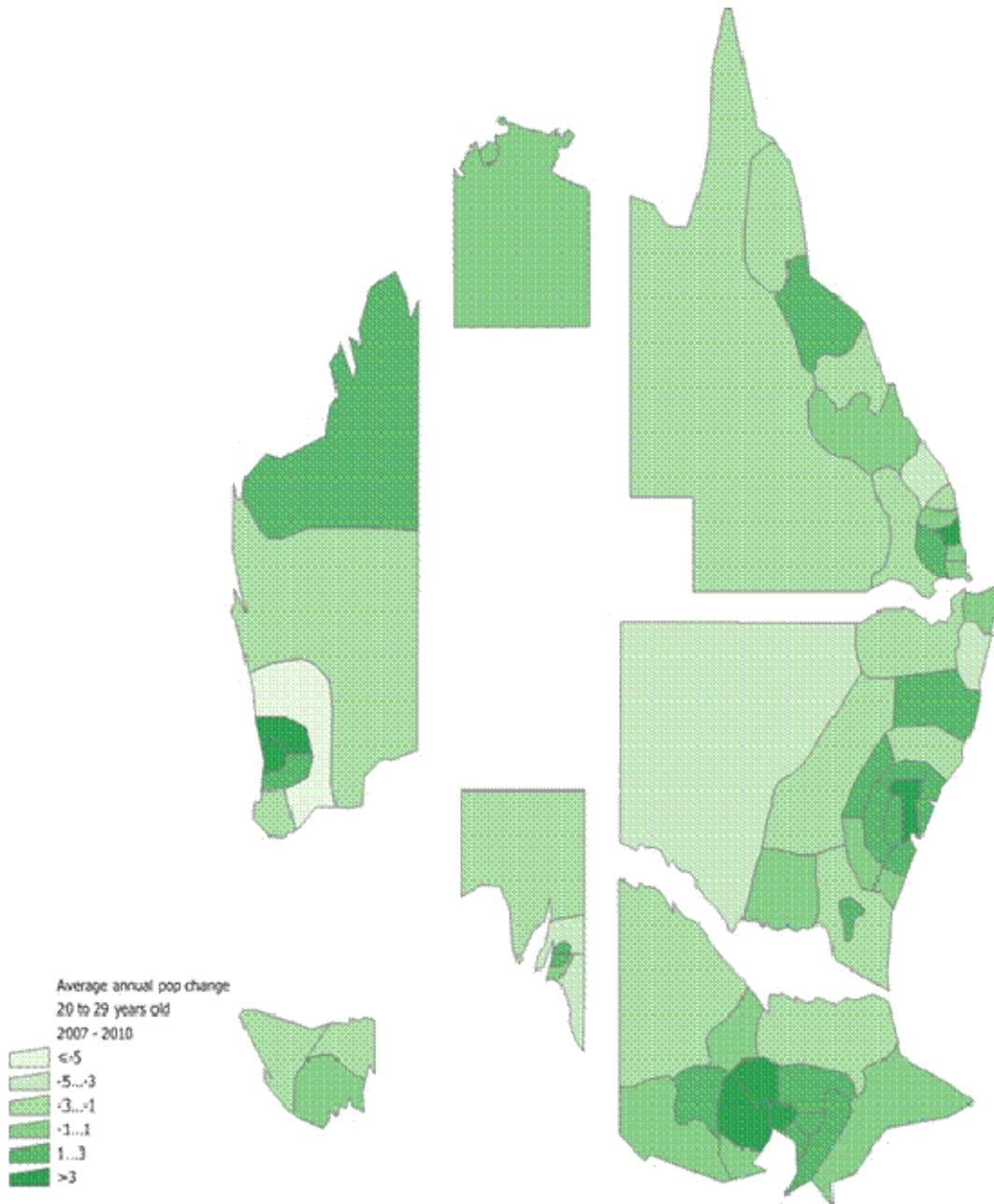
Annual projected population growth – 2007-2010



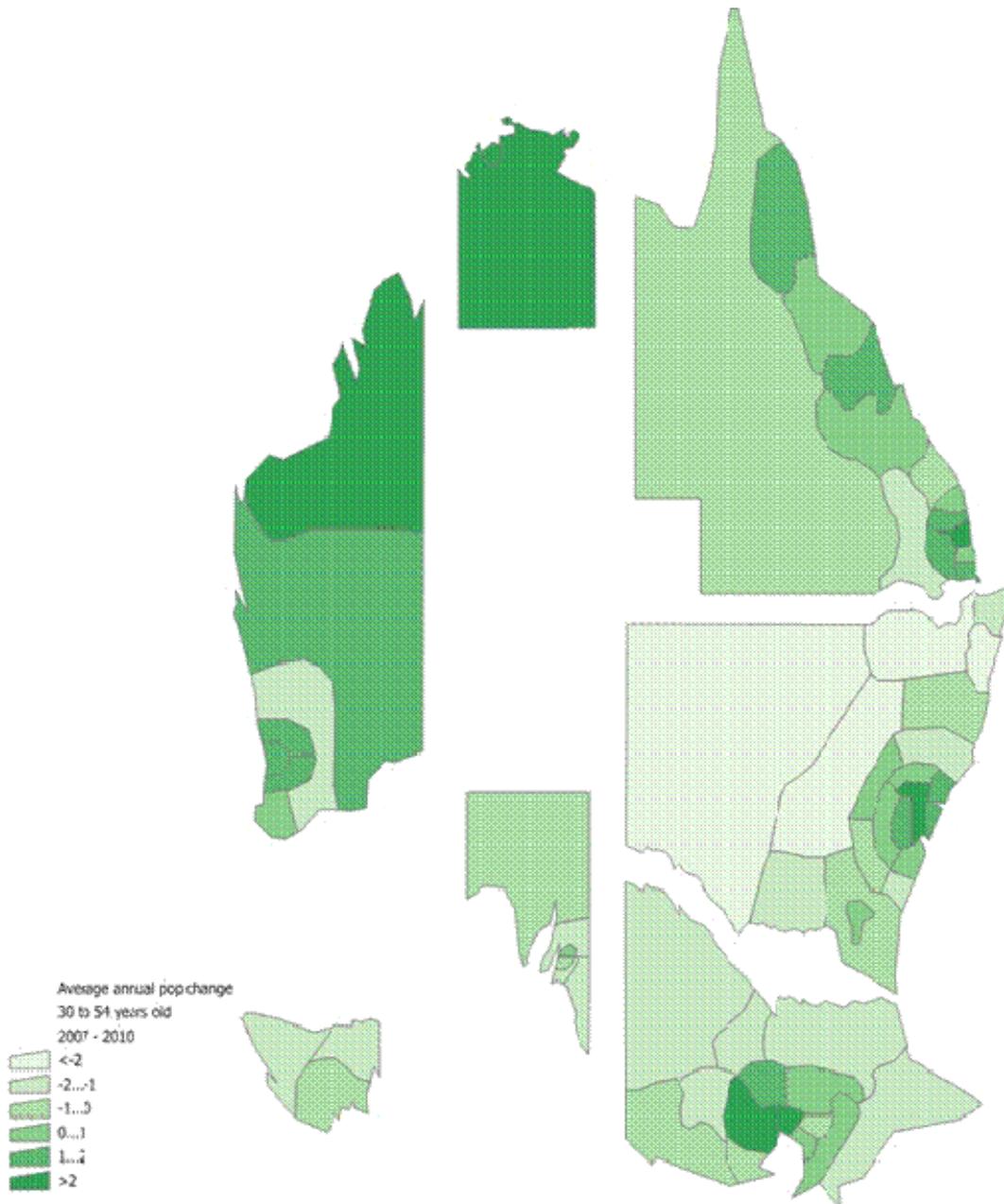
Average annual population change – 0 to 19 years old – 2007-2010



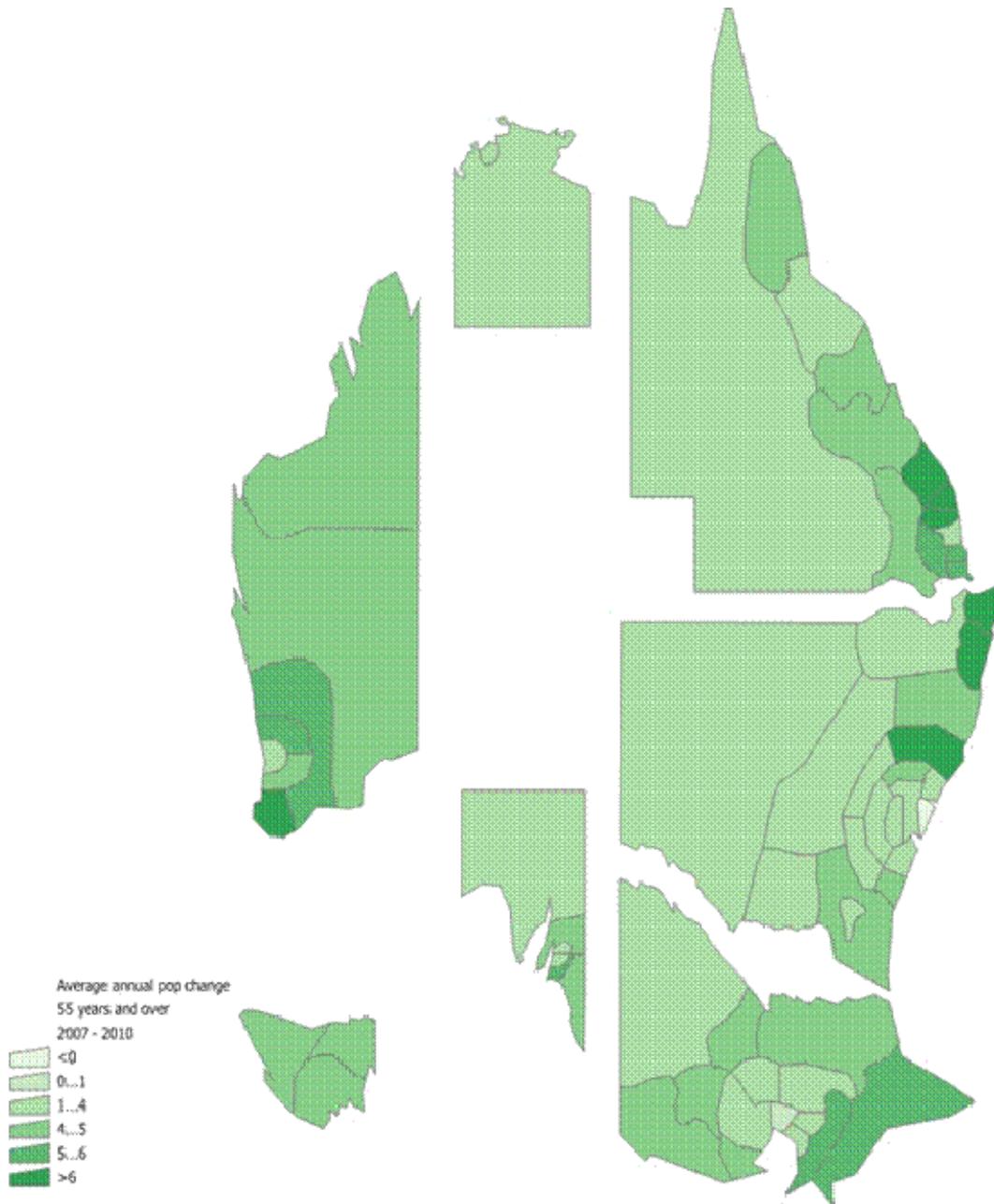
**Average annual population change – 20 to 29 years old –
2007-2010**



**Average annual population change – 30 to 54 years old –
2007-2010**



**Average annual population change – 50 years and over –
2007-2010**



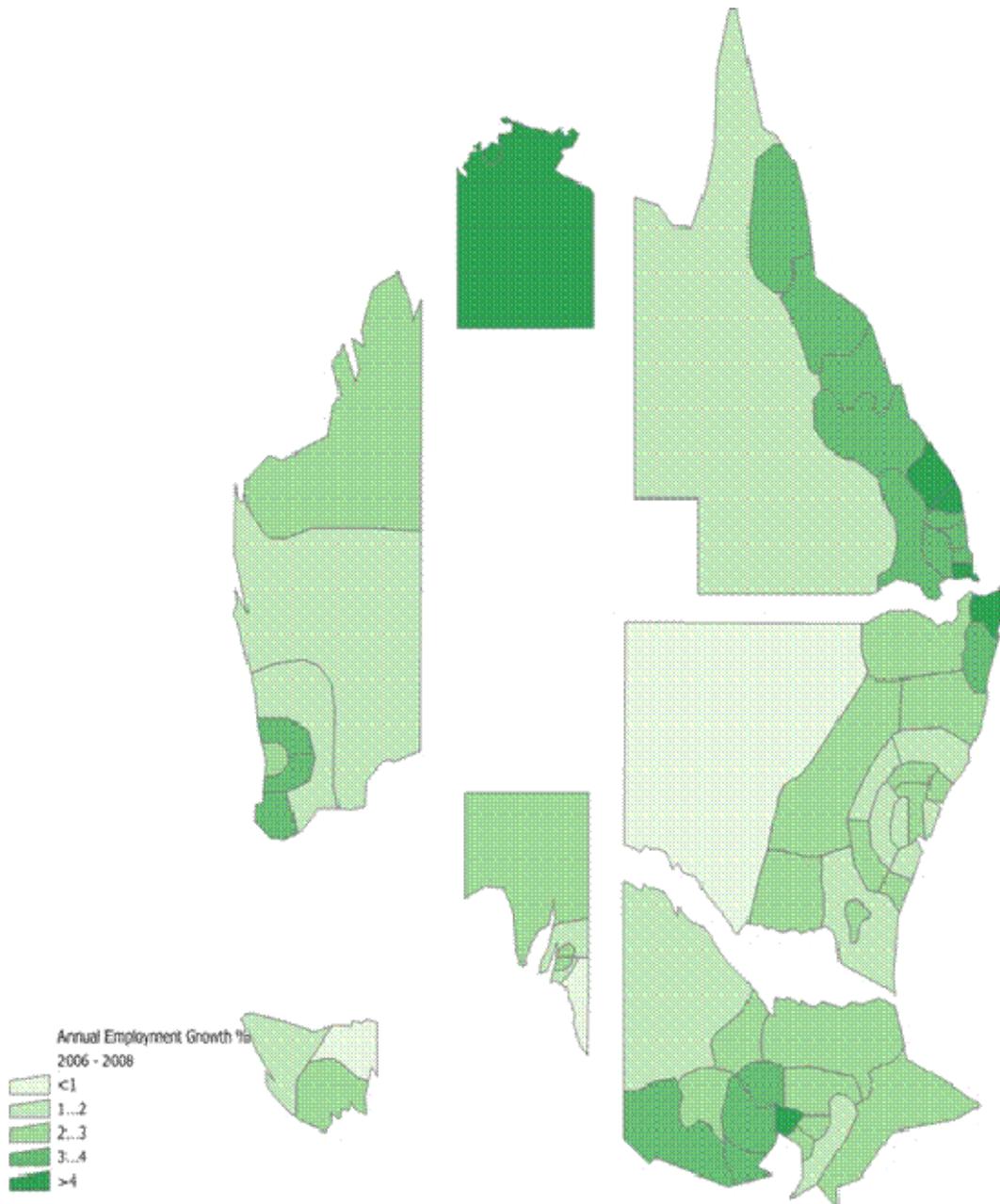
Headline (ABS-definition) unemployment rates have continued to fall. The lowest unemployment rate continues to be in the Knowledge-intensive Zone. The highest levels of unemployment continue to be in the Lifestyle Zone.

Table 1.7 Headline unemployment rate (per cent)								
	2000	2003	2006	2007	2008	Annual percentage point change		
						2000-2003	2003-2006	2006-2007
Knowledge-intensive	6.2	5.5	4.3	4.0	3.7	-0.3	-0.4	-0.3
Lifestyle	10.7	9.4	7.3	6.7	5.9	-0.4	-0.7	-0.6
Dispersed Metro	6.5	5.9	5.0	4.7	4.5	-0.2	-0.3	-0.3
Independent Cities	7.8	7.1	6.2	5.7	5.0	-0.2	-0.3	-0.5
Resource Based	7.4	6.7	5.1	4.5	4.5	-0.2	-0.5	-0.6
Rural	6.9	5.9	5.2	4.7	4.4	-0.3	-0.2	-0.5
National	6.9	6.2	5.1	4.7	4.4	-0.2	-0.4	-0.4

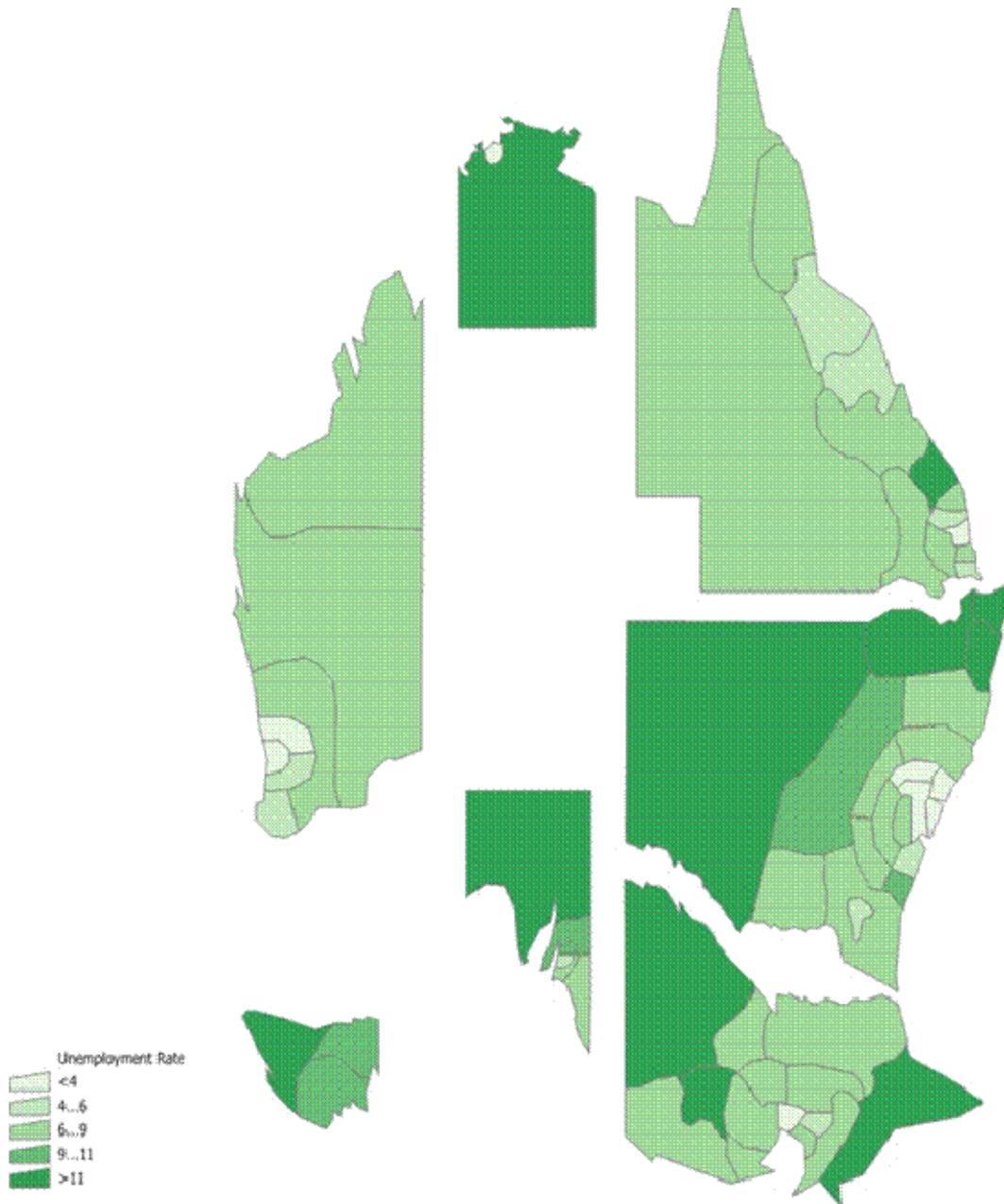
Table 1.8 shows the NIEIR unemployment rate which is derived from welfare service data. The NIEIR unemployment rate continues to show higher unemployment rates than the headline unemployment figures because it includes individuals on a range of allowances not included in the headline rate. (See Appendix 4 of this report and Chapters 10 and 11 in the 2005 SOR report.) Over the past year the largest reductions in the NIEIR unemployment rate occurred in the Lifestyle and Independent City zones, while NIEIR unemployment was starting to creep up in the Resource based and Rural zones.

Table 1.8 NIEIR unemployment rate (per cent)								
	2000	2003	2006	2007	2008	Annual percentage point change		
						2000-2003	2003-2006	2007-2008
Knowledge-intensive	8.3	6.9	5.4	5.0	4.6	-0.5	-0.5	-0.4
Lifestyle	15.7	13.5	11.6	10.9	10.0	-0.7	-0.6	-0.9
Dispersed Metro	9.0	8.2	7.1	6.8	6.5	-0.3	-0.4	-0.3
Independent Cities	11.5	10.5	9.3	8.9	8.2	-0.3	-0.4	-0.7
Resource Based	11.4	10.2	9.0	8.5	9.0	-0.4	-0.4	0.5
Rural	10.8	10.2	9.1	8.6	8.7	-0.2	-0.4	0.1
National	9.8	8.8	7.5	7.0	6.7	-0.3	-0.4	-0.3

Annual employment growth – per cent – 2006-2008



Unemployment rate



Trends in wages and salaries are closely tied to those in employment, the difference lying in changes in average earnings per employee. From 2006 to 2008, in Australia as a whole, the rate of growth in inflation-adjusted wages and salaries was still roughly double the rate of growth of employment. Average earnings per employee increased more rapidly than the national average in the Knowledge-Intensive, Resource Based and Lifestyle Zones. The rate of growth decreased when compared to the previous period of 2003-2006 for all Zones except for the Resource Based Zones. In the Independent Cities and Rural Zones average earnings per employee followed national trends.

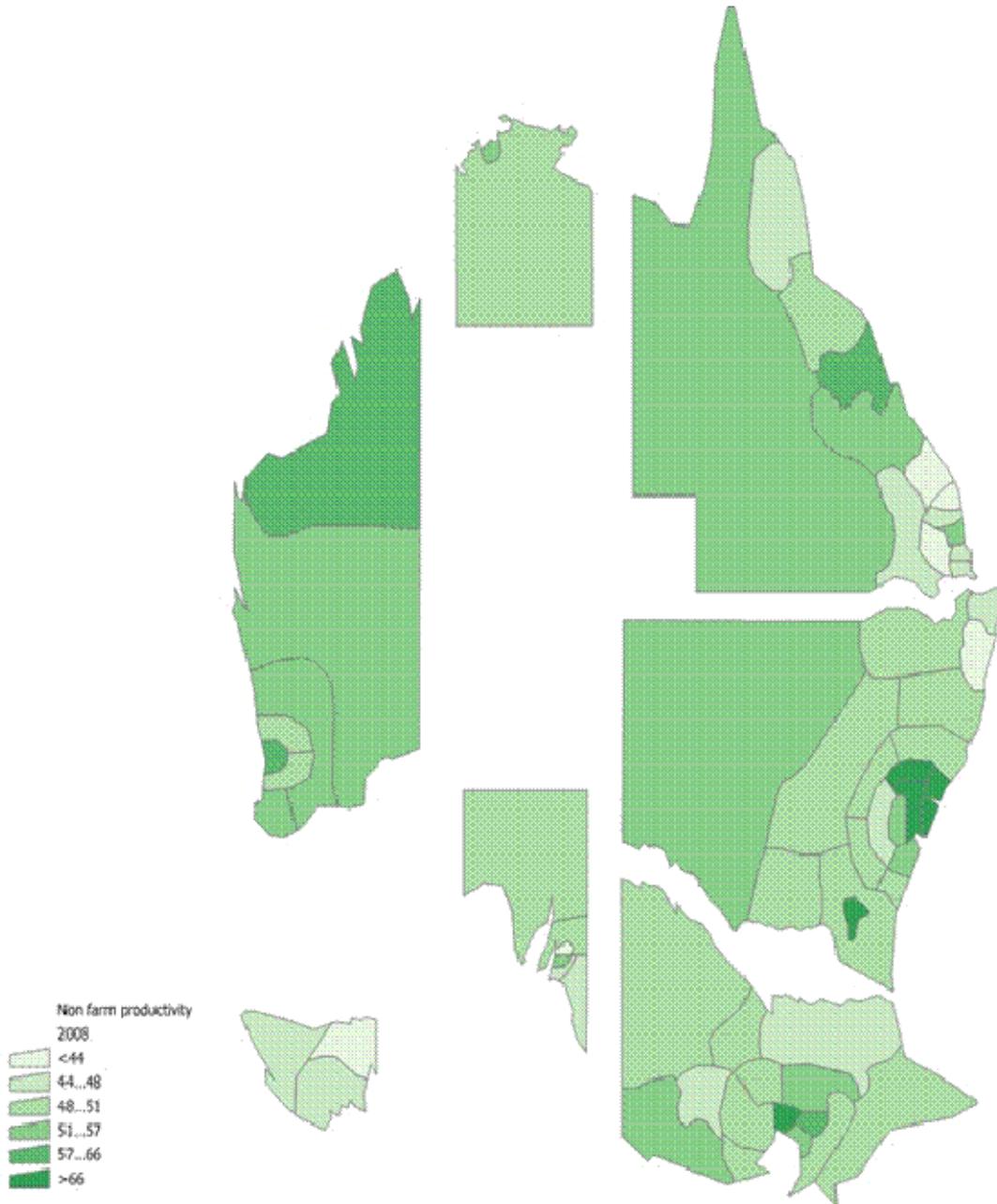
Table 1.9 Wages and salaries (annual growth – per cent)			
	2000-2003	2003-2006	2006-2008
Knowledge-intensive	2.0	5.6	5.3
Lifestyle	4.1	5.8	5.3
Dispersed Metro	1.6	4.9	4.6
Independent Cities	1.8	5.5	5.0
Resource Based	2.2	4.6	6.5
Rural	2.1	5.0	5.0
National	1.9	5.2	5.0

Business income

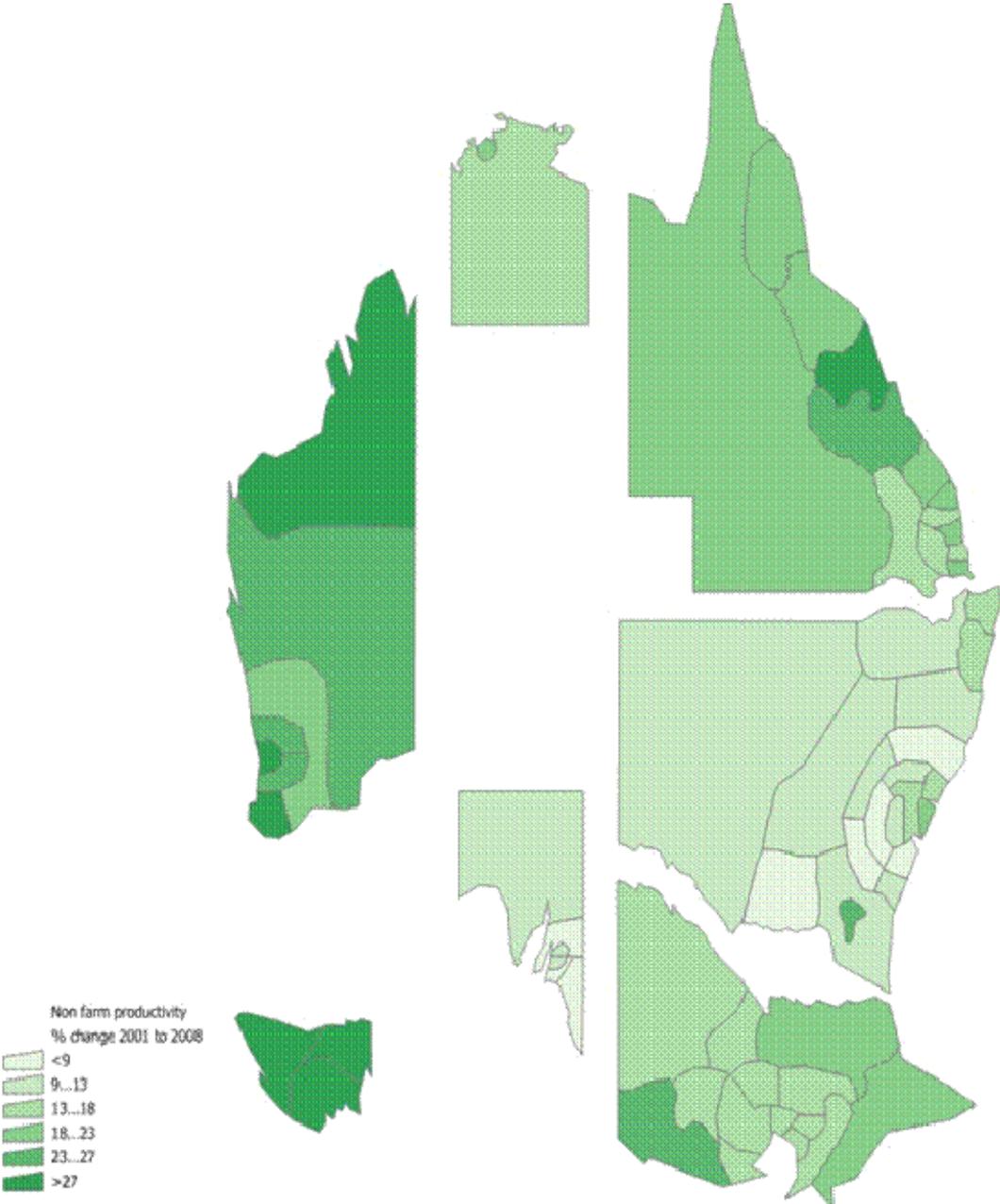
Continuing the previous trend, drought and other problems continue to play havoc with farm income so seriously (an average of -29.5 per cent from 2006 to 2008) that there has been a fall in total business income received by households – the fall in farm incomes again outweighing solid growth in other business incomes.

Table 1.10 Formation of business income (per cent)									
	Farm income annual growth			Non-farm business income growth			Total business income growth		
	2000-2003	2003-2006	2006-2008	2000-2003	2003-2006	2006-2008	2000-2003	2003-2006	2006-2008
Knowledge	-8.9	4.5	-38.4	1.7	2.7	2.9	5.6	5.4	2.5
Lifestyle	7.8	3.6	-45.1	4.4	2.9	3.6	5.8	3.7	-2.2
Dispersed	-1.3	8.5	-41.2	1.8	2.2	2.6	1.5	4.0	-0.7
Independent	-0.5	6.3	-25.2	1.9	2.1	3.1	1.8	5.1	-2.9
Resource	-1.0	3.8	-19.6	1.6	1.3	2.7	-1.7	3.4	-7.9
Rural	1.3	1.4	-30.9	1.9	2.3	2.5	2.4	2.5	-10.6
National	0.7	3.2	-29.5	1.9	2.4	2.8	2.9	4.2	-2.0

Non-farm productivity – 2008



Non-farm productivity – percentage change – 2001 to 2008



Property income

Property income includes landlord incomes, income from directly-owned financial assets and the imputed income from superannuation funds. The rapid and forced accumulation of superannuation assets continues despite fading returns, while the sharp increase in rental values has contributed to substantial increases in property income across the Knowledge-intensive, Lifestyle and Dispersed Metro Zones. These increases, no doubt, reflect the higher accumulation of superfund assets and high rental receipts. The drop in property income paid to the Resource Based Zone may be in part a result of the difficulty in allocating superannuation income to this zone. Needless to say, the good times are over and Table 1.11 in next year's SOR report is likely to provide a reality check.

Table 1.11 Property income received including superannuation (annual growth – per cent)			
	2000-2003	2003-2006	2006-2008
Knowledge-intensive	0.6	9.9	17.4
Lifestyle	2.0	12.8	16.6
Dispersed Metro	0.0	9.8	14.5
Independent Cities	-1.6	12.2	8.8
Resource Based	-8.0	15.0	-18.0
Rural	-1.8	13.6	5.6
National	-0.4	10.8	13.1

Social security

Social security payments continue to provide the major source of income for many households, and indeed some regions. From 2006 to 2008 the buoyancy of employment reduced the need for social security payments, and incomes from this source were also reduced by the Commonwealth policy of tightening eligibility conditions. Social security payments per capita are lowest in Knowledge-Based Zone and highest in the Lifestyle Zone. The decline in social security payments was most rapid in the Knowledge-Based Zone. At the other extreme, payments grew in the Rural zone and even more rapidly in the Resource Based Zone. This follows the end-of-boom warnings also being picked up in the NIEIR unemployment figures.

Table 1.12 Benefits as a per cent of disposable income (per cent)								
						Annual growth (%)		
	2000	2003	2006	2007	2008	2000-2003	2003-2006	2006-2008
Knowledge-intensive	11.4	11.8	11.1	10.6	9.9	0.9	-2.0	-5.4
Lifestyle	24.2	24.2	24.2	24.0	23.4	0.1	0.0	-1.6
Dispersed Metro	14.7	15.5	15.5	15.0	14.6	1.8	0.0	-3.0
Independent Cities	17.6	18.5	18.0	17.8	17.9	1.7	-1.0	-0.2
Resource Based	14.9	16.6	15.7	16.1	18.5	3.9	-1.9	8.7
Rural	17.5	18.1	17.8	18.4	19.6	1.1	-0.6	4.9
National	14.9	15.5	15.2	14.9	14.7	1.5	-0.8	-1.7

Disposable income

Taking the broad National Accounts measure of disposable income (essentially income received less income tax, and including imputed income from home ownership), the most rapid growth was in the Knowledge-intensive Zone, followed by the Lifestyle Zone. The deterioration in the household debt service ratio and household debt to gross income ratio continued to take its toll on available levels of household disposable income. Household disposable income is still highest in the Knowledge-intensive Zone.

In some parts of Sydney the level of household disposable income after debt servicing costs fell. These regions included Sydney Parramatta Bankstown where average household disposable income dropped from \$61,000 in 2001 to \$55,000 in 2008 (in 2005/6 prices). Sydney Outer West dropped from \$65,000 in 2001 to \$62,000 in 2008, Sydney Old West dropped from \$63,000 in 2001 to \$60,000 in 2008 while Sydney South's disposable income remained the same. Sydney Eastern Beaches and Sydney Northern Beaches had significant increases to their levels of household disposable income.

The Australian Capital Territory experienced a rise in household disposable income after debt servicing costs from \$94,000 in 2001 to \$105,000 in 2008.

Perth regions, and also Peel South West, as a result of resource developments, increased their levels of household disposable income. The increase in disposable income per household in Perth Central was from \$60,000 in 2001 to \$75,000 in 2008.

South East Queensland (particularly Brisbane and the Gold Coast) also appear to have benefited from the resource developments in their State. However, household disposable income fell in some Queensland regions including QLD Cairns (from \$56,000 in 2001 to \$48,000 in 2008) and QLD Resource Region (from \$113,000 in 2001 to \$68,000 in 2008). The spectacular fall in the resource region probably reflects rapidly increasing costs of living and a transfer of highly-paid workers to fly in, fly out.

Both Adelaide Inner and TAS Hobart South have had increases in household disposable income when compared to the 2001 figure.

Drought continued to depress household disposable income in some rural regions, and it was also noticeable that household disposable incomes in the remote resource based regions, while still high, actually fell. It appears that income growth is increasingly being shifted from these regions to the metropolitan and resort areas of their States.

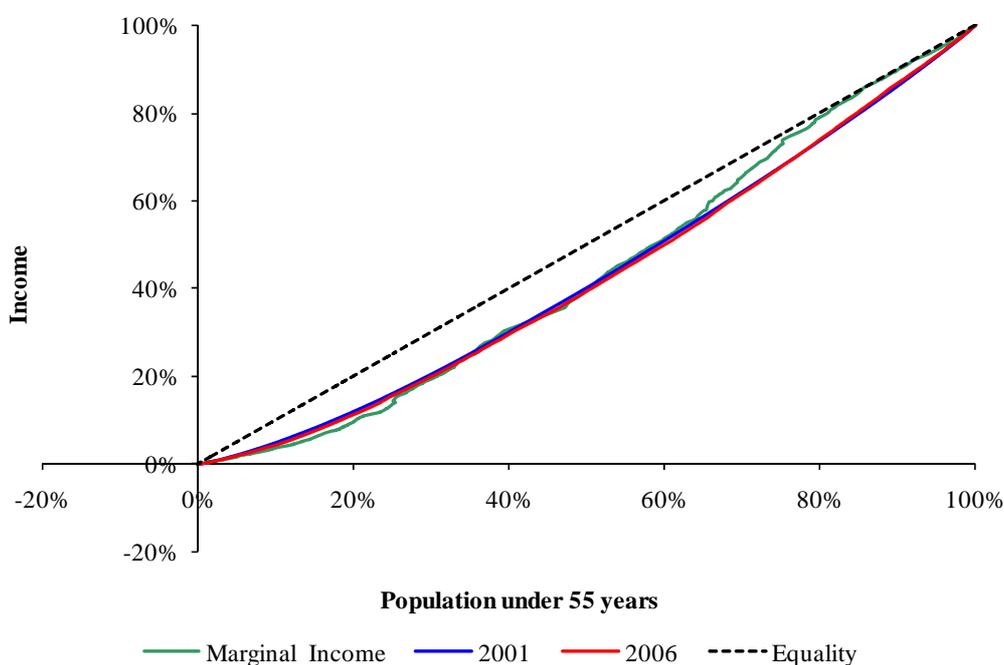
Table 1.13	Disposable income (annual growth – per cent)		
	2000-2003	2003-2006	2006-2008
Knowledge-intensive	2.2	5.0	6.5
Lifestyle	4.2	5.0	5.4
Dispersed Metro	2.0	4.1	4.4
Independent Cities	2.0	5.1	3.7
Resource Based	1.4	5.3	-2.4
Rural	2.6	5.0	2.0
National	2.2	4.7	4.5

Average household disposable income

The reclassification of the regions and zones compared to previous SOR reports does not provide any major surprises in terms of average household disposable income after debt servicing costs. The Knowledge-intensive Zone had the highest levels of disposable income pointing to the higher salaries paid to the knowledge based workforce. Lifestyle regions had the lowest level of household disposable income.

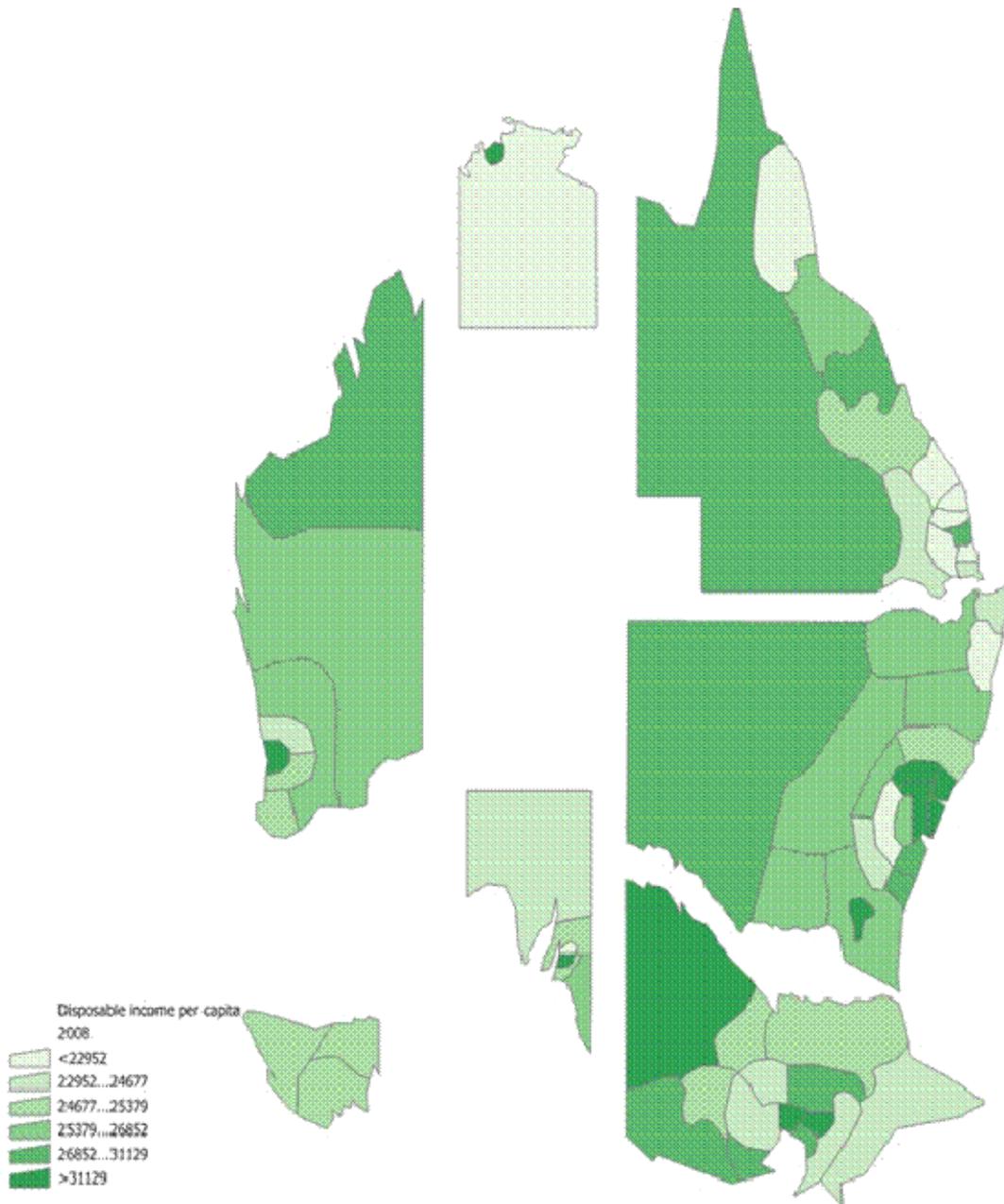
	2001	2008	Annual growth 2001-2008 (%)
Knowledge-intensive	70.0	80.6	2.0
Lifestyle Regions	45.4	50.7	1.6
Dispersed Metro	61.0	65.0	0.9
Independent Cities	56.1	61.5	1.3
Resource Based	72.3	63.9	-1.8
Rural	58.3	62.0	0.9
National	61.9	67.4	1.2

Lorenz curves - Income (LGA)



The Lorenz curve shows that income is more equally distributed regionally than wealth.

Disposable income per capita – 2008



1.3 The state of construction

This section reviews construction activity across Zones. Dwelling construction in all Zones is forecast to decline significantly in 2009, increasing the pressure on the existing housing stock. The Lifestyle Zone has already seen a significant drop in housing construction. The financial crisis is making credit harder to access and this will impact on the eligibility criteria for those seeking a mortgage, making the process of obtaining a housing loan more difficult. In turn, this tightening of access to credit will slow the processes of internal migration for the foreseeable future. In terms of expenditure on dwelling construction National Economics forecasts for 2009 show a reduction in national dwelling construction expenditure of almost \$7.5 billion when compared to the 2008 figure.

Table 1.15 Dwelling expenditure per annum (2007 \$ million)						
	<u>Average per annum</u>					Average growth 2004-06 to 2007-09 (%)
	1998-2002	2003-2006	2007	2008	2009	
Knowledge-intensive	9426.3	11152.9	10190.7	10063.9	7806.8	-15.3
Lifestyle	2167.4	2759.6	2433.0	2351.4	1755.2	-20.6
Dispersed Metro	10053.8	11567.5	10871.1	11672.8	9178.7	-6.9
Independent Cities	3047.0	3902.4	3905.6	3911.2	3044.1	-8.6
Resource Based	710.0	739.0	1025.2	1103.2	819.4	29.0
Rural	2769.1	3953.0	4251.0	4139.1	3215.7	-5.4
National	28173.5	34074.3	32676.6	33241.5	25819.9	-10.0

The figures for dwelling expenditure per capita are interesting, with Australian average growth at minus 13.9 per cent, compared to minus 7.6 per cent in last year's table. The Knowledge-intensive, Lifestyle, Dispersed Metro and Independent Cities Zones have particularly significant declines in per capita expenditure, again demonstrating the need for increased activity in metro areas to offset housing stock shortages and improve affordability.

Dwelling expenditures per capita in 2009 are forecast to be lower, sometimes significantly, than the average annual expenditure in the period 1998-2002 for all zones except the Resource-Based Zones, highlighting the magnitude of the downturn. Given the changing composition of households this is particularly serious and contrary to the desired trend.

Table 1.16 Dwelling expenditure per capita (2007 \$)						
	<u>Average per annum</u>					Average growth 2004-06 to 2007-09 (%)
	1998-2002	2003-2006	2007	2008	2009	
Knowledge-intensive	1869.2	2078.9	1824.8	1771.3	1345.2	-19.4
Lifestyle regions	1736.2	2038.8	1722.7	1638.7	1207.5	-24.3
Dispersed Metro	1415.0	1533.5	1387.0	1463.7	1131.7	-11.3
Independent Cities	1235.2	1502.3	1455.0	1436.6	1105.5	-12.2
Resource Based	922.9	942.2	1276.6	1354.1	991.4	24.7
Rural	1093.2	1508.1	1580.2	1521.8	1171.4	-8.3
National	1470.0	1681.4	1555.1	1557.1	1190.3	-13.9

The downturn in non-residential construction in 2009 is forecast to be equally pronounced with all zones forecast to have significant reductions in non-residential construction activity in 2009.

Table 1.17 Non-residential construction per annum (2007 \$ million)						
	<u>Average per annum</u>					Average growth 2004-06 to 2007-09 (%)
	1998-2002	2003-2006	2007	2008	2009	
Knowledge-intensive	9163.6	9921.4	11667.7	12699.6	10218.5	13.3
Lifestyle	804.4	1155.0	1316.5	1183.1	868.5	-6.4
Dispersed Metro	4544.1	5501.5	6946.3	7100.9	5469.8	14.1
Independent Cities	1934.5	2161.5	2854.9	2868.9	2273.0	18.1
Resource Based	594.2	535.5	821.2	902.9	733.6	48.2
Rural	1434.8	1761.7	2139.2	2134.1	1620.1	6.9
National	18475.6	21036.6	25746.0	26889.4	21183.5	13.3

Taken at the national level, non-residential construction per capita is forecast to drop by nearly \$300 per capita, reverting to the average levels of per capita non-residential construction expenditures experienced in the period 1998-2002.

Table 1.18 Non-residential construction expenditure per capita (2007 \$)						
	<u>Average per annum</u>					Average growth 2004-06 to 2007-09 (%)
	1998-2002	2003-2006	2007	2008	2009	
Knowledge-intensive	1820.4	1846.6	2089.3	2235.3	1760.8	7.8
Lifestyle	643.3	851.1	932.2	824.5	597.5	-10.5
Dispersed Metro	640.2	727.8	886.3	890.4	674.4	8.9
Independent Cities	784.9	831.0	1063.6	1053.8	825.5	13.7
Resource Based	772.1	682.8	1022.7	1108.3	887.6	43.1
Rural	567.1	671.7	795.2	784.6	590.1	3.6
National	965.2	1036.5	1225.3	1259.6	976.5	8.4

The construction sector has played an important role as an employer of young people, in particular allowing young people of moderate education to choose a career in the region in which they grew up. In various regional studies conducted by National Economics, the construction sector is becoming an increasingly important employer of young people as opportunities in manufacturing decline. The construction sector also provides the opportunity for tradespeople to establish their own businesses for which they require, not only construction related skills, but also business and management skills.

During the resources boom the construction sector lost skilled labour to the mines where salaries were higher. Construction demand in some regions, combined with labour shortages in many trades, meant that the cost of construction, particularly in regions associated with resource developments, increased significantly.

In many regions construction activity has slowed, easing the pressure on skilled labour supply and materials. Some regions are still under pressure, for example, in the QLD Mackay Region there has been a construction boom in association with resource development. Very high levels of construction activity have created difficulties with sourcing labour and materials. Darwin has also faced skills shortages of construction workers because of demand for labour from the resource regions of Western Australia and Queensland, where salaries are generally higher than salaries in the Northern Territory construction sector.

Construction in SEQ has slowed as has residential and commercial construction in other former growth regions. A strong programme of State and Federal Government works is particularly important at this time to ensure that construction sector activity remains at reasonable levels during the private sector downturn. In the many regions where private sector activity has softened, public sector works, the building or further expansion of schools, hospitals, police stations and other public infrastructure, could, at least partly offset the decline in private sector activity. Creating a more stable construction sector over the long-term will allow the industry to improve training and its overall skills base.

Planners, designers and architects were hard to source during more buoyant times, as were many trades. Shortages of tradespeople differed from region to region but electricians and plumbers were commonly in short supply while in some regions the supply of trade labour was in reasonable balance. The real issues, in terms of availability of construction trades, have been in and around resource rich regions and in more remote regions such as the Torres Strait. The higher end trades, such as electricians, were in high demand by the mines.

The construction sector plays an important role in facilitating the development of more environmentally and greenhouse friendly buildings. There appears to be an emerging problem in relation to the availability of engineers and tradespeople to work on green star projects because there are not enough skilled workers to cope with higher technical specifications in this type of construction. This emerging skills shortage could become an issue for many of Australia's regions, particularly with the imperative to build highly energy efficient buildings using new technologies and new materials in their construction.

The ageing of skilled tradespeople and supervisory staff continues to be an issue for the construction industry although various initiatives around Australia are encouraging young people to take up careers in the construction sector.

	<u>Average per annum</u>					Average growth 2004-06 to 2007-09 (%)
	1998-2002	2003-2006	2007	2008	2009	
Knowledge-intensive	18589.9	21074.3	21858.5	22763.5	18025.3	-1.6
Lifestyle	2971.8	3914.6	3749.5	3534.5	2623.8	-16.3
Dispersed Metro	14597.9	17069.0	17817.4	18773.7	14648.5	0.1
Independent Cities	4981.5	6063.8	6760.5	6780.1	5317.0	1.1
Resource Based	1304.2	1274.5	1846.4	2006.0	1553.0	37.1
Rural	4203.9	5714.7	6390.3	6273.2	4835.8	-1.6
National	46649.1	55110.9	58422.6	60130.9	47003.4	-0.9

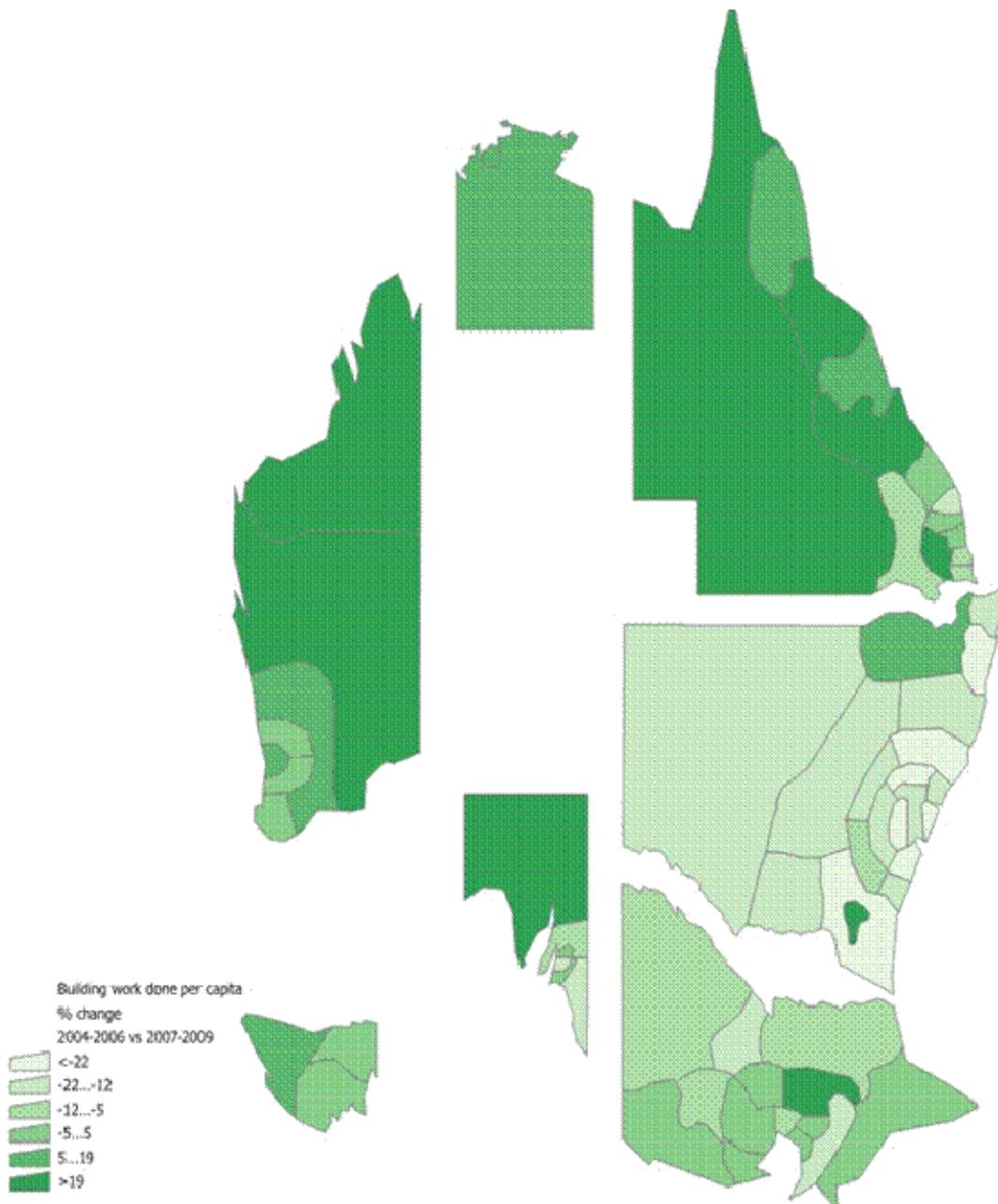
Total construction expenditure for 2009 is forecast to decline to close to the average annual real construction expenditure levels of the period 1998-2002 representing a significant slowing across the total construction sector from the highs of 2007-2008.

Table 1.20 Total construction expenditure per capita (2007 \$)						
	<u>Average per annum</u>					Average growth 2004-06 to 2007-09 (%)
	1998-2002	2003-2006	2007	2008	2009	
Knowledge-intensive	3689.6	3925.4	3914.2	4006.6	3106.1	-6.4
Lifestyle Regions	2379.5	2890.0	2654.8	2463.2	1804.9	-20.1
Dispersed Metro	2055.2	2261.3	2273.3	2354.2	1806.2	-4.5
Independent Cities	2020.1	2333.3	2518.6	2490.4	1931.0	-2.8
Resource Based	1695.0	1625.0	2299.3	2462.4	1879.0	32.5
Rural	1660.3	2179.8	2375.4	2306.4	1761.5	-4.6
National	2435.2	2717.9	2780.5	2816.7	2166.8	-5.2

Table 1.20 shows that total construction expenditure per capita is forecast to fall to its lowest level for the period since 1998 with only Resource and Rural Zones managing to improve on the 1998 figure. Declines in average growth of per capita construction expenditure were largest in Lifestyle Regions while a significant fall in per capita construction expenditure of almost 30 per cent is forecast for 2009, when compared to 2008, for Knowledge-intensive Zones.

Finally, it should be noted that although the projections were prepared on the basis of the latest official data, it is likely that the current financial crisis will result in a significant cancellation or postponement of projects that have approval, but not yet commenced production, as well as the termination of work on projects currently under construction as finance supply ceases. That is, the construction decline at the national level in Table 1.20 is likely to be significantly greater to 2009 than what is shown.

**Building work done per capita – percentage change –
2004-2006 versus 2007-2009**



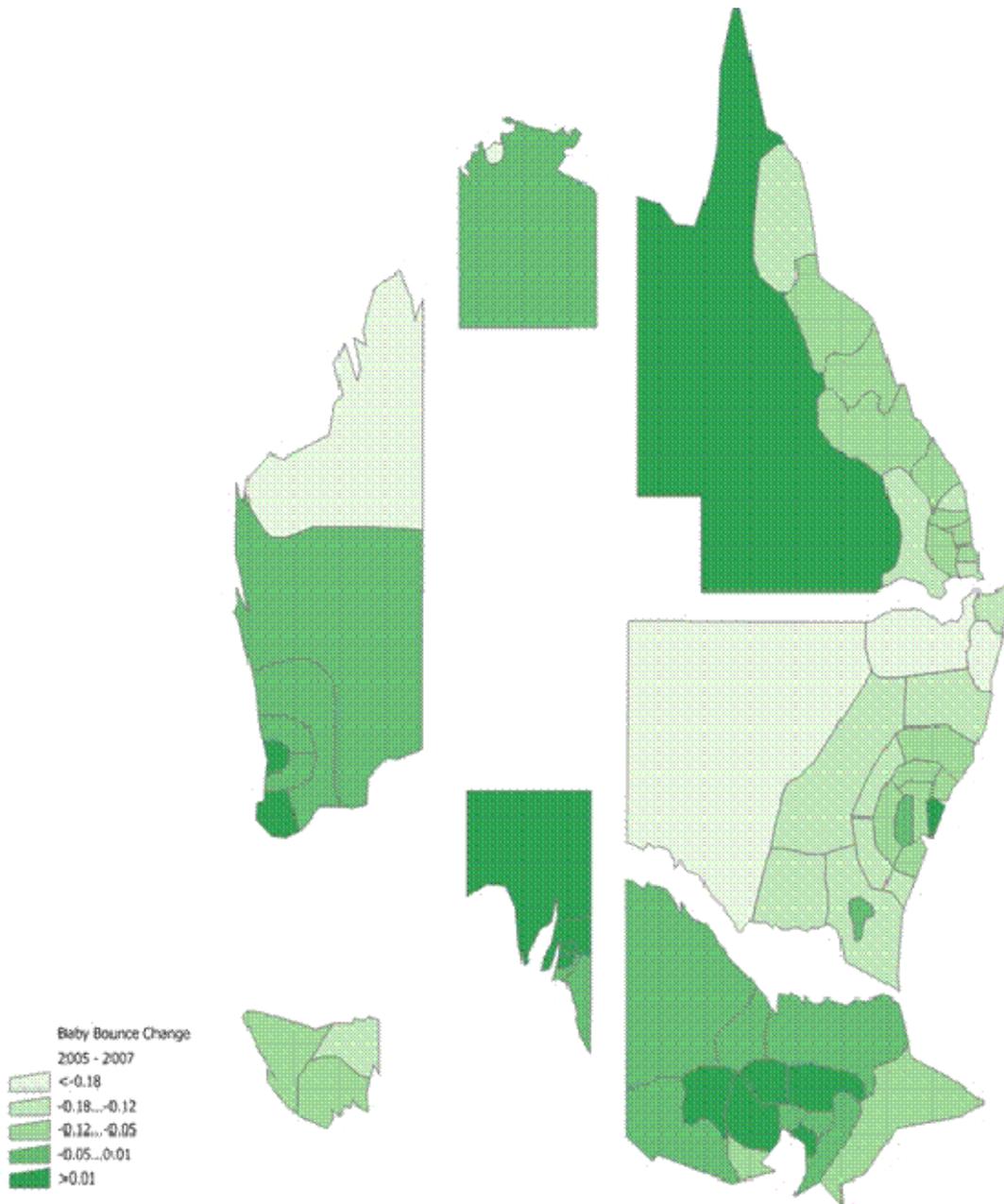
1.4 Baby bounce

The baby bounce indicator measures births as a percentage of population. Last year's figures indicated that the baby bounce was most pronounced in Resource Based, Dispersed Metro and Independent Cities Zones. The 2007 figures show that there were fewer births as a percentage of population in the Lifestyle, Independent Cities, Resource Based and Rural Zones. At the national level the 2006 and 2007 birth rates are the same at 1.3 per cent of population.

Table 1.21		Baby bounce							
		Baby bounce – per cent of population						Bounce	
		2002	2003	2004	2005	2006	2007	2006-2005	2007-2006
Knowledge		1.16	1.16	1.17	1.20	1.25	1.28	0.02	-0.02
Lifestyle		1.14	1.12	1.10	1.12	1.16	1.09	0.02	-0.10
Dispersed		1.31	1.29	1.30	1.31	1.35	1.37	0.03	-0.02
Independent		1.28	1.26	1.25	1.27	1.31	1.25	0.03	-0.10
Resource		1.61	1.56	1.54	1.54	1.56	1.53	0.03	-0.05
Rural		1.27	1.24	1.23	1.24	1.27	1.23	0.03	-0.07
National		1.26	1.25	1.25	1.26	1.30	1.30	0.03	-0.04

ABS data show that, for 2007, women aged 30-34 years had the highest fertility rates for all age groups with 126.6 babies per 1,000 women and that fertility in women aged 35-39 was the highest since 1950 with 68.1 babies per 1,000 women. Table 1.21 shows a figure for births in 2006 and 2007 of 1.3 per cent of population. The number of babies born in Australia in 2007 was actually 19,300 more than in 2006, representing the highest actual number of births ever registered in Australia. The population, however, also increased over this period, boosted by in-migration, so the baby bounce, as a percentage of population, remains similar to the previous year. It is worth noting that in-migration is still an important factor in maintaining Australia's working age population.

Baby bounce – percentage change – 2005-2007



2. Migration

The chief source of statistics on internal migration at the regional level is the national five-yearly Australian Bureau of Statistics (ABS) Census. After the release of migration data from each Census, National Economics includes a brief review of trends in the following *State of the Regions* (SOR) report.

The Census provides detailed data on LGA population by age, and also on responses to the Census question as to where people were living five years ago. In this chapter we review the migration estimates from the 2006 Census. The results from the 2001 Census are available in the SOR report for 2003.

The data include several traps for the unwary.

- ❑ Both census-night and permanent-resident population estimates are provided for each LGA. Because the Census is taken in mid-winter, more people are present in Australia's tropical regions than live there permanently, with the opposite for the colder regions. For the purpose of assessing population movements the ABS classifies people according to their permanent addresses, but this cannot apply to people with no permanent address. We therefore expect to find a number of recent migrants to the tropical regions who are actually nomads with no fixed address.
- ❑ The question as to where a person was living five years ago is not relevant for children aged under five. However, the number of children aged under five living in a region is a reasonable estimate of the number born into the region in the past five years.
- ❑ In 2006 approximately 7 per cent of the population failed to state a place of residence five years ago – up from 4.6 per cent in 2001. These people may or may not have shifted. The proportion of residents who failed to state a place of residence five years ago is high in the remote regions and also in Sydney Inner, Sydney Eastern Beaches and Inner Melbourne. All of these are areas of high population mobility where people may have forgotten where they were five years ago. The not-stated proportion was also above the national average in the four Queensland coast regions north of Gladstone, on the Gold Coast, in Sydney Old West and in Perth Inner – regions which also have populations on the move.

Using the Census tables, the population of each region can be divided into the following components. The percentage of the national population is given in brackets.

- ❑ Those aged under five (6.3 per cent).
- ❑ Those at the same address five years ago (49.1 per cent – prima facie a little less than in 2001, but after allowance for the higher level of non-response probably a little higher).
- ❑ Those who moved locally (defined as within the same LGA, or coming from another LGA less than 10 km away in the metropolitan areas and less than 50 km away elsewhere) (18.3 per cent, an increased proportion).
- ❑ Those who moved from elsewhere in Australia (15 per cent, a decreased proportion).
- ❑ Those who were overseas five years ago (4.3 per cent, a little more than in 2001).
- ❑ Those who did not state a location five years ago (7 per cent, as already remarked, a significant increase on 2001).

The data for each region are reported in the Appendix. We now review recent trends in each of these components of internal migration. The trends by region type are documented in Table 2.1.

Age in 2006	Location in 2001					
	Not yet born	Same address	Different but nearby address	In Australia, but distant	Overseas	Not stated
<20	24.0	38.7	17.2	11.3	3.5	5.5
20 – 29	0.0	31.7	23.7	24.9	9.9	9.8
30 – 54	0.0	49.9	21.4	17.1	4.9	6.7
55+	0.0	70.3	11.5	9.8	1.1	7.4
Total	6.3	49.1	18.3	15.0	4.3	7.0

Note: 'Not yet born' refers to children less than five years old in 2006.
Source: Census 2006.

2.1 Changes of address between 2001 and 2006

Children who were not yet born in 2001

The percentage of children (babies, toddlers and other children aged less than five) is highest in the three tropical resource regions: NT Lingiari, Queensland Resource and WA Pilbara Kimberley. These are regions with generally youthful and significantly indigenous populations. At the opposite extreme, the proportion of little children is low in the inner city regions of Melbourne, Adelaide, Perth and Sydney (and probably also in inner Brisbane, but this effect does not appear in the regional data because the City of Brisbane covers more than just the inner parts of the SEQ metropolitan area). The proportion of little children tends to be above national average in other remote regions and in new outer suburban regions, and below average in suburban regions close to city centres (like Sydney Eastern Beaches). Apart from Darwin, which is above average, the proportion tends to be around average in the independent cities and rural areas.

People living at the same address in 2006 as they were in 2001

At the regional level, the proportion of the population living at the same address as five years ago ranges from 30 per cent to 60 per cent, with a national average of a little over half.

The lowest proportion was in WA Pilbara Kimberley, which may be attributed to the high rate of turnover of population in mining-boom regions. However, high population turnover was not a feature of the other resource based regions, possibly indicating that they stabilised in the first five years of this century – perhaps the mining boom which took off in 2004 had yet to reach them. The proportion still living at the same address was also low in NT Darwin, which is likely to be related to resource-boom turnover as well as defence turnover. The other independent cities reported fairly average rates.

At 36 per cent, the proportion of the population remaining at the same address was as low in SEQ Gold Coast as it was in Darwin – an expected result for an area which until recently was a lifestyle area and is now classified as a knowledge-intensive region. The proportion of people not changing address was low in the inner-city knowledge-intensive regions except Adelaide Inner, but was average

to high in the suburban knowledge-intensive regions. Similarly, the proportion not changing address was low in the rapidly developing lifestyle regions (particularly Queensland Wide Bay Burnett) but around average in the older-established lifestyle regions.

The highest proportion of people still at the same address was in Melbourne North East, followed by Melbourne East, Melbourne Mid South East, Sydney Outer North and Adelaide South. All these regions are suburban, with a mixture of middle and outer suburbs. They are regions with generally high land prices, not particularly rapid population growth and (perhaps most important) high socio-economic status. It might be unkind to suggest that once people have arrived, they tend to stay put. Other dispersed and rural regions returned average proportions.

People who living away from, but close to, their 2001 address

At the regional level, the proportion of people who had made short-distance moves varied from a minimum of 10 per cent to a maximum of 27 per cent.

Regions with low levels of short-distance moves were of two types.

- ❑ Resource regions where there is very little to move to within 50 kilometres. Examples are NT Lingiari and Queensland Resource. Other resource based regions were similar in that they reported low to average proportions of short-distance moves.
- ❑ Suburbs with high land values and high levels of home ownership. Examples are Sydney Outer North, Melbourne East and Melbourne North East. It was also noticeable that short-distance moves tended to be less common in Melbourne than in the other metropolitan areas. Other dispersed suburban regions had low to average proportions of short-distance moves.

Regions with high levels of short-distance moves were more varied. The highest level reported was for the Gold Coast, and correlates with a high level of rental accommodation and redevelopment. The other knowledge-intensive regions had fairly average levels of short-distance movement. As if to claim similarity to the Gold Coast, the Sunshine Coast had a fairly high level of short-distance moves, as did several other independent cities, notably Vic Geelong and NSW Hunter. Short distance moves were also quite common in TAS North West, but were around average in the other rural regions.

People who were living a long way away, but within Australia, in 2001

The proportion of the population who were in Australia in 2001 but who in 2006 were living well away from their 2001 address varies from 8 per cent to 29 per cent. There is accordingly considerable variation in the extent to which regions attract population from other parts of Australia.

The map of long-distance moves reflects the pattern of interstate migration. Taking Queensland, the Northern Territory and Western Australia together, 17 regions reported that 19 per cent or more of their 2006 populations had lived far away in 2001, with only 5 regions reporting proportions around the national average of 16 per cent. Taking the other States and the Australian Capital Territory together, the proportions reversed, with 12 regions reporting that 12 per cent or less of their populations had lived far away in 2001 while 29 regions reported around average proportions and only one reported 19 per cent. People have been moving north and west, into the resource-rich States and Northern Territory. There is, however, a small caveat to this observation: the Census being taken in winter, it is likely to find a number of people who essentially have no fixed address but prefer to spend the cool season in the tropics. In the wet season many of these nomads are likely to be back in the south.

The trends to shift north and west converged in WA Pilbara Kimberley, which reported the highest proportion of long-distance movers. The other resource regions all had average or above-average proportions, continuing a trend that was also noticeable in 2001.

Other regions attracting high proportions of long-distance internal migration lay on the Queensland coast, including SEQ Moreton Bay (classified as dispersed suburban), QLD Wide Bay Burnett (classified as lifestyle) and QLD Mackay (classified as rural). It appears that location trumps classification – all parts of the Queensland coast have been attractive. However, the attraction has been fading in those Queensland coastal regions where there is less room for new development, and SEQ Brisbane City and SEQ Gold Coast both had merely average rates of migration from elsewhere in Australia.

Of the thirteen regions with low rates of attraction for long-distance internal migration, five were in Sydney – comprising more than half of the nine metropolitan Sydney regions. The obvious explanation is that, during the land boom, Sydney became too expensive for other Australians to move in. It may be significant that the only Sydney region to report an above-average level of internal in-migration (and then only just above average) was Sydney Outer North. Land prices are high there too, but it is probably the region of choice for incoming executives who receive home-purchase assistance from their employers.

It is noticeable that the knowledge-intensive regions have not been very attractive to Australian internal migrants. None of these regions attracted above-average levels of internal migration, and one of them, Sydney Parramatta Bankstown, was at the bottom of the list. Once again, we may suspect that the land boom raised accommodation prices out of the range of potential Australian in-migrants.

Among the independent cities, state effects dominated. Thus independent city regions located in the Northern Territory and Queensland (Western Australia does not have any) gained long-distance internal migrants at above average rates, while independent cities in Victoria, New South Wales and Tasmania (South Australia does not have any) gained long-distance internal migrants at below-average rates (or nearly average in the case of Vic Bendigo). None of this bodes very well for decentralisation policies in the south-eastern States.

Among the lifestyle regions, state effects were similarly prominent. The Queensland lifestyle regions were attractive to people moving from elsewhere in Australia, the New South Wales regions were less attractive.

Dispersed regions followed the fortunes of their State and metropolitan area, and rural regions followed the fortunes of their State.

People who were living overseas in 2001

People who were living overseas in 2001 include both overseas migrants (permanent and temporary) and Australians who returned from overseas. On a regional basis, the proportion varies from under 1 per cent to a maximum of 12 per cent. The national average is a little under 5 per cent.

The pattern of overseas contributions to the resident population is distinctive. Very low proportions were reported for the rural regions, lifestyle regions and resource based regions (which recruit from Australia, not from overseas). On the other hand, people who were overseas in 2001 made very strong contributions to the 2006 population in Melbourne Inner, Sydney Inner and Sydney Eastern Beaches. Their contribution to the population was also strong in Perth Inner and in some of the dispersed regions of Sydney and Melbourne.

The contribution to the population of people who were overseas five years before was above average in all but one of the knowledge-intensive regions. The exception, where the contribution was merely average, was the Australian Capital Territory.

These patterns are quite the opposite of those for Australian long-distance internal migration. We may hazard three explanations.

- ❑ The inner metropolitan regions have long catered to recent immigrants, and provide a range of social contacts for them which is lacking elsewhere.
- ❑ A high proportion of people coming from overseas are students and other highly-educated and ambitious young people, who naturally head for the knowledge-intensive regions.
- ❑ People coming from overseas are likely to be less daunted by high land and house prices, being more accustomed to high-density living and perhaps less ambitious in their demands for space.

The first of these possible explanations can be pursued in greater detail by considering the migration patterns for the young and mobile, that is people aged 20-29.

2.2 Migration patterns of young adults

Given the preceding discussion, the groups of interest are young adults who were living in Australia in 2001 but had made long-distance moves, and young adults who were living overseas in 2001.

Young adult long-distance internal migrants

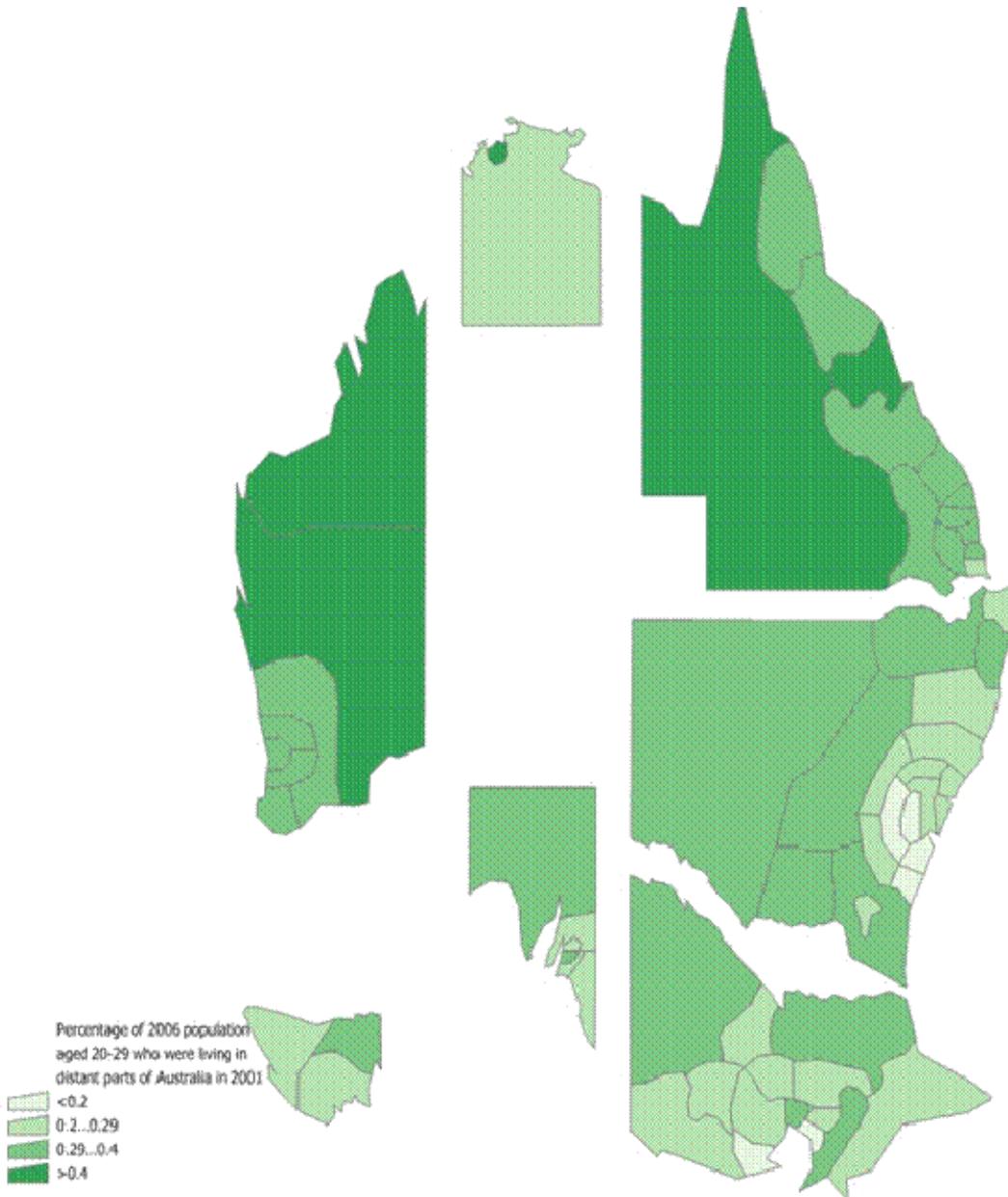
Approximately 28 per cent of the population aged 20-29 in 2006 reported that they had lived somewhere far away in Australia in 2001. On a regional basis, the proportions ranged from 15 per cent to 50 per cent.

As with internal migration as a whole, there was a strong interstate pattern, with the north and west gaining at the expense of the south-east. Taking Western Australia, the Northern Territory and Queensland plus NSW Far West and NSW North, 16 regions recorded that more than 35 per cent of their young adults were recent long-distance internal migrants, and no region had less than the national average. Taking South Australia, Tasmania, Victoria, the Australian Capital Territory and New South Wales minus its Far West and North, there were 15 regions where less than 25 per cent of young adults were recent internal long-distance migrants, 26 which were around average and none more than 34 per cent. Young people who were already resident in Australia in 2001 (most of whom would have been born here) were heading north and west, towards the resources boom. Most of the resource regions attracted young Australian residents at rates well above average. So did NT Darwin and the other regions along the Queensland coast from SEQ Sunshine Coast north.

By contrast, the knowledge-intensive regions attracted young Australian residents at rates which were average at best (the highest proportion was 33 per cent for Melbourne Inner) and rock-bottom at worst (15 per cent for Sydney Parramatta Bankstown). Sydney was particularly unattractive to young Australian residents, presumably because of its high housing costs and faltering economy.

Before we conclude that young adults who were in Australia in 2001 have rushed to become construction workers in the resources boom and hospitality workers in the tourism boom, we should remember that there is an important group which was not counted in 2006 – that is, young Australian residents who have emigrated, either temporarily or permanently. Not only are young Australians anxious to gain overseas experience, the Australian system of recouping education costs by income tax (HECS) encourages educated emigration.

Percentage of 2006 population aged 20-29 who were living in distant parts of Australia in 2001



Young adults from overseas

The pattern for people aged 20-29 who were living overseas in 2001 is completely different. This population group comprises approximately 11 per cent of young adults, and on a regional basis the proportion ranges from 2 per cent to 30 per cent. These young adults have headed for the knowledge-intensive regions. Even though the number of young adult overseas migrants is only about 40 per cent of the number of young adult long-distance internal migrants, young people from overseas more than match young people from elsewhere in Australia in three of the four Sydney knowledge-intensive regions, and come close in Melbourne's two.

Many young adults from overseas are students who are in Australia temporarily, being visa-obliged to return home. Commonwealth government policy has imposed strong incentives to recruit overseas students to all Australian tertiary education institutions, and the results are visible in the migration statistics. Regions lacking in tertiary education institutions typically report that around 2 per cent of their young adult population was overseas in 2001. Throw in a university and the proportion typically climbs to 4 per cent. However this is far short of the proportions reported from the knowledge-intensive regions, even if one allows for the larger universities in these regions. We conclude that most of the young adults from overseas living in the knowledge-intensive regions are permanent residents seeking a career in Australia.

The only knowledge-intensive region to have a merely average proportion of young adults from overseas is the Australian Capital Territory. This is not because the Australian Capital Territory lacks high-quality education opportunities. The low proportion therefore indicates a failure to attract young people from overseas. Possible reasons include its small-city ambience coupled with a perception that it is a government town in which recruitment favours Australian citizens.

In addition to the knowledge-intensive regions, young adults from overseas also spill into some of the adjacent dispersed suburban regions, notably Sydney Old West, Sydney South and Melbourne North. By complete contrast with the young people who have migrated within Australia, there are very few in the resource regions, lifestyle regions or rural regions. Many of these few would be temporary entrants on working holiday visas, though some intend to remain permanently – for example, the populations of young refugee agricultural labourers in irrigation settlements such as Robinvale in Vic Mallee Wimmera.

Divergent patterns between internal and overseas migration of young adults

There is a stark difference between the typical young Australian resident seeking fortunes in the resource or lifestyle regions and the typical young adult from overseas seeking a knowledge based future. We may speculate that the Australian-resident young adults combine lifestyle ambitions with relatively poor education – the latter the result of low government expenditure on post-school education. A contributing factor could also be that young educated Australians tend to emigrate. Poor educational qualifications would explain the need of the Australian residents to head to employment in the resource or tourism industries. Meanwhile young adults from overseas, with a preference for city life and better education (whether gained in Australia or overseas) are being recruited for the knowledge based industries, as well as keeping Australia's universities financially afloat as fee-paying students.

2.3 Migration patterns of older people

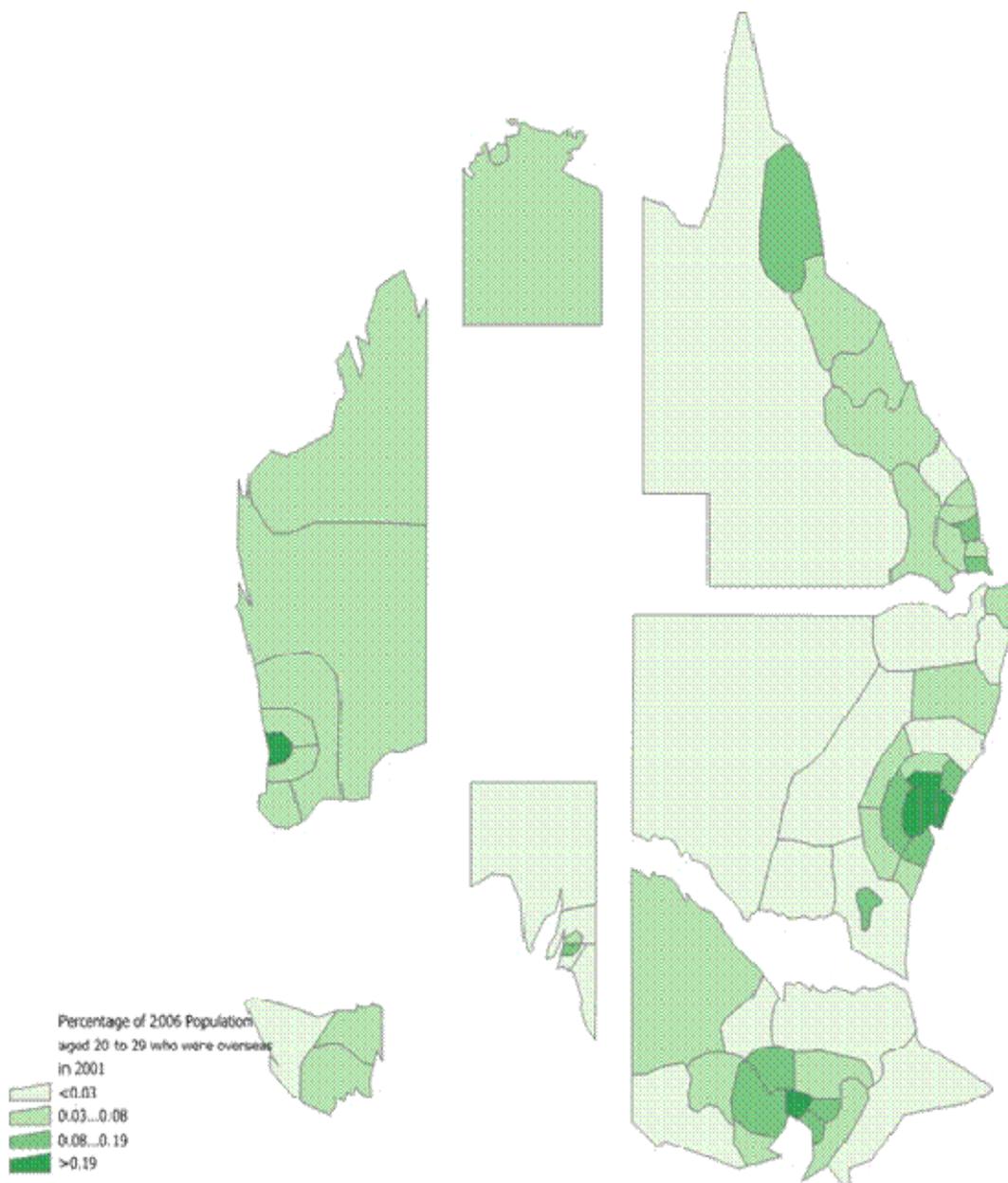
In previous SOR reports, particularly that for 2003, we have described the contribution of retirement migration to the ageing of the population in lifestyle regions. The question is, did this trend continue between 2001 and 2006?

Retirement migration destination regions

According to the Census, in 2006 approximately 11 per cent of people aged 55 and over were living a significant distance from where they were living in 2001. On a regional basis, the proportions ranged from 4 per cent to 26 per cent.

The highest proportion of long-distance internal migrants among the older population was found in WA Pilbara Kimberley. Like the fairly high proportion in NT Lingiari this would be due to grey nomads of no fixed address, who are unlikely to be in the region during the hot season or the wet.

Percentage of 2006 population aged 20 to 29 who were overseas in 2001



High proportions are also recorded in most of the established retirement areas along the Queensland Coast. The Gold Coast is no longer attracting retirees – land prices have risen as it has become a knowledge economy – so the focus of attention has shifted further north into Queensland Wide Bay Burnett, SEQ Moreton Bay and SEQ Sunshine Coast, with continuing flows also into QLD Mackay and QLD Cairns. The retirement migration to Moreton Bay is interesting. This region combines greater proximity to Brisbane with lower land prices than the adjacent Sunshine Coast, the price being a limited supply of beaches. There was also a moderate level of internal migration of older people into the hills behind Brisbane: SEQ West Moreton and QLD Darling Downs.

Among the New South Wales lifestyle regions, the NSW Mid North Coast and NSW Central Coast remain fairly popular but NSW Richmond Tweed drew only a little over an average proportion of retirees from long-distance internal migration. NSW Southern Tablelands has been attracting more retirees than this – this region includes the NSW south coast.

Another group of regions popular with retirees lies in Western Australia, and includes Perth Outer North and WA Wheatbelt – Great Southern (which has two lengths of coast) as well as WA Peel South West (the traditional Western Australian retirement region). Victoria has one region – Melbourne Outer South East, which includes beach-side developments around the Mornington Peninsula. As for SEQ Moreton Bay, it seems that retirees value easy day-trips to a metropolitan centre.

In summary, retirement migration continued from 2001 to 2006, though it tended to skip the New South Wales coast in favour of Queensland and (to a lesser extent) coastal areas in Western Australia and Victoria close to the metropolitan areas.

Retirement migration source regions

In previous SOR reports we have shown that retirement migration was encouraged by the land boom, which allowed home owners in the metropolitan areas in general, and Sydney in particular, to sell their houses and buy in much more cheaply in a lifestyle region. This was most simply done by selling out, paying cash for the new home and investing the remainder – but with the heavy accumulation of household debt over the period it was probable that many older people were adding to their mortgages rather than subtracting, whether or not they shifted house in the process.

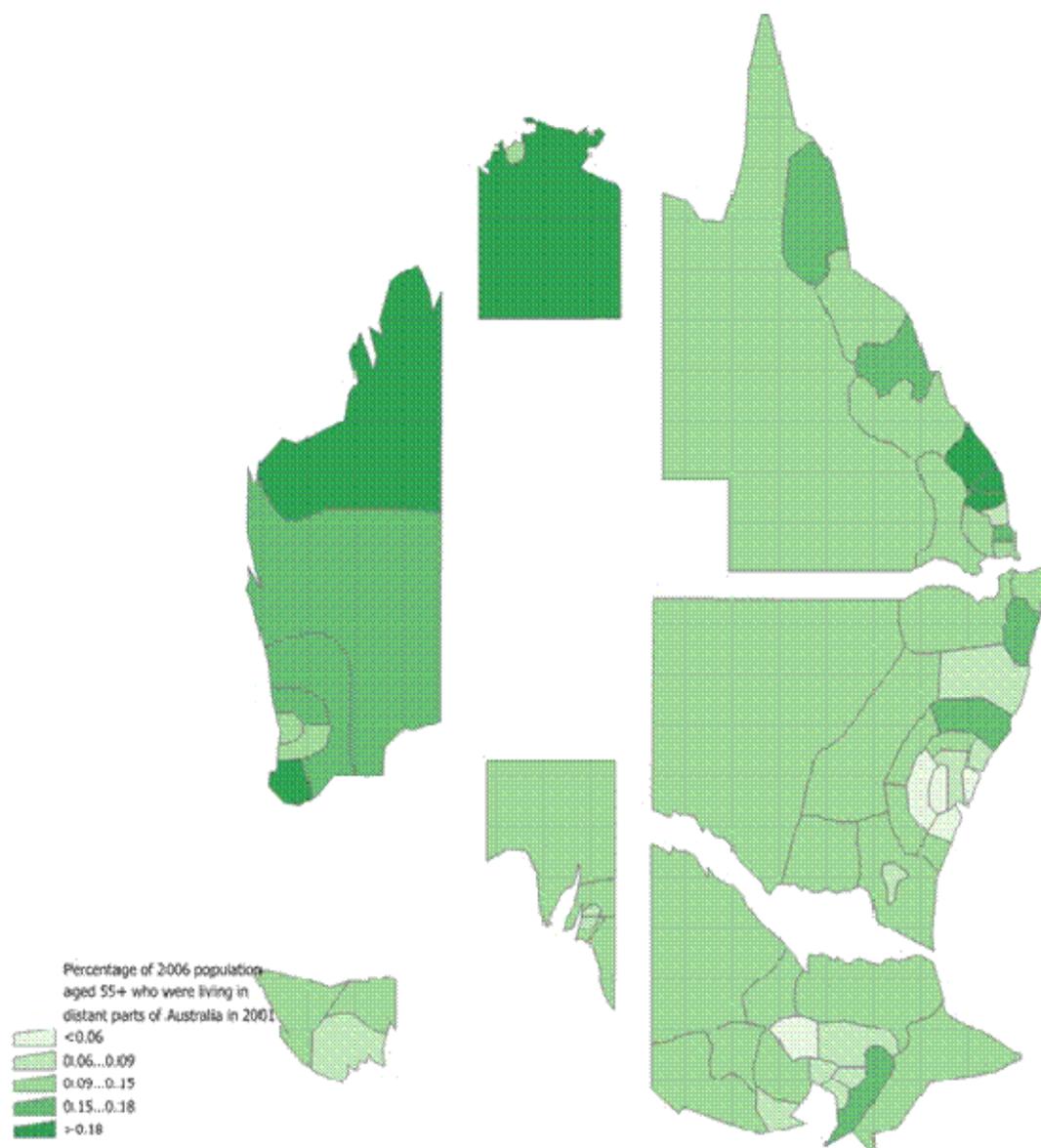
For this year's report, National Economics did not calculate where the retirees came from. However, the data allowed identification of regions that were attracting very few retirees. Top of the list here were Sydney Old West and Sydney Eastern Beaches, closely followed by Sydney South and Sydney Parramatta Bankstown. Sydney land prices have strongly encouraged retirement out-migration, and strongly discouraged anybody to retire in the vibrant metropolis. Other regions with significantly below-average retirement in-migration include Sydney Inner, Sydney Northern Beaches, the ACT, Melbourne North, Melbourne Mid South East, Melbourne North East and Adelaide North. Many of these regions also participated in the land boom, and are accordingly both unattractive to retirement in-migration and probable sources of retirement out-migrants.

Local migration by older people

Retirement migration is not the only move possible for older home-owners who find themselves with a large, valuable house. They also have the option of trading down to a smaller place locally. Local migration, which may or may not involve downsizing, is common – rather more of the population 55 and over made a local shift in the period between censuses than made a long-distance shift. The range was from 8 per cent to 24 per cent.

If downshifting is important, one would expect a high level of local migration among older people who have benefited from the land boom. The map of local migration by people 55 and over, however, indicates that local migration is most common on the Queensland coast – the Gold Coast and Sunshine Coast particularly. The impression is that the retirees are shifting locally as they settle down in the regions to which they migrated in the 1990s. However, the inner regions of all the capital cities except the Australian Capital Territory recorded an above-average level of local migration by people aged 55 and over, which is most likely downshifting.

Percentage of 2006 population aged 55+ who were living in distant parts of Australia in 2001



2.4 Internal migration by schoolchildren, adolescents and parent-aged adults

Not surprisingly, the migration patterns for children and young people aged 5 to 19 are similar to the patterns for adults aged 30 to 54.

Recent long-distance migrants (mostly internal, but including a minority from overseas) constitute a high proportion of the family-age population in some of the resource regions, particularly WA Pilbara Kimberley – continuing the long-established trend of the workforce to follow the jobs. The other long-established trend of families with metropolitan jobs to migrate to the outer suburbs in search of affordable housing also continues, and has been particularly strong in Perth Outer North and SEQ Moreton Bay. Sydney Outer North has also attracted working-aged adults and their children, perhaps as a final phase in the Sydney financial sector boom.

The regions which have conspicuously failed to attract working-age people and their children are southern independent cities: NSW Hunter, NSW Wollongong, Vic Geelong, Vic Ballarat and TAS Hobart-South, to which we may add TAS North West. With the possible exception of Hobart, these were all affected by industrial restructuring in the 1980s and 1990s, and have taken a long while to recover. Among the southern independent cities, only Vic Bendigo attracted an above-average proportion of working-age migrants – and some of these may have been spillover from Melbourne.

The proportion of working-age in-migrants is about average in the rural regions, even though many rural regions have suffered at least as much from restructuring as the southern independent cities. The reasons for the relatively high level of in-migration begin with the tendency of some of the locally-born to return home after their adolescent adventures in the city and include a general reliance on the knowledge-intensive regions to provide the post-school education and training needed for the supply of professional services in the rural regions. The migration pattern could also reflect the decisions of people searching for low-cost accommodation and an unstressed life style.

2.5 Conclusion

During the period 2001-06 established migration patterns continued. Retirement migration continued, with the most-favoured destinations along the Queensland coast north of Brisbane – the New South Wales coast and Queensland Gold Coast were less favoured, probably a response to rising prices. Similarly working-age migration continued to the job-rich resource regions and to the metropolitan outer suburbs – though the rate of shifting to the outer suburbs was subdued compared to the great days of suburban expansion in the post-war period.

The most intriguing pattern was the tendency for young adult Australians to avoid the knowledge-intensive regions and head north and west to resource and lifestyle regions, while young adults from overseas are seeking their future in the knowledge-intensive regions. The big unknown here is whether the Australian-educated young adults who are missing from the knowledge-intensive regions have emigrated permanently or are away gaining overseas experience. Either way, but particularly if they have emigrated, these trends indicate increasing divergence between the cosmopolitan knowledge-intensive core city regions and the relatively poorly-educated periphery.

3. Patents and the knowledge economy

For many years now the *State of the Regions* (SOR) reports have included data on patent applications per thousand residents as an indicator of activity in commercially-oriented research, and a proxy for scientific innovation, knowledge endowment and entrepreneurial dynamism. It is not, of course, a perfect indicator. It over-emphasises the amount of research carried out in the major city centre regions, since patent applications by large businesses tend to bear the head office postcode and there may also be cases where the address is that of a patent lawyer rather than the business which did the research. Patent applications also tend to come in bunches, which means that data for the less patent-active regions are unstable – a problem which we have addressed by taking the average for the six years 2001-02 to 2006-07. The data are provided for each region in the Appendix.

Patent applications were one of the indicators taken into account in defining knowledge-intensive regions, and it is not surprising to find that these regions as a whole have very much higher patent application activity than the rest. Again, given the location of head offices as well as of universities and laboratories, it is not surprising to find that Sydney Inner tops the list of applications per capita, followed by Melbourne Inner then the ACT. The patent application rate is relatively low in two of the suburban knowledge-intensive regions, Sydney Eastern Beaches and Sydney Parramatta Bankstown.

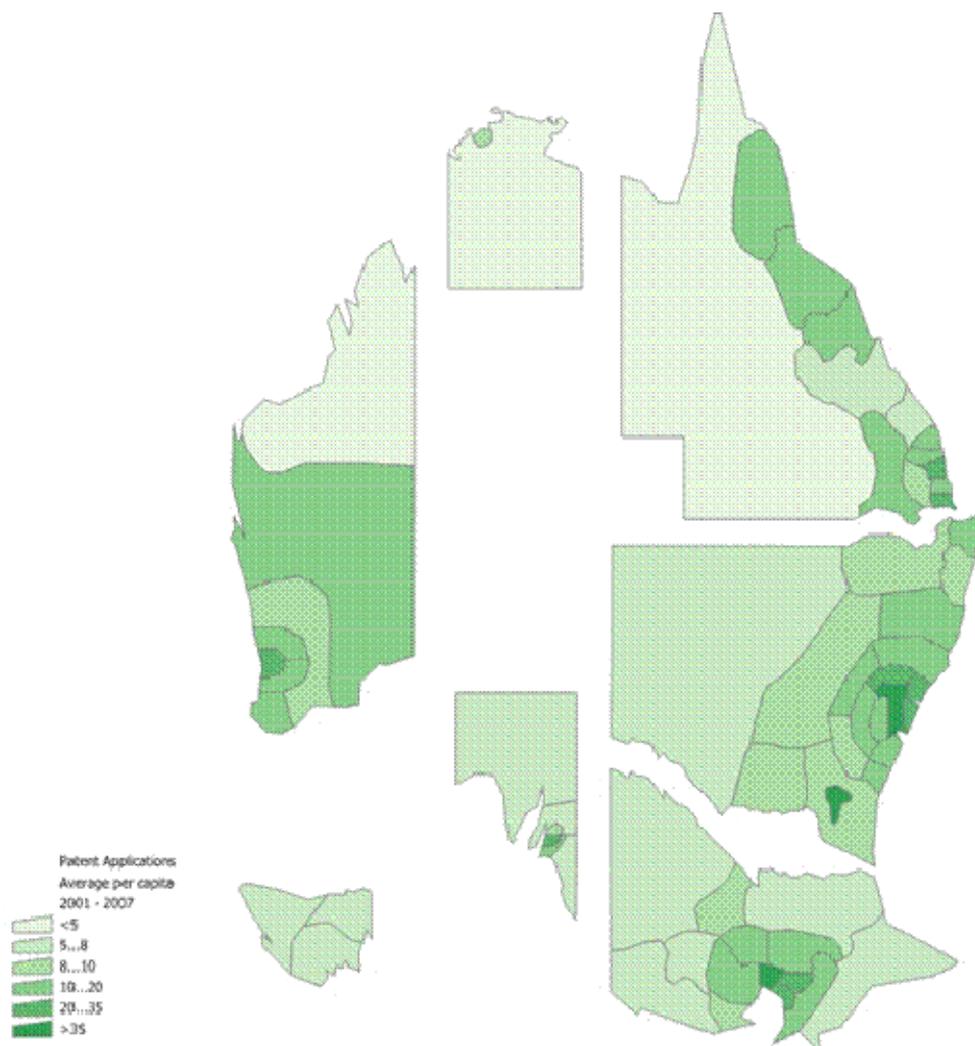
At the opposite extreme, the resource based regions have low patent application rates. The need for advanced technology to exploit the resource base should make for high patent application rates, but the lack of research facilities and talent in the resource regions means that their research and development is carried out elsewhere – presumably mainly in the knowledge-intensive regions, though the patent application rate is noticeably higher in the north-Australian independent cities close to the resource based regions than it is in the independent cities of Victoria and Tasmania.

Patent application rates are above average in two of the lifestyle regions – SEQ Sunshine Coast and NSW Richmond Tweed. Both of these regions are on track to follow SEQ Gold Coast into becoming knowledge-intensive regions. Similarly two of the dispersed metropolitan regions report relatively high patent application rates – they are Melbourne East and Sydney Outer North. Both of these are high-status residential areas, which can easily accommodate research laboratories. The patent application rate is also quite high in Brisbane South.

Apart from the resource based regions, patent application rates are low in Tasmania (all three regions) and in the rural regions generally.

In an attempt to assess long-term trends, the Appendix provides data comparing average patent application rates for 2001-07 with that for 1994-2001. Between the two periods there was a general rise in the level of patent applications per capita. Data instability means that the comparisons are not reliable for regions with low patent application rates. Among the regions with middle to high application rates Sydney Inner stands out with a high rate of increase – which might indicate growth of research activity, but might also indicate an increased proportion of head-office applications. Two dispersed suburban regions reported major increases: SEQ Moreton Bay and Melbourne North both lifted themselves from low levels of patent applications to levels a little above average.

Patent applications – average per capita – 2001-2007



Though the patent application rate in the Australian Capital Territory remains high, it has scarcely changed over the period – a poor performance compared with most regions, which may reflect reductions in Commonwealth budgets for research. NSW Illawarra and NSW Southern Tablelands are also regions with moderate levels of patent applications which failed to increase their application rates.

These changes have done little to alter the overall geographic pattern, which is that patent applications serve to identify a limited number of knowledge-intensive regions. Despite the hopes expressed in the early SOR reports, the knowledge economy – or at least that part of it which is proxied by patent applications – has failed to spread much beyond its Australian beachheads.

3.1 Knowledge intensity

This report highlights a number of trends that are particularly significant when they are brought together.

1. The lack of progress in developing a National Broadband Network.
2. The likelihood that, in Australia, the knowledge economy has failed to spread outside of the existing knowledge-intensive regions.
3. In terms of the migration flows, the tendency for young adult Australians to avoid the knowledge-intensive regions and head north and west to resource and lifestyle regions or perhaps to Knowledge-intensive regions in other countries, while young adults from overseas are seeking their future in the knowledge-intensive regions in Australia. These trends indicate increasing divergence between the cosmopolitan knowledge-intensive core city regions and the relatively poorly-educated periphery.
4. The need to convert the economy to a low carbon emissions future which will require a greater commitment to research and development and to innovation, the use of new technologies and the further development of advanced manufacturing industries.
5. Both the resource based regions, which are vulnerable to the global downturn and to falling demand for emissions intensive commodities, and the rural regions, which are vulnerable to the impacts of climate change, are likely to experience ongoing difficulties.

OECD figures show that the global distribution of expenditures on research and development is changing, with shares in annual expenditure in both the United States and the European Union falling by 3 and 2 per cent respectively since 2000 while China's research and development expenditures increased by 19 per cent per annum between 2001 and 2006. The OECD *Science, Technology and Industry Outlook 2008* reports that in the United States, business research and development intensity in 2006 was 1.84 per cent of GDP, down from 2.05 per cent in 2000. Business research and development intensity reached a new high in Japan in 2006 of 2.62 per cent. The OECD's *Industry Outlook* also goes on to report that the growing knowledge intensity of many countries is driving the demand for highly skilled global knowledge workers. In the OECD area employment has grown fastest in science and technology (knowledge-intensive) jobs, outstripping overall employment growth. Global knowledge workers are becoming more mobile as the market for their skills becomes increasingly global. The ABS statistics show that research and development expenditures by Australian businesses reached \$12 billion in 2006-07, the major contributors being manufacturing (31 per cent), mining (21 per cent) and professional scientific and technical service industries (17 per cent). The strongest research and development expenditure growth was in New South Wales, probably reflecting the location of head offices. Business research and development expenditure in Australia as a proportion of GDP was 1.15 per cent, well below the OECD average for the year of 1.56 per cent.

It remains obvious that the level of knowledge intensity and research and development activity within a national economy are key drivers of business innovation. Innovation, in turn, enhances the capacity of a nation or region to export goods and services. Regions in which innovation is encouraged create more highly skilled and better paid employment. The more knowledge intense the economy, the more the need for education and training, the more likely the development of high tech industry clusters and greater connectivity to global and integrated supply chain activity.

The 2006-07 SOR report noted how improvements to telecommunications were accompanied by an unexpected phenomenon: the unprecedented prosperity of several small regions within the United States, most notably Silicon Valley. These regions were engaged in the conversion of knowledge to both profit and employment. The report found that regions like Silicon Valley confounded expectations in two ways. Firstly, they were localised whereas the expectation had been that the telecommunications revolution, of which they were part, would remove the benefits of locality. Secondly, where were the economies of scale? So many of the businesses involved seemed to be small start-ups, and even if some of them grew large their industry was characterised by all sorts of temporary business relationships.

What remains confounding two years on from these findings is that little has changed, in as much as it still appears to be a great deal easier (recent weeks aside) to establish global and knowledge-intensive businesses in the global hotspots such as Silicon Valley. We can again go back to the discussion in the 2006-07 report which identified the ingredients required to establish global and knowledge-intensive businesses. Broadly these were as follows.

1. There are local sources of new knowledge and ideas.
2. Venture capital is available.
3. The penalties of failure are not too severe, either in terms of financial penalties for the entrepreneur, or in terms of lost knowledge.
4. There is a realistic outlook that success will be rewarded – not necessarily with wealth alone, but also with social recognition.
5. Local interpersonal networks assist in putting together the skills required to run an innovative business – practical as well as theoretical skills, managerial as well as production skills, marketing as well as product development skills.

So why is it still so difficult to establish new and global knowledge-intensive businesses away from global hotspots such as Silicon Valley? In the case of Australia, business people are not lacking in ideas and entrepreneurship. The telecommunications update in this report demonstrates that the demand for broadband is high and that demand compares favourably with the United Kingdom and United States. So what are the barriers that constrain the process of turning ideas into products and services, which, if Silicon Valley's example is followed, are products and services that supply global markets via information technology or other forms of highly integrated supply chain activity?

Because the businesses that are being created in Silicon Valley are likely to have a global reach, their market capitalisation, tends, in good times, to be very high and fast growing, while in times of economic shock, these same companies have proved not to be immune to rapid downturns in the value of their stock. A quick review of the current share price of the major Silicon Valley information and communication technology (ICT) companies against their 12 month highs reveals a significant decline in share values with many companies losing half of their value or more. These falls apply to hardware and software companies as well as companies whose business is online.

Silicon Valley financiers have tended to be less risk averse, or perhaps better understood the potential of some ICT and knowledge-intensive businesses, however, the financial crisis has had a major impact on the financing of start up companies in Silicon Valley and in other regions that apply this model. A number of more established companies may also now fail because finance has dried up.

While the United States has created companies such as Ebay, Cisco, Yahoo, Google, Facebook, YouTube, Apple, Dell, Microsoft, Intel, Oracle, IBM, Adobe, Amazon and HP, few, if any equivalent globally powerful companies, have been financed and developed in Australia, even in the Knowledge-intensive Zones. The reason for this is not the lack of ideas or of entrepreneurial skills, nor the size of the local market, as all the United States' businesses listed have global markets. Access to capital for high tech start up firms has probably been difficult, even though Australia's superannuation funds have continued to grow rapidly their contribution to real capital investment remains muted. Rather they have chosen to invest overseas, exposing themselves to the booms and busts of the United States market or simply invested in shares in well established Australian companies. The value of ideas and innovation may also be lost on, at least some parts of, Australia's investment community.

As broadband services in Australia improve and become more equitable in terms of their distribution because of improved telecommunications infrastructure, opportunities to create new products and services, that use the Internet as their delivery channel, will increase. This is not to say that these businesses will be in the ICT sector, but instead to suggest that they will use ICT to facilitate global supply chain activity and the delivery of goods and services to the end user. Perhaps the global financial crisis will create a level playing field in terms of providing more regions opportunity to invest in and develop knowledge economy businesses. There will need to be an associated effort from the investment community as well as a strengthening of Australia's knowledge-intensive regions. Next we investigate the state of Australia's telecommunications.

4. Telecommunications update

The 2005, 2006 and 2007 *State of the Regions* (SOR) reports have all included an overview of the state of telecommunications in Australia, with a focus on the competitiveness of broadband services and how the availability, quality and cost of these services impact regional economic development.

This chapter also includes commentary on the quality and equity of broadband services in major cities, suggesting that it may not only be Australia's more remote regions that suffer disadvantage.

The purpose of this year's telecommunications chapter is to bring together the issues highlighted in previous reports, in the light of previous findings, add the developments in the telecommunications sector of the last twelve months, and then to assess progress towards world best practice.

The Regional Telecommunications Independent Review Committee Report 2008, *Framework for the Future*, was tabled in the Federal Parliament on 15 October 2008. An extract from the report states:

'The importance of regional Australia and its industries to our overall national wellbeing underscores the importance of adequate telecommunications services to regional, rural and remote parts of Australia. Increasingly telecommunications services are not only an end in themselves for achievement of equity, but also critical enablers in equitable availability of other services. We therefore support a policy and regulatory environment that promotes competition, innovation and investment in telecommunications for regional areas, supported by effective measures to protect consumers. The ultimate aim of any such approach is to establish fairness and equity for all Australians'.

4.1 Overview of the telecommunications sector in Australia

Paul Budde, the leading expert and commentator on Australian telecommunications, estimates that the telecommunications market in Australia grew by around 5 per cent to \$38 billion in the twelve months to June 2008. Telstra still continues its domination of the Australian telecommunications market with 66 per cent of market share. Paul Budde estimates that the total mobile services market for the year to June 2008 was worth \$14.4 billion. In terms of its possible penetration, the mobile market has reached saturation. Further revenue growth in this sector of the market will come from increased use of 3G mobile data services and increasing use of mobile broadband, data services, which are now the most important driver of growth across the various delivery systems, wire, fixed wireless and 3G mobile wireless, in the telecommunications sector.

By the end of June 2008, Australian Bureau of Statistics (ABS) figures show that there were 7.23 million subscribers to the Internet in Australia. There were 1.02 million business and government subscribers and 6.21 million household subscribers. The number of non dial-up subscribers recorded at the end of June 2008 was 5.66 million, or 78 per cent of all Internet connections, compared with dial-up subscribers of 1.57 million.

Digital Subscriber Line (DSL) continued to be the dominant access technology used for non dial-up subscribers, with 3.94 million, or almost 70 per cent of all non dial-up subscribers. DSL connections continue to grow, with more than a 6 per cent increase since December 2007. Wireless technology increased nearly 90 per cent in six months, with over 809,000 subscribers at the end of June 2008, compared with 433,000 subscribers at the end of December 2007. The growth of wireless relates to increased use of wireless aiding mobility of workers and changing work practices. Cable, satellite and other non dial-up technology connections have remained fairly stable.

ABS figures show that connections with download speeds of 1.5Mbps or greater increased to 3.10 million or 43 per cent of all subscribers, compared to 2.47 million or 36 per cent of subscribers at the end of December 2007.

Paul Budde estimates that the growth in broadband subscribers will slow to around 17 per cent in 2009 and 2010.

Consumer demand for broadband services in Australia has been strong as households and businesses embrace the need for telecommunications services to enhance competitiveness and for education and other essential services, for entertainment, video and voice services. Given the current hiatus in relation to telecommunications infrastructure roll-out in Australia, it is likely that demand for high speed services will outstrip supply. Paul Budde predicts that this situation will lead to growth in Next Generation Network systems, which in turn will open up the market for a range of contemporary digital services.

The National Broadband Network represents the largest intended investment in broadband infrastructure in Australia to date. The Federal Government has committed some \$4.7 billion dollars to this project which, after completion should (according to the Federal Government's Request for Proposal (RFP) documentation):

- deliver minimum download speeds of 12 megabits per second to 98 per cent of Australian homes and businesses (the Australian Broadband Guarantee is to help provide services to the remaining 2 per cent unable to be serviced by the National Broadband Network);
- be rolled out and made operational over a five year period using fibre-to-the-node (FTTN) or fibre-to-the-premises (FTTP) technology;
- support high quality voice, data and video services including symmetric applications such as high-definition video-conferencing;
- facilitate competition in the telecommunications sector through open access arrangements that allow all service providers access to the network on equivalent terms; and
- enable uniform and affordable retail prices to consumers, no matter where they live.

The Federal Government's RFP initially requested that proposals from interested parties to develop the network be received by 25 July 2008, but this date was then changed to 26 November 2008. These delays may indicate that not all is well with the underlying assumptions that have driven the policies that have framed the current plans for the National Broadband Network, the foremost being the actual cost of creating such a network and, secondly, the capacity of the possible tenderers to actually deliver. Adding to the complex processes and uncertainties of completing these tasks, including the need for some legislative changes, is the ongoing instability in financial markets. How financial markets impact the increasingly essential roll-out of the broadband network will become evident over the next few weeks and months. It is in the nation's interest that the development of the National Broadband Network is facilitated as planned. Further delays will further undermine Australia's competitive position in relation to the benefits of the knowledge economy and of online services.

The provision of broadband Internet services with ADSL, via the existing copper network, has proved difficult because of the variability of Internet speeds and the equity issues, in terms of providing services across Australia's regions, that this situation creates.

Fibre to the node (FTTN) technology, which involves the installation of street-side cabinets connected to the local exchanges via high-capacity fibre connections will dramatically change speeds. Subscribers connect from their premises to these new cabinets via ADSL and their existing copper cable; or possibly via other technologies, such as wireless. One benefit of the National Broadband Network would be, in most cases, to eliminate the current distance limitations imposed by ADSL.

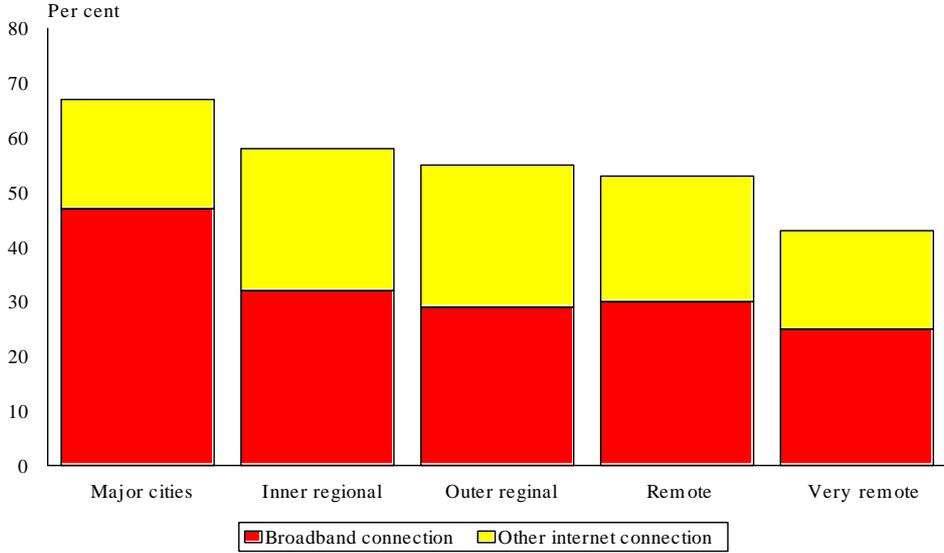
FTTN and connections of fibre directly to premises (FTTP) could allow the provision of very high capacity broadband Internet at speeds of 50 to 100 mbps – far faster than the typical ADSL broadband service used by Australians today. These higher speeds will allow industry sectors, particularly service industries such as healthcare, education and business services to reshape the way services are offered.

To date, the roll-out of the national network has been constrained by a series of unresolved issues, including the debate surrounding a level playing field for the telecommunications providers, an earlier debate about the privatisation of Telstra and a host of other side issues that have slowed the roll-out of the national network. It appears that it has been an obsession with industry level competition, rather than a focus on the needs of the broader economy, that has driven Australia’s broadband strategy. While policy issues have stalled the roll-out of the national network, overseas competitors have created broadband services that are not only faster but also cheaper.

4.2 Broadband use from home

ABS data show that, the remoter the community, typically, the lower the level of broadband connections. This trend raises issues of equity and the issue of how remoter communities are provided with Internet access and how these communities develop the skills which will allow them to benefit from the use of the Internet. The Internet has been important to the farming community in terms of providing access to market and technical and professional information as well as facilitating the improvement of on farm business management and education for children living on remoter farms.

Household internet access by remoteness areas - 2006



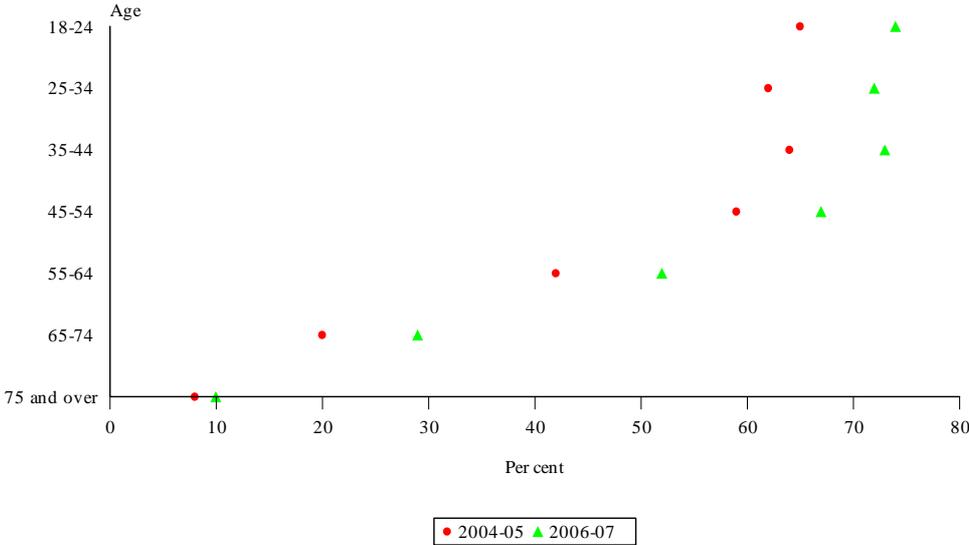
Source: ABS 2006 Census of Population and Housing.

Indigenous communities are particularly disadvantaged. As for the rest of the population, their access to the Internet decreased as their remoteness increased. The 2006 Community Housing and Infrastructure Needs Survey shows that while half (50 per cent) of Indigenous people living in Australia’s major centres had the possibility of Internet access at home, access declined to around 8 per cent for indigenous people living in the most remote areas. Given that approximately 69 per cent of indigenous people live away from major centres, this means that only 36 per cent of indigenous people had access to the Internet at home, compared with the national average of approximately 67 per cent.

It is expected that the benefit of high speed broadband access for communities living in Australia’s remoter regions could be significant in helping reshape the local economy, build skills and provide greater access to services such as health and education. The provision of an equitable broadband service across all of Australia remains an important goal.

The highest use of the Internet from home is by those under the age of 44. While levels of use decline in those over the age of 55, current trends show an increasing use of the Internet by the older cohort. From 2005 – 2007 there was an increase in home Internet use, from 20 to 28 per cent, for the group aged 65-74, well below the 77 per cent of 15-24 year olds.

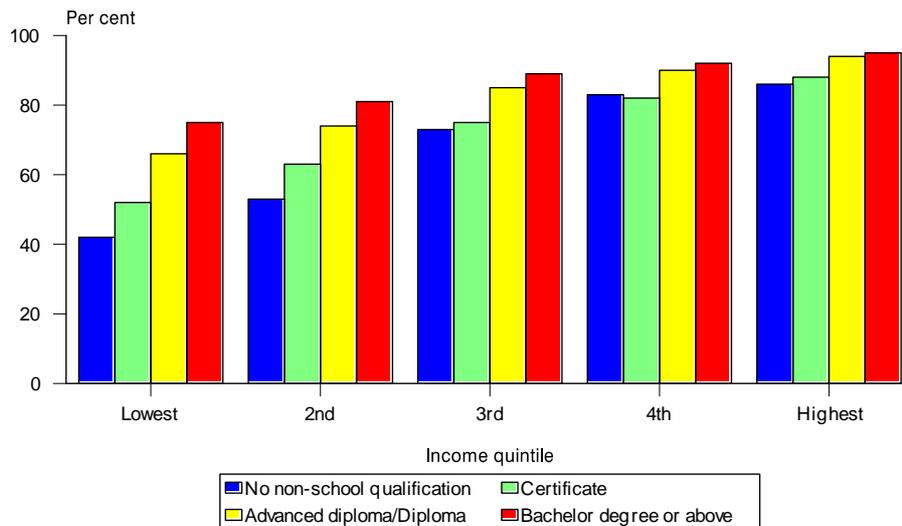
Internet use at home by age



Source: ABS Household Use of Information Technology Survey, 2004-05 and 2006-07.

In Australia, the combination of a poor standard of education in a given household and a low household family income result in the lowest levels of household Internet connectivity. The data show that at relatively high levels of household income, even when combined with relatively low levels of educational attainment, households have achieved high levels of Internet connectivity. The higher the household income, the less the difference in levels of Internet connectivity when related to educational outcomes.

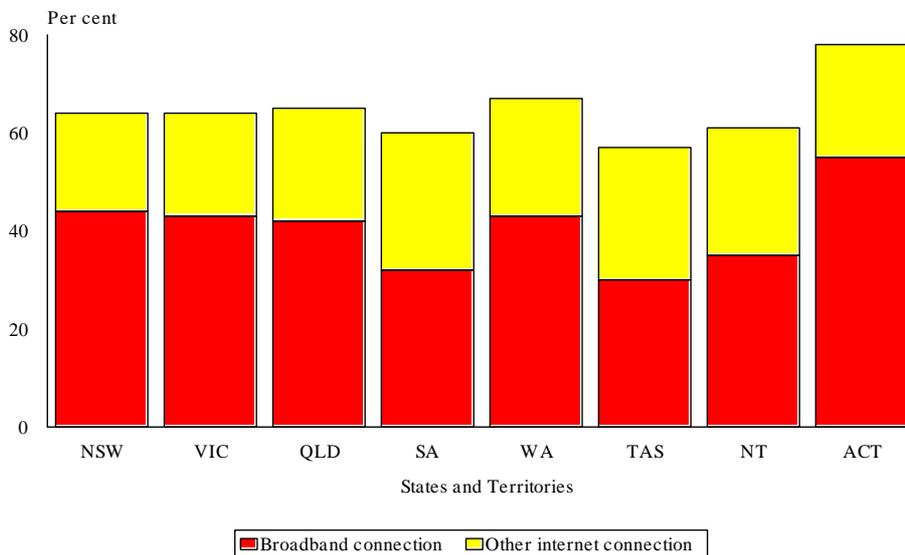
Internet access by highest level of educational attainment by household income, aged 15 years and over - 2006



Source: ABS 2006 Census of Population and Housing.

The 2006 census highlighted differences in the rates of household Internet access and broadband connection in the States and Territories. At the time of the census the Australian Capital Territory had the highest proportion of households with access to the Internet (75 per cent) and Broadband connection (53 per cent), while Tasmania had the lowest (55 and 29 per cent).

Internet access by State and Territory - 2006



Source: ABS 2006 Census of Population and Housing.

In the States of New South Wales, Victoria, Queensland and Western Australia, approximately 64 per cent of households had Internet access, about 40 per cent of which (about two-thirds of all households with Internet access) had a Broadband connection. Households in South Australia, Tasmania and the Northern Territory had lower levels of Internet connections, with 57 per cent of households with Internet access in 2006, of which around 30 per cent (half of all households with Internet access) were connected via broadband.

Figure 4.1 Internet activity summary, Australia, ISPs with more than 10,000 active subscribers

		Mar qtr 2007	Dec qtr 2007	Jun qtr 2008
ISPs				
Large	no.	23	28	26
Very Large	no.	9	10	11
Total ISPs	no.	32	38	37
Subscribers(a)				
Dial-up				
Business and government	'000	249	239	291
Household	'000	1 843	1 482	1 275
All dial-up subscribers	'000	2 092	1 721	1 566
Non dial-up				
Business and government	'000	512	619	726
Household	'000	3 825	4 406	4 935
All non dial-up subscribers	'000	4 337	5 025	5 661
All subscribers				
Business and government	'000	761	857	1 018
Household	'000	5 668	5 888	6 210
Total subscribers	'000	6 429	6 745	7 228
Access technologies				
Dial-up				
Analog	'000	2 068	1 701	1 551
ISDN/other	'000	24	20	15
All dial-up technologies	'000	2 092	1 721	1 566
Non dial-up				
DSL	'000	3 365	3 702	3 936
Wireless	'000	227	433	809
Other(b)	'000	745	888	916
All non dial-up technologies	'000	4 337	5 025	5 661
Total access technologies	'000	6 429	6 746	7 228
Download speed				
Less than 256kbps	'000	2 097	1 721	1 581
Broadband				
256kbps to less than 512kbps	'000	1 399	1 511	1 588
512kbps to less than 1.5Mbps	'000	1 376	1 040	963
1.5Mbps to less than 8Mbps	'000	np	1 014	1 444
8Mbps to less than 24Mbps	'000	np	1 283	1 390
24Mbps or greater	'000	np	176	262
Total broadband (256kbps or greater)	'000	4 331	5 025	5 647
Total download speeds	'000	6 429	6 745	7 228
Volume data downloaded(c)				
Dial-up	million MBs	1 469	2 332	1 597
Non dial-up	million MBs	40 610	53 961	53 837
Business and government	million MBs	10 807	4 894	7 778
Household	million MBs	31 272	51 398	47 656
Total volume data downloaded	million MBs	42 079	56 293	55 434

Notes: np not available for publication but included in totals where applicable, unless otherwise indicated.

(a) As at 30 June 2008.

(b) Includes ISDN, cable, satellite and other non dial-up technologies.

(c) During the three months ending 30 June 2008.

Source: ABS 8153.0 - Internet Activity, Australia, Jun 2008.

4.3 The Internet: United Kingdom update

It is useful to review the status of Internet use in the United Kingdom. Office of National Statistics figures show that in 2008 nearly 16.5 million households had Internet access with around 1.25 million households being added in the previous 12 months, representing an increase of 8 per cent.

The trends relating to households connecting to the Internet via broadband connections and the general decline of dial up connections are similar in the United Kingdom and Australia. In Britain only 9 per cent of households are now using dial up connections. 35 per cent of households in the United Kingdom still have no Internet connection. A similar proportion of Australian households are not connected to the Internet.

United Kingdom figures suggest that the higher the level of education the greater the likelihood that adults would access the Internet. Figures show that in 2008, 33.9 million adults accessed the Internet, an increase of 6.6 per cent from 12 months ago.

In terms of how people were using the Internet, the 2008 National Statistics Omnibus survey shows that the most frequently stated reason for using the Internet was for sending emails. This was the case in both the 55 year old plus group, and the group aged 16 to 24. The youngest group was the group most involved in Internet based activities. Internet banking and online selling were the highest rating activities for the 25-44 year old age group.

In terms of place of access, access from households was increasing while levels of access from the workplace remained stable since 2007. Use from Wi-Fi hotspots also increased, more than doubling since 2007, reflecting the more mobile use of laptop computers. The percentage of people using laptop computers via a wireless connection rose to 23 per cent, an increase of 5 per cent over the previous year.

The United Kingdom regulator, Ofcom, continues to encourage the telecommunications industry to develop next generation networks so that the United Kingdom remains competitive with the increasingly sophisticated broadband speeds and services available in countries such as Japan, Korea, the United States, Germany and France. In recent months there has been a debate in relation to the variability of broadband speeds across Britain and across the various communication providers. Australia is therefore not alone in experiencing difficulties in terms of equitable service provision.

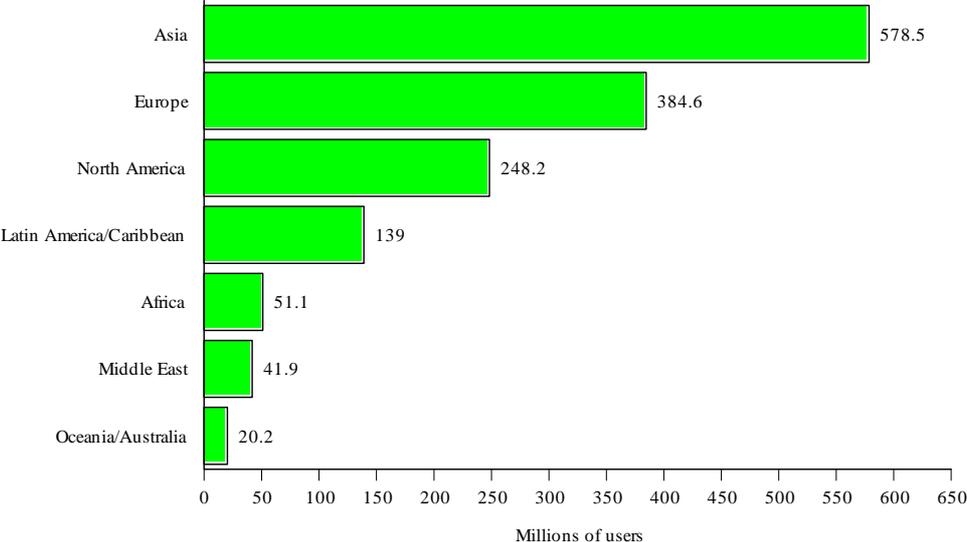
BT Openreach is conducting pilot testing of FTTP networks at a greenfield site in South East England at Ebbsfleet in Kent and FTTC trials at Muswell Hill, London and Whitchurch in Wales. These initiatives are expected to deliver broadband speeds of up to 40Mb, and larger roll-out of fibre is planned for 2009 – 2010. These initiatives will enable high definition online TV, rapid movie downloads, video on demand and other online entertainment as well as making possible a more sophisticated range of online services.

4.4 Internet use: India and China

It is now estimated that India has in the region of 50 million Internet users. By far the majority of these are from the major urban centres. In China the increase in the number of people using the Internet continues to rise dramatically, and is estimated to be more than 250 million. Of these users, estimates show 214 million users have high speed access. China now has more Internet users than the United States, making it the world's leader in terms of user numbers. The Olympic Games drove usage higher with many Chinese users accessing information about the games via the Internet, rather than television. E-commerce in China also continues to burgeon, with, according to Analysys International, Internet company earnings doubling over the past year to almost \$US6 billion.

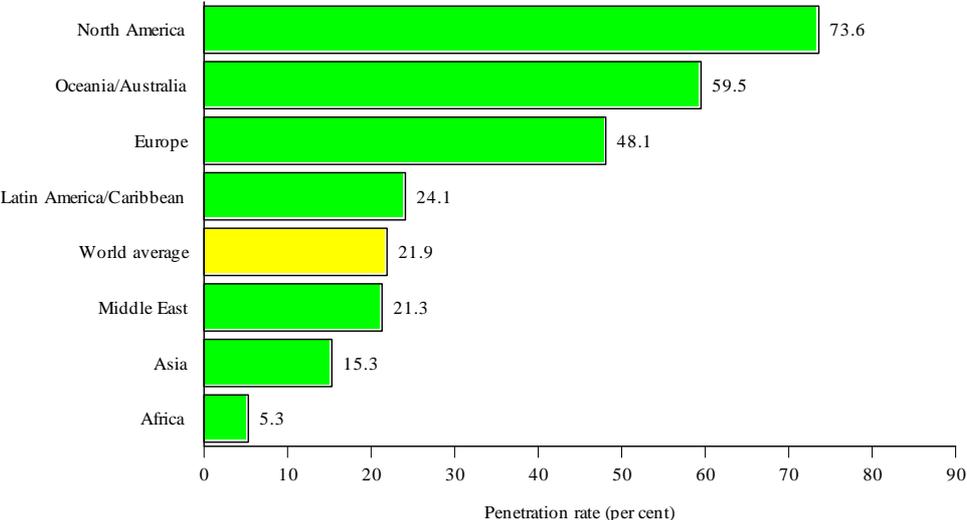
What stands out about India and China is that penetration rates are still relatively low and the scope for growth in online markets is significant. Both India and China have the potential to provide significant e-commerce opportunities for businesses across Australia’s regions, another strong reason for providing equity of service around the nation.

Internet users in the world by geographic regions



Source: Internet World Stats - www.internetworldstats.com/stats.htm
 Estimated Internet users s 1,463,632,361 for 2Q08. Miniwatts Marketing Group.

World Internet penetration rates by geographic regions



Source: Internet World Stats - www.internetworldstats.com/stats.htm
 Penetration rates are based on a world population of 6,676,120,288 for mid-year 2008 and 1,463,632,361 estimated Internet users. Miniwatts Marketing Group.

4.5 Variability of broadband connectivity

There are a number of ways in which customers connect to the Internet. The growing number of wireless connections is an example. The issue discussed in this section however relates to the most frequently used, and cornerstone, of Australia's broadband system, the existing copper wire telephone network.

xDSL networks

As xDSL utilises the existing copper-pair telephone network, it potentially extends broadband Internet quite widely. In reality this is not always the case because:

- ❑ the exchanges need to have DSL interfacing equipment installed – some 40 per cent of exchanges are still to be equipped, especially in rural areas;
- ❑ the maximum distance from the exchange to the user is typically five to six kilometres (length of cable run; not the distance to the exchange); and
- ❑ in many areas Telstra has installed pair-gain technology that enables two telephone services to be delivered over the one cable. As this technology blocks the broadband DSL signal, it must be removed or bypassed before these services can be enabled.

There are many different types of DSL services but the one most commonly offered to households and small business is ADSL – asymmetric digital subscriber line.

- ❑ Telstra is the monopoly owner of the copper based Customer Access Network (CAN) but has been required to offer other companies access to this network. The regulatory environment enables other carriers to rent Telstra's copper lines for the delivery of their own xDSL services (what is known as Unconditioned Local Loop – ULL), as well as be able to resell Telstra's ADSL broadband services under a broadband providers' own branding.

The actual speeds that can be achieved may be well below the maximums, depending on many factors, particularly the distance from the exchange as well as the number of copper pairs that are carrying ADSL services. The potential maximum speeds attainable via an ADSL connection are significantly less than for the fastest broadband cable connection. These maximum speeds are rarely achieved, and typical ADSL connections may be perceived as slow compared to broadband cable connections.

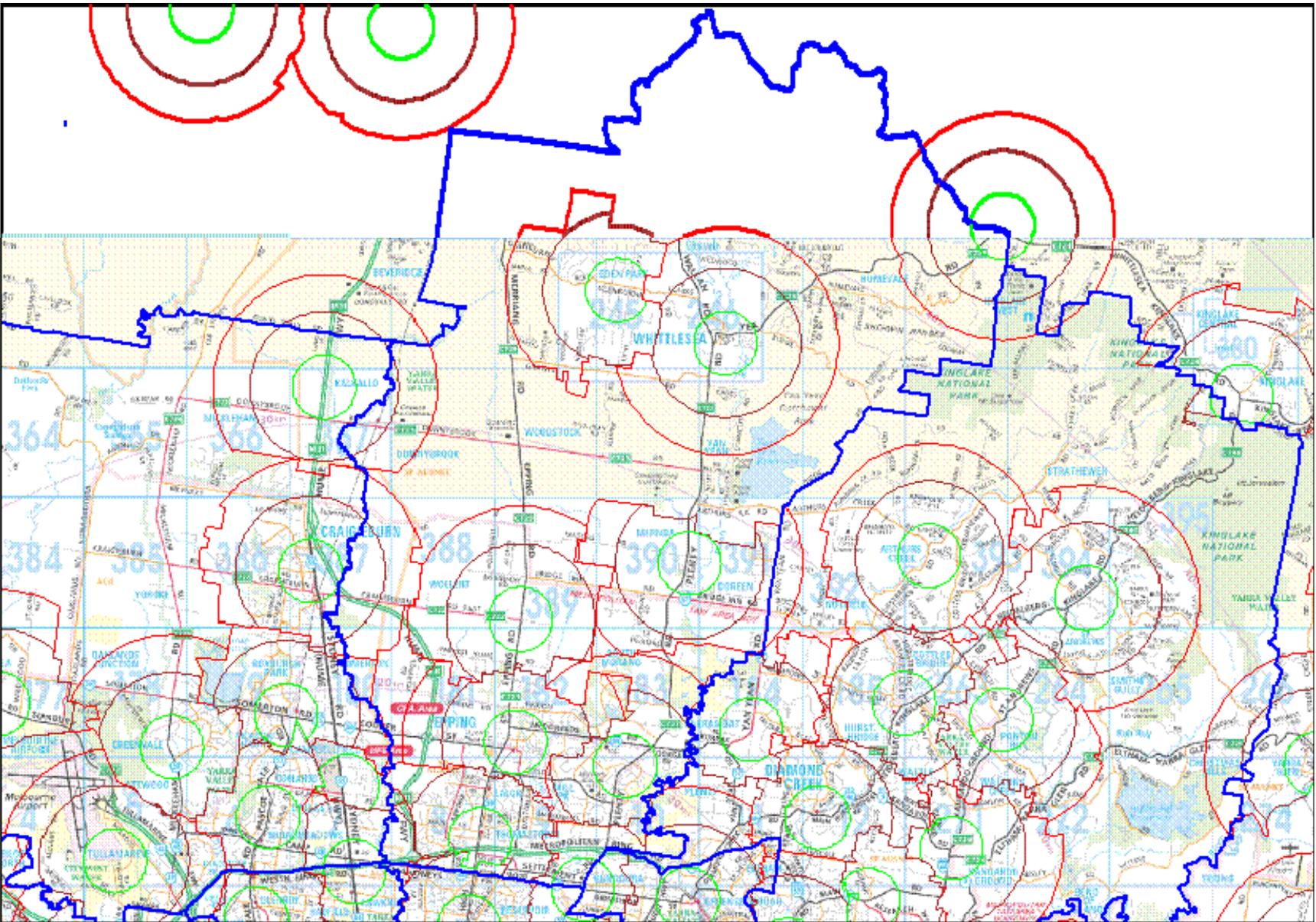
Other xDSL services offered in Australia are targeted at larger users such as businesses and other organisations. These include SDSL (Symmetrical DSL), which provides users with equal upload and download speeds, HDSL (high-bit rate DSL) and VDSL (very high data rate DSL).

The following map is of the local government area of Whittlesea in Melbourne's North. The map and associated commentary has been provided by Callpoint (www.callpoint.com), a geospatial services firm for broadband.

The Callpoint map shows coverage rings relating to xDSL broadband coverage only and, therefore, the map does not account for any other broadband access technologies that may be available.

When studying the Whittlesea map the following should be noted.

1. The coverage rings themselves are representative proxies for xDSL coverage. While copper does obviously not run in radial fashion from Telstra exchanges, the rings are easy to understand, and they do not require other datasets (such as Telstra copper cable duct feeder routes, or Shortest Street Centreline methods) to create a proxy of local connectivity. In any event, xDSL deliverability is determined by transmission loss, which is a function of actual distance and copper cable gauge (amongst other factors).
2. The three different rings relate to:
 - (i) Inner or green: Symmetric High Speed DSL (SHDSL) at 1.7km, most likely used by businesses;
 - (ii) Middle or brown: Asymmetric Digital Subscriber Line (ADSL), at 4km, the most commonly available type on the market; and
 - (iii) Outer or red: Reach Extended ADSL 2, at 6km.
3. The maps do not include any Large Pair Gain System (LPGS) information. LPGS are a major “broadband blocker”. The reason why the maps do not include LPGS regions is due to restrictions regarding access to certain Telstra Geographical Information System (GIS) datasets.
4. Further analysis, e.g. the number of premises that are within and outside of each of the coloured rings can be performed using spatial analysis methods.
5. In summary:
 - (i) the rings are a useful means of depicting xDSL coverage across a region, even though they are not necessarily accurate, do not account for LPGS and do not consider alternate broadband technologies; and
 - (ii) the most accurate means for determining specific broadband availability at a site is for the customer to request a full service qualification from their intended supplier.



4.6 Large Pair Gain Systems (LPGS)

In its response to a then DCITA discussion paper in January 2006, Callpoint describes the background to the issue of LPGS as follows, in the 1990s, Telstra introduced LPGS as a way of increasing the number of copper connections to high growth areas. This was done at a time when demand for PSTN services were also growing because, for example, fax machines being installed by business and residential customers. As such, these systems were seen as astute, both from a technical and commercial perspective.

Later, customers that were served by LPGS, noticed that they could not obtain ADSL services. Telstra has made enormous strides by upgrading its Customer Access Network., however, there were many premises that are still unable to obtain ADSL due to these systems.

In January 2003, the then Broadband Advisory Group outlined a number of elements necessary to encourage efficient market entry, including “the need to reduce information asymmetries facing new entrants”¹.

In August 2004, the Senate final report recommended “the Australian Communications Authority be provided with all of Telstra’s current geospatial datasets, and that the Australian Communication Authority make available these datasets on request, in a useable format, to other carriers and ISPs”².

In December 2004, Telstra Wholesale commercialised its geospatial datasets.

LPGS polygons became included within ExchangeInfo Plus, however sale restrictions still apply.

The majority of Exchange Service Areas (ESAs) have no LPGS.

Some have only a few. Others have significant LPGS penetration. It is the areas of significant LPGS coverage that are of concern because these have the potential to create further equity and access issues for certain regions, some of which are in metropolitan areas.

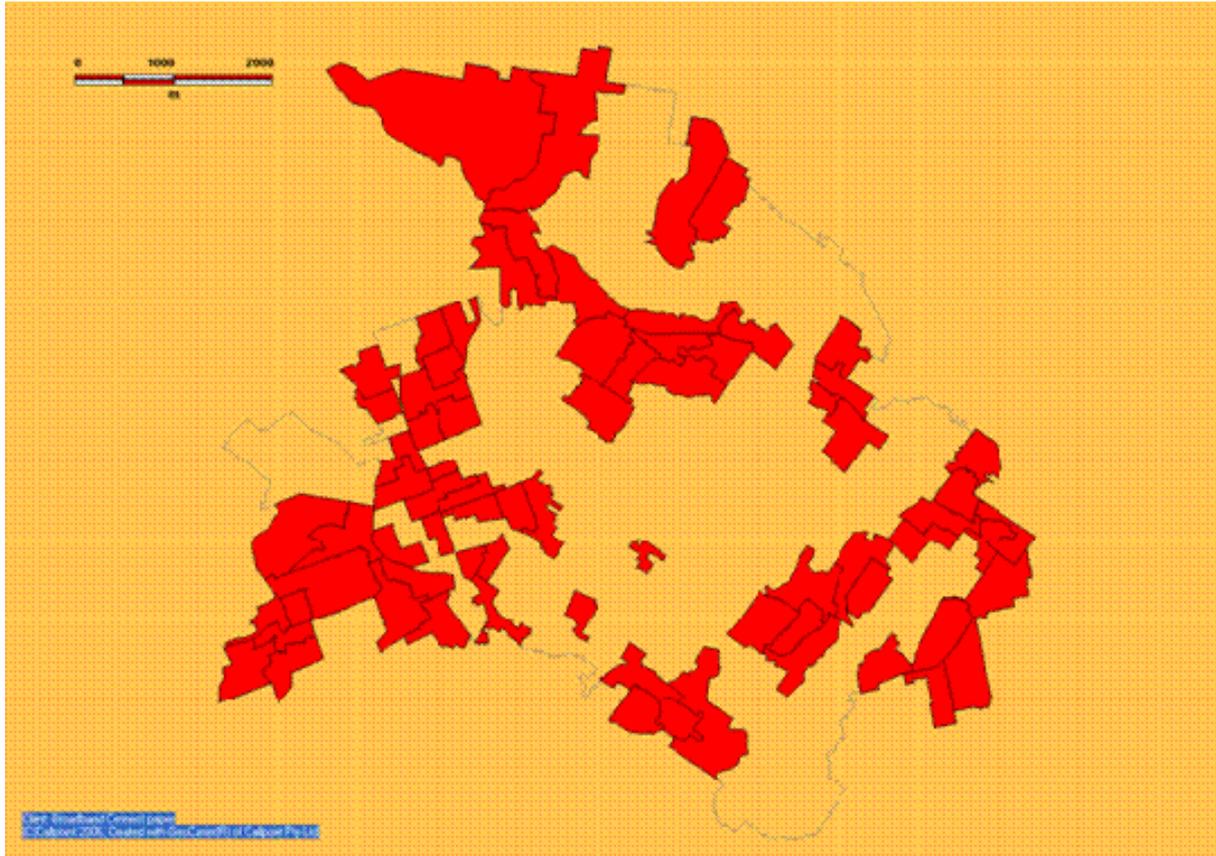
The information in this section might, for example, suggest two issues for Whittlesea:

1. The extent of broadband coverage in the outer areas of Whittlesea, and
2. The possibility of LPGS across those parts of Whittlesea, including inner, that appear to have broadband coverage.

An example of an ESA that has substantial LPGS coverage is shown in the following figure.

¹ “Australia’s Broadband Connectivity” report, p.41.

² “Competition in Broadband Services” report, p.103.



The Callpoint map (Castle Hill (New South Wales) Exchange Service Area) above provides an example of how substantial LPGA coverage can impact on a localities broadband access. The areas in red are those with LPGA. The impact is as follows:

1. xDSL services from non-Telstra ULL based carriers is basically not possible; and
2. xDSL services from Telstra can be possible, in certain specific cases.

4.7 Lost business use of ICT

Voice over the Internet Protocol (VoIP)

It is worth restating the importance of VoIP to Australia's regions.

Access to VoIP requires a broadband connection and hardware which varies depending on the type of VoIP system being used. Equipment might be a computer, with VoIP software and a headset, or a traditional handset with a VoIP box that adapts the handset for use on the Internet. A wireless device with the appropriate software can also be used for VoIP calls.

VoIP has a significant impact on reducing the costs of voice communications as the Internet is used to channel the voice signal. Call costs are far less than standard telephone calls made from a landline. However, VoIP services are constrained by poor Internet speeds as they affect voice quality. VoIP could be of significant benefit to businesses in regional Australia as the cost of national and international calls are very low, potentially encouraging more sales based communication and marketing.

Two years ago the following comment was made in SOR, and it is unfortunate that the same constraints apply for many regions two years on.

“The point here is that an increasing proportion of voice traffic will require the Internet and faster speeds of broadband connectivity to create acceptable voice quality standards. This rapidly changing technology and market place will create new business opportunities where slow broadband speeds are likely to constrain innovation and new business development. These new technologies should also open up regional employment opportunities as telecommuting and teleworking become far more affordable and integrated with global company systems.”

Again the benefit created by VoIP, particularly to Australia’s regionally based businesses, is another compelling reason for equity on telecommunications delivery.

The increasing importance of *the third place* (between office and home) as the workplace of the knowledge economy will increasingly be driven by Wi-Fi and VoIP. Newer ways of working, ways which are more greenhouse friendly include work strategies that embrace working with VoIP and Wi-Fi. The worker is mobile, locally based and globally connected. The impact of an emissions trading scheme will include increased cost of transport and increasing costs relating to running offices, particularly those premises that are not energy efficient. The use of the Internet as a remote work platform could help many businesses to enhance their competitiveness in a carbon constrained environment.

VoIP has the potential to undermine telecommunications providers’ voice revenues. One of the possible issues for VoIP, is therefore, that some providers may push third party VoIP traffic to the lowest priority, affecting voice quality at times of heavy data traffic. This makes VoIP potentially unstable, working for much of the time, but unstable at other times. The impact of this may be greater in regional areas.

4.8 The 3G network

Telstra has replaced its CDMA mobile network, which was shut down on 28 April 2008, with its ‘Next G’ 3G mobile network (which commenced service in October 2006). This means that customers can no longer use CDMA mobile phones in Australia. There has been significant debate about the coverage of the 3G network, even between the providers themselves. Telstra has stated that ‘Next G’ would reach 98 per cent of Australia’s population. The 3G network in Australia has been set up using infrastructure-sharing agreements. The 3G providers are Optus, Vodafone, Telstra, Virgin Mobile and Hutchison. Over the last few months there has been an upgrade on some 3G networks which should increase speeds to a maximum of 3.6 Mbps. Telstra, which uses a different frequency and different technologies now has maximum download speeds of 14.4Mbps. Cost will start to be the main constraint for full uptake of these technologies and services rather than speed.

3G provides consumers with the capacity to download full motion video, stream music, use more efficient web browsing and access and participate in various forms of entertainment such as gaming. The next generation of mobile telephony will be 4G with much higher speeds of 30Mbps plus.

In rural areas the issue is often lack of competition. Coverage may also drop off in remote regions as areas covered include the township but signals can be poor away from these centres. It is also possible that 3G phones in rural areas will only receive a 2G signal.

An example of what can happen to remoter communities is Quilpie Shire in Queensland’s west. About one third of Quilpie Shire has mobile phone coverage. Given the road conditions are often dangerous, because of road trains, narrow roads, poor surfaces, etc, this lack of coverage could pose a danger. Statements that 98.5 per cent of Australia has 3G coverage is misleading, as of course much of the land mass, where few people live, but many may travel through, does not have any mobile phone cover. Another issue in Quilpie, in relation to mobile phones, is that visitors must have a Telstra phone, otherwise, as there is no competitor in town, they will have no coverage. This also adds to the danger of road travel and makes it hard for people who visit Quilpie on business. Broadband is available in Quilpie town and broadband can be accessed by residents and visitors at the town’s Library. Most properties in the shire have a traditional copper wire connection.

The knowledge economy is constrained by lack of an equitable high speed broadband network

Until the National Broadband Network is completed the growth in the knowledge economy firms and government online services will continue to be constrained, holding back the competitive position of firms and, in government services, delaying cost savings that could have been achieved by online service delivery.

Public sector services include e-medicine and e-education. Poor standards of connectivity also constrain innovation: opportunities to develop smart network grids, which have a major role to play in managing levels of greenhouse emissions, for both households and industry, are compromised.

The telecommunications sector and telecommunications in general, are extremely important to aiding the development of a low carbon economy. They are important because telecommunications facilitates communications, and because advanced telecommunication technologies are providing many opportunities to change behaviour away from unnecessary use of energy. Savings are achieved from everything from video meetings, through to the deployment of smart grids, for example innovative ways of working, such as real-time, high-definition interaction and collaboration (with a real sense of presence) between geographically dispersed people.

In its report, *Towards a high-bandwidth, low carbon future* (released in mid October 2007), Telstra estimates that telecommunications networks have the capacity to reduce national emissions by around 5 per cent with cost savings in the order of \$6.6 billion each year with the value of carbon credits created somewhere between \$270 million and \$1.2 billion depending on the price of carbon.

Telstra’s carbon opportunity types	Percentage of national emissions saved
Increased use of renewable energy	1.81
Personalised public transport	0.70
De-centralised business district	0.55
Presence based power	0.53
Real time freight management	0.52
On live high definition video conferencing	0.43
Remote appliance power management	0.33
TOTAL	4.87

The questions are what progress has been made towards creating equitable broadband service delivery across the nation and has there been progress towards more effectively enabling the knowledge economy since the 2007 SOR?

The answers are complex but can be easily summarised. There has been some improvement in broadband speeds although these improvements have been patchy. The wait for the National Broadband Network continues for yet another year and although telecommunication costs are reducing, these reductions have not been enough to really stimulate a new telecommunications knowledge economy of products and services that are in general use. Progress towards achieving Telstra's suggested reduction of emissions through the use of telecommunications also appears to be slow. The multiplicity of delivery systems/channels and great variations in speed across channel types and regional variations in speeds and access make accurate estimates of the costs of lost opportunities in ICT extremely difficult. It is however possible to reference previous SOR reports to get a sense of the economic implications of any shortcomings in telecommunications delivery.

Last year's SOR identified \$3.2 billion and 33,000 jobs lost to Australian businesses in the previous 12 months due to inadequate broadband infrastructure and the possibility of an estimated \$40 to \$50 billion in savings from e-health/e-medicine and smart networks over 10 years. There were also lost opportunities to reduce greenhouse emissions because of the failure to implement knowledge economy advances to health related transport and failure to introduce smart grids to reduce energy consumption. There is no reason to assume any improvement in these numbers for 2008.

Australia now has a new generation mobile system with the opportunity for upgrades in technologies. Australia also has a business community and households that are keen to benefit from opportunities provided by improved telecommunications across the Nation. To what extent the rapid uptake of wireless and mobile broadband in Australia is a symptom of the lack of a high speed national broadband fibre network is a matter of speculation. The issue is that wireless broadband services in Australia are still relatively expensive and the cost of these services could constrain the development of businesses delivering services via broadband.

What continues to be extremely frustrating is that demand for improved telecommunications is manifest, while the underlying outcome of many years of misplaced telecommunications policy has led to the stalling of investment in high speed broadband telecommunications infrastructure. The weakness of the Australian dollar combined with the impact of the global financial crisis will bring upward pressure on the costs of building the National Broadband Network.

PART TWO

CLIMATE CHANGE

5. Reaping two whirlwinds

They sow the wind, they will reap the whirlwind; their wheat will yield no ear, the ear will yield no flour, or, if it does, foreigners will swallow it. (Hosea 8:7, Jerusalem bible translation)

Past *State of the Regions* (SOR) reports have documented how Australians, collectively, were sowing financial winds by accumulating more household debt than they could manage, and sowing environmental winds by contributing to climate change. These winds are now returning as whirlwinds, which, added together, look like coalescing into a category 5 cyclone.

At the time of writing (October 2008) the returning whirlwinds are mere dust devils compared to what is to come. There are signs of trouble on both the financial and environmental fronts. We will review them in turn.

5.1 The financial crisis

On the financial side, the most serious portents so far are mainly American, with an overflow into Europe. Financial houses have collapsed, and banks have threatened to collapse. The first wavelets of the financial crisis reached Australia in mid-2007, when it became impossible to sell Australian mortgage-backed securities on international financial markets because of bad experiences with such securities in the United States. The crisis reached Australia with much greater force in September 2008 in the form of a plunge in the value of the Australian dollar. In terms of Japanese yen, the market value of all assets in Australia at the end of October 2008 was little more than half what it had been four months earlier.

The history of financial crises is as long as the history of banking. It has a common theme: crises occur sooner or later when financial intermediaries lend to borrowers who turn out not to be credit-worthy. A classic case occurred in the Netherlands a couple of centuries ago, when financiers lent to speculators in tulips. Much more recently, in the 1980s Australian banks and other financiers rushed to make loans to corporate financial engineers. Among the culprits in the current United States collapse were lenders who made loans to households without responsible credit risk assessment, or (imputing blame the other way round) households who borrowed beyond their capacity to service debt, or (converting the blame to misplaced idealism) politicians who wanted to increase home ownership among low-income households. The more clever culprits included those who invented financial techniques which were supposed to manage the risks but which turned out to magnify them – and the investors in such instruments, who turned out to be misguided or misled. A favourite technique was leveraging, by which the profits available in good times were concentrated on small equity tranches in debt-laden balance sheets – with rates of return sometimes augmented by high rates of dividend payout, sometimes tantamount to asset stripping.

Leveraging was designed to generate capital gains, and, in a fine example of market mispricing, it initially did so. However it overlooked the purpose of equity in balance sheets: to give businesses an element in their liabilities on which returns can be varied as profits change, and hence to help in risk management. When a leveraged firm has to deal with adverse events, it can easily lose its equity and be unable to service its debts, placing itself, from its bondholders' point of view, in the same position as an overcommitted householder. Again, contributions to the collapse came from the gullible who invested in these equities, and the financial advisers who said they should do so, the auditors who underestimated the risk and the regulators who failed in their duty to enforce bank prudence – and from the governments which accepted that the finance sector should be given full rein to run the economy to maximise its own short-term profits.

Reflecting the lapse from prudential standards, during the boom financial houses employed imaginative lawyers and accountants to create new financial products and salespeople to spruik them. Because of this creativity the full extent of financial disarray is not yet known. In Australia, it took several years for the damage from the stock exchange collapse of 1987 to be fully documented, leading into the business collapses and recession of 1990. On this precedent the world faces years of uncertainty as the global financial system is sorted out. This uncertainty of itself is a force for depression, and doubly so when coupled with the effects on the world trading system of the reduction in United States imports which will inevitably result from the tightening of household budgets in North America.

5.2 The financial crisis as the fall of neoliberal economics

The United States financial collapse is already seen as more than just another in the long sequence of financial crashes. Instead, it is seen as doing for the United States what the fall of the Berlin wall did for the USSR: deeply challenging the prevailing way of thinking. In the USSR the prevailing way was an oversimplified Marxism, and in the United States the prevailing way has been an oversimplified version of economic theory known as neoliberalism – an oversimplification which reduces to the idea that, left to themselves, markets will work efficiently. Andrew Hamilton has summarised the underlying neoliberal argument in the following terms. ‘Neoliberalism assumes that in the market the actors are individuals, not communities, and that they seek to increase their wealth. Wealth expands the life choices individuals can make, and so their happiness. Therefore they should be allowed to engage in the market free from constraint.’ The financial crisis has revealed the deficiency of this argument. ‘Neoliberalism failed to take account of the importance of relationships in human activity. It ignored particularly the importance of trust and of the conditions that nurture it. It therefore disregarded the power of greed to destroy the trust that is essential if markets are to work. Its assumptions about human life were jejune.’ (*Eureka Street* 7 11 08)

To outside observers like Hamilton the collapse of the unregulated United States securities markets reveals the inadequacy of market economics. However, a whole generation of economists, bureaucrats and politicians has been American-trained to think in these terms, and their habits of mind will not be easily disturbed. This is even more the case when neo-liberal economics has the support of powerful political interests – in this case the finance sector. To quote Peter Brain’s observations in 2001:

‘The current dictatorship by the finance sector means that the effective national interest is defined by the incentives in fund manager remuneration packages. What a stupid way to run an economy. You know you are living in a regime of dictatorship of established interests when blatant hypocrisy is employed to enhance interests. The finance sector argued long and hard in the late 1980s and early 1990s that Australia’s low household savings rate was detrimental to long-term economic performance. The superannuation levy, with enormous benefit to superannuation funds, was imposed to increase household savings. The policy failed and household savings at the end of the 1990 decade were negligible, compared to the nine per cent level at the beginning of the period. Judging by the strong endorsement of the finance sector to the strength of Australia’s economic fundamentals over the last few years, one can only conclude that negligible household savings are now good for sustainable development.’

The capture of Australian intellectuals and politics by neoliberal economics should be borne in mind, not only when we come to consider policy responses to the financial crisis, but when we examine policy studies such as the Garnaut report on climate change.

5.3 The spread of the financial crisis to Australia

Financial breakdown in the United States is particularly significant for Australia, for two reasons. First, Australia depends heavily on production for the United States market – not so much by direct sales, but by sale of minerals to countries which depend on exports to the United States to earn the foreign exchange with which they pay Australia. Second, Australia has been an eager disciple of neoliberal market economics as taught in the United States and has reformed its own economy in imitation of the United States. The nagging question is whether the reforms have included importing the weaknesses which led to the breakdown of the United States financial system.

Local government practitioners will be familiar with the theme of the United States inspired reform program in Australia: give primacy to competition in all economic policy decisions. An obvious example was the requirement for National Competition Policy reviews of council services. The primacy of competition has been reflected in decisions to privatise public authority businesses; deregulate the labour market and sideline the unions, and (perhaps most significant for present purposes) decisions to de-regulate the financial system.

In Australia financial deregulation involved Reserve Bank of Australia withdrawal from direct control of bank interest rates and balance sheets. The latter withdrawal meant that the Reserve Bank of Australia no longer even pretended to control the supply of money and credit. The stated aim of bank deregulation was to stop governments from interfering in matters which should be market-determined while maintaining prudential regulation to ensure the soundness of the banks. However, the new prudential regulation was, in the language of the day, deliberately light-handed and certainly did not interfere with the banks' judgement when they saw profit in the expansion of credit.

Financial deregulation has been lauded as yielding competitive efficiency dividends, but as National Economics has pointed out in previous SOR reports, it has also generated three extremely dangerous balance-sheet outcomes:

- a land boom, resulting in housing prices way above the capacity of potential purchasers to pay;
- a very high level of consumer debt; and
- a financial system (chiefly a banking system) which has borrowed heavily overseas,

plus two extremely dangerous flows of funds:

- reliance on continued consumer borrowing to maintain demand (that is, to maintain retail sales of goods and services, generating incomes for retailers and service workers, and thus for producers in general); and
- reliance on continued overseas borrowing to finance the imports which are required to satisfy consumer demand.

In October 2008 these weaknesses had placed the Australian government in a quandary. For over a decade the banks had kept the land boom going by pumping out mortgage loans, and the expectation in Canberra seemed to be that the economy could be kept bubbling along indefinitely. However, the troubles in the United States caused a re-think in Australia. Consumers remembered their parents' warnings about putting things on the never-never, and banks began to wonder about the reliability of their loan repayments. The Reserve Bank of Australia reacted in the only way it knew how – indeed, under deregulation in the only way it was allowed to. It cut interest rates, to encourage the public to keep on spending. Meanwhile the world made its judgement on Australia: exports likely to falter, export prices already falling and interest rates unattractively low from the point of view of overseas investors. The result was withdrawal of overseas loans and a plunge in the exchange rate – which cannot but work through to a burst of inflation as the price of imported goods rises. Following its usual rule of inflation targeting, the Reserve Bank of Australia should now raise interest rates. The quandary

is that the domestic economy requires low interest rates if it is to keep busy, but the overseas creditors require high interest rates.

National Economics predicted this impasse eight years ago, when the land boom was only just gathering strength. 'The real threat of inflation in Australia over the next few years comes from the risk to the exchange rate, which in turn comes from the financial imbalances created by the lack of monetary policy. Australia will not create the preconditions of long-run sustainable growth until the current dictatorship of the finance sector over monetary policy is crushed. This would involve paying real respect to a much broader range of monetary policy targets, including imposing maximum credit growth rates.' It is a matter of record that this advice was not heeded.

Leaving Australia's particular vulnerability aside for the moment, at the global level the prime question is: can there be a replacement for sales to the United States as a source of revenue to finance global production? Or should the world meekly accept the onset of the depression that it has to have? This would be a difficult question at the best of times, but these are not the best of times. The answers will have to be compatible with a response to that other approaching whirlwind – climate change.

5.4 Climate change and the world economy

The portents on the climate change side are even more alarming than those from the financial sector. In last year's SOR report we described the bad news for Australia contained in the Stern Review for the British government and in the latest report of the Intergovernmental Panel on Climate Change – the extension of deserts, the intensification of cyclones. The portents now are that the IPCC were optimists, for they omitted the effect of global warming on the earth's stores of ice and frozen methane. Within the last two years the evidence that the Greenland and West Antarctic ice sheets are melting and sliding into the sea has become overwhelming. This meltwater alone has potential to raise sea level by four or five metres by the end of the present century (Hansen 2009). Similarly the Russians are reporting increased releases of methane from the tundra and from under the Arctic sea. These have the potential to speed global warming.

There is a very simple prescription for arresting climate change: the world economy must drastically reduce its emissions of greenhouse gases, principally carbon dioxide. This will require scrapping large amounts of emissions intensive equipment and the substitution of zero emissions equivalents – which fortunately already exist for most types of emissions. This in turn requires a massive investment campaign.

At this point the global logic becomes blindingly obvious.

- The global economy can no longer focus on satisfying the United States demand for imports.
- Similarly, world economic activity can no longer be sustained by fossil fuel technologies. There is a pressing global need to invest in emissions abatement.
- Therefore investment in emissions abatement should replace United States demand as the major focus for world production.

Easier said than done, but at least the connection is being made. In mid-October 2008 the United Nations Environment Program called for 'a refocusing of the world's economy towards investments in clean technologies and natural infrastructures such as forests in a Green New Deal that could revive the stumbling global economy, combat climate change and cut poverty'. Similarly Nicholas Stern, whose report on climate change was reviewed in last year's SOR report, wrote: 'Let us grow out of this recession in a way that both reduces risks for our planet and sparks off a wave of new investment which will create a more secure, cleaner and more attractive economy for all of us. And in so doing, we shall demonstrate for all, particularly the developing world, that low-carbon growth is not only possible, but that it can also be a productive and efficient route to overcome world poverty.'

As we delve into the detail, we should not lose sight of this disarmingly simple proposition. Economic growth as we have known it over the past few decades was both financially and environmentally unsustainable – indeed it has been environmentally unsustainable for the best part of two centuries. The first priority now is to pursue an environmentally sustainable world economy, and to use this priority to guide the necessary financial reconstruction.

5.5 The bad news on climate change

In last year's SOR report we provided a summary of the then-current predictions of climate change. However, events have moved on alarmingly, and an update is necessary.

The suspicion that economic development based on the combustion of fossil fuels is not sustainable has a long history. An example which may be remembered by today's senior executives and councillors was the Club of Rome's dire forecasts, published in the mid 1970s, which predicted the imminent collapse of energy-intensive economies due to failing supplies of fossil fuels and other raw materials. Though the oil price shocks of the 1970s gave these predictions an initial plausibility, they were eventually laughed out of court. It turned out that there was more oil than was then thought, and certainly plenty of coal. Despite current second thoughts about oil and gas supplies, the Club of Rome's forecasts now provide a precedent for laughing at any suggestion that there are limits to fossil fuel consumption.

Laughter, accompanied by the cutting off of research funds, was the major response to James Hansen's 1981 paper on the likely effects of fossil fuel use on the earth's climates. The summary of his paper included the following: 'It is shown that anthropogenic carbon dioxide warming should emerge from the noise level of natural climate variability by the end of the [20th] century, and there is a high probability of warming in the 1980s. Potential effects in the 21st Century include the creation of drought-prone regions in North America and central Asia as part of a shifting of climatic zones, erosion of the West Antarctic ice sheet with a consequent worldwide rise in sea level, and the opening of the fabled Northwest Passage.' These predictions have now been proved correct. In Joseph Romm's words: 'The 1980s warmed, the Northwest passage opened, the drought-prone regions have emerged and sea level rise is a top worry (even if Greenland has emerged as more troublesome than West Antarctica).' Hansen has emerged credible, and the Intergovernmental Panel on Climate Change (IPCC), on whose scenarios discussions about greenhouse response have so far been based, finds itself accused of undue optimism.

Despite Hansen's warning about the potential for rapid melting of ice sheets, the climate change modellers who contributed to the forecasts prepared by the IPCC left ice sheets out of their calculations. The IPCC comprised modellers who, in the main, had a background in atmospheric physics, so they concentrated on atmospheric behaviour under increased insulation. With climate change sceptics laughing, carping and extremely influential with governments, the modellers were under pressure to emphasise their scientific conservatism. The IPCC scenarios identified drought as a major consequence of global warming, and as the evidence from Southern Australia, South Africa, North Africa, Southern Europe and California accumulates these forecasts have been shown to be correct in broad direction but conservative in their prediction of impact. The IPCC scenarios also included warnings of sea level rise which, while correct in direction, were based mainly on the expansion of sea water due to warming and, by omitting ice-melt, understated the likely rise by an order of magnitude. Australians should note that the *Garnaut Climate Change Review* is based on the IPCC scenarios. Chapter 2 of that report, 'Understanding climate science', follows the IPCC in assuming that sea-level rise due to ice melting will occur very gradually over several millennia (p42).

Hansen's original forecast of ice-melt has been confirmed by two sets of observations. One is that the rate of melting of the ice sheets has increased – due not only to warming, but to factors such as the lubrication of the interface between the ice and the underlying rock by meltwater, causing the ice to head more rapidly into the sea. A second, broader source of confirmation comes from the paleontological evidence, which indicates that there have been rapid changes in climate and sea levels which were not taken into account in constructing the IPCC climate change models were estimated even though they were within the very recent geological past, and indeed within the human past. A visit to Kakadu is enough to observe the effects of climate change – here one can see drawings on rock executed many thousand years ago, when the climate was drier and the sea was far away as attested by the animals drawn. A similar experience is available on the Burrup Peninsula in Western Australia, where the ancient sculpted animals are those which dwelt on inland rock-ridges one hundred kilometres inland, not by the seaside. Australian society is making a strong statement about its priorities by encouraging the bulldozing of these ancient carvings to provide sites for LNG plants and fertilizer factories, which in turn will add to the greenhouse gas emissions which will eventually result in the sites being drowned by sea level rise, or more likely flooded by storm surges.

Unlike current change, the changes in climate which increased rainfall in Kakadu and the increase in sea level which created the Burrup Peninsula were not precipitated by human activities, but the fact of them puts the lie to the myth of inherent climate stability. Hansen is not the only scientist to sound the alarm: broadly similar summaries of the evidence are available from other sources such as David Spratt and Philip Sutton's book *Climate Code Red* (Melbourne, Scribe, 2008). The scientific consensus includes the following propositions.

- ❑ Climate change from global warming is already under way, driven by human emissions of greenhouse gases.
- ❑ It is not a simple steady process, but is likely to be subject to sudden and perhaps irreversible accelerations, for example due to melting of ice caps or release of methane from the tundra.
- ❑ The two most worrying consequences of accelerated change are the expansion of deserts into the areas of previously Mediterranean climate, and rises in sea level which could drown the world's ports within a few decades. While humanity may be able to live with – indeed is already living with – the consequences of significant global warming (around 0.8°C averaged across the whole earth since 1850), accelerated change would be disastrous.
- ❑ Global warming is due to the accumulation of greenhouse gases, chiefly carbon dioxide.
- ❑ The other greenhouse gases – methane, nitrous oxide and various by-products of the chemical industry – are responsible for roughly 15 per cent of the trend to global warming.
- ❑ Reflecting its primacy as a greenhouse gas, discussion of climate change concentrates on carbon dioxide. The atmospheric physics of carbon dioxide is complicated because the gas is continuously generated and absorbed in the natural carbon cycle – the human contribution being to put this cycle out of balance.
- ❑ The current total concentration of greenhouse gases is around 460 parts per million (ppm) carbon dioxide equivalent, of which 387 ppm is carbon dioxide alone. The carbon dioxide concentration is increasing by 2 ppm a year. The pre-industrial concentration was 280ppm.
- ❑ To retain the ice caps – and also to retain any hope of continuing agriculture in the southern Australian wheat belt – the carbon dioxide concentration needs to be returned to less than 350 ppm, and perhaps to 300 ppm. To re-freeze the Arctic sea ice, which seems to be the most sensitive measurable indicator, the concentration needs to dip below 325 ppm.

Though substantial reductions in concentration are required, it will not be necessary or desirable to eliminate all carbon dioxide emissions. The challenge is to bring emissions to within the earth's capacity to cope.

5.6 Greenhouse gas emissions abatement targets

The action required is deceptively simple. It is that the world's nations should set a target concentration of greenhouse gases in the atmosphere, and *attain that target*. Responsible scientists now place the target in the 300-350 parts per million carbon dioxide range – probably closer to the lower than the upper bound. This translates into a range of around 365-425 ppm carbon dioxide equivalent. These targets are lower than those which were under discussion in 2007 as giving an even chance of avoiding dangerous climate change. The Stern report to the British government reflected this state of play, as does the Commonwealth of Australia's *Garnaut Climate Change Review Final Report*, published this year. The revised reasonably-safe upper bound of 425 ppm carbon dioxide equivalent is significantly below Garnaut's 'stringent' target of 450 ppm and even further below his 'politically feasible' target of 550 ppm. (In fairness to Garnaut, if we note that these targets were written into his terms of reference.)

An important difference between Garnaut and Hansen is that the former is willing to contemplate a period of 'overshoot' before the atmospheric concentrations are stabilised at the target level. Garnaut follows the IPCC in assuming that the world's climate system will tolerate this; Hansen argues that the period of overshoot is likely to trigger irreversible changes which either cannot be scaled back as the concentration of greenhouse gases subsides (like ice sheet melting) or will make it impossible to meet the target (such as release of methane from the tundra).

That recommended targets can change so significantly in one year – and that the Commonwealth's greenhouse emissions adviser can be caught – is testimony to the rapid unfolding of events.

How does this global target translate into emissions? If the global concentration of greenhouse gases is already above the maximum prudent level, we know for certain that current global emissions of carbon dioxide of approximately 30 gigatonnes a year (or around 50 gigatonnes a year carbon dioxide equivalent) are already excessive. At this point we may quote Garnaut: 'Carbon dioxide is naturally removed slowly from the atmosphere through exchange with other parts of the carbon cycle. The current rate of emissions is well above the natural rate of removal. This has caused the accumulation of carbon dioxide in the atmosphere. To achieve stabilisation of carbon dioxide concentrations, emissions must be brought down to the natural rate of removal.' The report notes that, as the atmospheric concentration of carbon dioxide increases, these sinks (such as carbon dioxide dissolved in the oceans) absorb some of the carbon dioxide released to atmosphere. However, 'once stabilisation in the atmosphere is reached, the rate of uptake will decline. Long-term maintenance of a stable carbon dioxide concentration will then involve the complete elimination of carbon dioxide emissions as the net movement of carbon dioxide to the oceans gradually declines.' (p 43)

There you have it: the target is no less than the elimination of net carbon dioxide emissions – that is, for every man-made carbon dioxide emissions there has to be an equal man-made carbon dioxide sequestration.

This is the reason why Hansen is dead-set against emissions quotas. Whatever role interim targets may have in phasing down emissions, they give legal legitimacy to unsustainably high emissions. Hansen is thus consistent in opposing emissions trading, since it creates property rights in circumstances where, in his view, none should exist.

The admission that the sustainable carbon dioxide emissions target is net zero is readily translated into targets for every country. It involves a return to the position in the early nineteenth century, before the industrial revolution, when humanity lived within the constraints of the natural carbon cycle. This was a time when the world human population was much less than it is now, and the standard of living in middle-income and rich countries was less comfortable than now. Even though technological change means that a twenty-first century economy which lives within the limits of the carbon cycle would be much less constrained than the economy of two centuries ago, there is an overwhelming political demand that emissions be phased down over time, rather than cut right out. Fortunately, it appears that some parts of the carbon cycle work rather slowly, particularly the oceanic absorption of the gas, giving rise to the possibility that atmospheric concentrations can be stabilised for the next few decades while still permitting net positive emissions. Judgements vary as to the 'safe' level. The Commonwealth Treasury's judgement is 'significantly less than half of current emissions levels'. (p11)

As reported by Garnaut, current global emissions per capita are 6.5 tonnes of carbon dioxide equivalent (CO₂-e) a year, with Australia producing around 28 tonnes per capita. A per capita allocation of 3 tonnes implies that Australia's emissions should be reduced by 90 per cent, with further reductions to come as the population grows and the target reduces to zero. The Garnaut report is based on the judgements that reductions in Australian emissions to 21 tonnes carbon dioxide equivalent per capita by 2020 and 2.8 tonnes per capita by 2050 are compatible with stabilisation of the atmospheric concentration of greenhouse gases at 450 ppm (fig 12.2). Further reductions would then be required to meet the eventual target of zero net emissions.

There are many who would prefer to deny Australia's responsibility to reduce emissions. The human propensity to deny responsibility goes back to Adam and Eve, and is particularly tempting in cases where the actions of individuals, indeed of entire countries, make very small contributions to the overall problem. We can see that Australia's drought-affected farmers are facing disaster, but there are those who prefer to disbelieve the scientists who tell us that the disaster is man-made. Even if those who concede that climate change is due to human behaviour may blame China or the United States and fail to take responsibility for our own contributions. It is tempting to try to carry on as usual.

Maybe this is the decision that humanity as a whole will take. However, the consequences for the next generation are so serious that this report assumes that the world at large will accept the scientific diagnosis and its consequences. The working of financial markets will also tend to force the issue. Insurance companies are strongly attuned to the risks of climate change, and the outlook is that properties exposed to the effects of change will become uninsurable. The world investment community is starting to wake up and is discounting the value of emissions intensive businesses and countries. For example, Prince Charles is sponsoring a campaign to persuade pension funds to stop investing in emissions intensive businesses and take stakes in companies developing sustainable energy solutions. Again, in some countries there are now strong political demands for reduced emissions, particularly from young people, and European governments in particular are taking action. Even in Australia, the country's first political demonstrations demanding closure of coal-fired power stations have already taken place in the Latrobe Valley.

As a debtor nation Australia is very poorly placed to go it alone and refuse to take responsibility for emissions abatement – our creditors are in a position to force us to act. Whether the commitment arises voluntarily or through international pressure, it is probable that, within the next decade, Australia will find itself pursuing a CO₂ atmospheric concentration target of less than 350 ppm, implying a cut of more than 90 per cent in current greenhouse gas emissions.

What would such a commitment involve? We can begin our answer to this question by going back to the review of the Australian greenhouse gas inventory in last year's SOR report. The inventory lists the ways in which Australia is contributing to the flow of greenhouse gases into the atmosphere. The pattern is not necessarily the same in all countries, mainly because the Australian electricity generation industry is unusually greenhouse-gas intensive. However, the same list of sources applies: if the world is to achieve the stringent target it will have to drastically reduce the burning of coal; very

considerably reduce consumption of petroleum fuels and natural gas, curb other emissions such as methane from agriculture, and increase sequestration. This list is scary. Where will we get our electricity? What will become of our beloved motor cars?

5.7 The basics of emissions abatement

Before we jump to the conclusion that nothing can be done and the world's human population should have one grand party before the earth becomes uninhabitable, we should at least try and think about what could be done. Since the problem is global, the response must be global, and the first place to look for careful thought as to what should be done is therefore the global agencies. True to expectation, the International Energy Agency (IEA) has responded to the crisis and produced a review of the technologies which, in our present state of knowledge, is relevant to the reduction of emissions with minimum sacrifice of standards of living. In reviewing this material it should be remembered that the IEA, like the IPCC, is authoritative but conservative, with a tinge of optimism.

Despite the depth of its research, the IEA's methodology is quite simple. It first sets up a base case by taking a projection of world economic growth, from which it derives energy demands. It specifies the technologies which are expected to meet these demands in a business-as-usual scenario, taking into account known fossil fuel supplies and currently expected technological developments. It therefore includes restrictions on the supply of crude oil in its base case, as well as unrestricted supply of coal. The resulting growth in emissions is sufficient to guarantee very nasty climate change.

The IEA then prepares its abatement scenarios by starting from the array of possible abatement technologies. It asks several questions of each technology.

- What is the current cost of this technology, and how is it divided into capital and operating costs?
- What is the expected future cost of this technology? How is it likely to respond to research, development and demonstration expenditures and how is it likely to respond to increased uptake? (Increased uptake generally leads to reduced costs through economies of scale, improved understanding of the technology by its operators, improved designs through customer contact, etc.)
- What is the scope for application of this technology in relation to the base case? For example, the scope for abatement from a technology like solar water heating is limited by the number of households which do not yet have solar heaters and which have suitable roofs for the heaters.

Having answered these questions as best it can the IEA lines up the technologies in merit order, least cost first. The line-up is expected to change from year to year, as potential is taken up and as costs fall in response to the identified cost drivers. The result, for any year, is a line-up which generally starts with a few technologies which offer emissions abatement at negative cost. These are the 'no regrets' options, most of which offer savings in operating costs which more than justify a capital expenditure. The typical case is savings in heating and cooling costs which justify a modest capital expenditure on building insulation. From the point of view of market economics these options should not exist because economic men (neo-liberal economics is built on the concept of 'economic man') are assumed never to forgo an opportunity to increase profit. However, they have often been observed, as when an energy advisor comes across a building which could profitably have been insulated years ago. Because of their resistance to the usual market incentives, potentials and cost savings are hard to calculate, especially when one includes the costs of whatever non-market measures are necessary to ensure that the potential abatements are achieved. Engineering estimates are that the abatement potential of improved energy efficiency obtainable at negative cost is considerable – up to around a quarter of the 90 per cent target, both in Australia and at the global level.

After the no-regrets options comes a substantial array of relatively low-cost options. Most of these are in the electric power sector. These technologies have costs assessed at around \$50 to \$100 a tonne of CO₂ abated, compared to the base case. (For comparison, the current Australian petrol tax works out at roughly \$120 a tonne of CO₂.)

Once these opportunities are exhausted, the graph of costs against emissions reduction begins to rise quite steeply as abatement moves into the manufacturing and transport sectors. Abatement targets which require over 60 per cent reductions in emissions necessarily require reductions in these sectors, where the IEA estimates that costs will be at least \$300 per tonne of CO₂ abated, more likely around \$600 per tonne and half as much again on pessimistic assumptions – the differences reflecting the uncertainties of technological development over the next few decades. (For comparison, typical current petrol taxes in Europe work out at around \$600 a tonne of CO₂.)

The IEA does not go into the macroeconomics of emissions abatement – where the resources to finance a massive program of emissions abatement are to come from, and what the effects of the program will be on incomes and consumption patterns. Its contribution is to describe and cost abatement technologies.

5.8 Emissions abatement – the basics in Australia

McKinsey and Co have prepared similar abatement cost estimates for Australia, which begin with a range of negative-cost energy efficiency measures, move into moderate-cost measures to replace coal as a fuel for generating electricity, and then rise as abatement moves into manufacturing and transport. James Hansen has drawn the obvious conclusions. In an open letter to Mr Rudd posted on 27 March 2008, he suggested that the most urgent action for Australia is to begin the phase-out of coal-fired electricity generation, except where the resulting carbon dioxide could be sequestered. Other important subsidiary issues are the need to phase out the burning of oil and gas in energy utilities, industrial facilities and transport, and the removal of barriers to increased energy efficiency. Based on its experience in modelling the energy sector, National Economics would similarly see the following as priorities.

1. Convert electricity supply from fossil fuels to non-greenhouse emitting sources – coal-fired stations first.
2. Pursue an energy-efficiency program, in particular reducing the demand for energy for space heating and cooling by retrofitting improved insulation.
3. As non-greenhouse electricity supply is augmented, convert transport from the internal combustion engine to electric power.
4. Institute a sequestration program, involving forestry and the development of biosequestration technologies.

As regards the technical practicability of step 1, decarbonising the electricity supply, there is little to add to the discussion in last year's SOR report – save that, with the more stringent target, the gain by converting from coal to gas power will necessarily be no more than a transitional phase, quite possibly brief. In considering the possibility of converting to renewable sources, it is worth remembering that electricity supply systems wholly based on renewable power are by no means unknown – Tasmania had one until demand rose above the capacity of its hydro system, which was simultaneously falling due to climate change. Even though Australia's potential for hydro electricity is largely exploited, there are considerable opportunities for wind, solar and geothermal electricity. Development work continues on carbon capture, transport and storage, but it remains an unproven suite of technologies, and there is more than a whiff about it of a rearguard action to salvage the value of existing resources.

The technology for step 2, improved insulation, is old and proven.

Step 3, the decarbonisation of transport, requires more imagination. Over the past century so much research, development and capital, not to speak of emotional commitment, has been invested in the internal combustion engine that it is difficult to imagine it being consigned to museums, as the steam locomotive was fifty years ago. However, stringent emissions targets allow very little, if any, room for continued use of carbon-dioxide emitting engines. To maintain the value of internal-combustion technology, two rearguard actions have been proposed.

- ❑ Re-power internal combustion engines with hydrogen. This requires investment in vehicle conversion, in a network of hydrogen service stations, and in production of hydrogen from renewable sources. Technological breakthroughs would be necessary to make hydrogen cost-effective as against renewable electricity and batteries.
- ❑ Biofuels have potential to pass the renewable test, but require an increase in agricultural output at a time when capacity is diminishing as a result of climate change. Potential can only be assessed as fairly limited.

On present indications, we therefore expect that electricity will be the way to convert renewable energy into movement of goods and people on land. Proven and cost-effective technologies exist for the electrification of rail transport and at the other end of the spectrum proven and cost-effective technologies exist to design small, light, battery powered vehicles for relatively short distance travel – in other words, the pattern of travel accomplished by the typical urban car or delivery van. There are also promising developments in wind and solar power for shipping. The uses in which the internal combustion engine (either reciprocating or jet) is hard to replace are air transport, heavy road vehicles and agricultural power. However, in heavy road vehicles trolleybuses are a proven technology and current models have battery power for short forays away from the wires. The designs could be adapted to trucks. It is also worth noting that, overland, aircraft can be replaced by fast electric trains without serious time cost for distances up to one thousand kilometres or so.

Step 4 also appears practicable. It will involve a mixture of extremely traditional technologies like tree planting, and newer forms of biosequestration.

This list outlines a program by which most energy services in the Australian economy can be converted to non-greenhouse sources rather than simply eliminated. As remarked last year, the remaining areas of exceptional difficulty such as long-distance aircraft, cement manufacture and the metallurgical use of coal may have to be scaled back, but may also perhaps be continued within the drastically reduced emissions cap – especially if that cap is augmented by sequestration. The program faces economic and political rather than technical constraints – it involves writing off and scrapping a significant amount of equipment and its replacement with new equipment. It will also require much re-training of skilled workers. Fifteen years ago National Economics made the point that greenhouse gas abatement would be relatively costless if it could be accomplished slowly, allowing business to wait till emissions intensive equipment had been fully depreciated before replacing it with low emissions equipment. Nobody listened, and the urgency of action is now such that much non-depreciated equipment will have to be scrapped.

As at the global level, the basic strategy must be to switch from consumption as the driver of the economy to emissions abatement investment. A golden opportunity to do so is presented by the present financial crisis, the one certainty of which is that the United States can no longer bear the burden of buying goods and services sufficient to keep the world economy powering along.

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6. The financial whirlwind explained

It is no accident that the current global financial crisis began in the United States. The crisis reflects financial weaknesses which have their origins deep down in the way in which the current generation of United States administrators and economists think about economics – the mindset of neo-liberalism, or market economics. This is important to Australia, because we imported neo-liberalism along with a generation of American-trained economists and United States admiring business people, politicians and journalists. However, the American crisis raises highly practical questions for Australia, questions which challenge the intellectual primacy of neo-liberalism only indirectly. The significance of neo-liberalism for Australia is that it has led us into some very poor policy, and threatens to limit the creativity of Australia's response to the current crisis.

6.1 The financial crisis and Australia

The immediate effect of the United States financial crisis in Australia was that investors in the United States financial intermediaries which went broke lost their money. These losers are not as wealthy as they once believed themselves to be, and are less able to buy goods and services – hence the beginnings of recession. A more important effect is psychological: businesses and households reduce their estimates of future incomes, and so mark down possible investment projects and have second thoughts about borrowing and spending. As the financial crisis proceeds, banks tighten lending criteria, so contributing to the fall-off in purchasing power and the recession. If this happens primarily in the United States, the effect is transmitted to the rest of the world via declining United States imports. In this respect Australia is not as badly placed as some: the United States-Australia free trade agreement did not do much to increase Australian exports to the United States, and Australian vulnerability to reduced export revenues is mostly indirect. It depends on how China, Japan and Asian countries generally cope with the United States breakdown.

However, as also pointed out above, Australia is not well placed to weather a financial breakdown, even when that breakdown originates overseas. Optimists will point out that in 1998 Australia was not much affected by the Asian financial crisis, but Australian balance sheets have deteriorated seriously since 1998 and this time round the financial shock is greater because it is global in extent. It is also currently being argued that the Australian financial sector is in much better shape to weather a crisis than the American, since there was not the same proliferation of derivative financial instruments or the same obfuscation of risk. However, it remains that Australia, both at the household and the national level, financed consumption by borrowing. This was most unwise, and has left a heritage of overstretched household borrowers. Accountants assess financial vulnerability by looking at balance sheets, and what they see in Australia is the legacy of poor economic management during the neo-liberal era.

The poor condition of Australia's balance sheets has domestic and international aspects. Starting with the domestic side, as past *State of the Regions* (SOR) reports have pointed out, the land boom which Australia enjoyed in the decade from 1996 affected household balance sheets by increasing the market value of residential land, with a counterpart of increased mortgage debt. The aggregate household balance sheet does not look too bad till one calculates the cash flows required to service the debt. These have risen to a dangerously high proportion of household income. In the light of the effect of high household debt in the United States, continued bank lending to households is hardly an option in Australia – hence the need for an alternative to consumer purchases as a source of cash flow with which to finance employment.

World trade inevitably spreads recessions from country to country. The reduced imports of the recession countries result in reduced exports for the countries not yet in recession, hence reduced incomes for their exporters. Where the not-yet-recessed countries have plenty of household savings, it is possible for them to compensate by encouraging households to spend some of their savings and buy the goods and services which would otherwise have been exported. However this is not possible in an economy such as Australia where households are indebted. In such countries reductions in export income have knock-on effects – it is much harder to arrange a substitute source of income, and reductions in income and employment become difficult to avoid. These reductions can result in financial instability, since some at least of the households which suffer income reductions will lose the capacity to service their debts. This presents the banking system with a tricky problem. If the banks bankrupt their debtors and repossess properties, they are liable to find themselves with assets which are no longer worth their land-boom valuations. If they choose to sell the assets, they take an immediate write-off; if they choose to hold, they may or may not be able to generate sufficient income from the properties to meet their obligations to the lenders from whom they have borrowed. If they renegotiate the debts to what the households can manage to pay, they may again find themselves without the capacity to service their own debts.

If Australian banks had not borrowed overseas to finance their credit expansion, the Reserve Bank of Australia would have considerable room for manoeuvre in responding to the crisis. If borrowers default on their loans and so threaten to give the banks an excess of liabilities over assets, the Reserve Bank of Australia could help the banks to re-negotiate both their loans (assets) and borrowings (liabilities), perhaps making good any deficiencies with cash grants. Such policies raise serious issues of fairness, but in desperate circumstances cash refinancing can be the less-worse option.

However, the Reserve Bank of Australia does not have a free hand, since it has to take into account the heavy overseas borrowing of Australian banks – the balance sheet counterpart to their mortgage loans to Australian households. This debt arose year by year over the past couple of decades, after Australia switched from a policy of limiting overseas borrowing to the financing of resource development (which, if successful, generated a flow of export revenues from which the debt could be serviced and repaid) to a policy of allowing banks to borrow overseas and on-lend to households. At the time of its adoption, various old-timers queried the prudence of this new policy, but the Commonwealth government and the market economists assured the public that all would be well, since the borrowing and lending was throughout between private parties. If people can freely borrow and lend within a country, why not between countries?

The difference between domestic and overseas borrowing is now sadly obvious. When debtors and creditors are within the one country, errors of judgement on both sides (creditors over-lending to high-risk borrowers, borrowers over-borrowing) can be dealt with within the country. When overseas borrowing is involved, errors of judgement have to be adjudicated internationally, with the creditors having a major say as to the terms of refinancing of debt as it becomes due, not to speak of the financing of any further borrowing to meet continuing balance of payments deficits. Indebted banks can face the prospect of having to repay – daunting enough if the repayment is to be in their currency of lending (in Australian dollars) and even more troublesome if the repayment is to be in the creditors' currencies, given that these are likely to be rising in value vis-a-vis the Australian dollar.

Our market economists hasten to protest that all is well, because the banks have hedged their overseas borrowings against devaluation. Essentially they have paid an interest-rate surcharge to obtain a guarantee that they can repay at a pre-specified exchange rate. This indeed gives them relief as long as the protection lasts: they can repay their bonds at the guaranteed exchange rate. But what about refinancing them? If the balance of payments deficit were miraculously to turn around, this would yield a source of overseas currency to repay. But if not, there is no alternative to paying whatever increased costs the creditors impose.

Only the banks know precisely who their creditors are and what their currency exposures are and when they will arise, and hence the amounts to be negotiated, when and with whom. An optimistic view is that they will be able to manage their exposures, and it will certainly be claimed that they can – to think otherwise would risk a crisis of confidence. When the borrowing was going on the Commonwealth and its academic supporters assured us that taxpayer liabilities would not be generated because the borrowing was private. However, this could only be guaranteed if, in the event of gross errors of judgement, the banks would go bankrupt so that the debts disappear, with the cost being borne by their creditors both international and domestic (i.e. their depositors). This simply will not happen, and not only because the overseas creditors have unpleasant sanctions to apply to countries which attempt to repudiate fixed-interest borrowings issued by banks supervised by their Reserve Bank of Australia (as distinct from equity securities and junk bonds). The Commonwealth has already guaranteed the banks against collapse, which means that Australian taxpayers (or at least the Reserve Bank of Australia) will become liable for any overseas debt that the banks cannot service.

As an example of what may be to come, Australia should consider Iceland – a small country with considerable natural resources in relation to its population. These resources include reserves of geothermal power, which is making Iceland a favoured location for investment by aluminium smelting companies concerned that, as a result of emissions abatement, they will have to shift away from locations like Australia where they rely on electricity generated from coal. On the strength of these prospects, Icelanders borrowed from their local banks to finance a housing and consumption boom, and the banks in turn borrowed overseas. Iceland's problem is that its glorious future is long-term but its borrowing was short-term. The foreign exchange requirements to service the borrowing outran the growth in foreign exchange earned from exports, and the value of the Icelandic krona tumbled vis a vis the United States dollar. Unlike the United States' banks, Iceland's banking system had no problems with non-performing loans; its problem was with overseas borrowing. At first the banks were protected by hedging, but when the hedging ran out the Icelandic banking system collapsed. Iceland sowed the wind, it has reaped the whirlwind.

What this means is that the short-term economic outlook for Australia is at least as bad as for its mentor the United States. What it also means is that the policies which Australia adopted over the past couple of decades, largely under American tutelage, have failed. This is not in the least surprising, since the policies were based on faulty economics; on the short-term rather than the long, and on the self-perceived interests of the finance sector rather than on broader sustainability, either financial or environmental.

6.2 Market economics (neoliberalism)

We have already provided a brief characterisation of market economics, and claimed that the United States financial crisis constitutes its Berlin-wall moment. A bit more detail is necessary if we are to understand the policy proposals currently going the rounds, not only on financial sector rescue but on emissions abatement.

The faulty economics – market economics – centres on the theorem that a society of rational, satisfaction-maximising 'economic men' engaged in perfect competition will use their available resources to produce an optimal mix of goods and services. In defence of the discipline of economics as a whole, the very restricted circumstances in which this theorem is true have been specified again and again, and their unreality emphasised again and again. Unfortunately this has not stopped market economists from simplifying the theory and using it in two inappropriate ways. It is, first, often mistaken as an accurate description of how the economy actually works – a misidentification which leads to continuous errors of forecasting. Worse, it is used as a basis for practical economic policy. The most direct application was Competition Policy, which at least had the virtue of recognising that perfect competition was usually not achieved and is not always possible or even desirable. We have already seen that the fatal application was to finance.

Free market economists have dominated Australian economic policy over the past two or three decades, and there are still plenty of them around to argue that the current financial instability (like that of 1990) does not reflect any inherent problem with free market policies, but is due to easily-rectified deficiencies. The United States, United Kingdom and Australian governments are rallying round to prop up banks in the hope that this will allow a return to business-as-usual. The chorus of ideologues is blaming the crisis on lack of sufficient deregulation, while the historically-minded blame the failure to adhere to the gold standard. If there is any deviation from market orthodoxy, they can be relied on to criticise the deviating government vehemently. Though different market economists would specify the list of rules differently, their rules for economic policy are broadly as follows.

- ❑ Government budgets should be balanced over the economic cycle.
- ❑ Reserve banks should limit themselves to managing short-term interest rates in the interests of low inflation, in Australia measured by the Consumer Price Index (CPI).
- ❑ All other economic decisions should be made by free and competitive markets, except that governments may intervene:
 - (a) in the interests of maintaining competition; and
 - (b) if there are ‘market failures’, which boil down to failure to put prices on benefits or costs. (From this point of view climate change qualifies as an unpriced cost.)

The Commonwealth of Australia, including the Reserve Bank of Australia, appears to be fully committed to these rules.

6.3 Policy on interest rates

On receipt of the bad news from the United States, the Reserve Bank of Australia foresaw difficulties in maintaining employment and cut its interest rates. Market economists see four benefits in this.

- ❑ In so far as a cut in interest rates reduces net bank borrowing costs, it assists in maintaining bank solvency (and profitability).
- ❑ In so far as the cut is passed on to borrowers, pressure on the cash flows of heavily-indebted households is reduced. Fewer of them go bankrupt, and many are enabled to increase their consumption expenditure.
- ❑ Again, in so far as the cut is passed on, such households as still have capacity to borrow will be encouraged to do so, once again helping to maintain consumer expenditure through the crisis. However, there is nothing like financial uncertainty to cause solvent households to think twice about borrowing.
- ❑ Lower interest rates provide an incentive for businesses to borrow – but again, as Keynes pointed out over seventy years ago, there is nothing like financial uncertainty to cause businesses to be cautious about incurring debt.

The cut in interest rates, coupled with deteriorating Australian export prospects, produced an unhelpful result: a plunge in the exchange rate. This will raise the Australian dollar prices of imported goods and services – both consumers’ goods and machinery and equipment. Any effect of the reduction in interest rates on business willingness to borrow is likely to be negated by this rise in the price of imported equipment. It will also be interesting to see whether the Reserve Bank of Australia sticks by its general rule that rising prices should be countered by rising interest rates.

An important problem is that cuts in interest rates threaten the capacity of the banks to service their overseas loans. Here lies the conundrum for interest-rate policy: the domestic situation requires lower rates to help indebted consumers and businesses but the international position requires higher rates to finance overseas borrowing. If the Australian banks follow the precedent in Iceland, overseas demands for higher rates will win. It is at this point that market economics collapses, leaving Australia all set to participate in the United States led global recession.

6.4 The economics of recession

Almost unbelievably, market economics has no place for recession. Recessions are logically impossible if markets are working as per theory, and are therefore assumed away. However, for the reasons already considered, in practice market economies are prone to booms and busts. During booms the economy comes to depend on unsustainable borrowing and accumulates bad financial assets – the heritage of various misjudgements. The problem is to write off these assets and adjust system rules and behaviour, allowing a new start which at least claims to avoid repetition of the mistakes. In market theory this should happen rationally and equitably – even in cases like Australia's, where some of the ill-advised borrowing was overseas and cannot be repudiated. If everybody concerned accepts their losses graciously, the cost of a rational financial restructuring is likely to be some mild tightening of belts, a diversion of production towards exports and a diversion of purchases towards domestically-produced goods and services. However, this assumes that market participants quickly and coolly retreat from their mistakes and change their behaviour to avoid repetition.

Adjustment becomes a difficult undertaking when there are vested interests seeking to maintain the value of bad assets and even more seeking to maintain bad system rules. The sad practicalities are that the burdens of adjustment are rarely minimised. Those with bad assets, and even more those who are comfortable in the present system, require heavy persuasion before they will relinquish their assets and their status, and that persuasion perforce takes the form of declining values and unemployment. There is a great deal of collateral damage and undeserved suffering. Unemployment, whether of labour or equipment, raises the costs of the process of adjustment because of foregone production, and the loss of consumer spending due to unemployment results in further losses.

This prognosis is unhappy enough. But it is not only financial vested interests that are threatened in Australia at present. The required response to the climate change crisis is structurally similar to the required response to the financial crisis. As a result of various natural endowments coupled with ignorance and misjudgement, Australia has a heritage of bad energy and transport sector investments: capital equipment which will have to be scrapped prematurely if emissions abatement is to be effective, operated by workers with design and operating skills which will become obsolete if the equipment is scrapped. Though concern is growing, particularly among the young, there are many Australians who prefer not to know about it – a mixture of unbelief and denial of responsibility. In these circumstances it is possible that Australia will attempt to go it alone – that is, to make no more than token efforts at greenhouse gas abatement. An Australian decision to go it alone will not prevent other countries from adopting strong abatement policies and it is quite likely that the countries on which Australia depends for inbound investment will be in this group. The following consequences can then be anticipated.

- Export sales of coal and eventually gas will fall off as international demand abates.
- Australian exports to abating countries will face tariff barriers, which will be set to maintain the competitiveness of abating-country industries.
- Overseas investors in Australia may face home-country taxes on profits earned in Australia, calculated to negate any profitability advantage of lax emissions abatement.

- ❑ Overseas investors, and probably a majority of Australian investors as well, will develop an expectation that Australia will eventually have to comply with emissions abatement. A lax emissions policy will therefore not afford any advantage in attracting international investment.

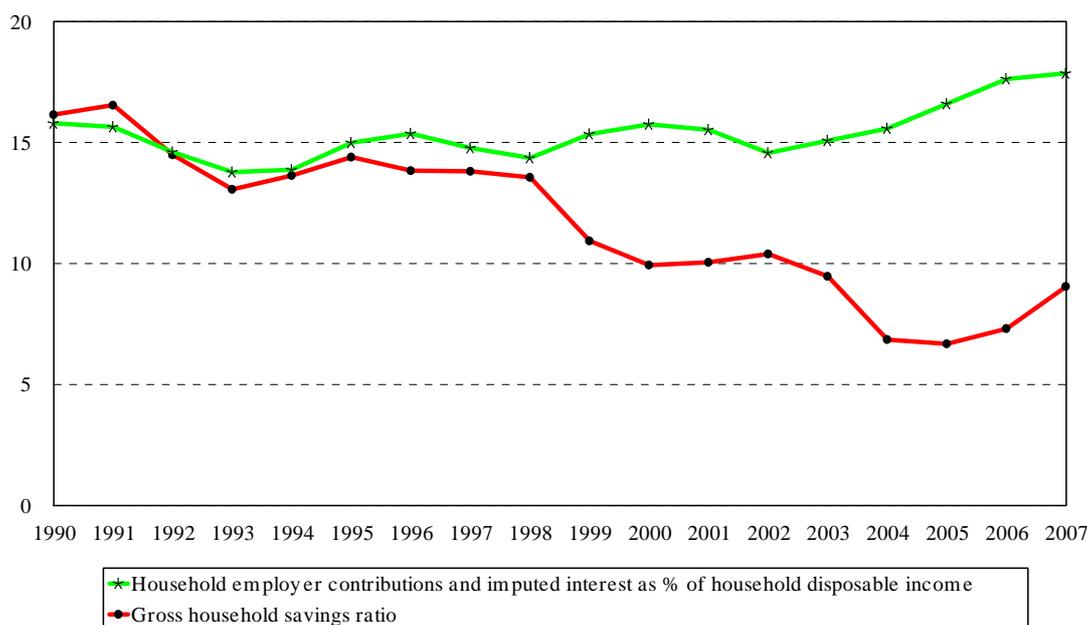
It can confidently be predicted that the expectation of eventual emissions abatement compliance, coupled with the expectation of international action to encourage compliance, will be discounted into the prices of Australian assets and into the risk premium that Australia has to pay on overseas borrowing. In other words, failure to act is likely to bring market penalties. We therefore assume that Australia will act – perhaps sooner, perhaps later and as a result of international pressure.

6.5 The financial whirlwind explained: The statistical foundations

The causal mechanisms and the cumulative outcome over the past 15 years that have led to Australia’s current financial vulnerability can be demonstrated by reference to a small number of statistical series.

One series in Figure 6.1 is the ratio of employer social security contributions plus household imputed interest on superannuation assets to household gross disposable income net of cash transfers. Driven in part by compulsory superannuation, this ratio has increased from 14 per cent in 1994 to 18 per cent in 2007.

Household non-discretionary and total savings rate



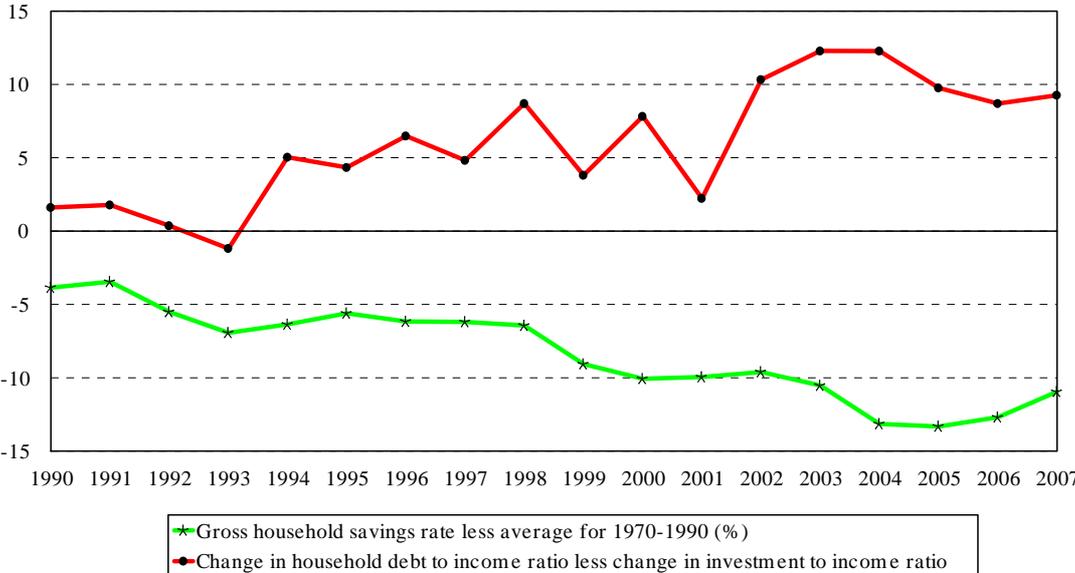
Source: ABS Australian National Accounts, Cat. No. 5204.

Over the same time period the gross household savings ratio has fallen by more than 4 percentage points. This is perverse since both employer contributions and imputed interest are treated as part of household income in the Australian National Accounts, with no disbursement entered on the outlay side of the household accounts. That is, premiums and imputed interest are included in gross savings. The expectation, therefore, would have been that gross savings should increase in parallel with the premiums/imputed interest series. This after all was one of the objectives of the policy.

The conclusion is that the household sector simply used the deregulation of the financial system to offset the increased savings pressure of compulsory superannuation by borrowing to finance consumption.

This conclusion is consistent with the evidence provided in the following figure. This figure shows the ratio of gross saving to household disposable income less the average for the gross household savings to income ratio from 1970 to 1990, during which period the household debt to income ratio exhibited a relatively slow upward trend, at least compared to post mid 1990s experience as indicated by the figure on the next page.

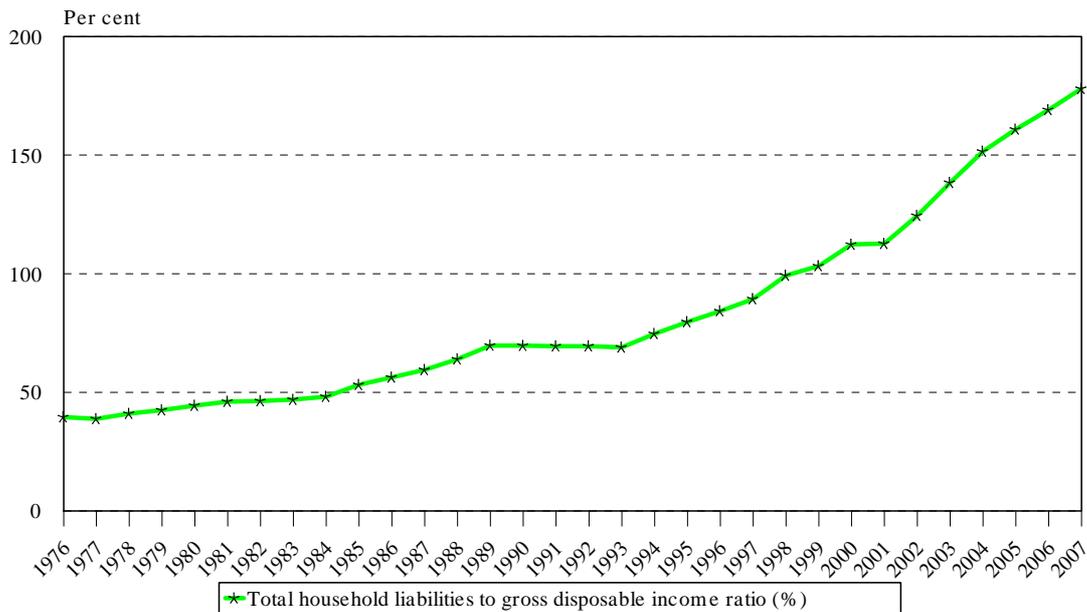
Ratio of gross savings to household disposable income less average gross household savings to income ratio



Source: ABS Australian National Accounts: Financial Accounts, Cat No. 5232 and Australian National Accounts, Cat No. 5204

Also plotted in the above figure is the change in the household debt income ratio (shown in the following figure) less 75 per cent of the change in the household gross investment (dwellings plus unincorporated enterprises) to income ratio. This series attempts to estimate the increase in debt to income ratio that was, in whole or part, used to finance consumption. The close correlation between the two series in the figure suggests that the build-up in household debt has largely been used to finance consumption. This in turn implies that, to stabilise the debt to income ratio, the household savings ratio will have to increase by at 8 to 10 percentage points, that is, almost double.

Household debt to income ratio

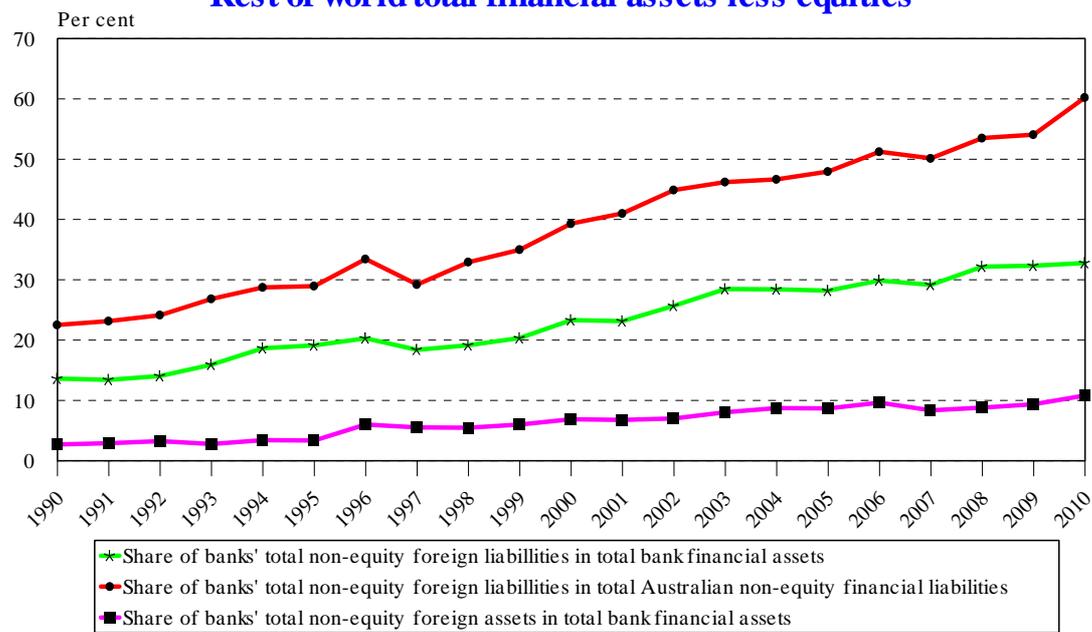


Source: ABS Australian National Accounts: Financial Accounts, Cat No. 5232 and Australian National Accounts, Cat. No. 5204.

This conclusion is reinforced by long run model-based projections in the Brotherhood of St Laurence (2008) study, which were prepared using a formal household income-capital account-balance sheet model structure. It also suggests that if household borrowing for consumption were to cease suddenly, then consumption would fall directly by between 5 and 10 per cent from what otherwise would have been the case, or an absolute fall of between 1 and 6 per cent. With multipliers this would plunge the economy into a recession. The severity of the recession would depend on the drawdown in financial assets.

In addition any economy-wide response to a cessation of household borrowing for consumption will be aggravated by the vulnerability of the banking system. The following figure indicates that the banks' holdings of Australia's total gross non-equity foreign financial liabilities have doubled from the 30 per cent to 60 per cent since the mid 1990s, with the result that the banks' share of total foreign non-equity liabilities as a percentage of total bank financial assets has increased by 83 per cent over the same period to a third. The increase in Banks' net foreign liabilities as a percentage of their assets has been 70 per cent. To what extent the foreign banks' gross foreign assets are a hedge against their gross foreign liabilities is unknown.

The banking sector - foreign assets and liabilities Rest of world total financial assets less equities



Source: ABS Australian National Accounts: Financial Accounts, Cat. No. 5232.

Any household cessation of lending for consumption is expected to reduce the banks' demand for new foreign liabilities, which in turn will result in a depreciation of the currency. Once hedging positions are unwound, this will increase bank costs, force the banks to increase domestic and lending margins, so reinforcing the contraction in economic activity. Furthermore, uncertain times would force up bank hedging costs as debt is rolled over, as well as force the acceptance of a greater proportion of foreign liabilities denominated in foreign currency.

In any case, the level of bank holdings of Australia's international debt is so high that any loss of confidence in the Australian economy and its banking system will result in a sharp plunge in the exchange rate, as per Iceland over the past 18 months, which, by itself, could result in the banks being unable to roll over international debt, forcing them at best into a partial nationalisation arrangement with government as per the recent experience of the United States and United Kingdom banks. This issue is explored in more detail in Chapter 9. By itself, the banks' balance sheet structure could trigger a sequence of actions, by which the unavailability of bank finance for consumption expenditure is a consequence of, not a trigger for, the descent of the Australian economy into recession or at worst depression.

Finally, as noted above, the issue of climate change itself could be a catalyst for financial and economic crisis. If the projections of the damage from climate change increase and the acceptance of low common per capita emissions cap is forced on the world, then the recognition by investors of just how far Australia has to go to achieve required outcomes in terms of CO₂ reduction in the context of unsustainable bank and household balance sheets could trigger exchange-rate-lending-economic crisis. If Australia was unprepared, or did not understand the reasons, or responded poorly, then the crisis could easily be translated into a depression, as in Iceland.

7. Policy for emissions abatement

It is nearly twenty years since the need for emissions abatement was first recognised by the Member States of the United Nations, and during that time it has gradually crept up the international agenda. For years international discussion was dominated by the Kyoto protocol – who was going to ratify it, who wasn't, and increasingly who was failing to meet their Kyoto targets and why. Meanwhile the science has moved on, and emissions have accumulated. Negotiations are now under way for a more urgent approach.

A fundamental change is that there is less talk about emissions abatement targets per se, and more about targets specified in terms of greenhouse gas concentrations. We have already considered the strengthening evidence that a global target of less than 350 ppm for CO₂, and the corresponding target for all greenhouse gas emissions of around 430 ppm CO₂-e. As pointed out above, these targets involve reducing net global greenhouse gas emissions from human activity to zero by the end of the current century, and mandate a drastic program of emissions abatement.

International negotiators face three major questions.

- Setting the global target for the atmospheric concentration of greenhouse gases.
- Translating this target into emissions caps, which involves moving from the stock of gases in the atmosphere into rates of addition to and subtraction from that stock.
- Apportioning this target to countries.

Increasingly, the laws of physics will impose answers to the first two questions. The third is a matter of equity, with an obvious answer. When permissible emissions reduce to net zero (i.e. no emissions that is not balanced by sequestration) equity requires that no country should have the right to emit without arranging equal sequestration, either on its own territory or elsewhere. In the meantime, while positive emissions are still taking place, those countries with the highest per capita emissions should undertake the most stringent abatement programs. They have furthest to go to the ultimate target, and are also, by and large, the countries which have contributed most to the accumulated stock of greenhouse gases in the atmosphere. A further argument is being put by the developing countries. If these countries are not to use the high emissions technologies by which the present-day high income countries became rich, they will require extra capital and improved technology if they are to meet the income aspirations of their citizens. They are seeking additional help from the high-income countries as a counterpart to signing up to emissions abatement. To quote the *Guardian Environment Network*: 'China has lots of coal and would like to burn it, because it's the cheapest way to pull rural Chinese out of dire poverty (something the country's leaders would quite like to do because otherwise they won't be the country's leaders much longer). If we want them to use, say, windmills instead, we're going to have to "share some wealth", north to south, to make it happen. The Chinese opened the bidding last week, with a suggestion that one per cent of the U.S. annual GDP would be a good amount to send their way.' (McKibben, *Guardian*, 6 November 2008)

Whichever way the international debate goes, the targets for countries like Australia are expected to be stringent abatement – and this time round there are no opportunities for Australia to wriggle out of a stringent target by reducing its rate of land clearing. As countries face up to target achievement, a new front has opened up in the debate between the neo-liberal economists and their opponents. At the extreme, the neo-liberal economists argue that emissions trading, which puts a price on emissions, is an all-sufficient response to climate change. Their opponents accept that an emissions price is a necessary component of any scheme to cut emissions, but argue that much more is required.

7.1 British policy

As an example of policy development on climate change, we may instance the United Kingdom, where the current Climate Change Bill is expected to put into statute two targets to reduce carbon dioxide emissions through domestic and international action. The targets are at least 26 per cent abatement by 2020, and at least 60 per cent by 2050, against a 1990 baseline. The targets are to be reviewed by an independent Committee on Climate Change, which is to report by December 2008 on whether the targets should be more stringent, and on the implications of including other greenhouse gas emissions and emissions from international shipping and aviation. The Bill provides that a rolling program of five-year carbon budgets will always be in law, and will continually be updated to provide a balance between predictability and flexibility. These will be prepared by the Committee on Climate Change, which will then proceed to supervise implementation and report on target attainment.

As a European Union member, Britain is committed to participation in the Union's emissions trading scheme. However, that scheme has been criticised as an inadequate response to climate change. In its first round permits were handed out free to large emitters, who proceeded to take the windfall gains rather than take action to reduce emissions. It has also been criticised for excessive reliance on purchase of carbon abatement certificates from middle-income countries rather than attending to Europe's own abatement. Member governments which regard the European Union Trading Scheme as an insufficient response are accordingly committed to taking additional action, both in the sectors covered by emissions trading and those outside the scheme. One important initiative is United Kingdom government assistance for local authority incentive schemes for household waste minimisation and recycling.

The Committee's first work plan was published in May 2008. It covers much of the ground included in the recent Australian Garnaut report. Superficially its economic modelling intentions look less ambitious than Garnaut, but it proposes investigation of topics which Garnaut merely covers by assumption, notably the possibility of changes in consumer behaviour.

The German government has also been actively promoting emissions abatement policies in addition to emissions trading. Its policies are summarised below in section 8.6.

7.2 Australian emissions abatement policy

Australian greenhouse gas abatement (or mitigation) policy to the end of 2007 was discussed in last year's *State of the Regions* (SOR) report. Apart from the ratification of the Kyoto agreement and an extension of the mandated renewable energy target, these policies are essentially still in place. The change is that the Garnaut Climate Change Review has come and gone, and taking its recommendations into account the Commonwealth proposes to introduce an Emissions Trading Scheme as the centrepiece of its mitigation response to climate change.

Pricing emissions

As a committed market economist, it came naturally to Garnaut to think of global warming as a case of market failure – a simple failure to put a price on emissions. His remedy is equally simple: impose that price, and the market failure will disappear.

Garnaut is so convinced of the superiority of price based policies that he barely pauses to dismiss the likes of Hansen, with his simple proposal to scrap coal based power stations. Garnaut argues that 'the very purpose of a market based approach to mitigation policy is to enable producers and consumers throughout the economy to determine the most effective response to meeting a mandated emissions limit'. Equally important, but unstated, it distances the government from the distasteful task of mandating which power producers have to close down first. In any program of greenhouse gas

emissions abatement there will necessarily be losses in capital values, and a market allocation of losses is more likely to be accepted by the business community than an allocation which they see as political. The same goes for the disappointment of business expectations: businesses are accustomed to accepting market verdicts on the success or failure of their business strategies. A market system for allocating the losses has the further virtue of allowing businesses to spot for themselves the investment opportunities which arise from abatement. With any luck excitement at these opportunities will partly overcome the disappointments stemming from the losses.

The proposal to put a price on emissions requires that there has to be an authority to sell emissions, or more strictly to sell the right to emit. There is little argument that governments are the only entities with the power and legitimacy to step into this role. Further requirements are that the emissions to be priced must be measurable and emitters who are to pay the price must be identifiable. In practical terms, these requirements restrict the scope for emissions pricing to the combustion of fuels with measurable carbon content. Fortunately these fuels are currently responsible for around 75 per cent of Australia's total emissions. It is also fortunate that these fuels are mined, processed and sold by a relatively small number of large enterprises, so that the task of measuring fuel sales, as proxy for emissions, is not expected to be onerous.

Emissions which cannot easily be priced include those from agriculture and forestry (apart from fuel for tractors etc), those from waste management (again apart from fuel for trucks etc) and some of the so-called fugitive emissions – those which arise through gas system leakages and the like. Though these emissions can be estimated with sufficient accuracy to be included in the national greenhouse gas emissions inventory, and though it is proposed that they be included in the emissions trading scheme, problems are likely to arise in measuring them and allocating them to responsible parties with the accuracy required for pricing purposes. The immediate priority may be to tackle emissions which can readily be priced, but those which cannot be priced should not be forgotten, particularly in considering the more stringent abatement targets. We must also expect that the boundary between priced and unpriced emissions will change as measurement technologies improve.

The simplest way to put a price on emissions – or at least, on such emissions as can easily be measured – is called a carbon tax. By imposing such a tax the Commonwealth would act as representative of the Australian people who are being harmed by climate change caused by emissions. The tax has two effects: it makes it more expensive to emit and it raises revenue. The revenue can be spent in various ways, for example compensating households adversely affected by climate change, compensating households whose incomes fall as a result of the tax or promoting research into emissions abatement technologies.

Emissions trading

Emissions trading schemes generate emissions pricing just as surely as a carbon tax, and have the same requirements: they can only be applied to measurable emissions and identifiable emitters. The centrepiece of an emissions trading system is a quota of emissions, which would be determined by the Commonwealth. The quota is subdivided into permits which are enforced by imposing a penalty tax on non-permit emissions. When permit schemes were first mooted it was pointed out that assets like coal-fired power stations cannot be replaced overnight, and their owners accordingly put a case that they should receive free permits – the alternative being that they would have to raise electricity prices. When free permits were tried in Europe, many of the recipients put up their prices anyway, so this argument is now discredited. Garnaut, in proposing an emissions trading scheme, is accordingly adamant that the permits should all be issued for a price, preferably by auction. Permit-buyers would either have to absorb this addition to their costs, or put up their prices. The expected way to absorb the cost would be by reducing the emissions intensity of production. The expected result of the increased prices would be loss of sales, which also reduces emissions.

Auctioning permits will raise revenue for the government which can be spent in the same way as the revenue from a carbon tax. Indeed, if the permits are valid only for short periods one may wonder whether there is any point in making them tradable. The fundamental difference between carbon taxation and short-life non-tradable permits is that the former sets the price and accepts the resulting quantity of emissions; the latter sets the quantity and accepts the price.

Garnaut gives the carbon tax option short shrift for two stated reasons.

- ❑ In the event of the world at large opting for emissions trading, Australia would be left with nothing to trade, thus forgoing access to low-cost abatement opportunities available in third-world countries. The importance of this depends on the course of international negotiations. If the international community decides, essentially, that each country should acquit its own obligations, international trade in emissions will not be encouraged. Even if it is, much depends on the price. There is a current expectation that third-world countries will be allocated more permits than they can use, resulting in substantial international sales at low prices, but there is no guarantee that this expectation will be realised.
- ❑ An emissions quota guarantees achievement of the target; carbon taxation does not. This argument is hard to understand, in that carbon taxes can readily be adjusted in the light of abatement achieved, and similarly a target which generates an unexpectedly high emissions price is unlikely to stick.

In explaining Garnaut's preference, one might add that United States' style market economics has been opposed to taxes of all sorts, as part of its belief in small government, and in favour of trade of all sorts. In particular, emissions trading is an enticing prospect for the finance sector, for which it is expected to yield all manner of brokerage, arbitrage and banking opportunities. The sector argues, of course, that these activities will greatly improve the efficiency of the market. However, its current performance indicates that financial markets must be well-designed and closely regulated before efficient performance can be guaranteed. Contra Garnaut, for the time being it might be better to stick with a simple carbon tax or with non-tradable auctioned permits.

Once an emissions permit scheme is in place, Garnaut argues that there should be no additional targets or abatement incentives. These are merely 'pet solutions' which incur the market economists' traditional scorn for 'government officials, academics or scientists' who presuppose that they 'have a better understanding of consumer preferences and technological opportunities than households or businesses'. However, he admits that there can be 'market failures' which hinder producers and consumers from responding to the revised pattern of prices. Government action to address these 'failures' is desirable as an ancillary to the emissions-trading centrepiece. The Garnaut report thus includes a number of chapters in which quite extensive ancillary measures are canvassed.

It is not so in the Treasury report: *Australia's Low Pollution Future*. Here the view is that 'other policy options are available to reduce emissions, such as more command and control style regulations, that prescribe technology standards or ban certain types of activity that lead to emissions. However, these generally will be more costly than a market based policy mechanism, because regulators do not have perfect knowledge of mitigation opportunities, costs and preferences of firms and households. Non-market policies have often obscured less transparent costs and welfare consequences.' (p9) Here speaks the voice of market economics. We may note, for example, that the comment that regulators lack perfect knowledge begs the question as to whether households and businesses have perfect knowledge.

The Australian Treasury's rather dogmatic stance contradicts the technical experts in the International Energy Agency, who conclude as follows. 'This analysis suggests that, given the distinct sector emissions reduction pricing ranges and option characteristics, a single generic price or cap across the whole energy system may not be the best approach to incentivising CO₂ reductions' particularly when the target is to cap atmospheric CO₂ at less than the current level. 'In such circumstances, cheaper options could benefit from large windfall profits, which would raise the pressure to change the basis of

the approach' (p2). What the IEA is saying is that emissions trading may be a useful way of imposing emissions cuts on the electricity sector, but is ineffective in encouraging energy efficiency and too costly when extended to manufacturing and transport. We must also remember that it fails to cover abatement opportunities outside the energy sector.

7.3 The proposed emissions trading scheme

The Commonwealth has named its emissions trading system a Carbon Pollution Reduction Scheme, CPRS. However, to avoid complicating our discussion with yet another string of initials, we will continue to refer to it as the Commonwealth's emissions trading proposals. The proposed scheme is to cover around one thousand large-scale emitters, accounting for around 75 per cent of total emissions. (For this purpose, emissions by motorists are treated as emissions by the large companies which supply them with petrol, and emissions by households are treated as emissions by the electricity and gas utilities.) The major sector not covered is agriculture and forestry. Apart from possible emissions blowouts from this sector, Garnaut is satisfied that emissions trading, dutifully implemented, will guarantee that Australia achieves target abatement.

He could have ended his report at this point, leaving it to the Commonwealth to implement the scheme and leaving it to the market to determine the price of permits and the activities to be switched or curtailed in order to meet the target. However, his terms of reference included a requirement to take the costs and benefits of domestic and international policies on climate change into account. Garnaut tackled this term of reference in conjunction with the market economists of the Commonwealth Treasury, and the most detailed costing of emissions trading is in a companion to the Garnaut report prepared by Treasury – *Australia's Low Pollution Future*. This, like the Garnaut report proper, includes estimates of the expected permit prices generated by different quotas and the cost in terms of reductions in gross national product and employment compared with hypothetical reference scenario in which there is no climate change.

Before we give an account of the Garnaut/Treasury economic modelling, we should note that, in their concentration on the merits of emissions trading, neither the Treasury nor Garnaut mention local government as an agency which can help with emissions abatement. If emissions trading is an all-sufficient response, the most that can be expected from local government is passive adjustment to energy prices as they change. However, the Garnaut review does note local government responsibility for preventing construction in localities vulnerable to climate change and suggests that councils should be supported with better data on climate change risks.

7.4 Emissions abatement: Garnaut/Treasury and economic modelling

Theoretically, the first advantage of emissions trading is that the combined brains of all businesspeople whose cost of production is increased by the new emissions price will be turned towards minimising the cost, and hence minimising emissions. Such costs as cannot be removed by the actions of businesses will then be passed on to consumers, who (as a second advantage) will devise creative ways to maintain their standards of living while reducing emissions by switching from emissions intensive goods and services to low emissions goods and services. The risk in this process is that businesspeople will take the easy way out by simply passing on the new cost to consumers. If consumers, in their turn, fail to find substitutes for emissions intensive goods and services, the policy response simply generates a burst of inflation and whatever reduction in incomes – and increase in unemployment – is necessary to reduce emissions to target. To be reasonably sure that this will not happen, we have to look at the opportunities to reduce emissions without reducing the production of goods and services. This is what Garnaut does with his economic modelling.

Economic modelling has its place, but can also be confusing, since it tends to conflate technical opportunity with business decisions to take advantage of opportunities. This is particularly true of the Garnaut/Treasury modelling, the greater part of which was carried out using models which simply assume that market economics provides an accurate account of how the Australian economy behaves. Technologies were reduced to inputs of land, labour and capital, and businesses choose among these abstract inputs to make their profit-maximising decisions.

Using their chosen models, Garnaut/Treasury constructed a reference scenario in which there is no climate change, and therefore no need to adapt to climate change or to avoid it. Though this scenario is pure wishful thinking, it probably represents the state of mind of the average Australian, and was easy to construct, essentially as a projection of the recent past in which global and Australian economic growth were rapid and unconstrained either by climate change itself or by efforts to mitigate climate change.

Having constructed the reference scenario, Garnaut/Treasury put together an end-of-the-world scenario in which emissions go on as usual, resulting in unmitigated climate change. Neither the world nor Australia take any notice as the deserts enlarge and the sea rises. This scenario was not modelled in any detail, but the conclusion was that gross national product would fall below the reference scenario, not very noticeably at first, but at an accelerating rate after 2040. The graph will be familiar to readers of the Stern report. Unlike the reference scenario, this is a coherent business-as-usual scenario.

The modelling for the emissions trading case was much more detailed, and produced comforting figures. The most stringent emissions trading scenario, with quotas intended to stabilise greenhouse gas concentrations at 450 ppm CO₂-e, was claimed to require a 25 per cent reduction in emissions below reference case by 2020. This in turn required a reduction in the growth rate of GNP per capita from 1.4 per cent a year to 1.2 per cent – an amount which will hardly be noticeable in the ordinary fluctuations of growth. In a similar vein, the scenario was modelled to generate a price of \$52 a tonne of CO₂-e (2005 prices) at the beginning of the scheme in 2010, rising to \$60 in 2020 – equivalent to around 18 cents a litre of petrol, and much less than the price increases which have recently been generated by changes in the relative demand and supply of crude oil. These impacts are so small that one wonders why Garnaut did not go for a more stringent target. Perhaps he was dubious about the modelling.

7.5 The Garnaut/Treasury modelling – fundamental approach

In approaching his term of reference about costs and benefits, Garnaut determined to utilise the most detailed advice available. Not for him back-of-the-envelope calculations – had he performed these as a check on his modelling he may have come to different results.

Emissions trading is nothing if not market based, and Garnaut and his Treasury colleagues appear to believe that market economics provides both an accurate description of the way economies operate and an accurate basis for policy assessment. We have met this neoliberal article of faith before: it underlay competition policy; it underlay deregulation and privatisation, and it enabled Garnaut to diagnose excess emissions as a case of market failure which could easily be corrected by putting a price on emissions. Given these beliefs, what could be better than to commission scenario construction from economic modellers who simply assume market economics? These models do not extend internationally, so supplementary work was commissioned from other market economists who apply the theories to the world as a whole. The models are also inevitably abstract, so further supplementary work was commissioned from researchers into the cost structures of the transport, electricity and agricultural sectors. In the cases of electricity and agriculture this work included considerable technical detail – even, in the electricity case, extending to work similar to the IEA on the merit order and potential of alternative technologies. An effort was made to integrate these ‘bottom-up’ studies into the market economics work, but they were never allowed to dominate.

At this point National Economics must enter a disclaimer. Though we respect Garnaut's detailed work on the electricity and agricultural sectors, we have never believed that market economics provides a sufficiently accurate account of the operation of the Australian economy for it to be a reliable guide to policy formation. For evidence, one need go no further than the failure of market economics to highlight the macroeconomic problems which now beset Australia: the lack of savings, the overseas indebtedness, the heavy load of household debt. A paradigm which is not sensitive to the onset of these problems is deficient.

It will, of course, be argued that these are problems of short-term macroeconomic balance, and that market economics provides a firm foundation for analysis of long-period problems like the response to climate change. Treasury puts it this way: the models 'provide a more robust analysis of the post-transition economy than of the transition process' (p22). In other words, we think we know what a low emissions economy will look like when we achieve it, but we're not sure how we'll get there. Since most of the costs are incurred en route, this is a rather damning admission. To give Treasury its due, all economic models abstract from reality. The problem is not that they have employed abstract economic models, but rather that they have abstracted too much. The trick in economic modelling is to simplify in matters unimportant for the results, and go into detail where it matters.

We organise our more detailed review of the Treasury/Garnaut modelling by asking a simple question: given that emissions abatement requires major change in core industries, why are the modelled costs so low?

7.6 Treasury's low costs: why?

We begin with two possible reasons which turn out to be furrphies.

'No regrets' benefits

First, as we have noted, surveys of emissions abatement possibilities at both the global and Australian levels identify a substantial tranche of 'no regrets' opportunities. Most of these occur when, by replacing or updating buildings or equipment, emissions can be reduced along with reductions in energy usage – with the cost savings from the reduced energy purchases justifying the cost of replacing and updating. It is possible that the Treasury somehow assumed that households and businesses availed themselves of these opportunities, yielding considerable abatement at zero or negative cost. However, it is a matter of faith among neo-liberal economists that such opportunities do not exist. Though engineers may observe an opportunity, neoliberal economists argue that the fact that people have not responded to it means that there must be barriers to implementation, and that these barriers can only be overcome at a cost – in other words, the opportunities are sheer mirage. We can therefore be confident that they have been excluded from the Treasury modelling.

The world recession

A second possible reason for the low cost of abatement could be that the Treasury foresaw the coming recession. They could then include it in their base case, complete with significant unemployment of both capital and labour. It would then be possible to argue that an investment campaign in emissions abatement could use the resources thus unemployed. If otherwise-unemployed resources are used on an investment campaign, the cost is much less than if the campaign has to bid for resources which would otherwise be fully employed. In Treasury language, an investment campaign which has to bid for fully-employed resources crowds out other uses. However, this explanation definitely does not apply to the Treasury modelling, since the threatening world recession just isn't in their base case. Indeed, there is no recession anywhere in the projections. The historical graph of growth in gross national product spikes wildly up and down up till 2007, after which all is calm and steady. It is no surprise to find that this is simply by assumption. Market economists believe that markets yield steady

economic growth and never leave resources unemployed. They therefore build models in which this is true, whatever the historic experience.

Does this abstraction from the reality of booms and slumps matter for the assessment of costs? Yes, it does, for it means that Treasury simply assume away the argument that the Australian economy over the next few years may be in deep slump due to falling exports, the falling demands of over-indebted households and the persistent demands of overseas creditors. In these circumstances a program of infrastructure construction to underpin emissions abatement may be a way of maintaining national activity levels, if not national consumption, in a time of adversity. Comparing the level of Gross National Product in such a slump with the level it would reach supported by a campaign of investment in abatement infrastructure may even mean that abatement is virtually free, since it is modelled to be provided by resources which would otherwise be unemployed. (Note: the modellers sensibly use Gross National Product rather than Gross Domestic Product, since Australian incomes are more directly derived from national product than from domestic product.)

Abatement in the reference case

The Treasury/Garnaut reference case assumes that the rate of growth of emissions will be less than the rate of growth of GNP. This assumption reduces the amount of abatement required from emissions trading, so reducing costs. This optimistic assumption is not supported by past trends.

An easy target?

A possible reason for the low costs reported by Treasury is that the target has been set so that it can be met without significant cost. Conservationists would certainly like to argue that this is the case, because they believe that even the most stringent of the Treasury/Garnaut scenarios does not reduce emissions rapidly enough. By 2020 the most stringent Garnaut case is projected to produce emissions approximately 17 per cent below present, and 73 per cent below present by 2050. (The issue can be confused by noting that these reductions can be made to seem larger than they are because they are respectively 35 and 84 per cent below reference case. We have already noted that the reference case is a completely artificial construct.) These reductions are well short of the targets which are likely to be needed, and Garnaut's claim that they are compatible with the stabilisation of greenhouse gases at 450 ppm CO₂-e is accordingly suspect.

According to the technology based work of the IEA, the cost of an additional tonne of emissions abatement is typically moderate in the electricity generation sector, somewhat higher for industrial processes and is generally quite high in transport. The less stringent the target, the less the need to push abatement into high-cost areas. Judging by Treasury results, the target has been set so as to avoid major mitigation efforts in transport and agriculture, two sectors where high abatement costs are generally expected. This hypothesis is supported by the Treasury's published results, according to which emissions abatement from the transport, agricultural and other stationary energy (such as gas for home heating) sectors will be much lower than in electricity generation.

Though transport lies at the high cost end of the IEA merit-order of emissions abatements, it is such a significant source of emissions that it cannot be ignored if we are to attain the levels of abatement that the science now requires. The Treasury is indeed realistic in concluding that the effect of emissions trading on transport will be negligible – a price increase of 18 cents a litre for petrol, even if it is fully passed on to the consumer, is not large enough to effect major behavioural change, particularly if public transport is not improved at the same time. At best, the change will influence new car purchasers to pick more fuel efficient vehicles. Such abatement as the Treasury believes will occur in transport seems to be reserved for the period after 2030, and to depend on the ready availability, by then, of electric vehicles using electricity generated from renewable sources.

A peculiar feature of the Treasury modelling is that it reports emissions abatements from agriculture – even though, as discussed above, it is not likely that emissions trading can be applied to agricultural emissions due to measurement difficulties. On the other hand, the low level of emissions abatement from the ‘other stationary energy’ sector confirms that Treasury do not believe that ‘no regrets’ emissions reductions are available from energy efficiency improvements, such as improved home insulation. Given the ineffectiveness of price incentives in this area, Treasury is realistic in acknowledging that emissions trading has little to offer by way of emissions abatement from stationary energy other than from electricity generation.

Despite these caveats, the Treasury modelling does produce a pronounced break in the Australian trend towards growing emissions. This is modelled to include an abrupt fall of about 20 per cent as an initial reaction to the introduction of the emissions trading scheme – presumably a wake up in fright effect. After this initial emissions plunge, further gradual reductions take place, presumably as high-emissions equipment is replaced by more emissions efficient varieties. Given the great difficulty which Australia has experienced in attaining any form of emissions abatement to date, this is a remarkable turnaround, and it is surprising that the Treasury does not report higher costs.

Low-cost international permits

One reason for the low cost of abatement is that Treasury expects that Australia will be able to import emissions permits, resulting from abatement elsewhere in the world, thus avoiding some of the necessity to impose domestic abatement. This expectation is based on modelling of the world economy – a necessarily somewhat hazardous enterprise, given that the politics of international trade in emissions abatement has yet to be settled. Needless to say, it may turn out to be unwise for Australia to rely on such uncertain accommodation of its high emissions practices by the rest of the world – particularly in view of recent falls in the exchange rate, which are making international permits more expensive.

Responsiveness to price changes

The Treasury/Garnaut modelling depends on embedded assumptions about responses to price changes. This is not surprising: the purpose of emissions trading is to put a price on emissions, and its effectiveness in reducing emissions accordingly depends on how people react to the price. If they can easily switch to low-emissions activities, the costs are low. If they find that they cannot switch, the costs are high.

Let us take the example of a place in the country where firewood is freely available, apart from the effort of chopping it up. Despite this ready availability, the locals fire their barbies with LPG. Now impose an emissions trading scheme which increases the price of LPG so that country people cannot afford it. A cheery group of locals takes up its axes and continues its parties using firewood, which, since it is within the carbon cycle, is excluded from emissions trading. A less resourceful group finds the LPG price increase is too much, and abandons partying. The cheery mob suffers little reduction in standard of living as a result of the increase in the price of LPG: indeed, they are likely to find their standard of living improved, particularly if they value their rediscovered skills at wood-chopping and like the smell of wood-smoke, and on top of it all they can spend the cash previously spent on LPG on other things. But what if there is no firewood? What if there is no axe? What if people have forgotten how to use an axe? What if people don’t know how to work a wood-fire barbie? What if their barbie is so constructed that it will only take gas fuel, and cannot be switched to firewood? A no to any of these questions and the probability of the no-party result increases.

This example may be frivolous, but it makes the basic point. The easier and more obvious it is to switch from a fuel which has risen in price to an energy source which has not, the lower will be the cost of emissions trading. In turn, this ease depends on millions of individual situations: on the technical choices confronting all sorts of people in all sorts of situations; their awareness, their

resource constraints. The variety of situations defies analysis, with results ranging from people who are better off after the price increase to those who completely abandon pleasurable activities which required fuel input. In the throes of such uncertainty, market economics has the answer: it throws in an assumption. Because market based measures work best if people are highly responsive to price changes, there is a temptation to assume that people are indeed highly responsive to price changes. Such assumptions prove nothing.

Behaviour will be highly responsive to prices if there are few barriers to price response: neither ignorance, nor lack of resources, nor commitment to existing technologies interfere with rational switching from emissions intensive to low emissions fuels, and from emissions intensive activities to those with low emissions intensity. By considering these factors area by area it is possible to build up a view on price-responsiveness, but the Garnaut/Treasury modellers have not documented their efforts to do this. We are left with economists' general experience, which is that measures of responsiveness to price changes are notoriously unreliable and difficult to estimate accurately. Therefore it is difficult to challenge an assumption of high price responsiveness – and also very easy to be disappointed when policies based on the assumption of high price responsiveness fail to deliver their policy goals, or do so at much greater than expected cost.

It is possible that optimism over price responses explains some of the low costs in the Garnaut/Treasury modelling.

Technological change

An important embedded assumption which reduces the cost of emissions abatement in the Garnaut/Treasury modelling is that major technological breakthroughs occur around 2030 which reduce the cost of emissions free electricity generation markedly. The breakthroughs are assumed to occur both in carbon capture and storage (which rescues the coal industry when it is on the verge of collapse) and in renewable electricity (which thus remains competitive with coal). All of this is possible and some would say probable, instancing the general technological progress which has been the mark of societies which pay attention to science. However, there are also instances where concerted research efforts have failed to yield the expected benefits. For example, sixty years of research into nuclear technologies have produced gradual cost reductions, but nothing like those hoped for when the research was inaugurated in the 1950s.

Current IEA views on carbon capture and storage are that it is probably technically sound, though this is yet to be proven at power-station scale. The main uncertainties concern its cost vis a vis its low-emissions competitors – nuclear power and renewables. As usual we are considering the reasonableness of assumptions, which in the case of carbon capture and storage include assumptions about the effect of carbon capture on power station efficiency; the cost of pipeline transport of CO₂ and the cost and effectiveness of the final storage (since storage isn't much good if it leaks). The major role which Garnaut/Treasury see for carbon capture and storage post 2030 also depends on the breakthrough matching the rate of technical development and cost reduction in nuclear power and renewable. This is all highly uncertain. Undue optimism about carbon capture and storage has two risks.

- It encourages business-as-usual on the coalfields, in the expectation of a technical fix in the near future.
- It encourages the direction of research and development funds into carbon capture and storage.

The argument is sometimes put that, given its coal resources, Australia has a particular interest in the success of carbon capture and storage, and should accordingly devote major research efforts in this area. However, Australia is not the only country with a vested interest in coal – the United States is equally coal-dependent, not to speak of China. Again, coal is not the only resource which Australia has in abundance – the obvious competing resource is sun-power, not to speak of uranium. In these

areas, too, the major research effort will be outside Australia, but opportunities for local development and adaptation should not be lost in the pursuit of one particular, necessarily uncertain technology.

Abatement without investment

An important reason for expecting abatement costs higher than those estimated by the Garnaut/Treasury modellers is the common-sense view that scrapping perfectly good equipment in order to replace it with lower-abatement equipment inevitably involves a cost. New power stations have to be built, new refrigerators and new vehicles purchased and new infrastructure provided – and since when did these things come free of charge?

Yet a case can be made that old power stations have to be replaced by new in the ordinary course of events. If old high emissions power stations are fully depreciated by the time they are replaced by new low emissions stations, the capital cost of emissions abatement is not the full cost of the new station. It is no more than whatever additional cost is incurred due to the installation of low emissions technology. Treasury does not explicitly state that it has made the assumption that all replaced equipment is life-expired, but there are indirect indicators that it has done so.

We start our investigation with one of the Treasury's stated assumptions. 'Domestic savings is determined as a fixed share of household disposable income and the Government's budgetary position' (p 213). We have already noted one meaning of this assumption – the modelling abstracts from the troubles that Australia has brought upon itself by allowing the financial system and the household sector to rake up debt. But there is a further meaning. The model does not provide for household savings to increase to accommodate a burst of investment in emissions reducing equipment. This leaves open the possibility that Treasury has assumed that government savings rise to foot the bill, though this would be contrary to the usual market economics preference that government budgets should remain balanced.

It also appears that 'investment depends on expected rates of return relative to rates of interest' where 'investors only take account of current rentals and asset prices when forming current expectations about rates of return' (p213). If this means what it says, it is a somewhat unrealistic approach in a time in which expectations are veering from business-as-usual to deep gloom. We know that investors are busily recalculating asset values because they now expect both debt defaults and the price effects of emissions trading. However, this is not what the Treasury had in mind. What they were thinking about was that emissions trading will lower 'current rentals and asset prices' in a number of industries, as a result of which investment will fall. These falls are indeed reported in their results: investment declines compared with 'reference case' in virtually all industries. Unless investment in replacement capacity is somehow excluded from the definition of 'investment' in the Treasury modelling, emissions abatement is somehow accomplished with a reduced level of investment – and this means there is no allowance for expenditures required to update the stock of equipment.

There is a temptation, in building economic models, to write $C = \text{capital}$, and forget that capital is embodied in machines and human skills. It is then but one step to arguing that capital automatically updates itself – for example, capital no longer required in manufacturing suddenly becomes capital required in mining, or capital embodied in emissions intensive equipment suddenly becomes capital embodied in low emissions equipment. This is a very convenient assumption when one is promoting structural change, because it leads to low estimates of cost. However, it is realistic only if equipment is not replaced till fully depreciated, and similarly that worker skills are not devalued.

Treasury costs are unrealistic

To summarise, the Garnaut/Treasury modelling systematically underestimates the resources which would have to be devoted to a realistic abatement program and the extent of change required. It overestimates the extent and speed with which emissions trading can reduce emissions. It yields very

low estimates of the cost of emissions abatement, even though it disregards the potential for low-cost abatement through energy efficiency improvements additional to those induced by emissions pricing, and also disregards the case for investment in emissions abatement as part of a program of recovery from the economic damage inflicted by two decades and more of policy based on market economics.

7.7 The role of inappropriate structural features in the Treasury's modelling and conclusions

The key conclusion of Treasury's modelling is "*a price on emissions breaks the link between economic activity and emissions. It allows for significant cuts in emissions without large economic costs*" (page 140). This conclusion is reached because assumptions are made to ensure that the conclusion is validated by the modelling. The core problem for Treasury is that there is no empirical evidence to justify the assumptions and, therefore, there is no empirical evidence to justify the key conclusion.

In this regard the key modelling assumptions revolve around:

- (i) The determinants of the investment decision;
- (ii) The role of local and firm-specific drivers in industry energy efficiency outcomes; and
- (iii) The selection of technologies under resource constraints.

Each of the aspects will be considered in turn.

7.7.1 The determinants of the investment decision

In Computable General Equilibrium (CGE) modelling of the type used by Treasury, the total investment pool is set in the aggregate, either exogenously to the economy or as a function of total economic activity. In the MMRF model used by Treasury, domestic savings is "a fixed share of household disposable income and the government's budget position" (page 213). To maintain saving-investment balance, total gross investment will simply equal gross investment minus the current account balance. The total investment pool is then allocated to industries on the basis of relative rates of return. That is, the investment decision maker is independent of business, disconnected from any industry and simply makes investment allocation decisions on the basis of relative rates of return.

By making this structural assumption Treasury has in fact isolated Australia from the rest of the world, since whatever happens in the rest of the world will not alter the quantum of investment allocated to domestic industry, only its distribution. By definition, no matter what happens to the economy in relation to CO₂ abatement policies, there will be little aggregate economic cost. Total economic activity is fixed by the workforce and the aggregate productivity assumption. The Treasury have simply adopted an extremely crude model of the economy which guarantees the result achieved.

This structural feature assumed by Treasury is both nonsensical in logic and wrong in fact.

As is widely recognised beyond the economics profession, investment decisions are made at the firm (that is, industry) level by decision makers linked to the firm (that is, management/board).

The investment decision involves selecting from a list of competing proposals up to the firm's investment budget constraint. These proposals involve increasing the productive capacity and/or efficiency of the production of existing goods and services and/or adding capacity for the production of new products, generally with some synergy with existing production. The allocation of scarce resources will be based on maximising the firm's competitive position in three to five years.

On this account of the investment decision, jurisdictional-specific competitive characteristics, for example the relative cost of energy and carbon, will determine how much of a multi-national firm's investment resources are allocated to a given country. Needless to say, multi-national firms dominate the Australian economy.

If the MMRF model investment mechanism had any validity, it would be expected that firm-specific factors would have a weak influence on the firm's investment level. Aggregate and relative rates of return are defined as the key driver of investment.

Unfortunately for Treasury, the overwhelming weight of empirical evidence concludes that firm/industry cash flow is the core driver of firm/industry investment. This is well established, both at the macro level and at the micro level. In the Mills *et. al.* study, a pooled time series cross section statistical analysis was undertaken for 66 companies listed on the Australian stock exchange for the period 1982 to 1992. While other drivers were included (sales, debt, etc.) the main driver of investment was firm cash flow.

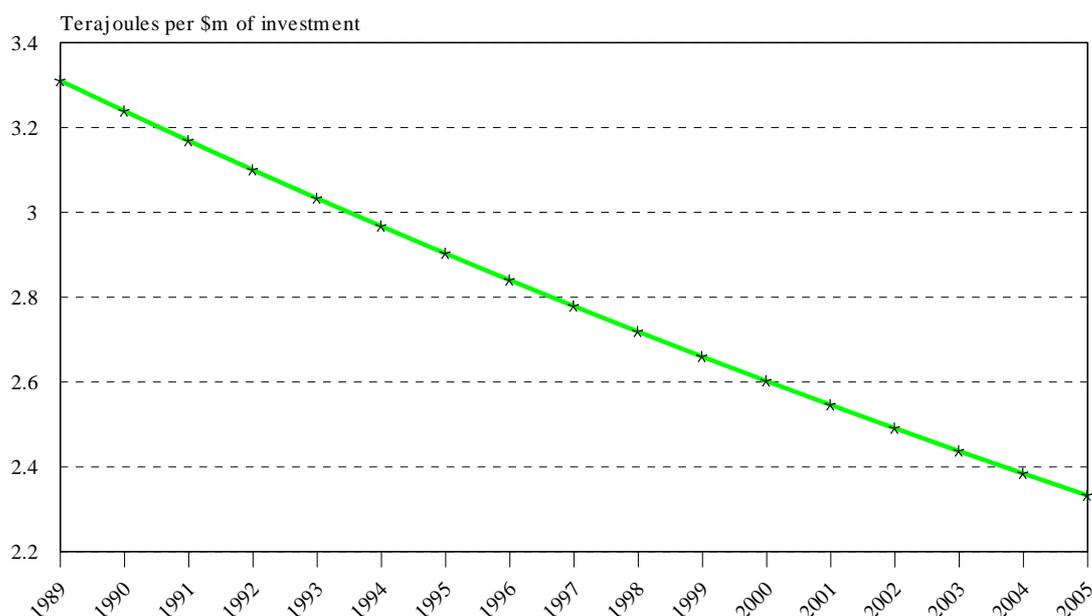
Once conflicting objectives are introduced, at the firm level, within the firm's investment budget constraint (determined by firm cash flow), it can immediately be shown that sole reliance on a CO₂ price will be an inefficient tool to promote energy efficiency.

For the Brotherhood of St Laurence (2008) study, a 60 industry model was employed where, for each industry, energy efficiency is measured by estimated actual petajoules per \$1 million of investment. This is calculated for each vintage of investment employed in the capital stock. A vintage is the investment undertaken in a given year. The following figure shows these estimates for the paper and paper product manufacturing industry for 1989 to 2005. For this industry the energy required per \$1 million of investment fell from 3.3 terajoules 1989 to 2.3 terajoules in 2005. Assuming, for illustrative purposes, that the Australian paper industry comprises one firm, then the firm in 1989 invested \$674 million and now has the potential to improve energy efficiency by scrapping the 1989 plant and replacing it with a 2005 plant. The reduction in petajoules consumed will be $(0.0023 - 0.0033) * 674$, or 0.67 petajoules, or approximately a 2.2 per cent saving in energy costs, or \$2.5 million at 2005 prices. It would take a carbon price of over \$400 a tonne of CO₂ before a payback period of 10 years would be obtained.

In contrast, if the "firm" invested in capacity expansion at 2005 gross post tax profitability levels for the Australian paper industry, then the payback period would be around five years. What the firm would do in this instance would simply allow energy efficiency to improve in the normal way as plant comes to the end of its effective life. Clearly in this case the major problem is that energy efficiency improvement can only be accelerated if the entire capital stock of a given vintage is replaced. This is not the case for all industries. However, for most energy intensive industries it will be the case that the opportunities for the majority of major improvements for energy efficiency will only come from replacements of whole given vintages of equipment, or the redesign and rebuilding of whole production processes. The same is true in transport where whole trucks and commercial vehicles will have to be replaced.

We conclude that the firm/industry will always choose projects that involve capacity expansion over accelerating energy efficiency projects provided that such projects are available within a given capital budget. However, even if such projects are not available, the argument does not imply that energy efficiency projects for an industry in a given jurisdiction will automatically proceed. This is because of the industry-specific drivers of energy intensity.

Paper and paper products: Energy intensity of investment (TJ per \$m gross investment)



7.7.2 The role of industry-specific drivers in energy intensity

CGE models typically assume that the same production technologies are relevant to all firms in each industry, no matter where the firm is located. In this context, specific factors, such as firm scale, plant scale (in a given location), productivity and output growth are irrelevant to energy intensity outcomes.

In 2007 National Economics undertook a study for the Victorian Department of Sustainability and Environment to quantify the drivers of industry energy intensity change for the Australian States and 13 OECD economies. The key results are reported in Table 7.1.

The key finding is that factors such as:

- industry scale;
- (labour) productivity in the industry; and
- industry output growth (by accelerating the rate of capital stock growth),

have an important and, in some cases, dominant influence on the change of energy intensity. The greater the scale of the industry (average plant size) the greater the level of labour productivity, and the faster the rate of growth of industry output the greater the level of energy efficiency. All of these factors serve to reduce the energy (petajoule) to real output ratio. CGE models are constructed to disregard this basic fact because returns to scale at the industry, for example, provide a justification for large scale interventionist policies which, on ideological grounds, are opposed by many CGE model users including the Productivity Commission and, from time to time, the Treasury.

In this context, when faced with large scale increases in energy costs, the multi-national firm will seek investments in jurisdictions which allow the largest scale plant to be built with the highest level of overall productivity and the best prospects of long-term market growth. This in general will not be Australia, where there is a high risk of increases in energy costs from CO₂ pricing, a small market and limited access to export markets, thereby limiting the economies of scale and scope. Therefore, by

itself, the use of carbon pricing as the main instrument for CO₂ abatement will lead over time to the relocation of energy intensive plants elsewhere. This can only be offset by the use of complementary industry policy instruments such as investment allowances and discounted permits.

Finally, Treasury's modelling assumes decision makers are stupid. The modelling assumes that they take today's prices as given in evaluating where to invest over the 20 years or so life of an asset (Treasury 2008, page 213). Investors will not, of course, assume that CO₂ prices are constant at today's level. They build in substantial escalation factors for projected growth. This is all the more reason for relocating plants to those jurisdictions that offer the best opportunities for economies of scale and scope, and hence, energy efficiency and, therefore, greater protection against future price rises.

Table 7.1 Annual average change in energy intensity and contribution of general industry drivers	Australia		Thirteen country average	
	Industry drivers	Energy intensity	Industry drivers	Energy intensity
	Agriculture	-0.7	1.1	-1.1
Mining	-1.5	0.3	-1.0	-1.4
Food	-1.3	-1.2	-1.4	-1.3
Textiles	2.0	1.5	1.3	-0.5
Wood and paper products	-0.3	-1.8	-0.2	-0.2
Metals	-0.5	-0.2	-1.3	-2.5
Non-metallic minerals	-1.1	-1.8	-0.6	-1.5
Machinery and equipment	-1.7	-1.8	-1.4	-1.2
Chemicals	-1.4	-1.6	-1.6	-2.5
Construction	-0.5	-2.3	-0.2	0.8
Transport services	-1.7	-1.9	-1.3	-0.7
Business services	-0.2	0.0	-0.1	-0.1

Source: National Economics, Department of Sustainability and Environment, "The economic independency of Victorian non-metropolitan regions", April 2007.

7.7.3 The selection of technology employed

In Treasury's analysis, investment is fixed by savings. This in turn fixes capital stock growth. There is no constraint from the need to divert investment from capacity expansion to energy efficiency since either:

- (i) the new technology is marginally embedded in the capital stock like "manna from heaven" once the CO₂ price triggers the appropriate CO₂ abatement technology from the marginal abatement cost schedule; or
- (ii) if capital is diverted from capacity expansion to energy efficiency, the real wage of labour declines to maintain full employment.

What (ii) is assuming is that firms adopt old technologies to increase their labour intensity. For example, to save on capital a check-out person in a supermarket is replaced by two people, one to do the adding up (replacing the machine) and one to pack. Airlines replace their large 500 seat planes with smaller planes flying more often. Transport companies reduce the size of their trucks. In reality the reverse is the case – when the rate of return is declining companies pour in more capital to replace labour and more importantly to reap the benefits of the economies of scale and scope. Technology is adopted to replace labour in the supermarket, bigger planes reducing total aircraft movements and bigger trucks which exploit further opportunities of economies of scale and scope which, by assumption, is not available in CGE models.

The CGE model mechanisms are implausible and always have been implausible. They are particularly implausible in the CO₂ abatement context because they ignore the clear conflict between the effort to save capital by a return to more labour intensive technologies and the increase in CO₂ emissions from losses in economies of scale.

7.8 Conclusion

The recession now beginning in Australia has ‘made in United States’ written all over it. Not only did it originate in the United States, but it reflects the weaknesses of the economic system which the United States has been promoting world-wide, and the way of thinking about economics which accompanies that system. The centrepiece of the system has been a deregulated financial system, and the way of thinking has been neo-liberal economics.

Though the financial crisis was triggered across the Pacific, it reflects Australia’s own decisions. In particular, the adoption of neo-liberal thinking by Australian economists and governments, particularly Treasuries and the Reserve Bank of Australia, blinkered all concerned. They failed to realise the folly of financing consumption from debt, and the particular folly of financing consumption from overseas debt. Sooner or later the resulting land boom was bound to bust.

In the United States, neo-liberal policies resulted in financial innovation which was supposed to control risk, but which in the event hid it from view. The default of a relatively small number of home-mortgage borrowers was thus sufficient to cause the whole leveraged structure to tumble down. In Australia, on the other hand, there has been less innovation in the financing of mortgages, and so far the default rate has been manageable. The danger lies in the overseas indebtedness of the banks.

Add to this the second crisis of our times: climate change. The science is now compelling, and the need for emissions abatement urgent. After a decade or more of denial, the Commonwealth has acknowledged this reality, but its intended response is blinkered by neo-liberal economics. The Treasury proposes the silver bullet of an emissions trading scheme. The Commonwealth’s adviser on emissions abatement, Professor Garnaut, basically concurs, though he would be willing to add a variety of complementary measures designed to push people into prompt response to the price changes brought about by emissions trading. Both propose programs which, at best, are expected to yield abatements well short of those the scientists now believe are required.

National Economics predicted that a boom based on high levels of consumption, financed by a combination of consumer mortgages and overseas borrowing by banks, would inevitably result in a bust. We have argued in this chapter that the predicted bust is upon us. In this chapter we have also, on the basis of our long experience in the assessment of greenhouse gas abatement measures, severely criticised the Commonwealth’s proposal that an emissions trading scheme will be a sufficient response to climate change. In particular, it appears that the Commonwealth has used neo-liberal economic models to seriously underestimate the cost of abatement. We face more than a minor update of the capital stock.

Where to go from here? It is obvious that the twin crises need to be addressed as one. The next chapter continues the argument.

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8. The need for policies to support emissions trading

In Chapters 5 and 7 we encountered the Commonwealth's proposal to respond to climate change by introducing an emissions trading scheme. The Treasury version of the proposal is that emissions trading should be the Commonwealth's sole response and that attempts to hasten abatement by other means should be discouraged. In the event of this Treasury policy being adopted, there will be little room for local government action to ameliorate climate change, though there will be a considerable need for local government assistance to adapt to the reality of climate change. On the other hand, if emissions trading is but one part of a much broader Commonwealth approach, local government will find itself central to the all-Australia program of emissions abatement.

We reviewed the Treasury modelling of the costs of climate change, and found it wanting in realism and suspiciously optimistic as to cost. The modelling did not prove that emissions trading would result in Australia meeting abatement targets at low cost; it simply assumed that it would. Such modelling by assumption is not helpful. At best it might assist politicians to do what they have to do anyway – which is to overcome inertia and opposition and institute an emissions abatement program. At worst it generates false optimism on two counts: optimism that emissions trading by itself will reduce emissions rapidly, and optimism that it will do so at low economic cost. We have criticised both these assumed results, and must now go on and suggest better alternatives. We begin with another quick look at the Garnaut report.

8.1 The distributional effects of emissions trading

In some chapters Garnaut strongly supports the Treasury position while in others he recognises that emissions trading should be supplemented by compensation for the distributional cost of emissions trading and by measures to counteract 'market failures'. In this context, a distributional cost arises when the real incomes of poor people are reduced, while a market failure is anything which hinders a rapid and rational response to the pricing of emissions.

A major risk in greenhouse gas emissions abatement policy is that of subversion by the industries which it is supposed to control. A notorious example was the inaugural European emissions trading scheme. In the negotiations over the specifications of the scheme, electricity generators threatened to raise prices if they were charged for permits. Their political lobbying was successful, they received free permits and then proceeded to raise prices anyway. The increase in prices resulted in a major transfer of income from consumers to electricity generators' profits – at the particular expense of poor consumers, who spend a greater proportion of their incomes on electricity than rich consumers.

Similar lobbying for free permits is under way in Australia, and we will doubtless hear arguments that the generators should be compensated for the loss of capital value of their assets, and should receive enhanced cash flows to enable them to invest in low emissions generation capacity. The reply to the first of these arguments is that climate change is a business risk for which the generators should have been prepared, since it has been on the cards for at least two decades. The reply to the second argument is that existing generators should not have privileged access to investment funds, but should take their place in the investment assessment queue. This applies whether or not governments add to the flow of investment funds into emissions abatement.

To his credit, Garnaut has opposed the gifting of emissions permits, arguing that all permits should be auctioned. Given the considerable danger that the scheme will be subverted, perhaps he should have gone further and argued that emissions should be priced, not by a permit scheme administered by a department with a primary interest in the energy industry, but by an emissions tax administered by the Tax Commissioner. It is very important that emissions trading should contribute to government funds

rather than to private profits, because there is a wide range of legitimate claims on the revenue generated. The household sector, which ultimately provides the revenue, has several claims:

- ❑ a general claim to compensation, particularly for low-income people;
- ❑ a particular claim to assistance with energy-efficiency improvements at the household level, again particularly for low-income people;
- ❑ claims to compensation, generally in the form of retraining, for individuals who lose skilled jobs as a result of industry restructuring; and
- ❑ claims to compensation, generally in the form of alternative employment generation, by regions adversely affected by industry restructuring.

The second of these claims overlaps with a more general claim that funds are required for the finance of investment in energy efficiency and low emissions technologies. These funding requirements are not only related to compensation for taxed household income but to the overcoming of market failures which hinder the effectiveness of emissions pricing. In his report Garnaut provides a formidable list of circumstances where supplementary measures may be required to address such market failures, and it does not take much imagination to think of more. The Garnaut report as a whole therefore argues for a response in which the Commonwealth supports a wide variety of measures complementary to emissions trading. The Treasury approach has no place for local government whereas local government can contribute enormously to a complementary-measures approach.

In Chapter 11 we will return to the role of local government. Before we do so, we need to emphasise the importance of broad coverage of emissions, the need for compensation and to flesh out the range of measures we consider to be complementary to emissions trading.

8.2 The importance of broad coverage of emissions

A first point to emphasise is that National Economics is not advocating a retreat from the pricing of emissions. In particular, provided it is not subverted by politics or corruption, emissions pricing can delegate the decision as to which power stations are to be closed, and when, to the actual owners and operators of the stations. Likewise, and again provided it is not subverted by politics or interested parties, it can delegate to investors in low emissions power which actual investments are to be made, and ensure that investors carry at least part of the risk and stand to reap commensurate reward. These are formidable advantages, and strongly suggest that emissions pricing should be imposed, with the reform of electricity supply its prime target.

Garnaut and Treasury both argue that emissions pricing should cover as many emissions as possible, rather than being confined to electricity supply. This is a sound argument, if only to avoid emissions blowouts by customers switching away from electricity to exempt fuels. National Economics therefore supports Garnaut in his advocacy of broad based emissions pricing. We are, however, concerned that the Garnaut report will be misconstrued, by Treasury and others, into a proposition that emissions pricing will be a sufficient response. National Economics also prefers the simpler forms of emissions pricing, and therefore supports an emissions tax or the auctioning of short-period non-tradable permits rather than a scheme which relies heavily on emissions trading. This view is based on fear that emissions trading will be captured by the major emitters, as well as scepticism about the value added by financial trading – a scepticism which was deeply unfashionable a few short months ago but is gaining support as a result of the global financial crisis.

8.3 Compensation

At first glance the distributional issues raised by emissions pricing are very similar to those which were raised by the GST, and the solution is therefore the same: raise social security payments and reduce income taxes. However, there is a difference. An important way in which households can avoid real income reductions from emissions pricing, and at the same time help to reduce emissions, is by improving their energy efficiency. Garnaut accordingly proposes a mixture of pension/tax compensation and programs to improve the energy efficiency of the homes of low-income people. National Economics supports this approach, like Garnaut pointing out that programs promoting energy efficiency are warranted not only on distributional grounds, but on grounds of correcting market failure – in this case low-income people's lack of funds to invest in energy efficiency.

Garnaut also recognises that particular regions will be adversely affected by the introduction of emissions trading – as they will be, more generally, by any global program to limit emissions. These regions have a claim on investment funds to generate alternative employment. Local economic development officers should be engaged in assessing their region's economic vulnerability to emissions trading as well as (and more important) the opportunities opening up in a world of high carbon prices, and developing plans for investment support including required infrastructure.

8.4 Measures complementary to emissions trading

Garnaut's discussion of complementary measures is rather theoretical in nature, depending as it does on the economic analysis of market failure. A more direct place to start is the International Energy Association approach using technology cost curves, which rank abatement technologies by cost per tonne of CO₂-e abated coupled with potential abatement in tonnes a year. It will be recalled from Chapter 5 that these schedules run through three ranges:

1. an initial tranche of abatements technically possible at negative cost – otherwise known as 'no regrets' abatements, because they make economic and business sense even in the absence of emissions pricing. There are already financial incentives to implement these abatements, but in practice they have not been implemented, and a great many hypotheses have been advanced as to why. The one thing certain is that strengthening the financial incentive to implement 'no regrets' technologies by imposing an emissions price cannot be relied on to get people to take advantage of their 'no regrets' opportunities. The International Energy Agency note that most of these opportunities involve improving energy efficiency, and a wide variety of programs has been designed to improve practice in this area. We shall see that, with its local knowledge, local government is well placed to assist with many of these programs;
2. the second tranche is that of abatements which become economic at a moderate emissions price, say less than AUD 120 per tonne of CO₂ emitted or abated (with emitters paying the price and abaters saving it). This tranche includes most of the technologies required to decarbonise electricity production, and is the primary area targeted by emissions pricing; and
3. the third tranche is that of abatements which do not become economic until rather higher emissions prices are reached. These may be divided into industrial emissions and transport emissions. The important fact about them is that an emissions price which is expected to bring about major change in the electricity generation sector is not likely to affect much change in these sectors – a fact which is confirmed in the Treasury modelling. It is, however, a sad fact that stringent emissions abatement will require cuts in these sectors. The question is: how?

Complementary measures in the energy supply industries

This analysis means that emissions pricing is likely to be adequate as the primary approach to emissions abatement in the electricity supply industry and its immediate competitors, such as gas supply. However, even here it is likely that supplementary measures will be required, in particular to ensure that finance is available for necessary investment in new generating equipment, new bulk transmission lines to cater for a different geographical pattern of electricity generation and possibly new equipment for system management. Local government has a considerable contribution to make in this area, including the following:

- local advocacy, to ensure that standards of local power supply are not sacrificed;
- advocacy, again, on behalf of regions where employment is likely to be reduced as a result of emissions abatement, and participation in generating alternative employment;
- local negotiation, to mediate in conflicts which arise in the investment program; and
- participation in local investment in decarbonised electricity.

Energy efficiency

The International Energy Association analysis identifies that emissions pricing is unlikely to make a major contribution to the pursuit of 'no regrets' options in energy efficiency. It also makes it plain that energy efficiency is worth pursuing in its own right. However, the need for emissions abatement increases the urgency of pursuit. As emissions pricing is imposed, it becomes imperative to ensure that energy users avail themselves of opportunities to improve energy efficiency – this both maximises abatement and also minimises costs. A great deal of work has gone into identifying why 'no regrets' options exist, contrary to market economics theory. The reasons, which vary from instance to instance, include the following:

- lack of information;
- lack of financial capacity to make required investments;
- split incentives – the benefits of abatement going to one party, the cost borne by another (typically a landlord/tenant split); and
- dithering about the decision.

'No regrets' opportunities can also be generated by economies of scale in manufacturing and construction. If a low emissions option becomes popular, it is likely to become cheaper and better simply because of high-volume manufacture and installation.

In Australia, local governments, state governments, voluntary agencies and some of the power distribution companies have already trialled a wide variety of programs to improve energy efficiency in households and business. Some of the programs are primarily about information, some primarily financial, some designed to overcome split incentives, and some designed to overcome dithering and perhaps to generate economies of scale. There have been notable successes, many of which are capable of generalisation to other regions.

Among governments, the primary responsibility for encouraging emissions abatement in manufacturing industry lies with the Commonwealth and the States. However, councils engaged in economic development planning and advocacy should have a full understanding of the issues, and should be willing to modify their industry policies including planning approvals, incentives and the like.

Transport

The transport sector is similar to the manufacturing industry in that emissions opportunities appear to be high cost and are certainly not easy to implement by emissions pricing alone. However, this assessment changes if transport is looked at more broadly. The transport sector is notable for several long-running debates reflecting persistent problems. One is the debate about road congestion, the other the debate about investment priorities between road transport, rail transport, shipping and airlines.

Road congestion is particularly intractable in urban areas, because it is not possible to adopt the simple solution of resuming land to widen the roads so that they can accommodate all traffic offering. (With the aid of billions of federal dollars it was possible to apply this road capacity solution in rural areas, where land is low-cost, but urban land is simply too expensive.) The market economists' answer is pricing (that is, tolls) to ration the use of peak-period roads to those who are willing and able to pay. Road pricing thus has a similar rationale to emissions pricing – and, like emissions pricing, is often opposed because it is likely to affect the poor more severely than the rich. The need for emissions abatement strengthens the case for road pricing, since it encourages shorter journeys, encourages a switch to public transport and reduces the remaining emissions by smoothing traffic flow. Even if road pricing is eschewed, the question remains as to whether roads can be more efficiently managed and at the same time emissions reduced.

A similar question arises in respect of transport infrastructure investment. For decades the Commonwealth has concentrated on the finance of roads for long-distance transport, with forays into airports (now largely privatised), railways and occasionally into urban public transport. It has also provided road grants to the States and, importantly, to local government via the Roads to Recovery Program and a portion of financial assistance grants. As discussed in previous *State of the Regions* (SOR) reports, the fundamental flaw of this system is the lack of any direct financial connection between road users and the authorities responsible for providing the roads. As a result road investments are exempt from commercial discipline – there is no requirement that any road should make a commercial rate of return. There is, however, a need to recognise that investment in local roads will not always be justified in economic terms, for example the need to provide access to individual households. It has also been argued that there has been a failure to assess transport investments as complementary to town and country planning. Despite recent reforms, such as AusLink, there remains scope for improving transport investment decisions, even if it were not necessary to do so as part of emissions abatement.

There is a need for improved analysis to work out how transport investment priorities and road management can be revised to encourage emissions abatement. There are many potential measures: encourage no-transport activities and production over options requiring much transport (here transport investment policy will integrate with industry policy); encourage short distances rather than long (openings here for town planning policy) and encourage low emissions transport over high emissions. There are many ways in which low emissions transport can be encouraged. One way is to invest so that capacity is available. An example of failure to invest is the current position in the suburbs of Melbourne, Sydney and Brisbane where, as everywhere in Australia, transport investment has emphasised roads. The recent rise in motor vehicle operating costs has resulted in passengers transferring from driving to the trains, which are accordingly now crowded – due mainly to lack of investment in amplifying track capacity. Though public transport is mainly financed by state governments, local government can assist in the provision of public transport options by advocacy, by supporting and assisting investment in rail and in other reserved-track public transport, by reviewing road design and management to favour buses, and last by not least by improving pedestrian facilities.

local government has commendably been a strong advocate of public transport investment and changes in the arrangements for roads programs to provide councils with greater flexibility in the use of funds. Walking is the least emissions intensive of modes and is an essential component of every public transport journey – hence improvements to pedestrian facilities are also improvements to public transport.

Many councils have already invested in cycle paths and cycle lanes which by improving safety for cyclists have given their citizens the option of low emissions transport that is significantly faster than walking. Much could still be done to complete systems of cycle paths useful for regular urban transport, supported by improved parking for cycles. The cycle path principle could also be extended to other low emissions transport, such as motor scooters and the like. By redesigning the roads to improve the safety of low emissions vehicles and increase their speed, road managers could significantly reinforce the financial incentives which already favour low emissions transport. Once again, as road and cycle path managers, there will be many opportunities for councils. The partnership between the Planning Institute of Australia, the National Heart Foundation and the Australian Local Government Association in developing a National Planning guide, to be known as Healthy Spaces and Places, is an important example.

In freight transport, recent increases in fuel prices have favoured conversion from road to rail, but the conversion has been hindered by the investment policies of the past few decades, which have created high-speed long-distance highways without much changing the rail alternative. Restoration of the competitiveness of rail is basically a Commonwealth responsibility, but many rural councils have already found an important role in arguing for proper maintenance and upgrading of their local rail lines. Local availability of rail transport is likely to be increasingly important when the time comes to electrify the transport system, which, it will be recalled, will become a priority task as soon as the electricity generation system is decarbonised.

Waste management

The significant methane emissions which arise from waste management are primarily a local government responsibility. The onus here is on councils to devise a plan for the abatement of these emissions, for incorporation into the national greenhouse gas abatement response.

8.5 Conclusion

At the theoretical level, there is a choice between relying wholly on emissions pricing to bring about abatement, and relying on emissions pricing plus a wide range of complementary provisions. Though Treasury supports the former approach, the arguments for the latter are overwhelming. Not only are complementary provisions required to counter the regressive distributional consequences of emissions trading; they have potential to greatly increase the emissions-reduction response to the price changes which result from emissions trading. The more the Commonwealth sponsors complementary measures, the more room there will be for local government to contribute to the national response.

The greater the reliance on complementary measures, the less the intensity of lobbying for free permits.

Overseas experience with emissions trading is that high emissions industries will lobby for free permits. The effect of free permits is to increase the profits of these industries at the expense of Commonwealth revenue from permit sales, thus limiting the capacity of the Commonwealth to finance measures aimed at enhancing the emissions-reduction response and measures to compensate both households and regions which are adversely affected by the industry impact of emissions trading. The greater the revenue to the Commonwealth, the stronger will be the capacity of the national government to undertake compensatory and complementary measures, and the stronger the argument for grants to

local government to compensate affected regions and to assist with complementary measures. Free permits are not, therefore, in the general interests of local government.

The position of councils in regions which rely on emissions-intensive industries for employment will be particularly difficult. These councils are likely to be lobbied by business to support free permits, on the argument that free permits are required to allow the industries to continue to operate and thus maintain employment. Councils in this unfortunate position should not delude themselves that such employment can be maintained indefinitely. At the very least, their support for free permits should be conditional on the re-investment of all revenue generated from the free permits in the creation of sustainable employment in their regions. The administration of such requirements is likely to be messy, so it may even be in the interests of councils in regions with energy-intensive industries to support auctioning of all emissions permits on condition that the Commonwealth returns substantial sums to their region by way of investment in alternative employment generation.

9. The challenge for Australian policy

The trillion dollar question is: how will Australia weather the current global financial crisis?

In Chapters 5 and 6 we outlined the nature of this crisis, emphasising the way in which the crisis built up over the several decades which culminated in the 1995-2008 land boom, both in Australia and overseas; emphasising also the influence of neo-liberal economic theory over the government policies which helped to generate the boom and the role of neo-liberalism in blinding governments and the public to the warning signs of impending crisis. As previous *State of the Regions* (SOR) reports attest, NIEIR can claim to have seen these warning signs, and can therefore speak with authority on what Australian governments should be doing to convert the crisis from the threat of depression into an opportunity to set the Australian economy on a firm footing for the 21st Century.

A good place to start is with the warning signs which were ignored by the neo-liberal establishment. In the United States the warning signs included a land boom, high and rising household indebtedness, high and rising government indebtedness, high and rising borrowing from overseas and the construction of complex financial pyramids which misled financiers as to levels of risk. Two of these warning signs did not appear in Australia, but any one of the three remaining is sufficient by itself to cause serious economic instability.

- The land boom has raised residential land prices to unaffordable levels.
- Household debt has accumulated to the point where debt-servicing is constraining the budgets of many households, to the point where some will be unable to meet their contractual obligations in the event of even a small downturn in income.
- Bank balance sheets are carrying dangerous amounts of overseas fixed-interest debt, ultimately denominated in overseas currencies – to the point where the banks could easily find themselves in difficulties in the event of a significant and sustained reduction in the exchange rate. (There is a feedback effect here too – widespread overseas expectations that the Australian banks are heading for trouble would be sufficient, of themselves, to reduce the exchange rate.)

As pointed out in Chapter 6, the catalyst for the Australian financial crisis was the financial crash in the United States, but this merely precipitated a latent crisis which was bound to occur, give or take a year or two. The American crash, coupled with the realisation that Australia has very similar problems, helps to explain the abrupt turnaround in Australian business and consumer confidence. The inevitable disappointments of over-optimism breed subsequent pessimism. In Australia pessimism is radiating out from the financial sector, and focuses on a new anxiety about debt – household debt, business debt, bank debt. When consumers and businesses become pessimistic, they cut their expenditures, which reduces business sales and generates unemployment. The process is already starting, and governments and the Reserve Bank are alarmed. They need to realise that any attempt to avoid depression which does not address the anxiety about indebtedness will not be able to counter the new pessimism.

In this Chapter we first consider alternative approaches to Australia's current predicament, and argue that approaches based on neo-liberal practice will inevitably result in depression. However, it is still possible to avoid a depression. Given the present position, it is inevitable that there will be constraints on consumption, but not inevitable that there will be a lapse from full employment. The measures required to maintain full employment while dealing with the various challenges from the financial crisis are outlined in section 9.7 at the end of the chapter. They require that the Commonwealth government should use all the economic policy instruments in its power. With skill, the present crisis presents the opportunity to re-found Australia on a sustainable basis.

9.1 The 1960s approach to financial crises

We have seen that the neo-liberal economics which spread from the United States to Australia has no place for recessions and depressions – it simply assumes them away. This is so contrary to experience that neo-liberal economics can no longer be taken seriously. If neo-liberalism has nothing to offer, the knee-jerk reaction is to revert to the style of economic management which had such apparent success in the 1950s and 1960s. In those decades, a looming slump was countered by two government actions.

- ❑ The Reserve Bank reduced interest rates and loosened its quantitative controls over credit. (This contrasts with recent practice, when there have been no quantitative controls and interest rates have been indexed to the consumer price index.)
- ❑ The Treasury cut taxes and increased expenditure. It also promised that the debt would be paid back as soon as the economy revived.

These responses are sometimes called ‘Keynesian’, though they are built on a very narrow version of Keynes’ body of economic theory – a version which was shown to be inadequate when the 1960s rules of economic management failed to deal with the stagflation of the 1970s. We should also guard against selective memory: the Menzies government’s reaction to the slump in export earnings in the early 1950s was much more drastic and involved import licensing and the rationing of foreign exchange.

Simple neo-Keynesian ‘pump priming’ of the low-interest budget-deficit kind is equally inappropriate in present circumstances, since it assumes that balance sheets are fundamentally sound rather than way out of kilter as they are at present. In Australia’s present domestic circumstances reducing interest rates may make it a bit easier to service debt, but does nothing to restructure it. With the current switch to pessimism, neither lenders nor borrowers are likely to return to the debt-financed spending levels of the recent past. Similarly governments may be able to help by transferring debt to organisations more able to carry it, but debt-creation by governments does nothing to address the fundamental problem that there is too much debt around.

When they find that interest rate cuts and budget deficits fail to address the fundamentals of the present crisis, governments may be tempted to revert to the nineteenth-century sound-finance response. This is all the more likely because it is a close relative of neo-liberal economics.

9.2 Sound finance

What we know as neo-liberal economics was a selection from a much richer body of theory, developed over more than a hundred years up to 1930, which included explanations of the booms and busts which were such a feature of nineteenth and early twentieth century economic life. The advice which derives from this body of theory is basically that governments confronted with economic slumps should stick by the principles of sound finance and sit out the slump. The emphasis on sound finance reflects a diagnosis that problems with debt are the root cause of economic slumps – an insight with which we can but agree, at least as regards the current crisis. The theory is that sound finance removes the excess debt from the balance sheets of the government, the banks, business and the household sector, and that once this excess debt is removed the grounds for pessimism are gone and economic activity will revive. The problem is that this process is extremely costly.

To get balance sheets in order – to remove the excess of debt – requires that borrowers should either repay or repudiate their loans. To find the cash flow to repay debts owed to domestic lenders some borrowers may be able to sell assets and a few may be able to increase their incomes. However, those who cannot sell assets or increase their incomes must perforce tighten their belts and reduce current expenditures. If belt-tightening dominates, expenditures will fall and unemployment and pessimism rise, but there is a silver lining – the hope that the lenders who are repaid will be relieved to get their

cash back and perhaps even turn a little optimistic and increase their spending. Debt repayment as a means of correcting balance sheets thus has potential to kick-start the recovery from a recession. The same cannot be said for repudiating domestic debt, since bankruptcy leaves both borrowers and lenders in a pessimistic frame of mind.

The problems are magnified when the borrowers have borrowed from banks. Banks rely on payments by customers who have borrowed from them to meet their contractual obligations to customers who have lent to them – payments by borrowers go to pay interest to depositors and bondholders. As soon as borrowers begin to skip payments, the banks worry about their ability to meet their obligations to depositors and bondholders. They become cautious about approving new loans, and may start to recall loans. This can start a downward spiral which mirrors the upward spiral when banks are extending credit. Among household borrowers, not only are no new loans available, but the banks demand full repayment of the old, limiting consumption. Among businesses, again new loans are not available for new business ventures however promising, but sound businesses can find themselves without working capital, and some of them have to close down. In this way a contraction of bank credit worsens the recession and increases unemployment.

There are even worse worries when overseas lenders have to be repaid before balance sheets can be put in order. Repaying overseas debt requires foreign exchange, and therefore not only do the borrowers have to tighten their belts but foreign exchange has to be found to satisfy the overseas creditors. If there is a shortage of foreign exchange, for example due to excess imports or lack of exports, the process of earning the necessary exchange can greatly magnify the cost and generalise it beyond the actual borrowers. Worse, there is no silver lining, since the repaid creditors – the happy parties to the transaction – are overseas. Except where the borrowings have been invested so as to generate a flow of export revenue to provide the necessary foreign exchange, repaying overseas debts is a thankless and painful process attended by unemployment and pessimism. The process is indeed so costly that countries which have imprudently become overseas-indebted are tempted to consider the alternative of debt repudiation. However, this involves accepting international pariah status – as Russia did when it repudiated its debts in 1917.

9.3 Sound finance applied to Australia's present circumstances

Proposals to apply sound-finance policy to the current Australian financial crisis are bound to meet with the objection that Australian governments, unlike the United States, have been virtuous and balanced their budgets. In current Australian circumstances the sound-finance advice is therefore that governments should maintain their balanced budgets and sit tight while households either repay their debts or repudiate them through bankruptcy, and the banks likewise. This might be a coherent policy if the problem were no more than household debt – and indeed would bear some resemblance to the Japanese policy of muddling through after their financial crisis of 1990. However, it is not an option for Australia because of overseas debt.

Though we have identified the banks as the most critical borrowers, we begin with Australia's overall position. Australia's liabilities to overseas creditors comprise equity and debt. The equity liabilities more or less cancel out against Australian equity assets overseas, but this is far from true as regards debt. In total, Australian entities currently (September 2008) owe over \$1 trillion (million million) in overseas debt, only about half of which is offset by Australian holdings of overseas debt.

The Australian government has already guaranteed one important class of bank liability, namely bank deposits. These made up approximately 55 per cent of the liabilities of the Australian trading banks, and total around \$1.3 trillion.

Drawing on the data used to produce the graphs in Section 6.5 above, in terms of changes in the structure of bank balance sheets, the following apply. As at June 2008:

- (i) total financial liabilities to foreigners sum to \$646 billion, excluding equity obligations, or a third of total bank financial assets;
- (ii) it would appear using Reserve Bank of Australia's partial data that approximately 20 per cent of liabilities are denominated in Australian dollars; and
- (iii) the total foreign non-equity fixed assets of banks is \$213 billion, or 11 per cent of total financial assets.

It would appear, therefore, that after hedging positions are unwound the banks will be exposed to direct short-term overseas borrowing representing at least 18 per cent of their financial assets. This may be very manageable. However, the worry is what happens if recent trends continue. Everything must be done to ensure that over the next couple of years there is no loss of confidence by international investors in the Australian economy.

If there is a loss of confidence, problems could arise with refinancing of bank overseas liabilities. A particular worry is what might happen to the banks' balance sheets if overseas borrowings have to be re-financed at a reduced exchange rate and in the face of overseas pessimism about Australian economic prospects – in particular, pessimism about Australia's capacity to repay promptly in creditor currencies. Worse, what would happen if Australia's creditors apply the principles of sound finance, and demand prompt repayment? Suppose that they refuse to refinance the net liability. Official overseas reserves of foreign currency amount to only about 20 per cent of this. This demand, should it arise, is accordingly serious: it would take virtually the whole of one year's export earnings to satisfy it. The adjustment required would be at least as serious as that which faced the Asian economies in the financial crisis a decade ago.

At this point the best that could be expected from a sound-finance approach would be a major effort to increase export earnings and devote them to debt repayment. However, the scope for this is limited: there is little that the Australian government can do to increase exports rapidly, and accordingly the main way to release foreign exchange to repay debts is by cutting imports drastically. The market mechanism to do this would be a drastic fall in the exchange rate, making imported goods much more expensive and making exporting much more attractive. The fall in the exchange rate would affect not only the price of consumers' goods (thus reducing the standard of living) but also the price of equipment – for example, computers would become much more expensive. Even worse, from a domestic point of view, the Australian dollar value of debt which is fixed on overseas currency terms would rise, meaning that the Australian dollar earnings required for debt service will rise. A major reorganisation of the economy is required, and in the process a high rate of unemployment would be inevitable. There would also be a financial meltdown, with a high threat of bank closures and the bankruptcy of other businesses with overseas borrowings to repay.

A slightly more palatable alternative, on the precedent of several of the countries involved in the 1998 Asian crisis and various of the Latin American countries which suffered financial crises in the 1980s is to take a loan from the International Monetary Fund. The Fund represents the major international creditors, and its loans are intended to provide bridging finance to over-indebted countries while they make the necessary domestic adjustments to allow them to repay their debts. Loans from the IMF are thus conditional on economic reforms which, in the judgement of the Fund's generally neo-liberal economists, will help repay the borrowing country's creditors as fast as possible. The IMF was able to play a major role in the Latin American and Asian financial crises, but has not previously had to face up to a financial crisis originating in the United States. We have yet to see how its policies will develop, but there is no guarantee that, as a representative of international creditors, it will be at all sympathetic to a rich country like Australia which has got itself into trouble by adopting foolish policies – and in this court foolishness will be judged in retrospect, not by the economic fashions of the 1990s.

A third alternative was pioneered by the Malaysian response to the Asian financial crisis, and is associated with Dr Mahatir, the then Malaysian prime minister. This was essentially a domestically-managed variant of the IMF loan response, with the following main elements.

- ❑ Suspension of currency convertibility on capital account, with a promise that this would be temporary. The effect was that central bank permission was required for domestic investors to shift funds overseas, and likewise for overseas investors to repatriate funds. The effect was to reduce downward pressure on the exchange rate while measures were put in place to deal with the over-indebtedness which was the root cause of the problem.
- ❑ Implementation of a plan to repay overseas debt so that it falls to sustainable levels. Essential elements in such a plan include reduced reliance on overseas borrowing and an emphasis on increasing the capacity to service the stock of overseas debt already incurred. Reliance on overseas borrowing can only be reduced if domestic saving is increased, while the capacity to service debt requires expanding export revenues relative to import costs.

The major difference from the IMF loan alternative was the imposition of exchange controls (which were anathema to the neo-liberal establishment running the IMF). The immediate benefit of this was the avoidance of further indebtedness to the IMF, but the major benefit was that the adjustment program was kept under local control, rather than ceded to the IMF. It was thus possible to take advantage of local knowledge to draft a more efficient adjustment program. However, an important point was that the program had to be drastic enough to rid the country of excess debt within a matter of a few years – and to convince international creditors that this would happen.

In the rest of this Chapter we will develop such a program, integrating it with emissions abatement.

9.4 Policy instruments

We can now see that Australia faces a crisis in economic policy of some magnitude. Governments cannot implement a credible plan to restore international confidence in Australian finances without making use of a wide range of policy instruments. This will involve repudiating the neo-liberal approach, a central tenet of which was that governments should abjure the use of many policy instruments. Neo-liberalism argued that governments could not be trusted with policy instruments – that is, with regulation – while the market could make the right choices. Now that markets have demonstrably made the wrong choices it is time to regulate them back into the areas where they perform efficiently.

The list of policy instruments with potential application to Australia's current predicament includes the following.

- ❑ Monetary policy: not just the manipulation of short-term interest rates, but quantitative controls over financial system lending. This will involve not only controls over banks, but over the whole financial system, including non-bank financial intermediaries. (One of the major practical reasons for bank deregulation in the 1980s was to improve the position of the banks vis a vis unregulated competitors, but if the United States financial collapse has taught us anything it is that this was the wrong choice – the competitors have to be regulated along with the banks.)
- ❑ Fiscal policy: government expenditures (service provision, social security, infrastructure), taxation, government borrowing – including, importantly, government borrowing overseas.
- ❑ Trade policy, including the fostering of exports and import-competing industries (which will make demands on monetary and fiscal policy), and regulation of the market for foreign exchange.
- ❑ Wages policy – in conjunction with trade policy and fiscal policy (both social security and taxation).

- ❑ Savings policy, particularly as applied to households, whose low savings rate is an important component of the present crisis. This will involve aspects of monetary policy (interest rates, availability of credit); fiscal policy (tax and social security treatments) and wages policy.

It can be seen that policies need to be integrated, because all policies have side-effects, and the art lies in ensuring that the side-effects contribute to the overall aim – which, we suggest, should be the direction of Australian resources to securing the economic future for the country, without the waste of unemployment, and with minimal reductions in standards of living.

9.5 The role of emissions abatement in the response to the current crisis

We have already argued that emissions abatement must be part of the response to the current financial crisis, if only because it is a pressing need. Two more pressing reasons must now be mentioned.

- ❑ Australia currently has very high emissions per capita. If we are to convince our creditors that we are a nation worthy of their continuing investment, a credible plan to reduce emissions must be part of our response to the crisis. If not, they will leave us to respond by ourselves, which would mean an immediate switch from the current balance of payments deficit to a surplus – a turnaround guaranteed to cause financial meltdown.
- ❑ More positively, emissions abatement gives Australia an opportunity to invest in growth industries. Australia was notable for its absence from the burst of information technology investment which occurred in the last few decades of the twentieth century, and as a result is an importer of a wide range of high-value manufactured goods. The world is about to see a burst of emissions-abatement technologies, and it is not too late to get in at the beginning – though doing so will involve much more sophisticated industry policy than Australia has managed over the past few decades.

The second point reflects a fundamental judgement that Australia's problems are due to failure to keep itself technologically up to date. Since a major driver of economic prosperity is up to date technology, Australia should not be surprised to find itself falling behind. This fundamental failing was, however, hidden over the past couple of decades by a flood of credit, which enabled households to increase their standards of living even though incomes were constrained by outdated technologies.

9.6 The importance of savings

The diagnosis that Australia is in trouble because of excess debt – chiefly household debt and overseas debt – directs attention to the process by which debt is created.

As a simple starting point, if a household spends less than it receives by way of income. If it acquires a debt, the opposite happens: it spends more than it receives in income. The saving household adds assets to its balance sheet, which raises its value as a household. The borrowing household adds a liability, and the balance sheet effect depends on what it does with the borrowed money. If it spends on consumption, the liability contributes directly to reduced net worth; if it buys a house an asset appears to balance the debt, and if it invests in a small business it not only gains an asset but with luck gains a cash flow which can directly help to service the loan. (It is arguable that house purchase also provides a cash flow, in that it saves on rent.)

This description abstracts from the effect of capital gains and of transactions in assets and debts to make the fundamental point: Savings = Income – Consumption. If it is a policy aim to reduce indebtedness, then savings have to increase. Either income has to go up or, if this cannot be arranged, consumption has to fall.

If we assume that, in present circumstances, income increases are an unlikely source of savings to reduce household indebtedness, the available source is a cut in consumption. NIEIR estimates that a cut of around 8 per cent from 2007-08 income levels would be required for Australian households to stabilise and begin to reduce their debt. From our knowledge of regional incomes and indebtedness we can estimate the regional distribution of this cut. The following map shows the pattern.

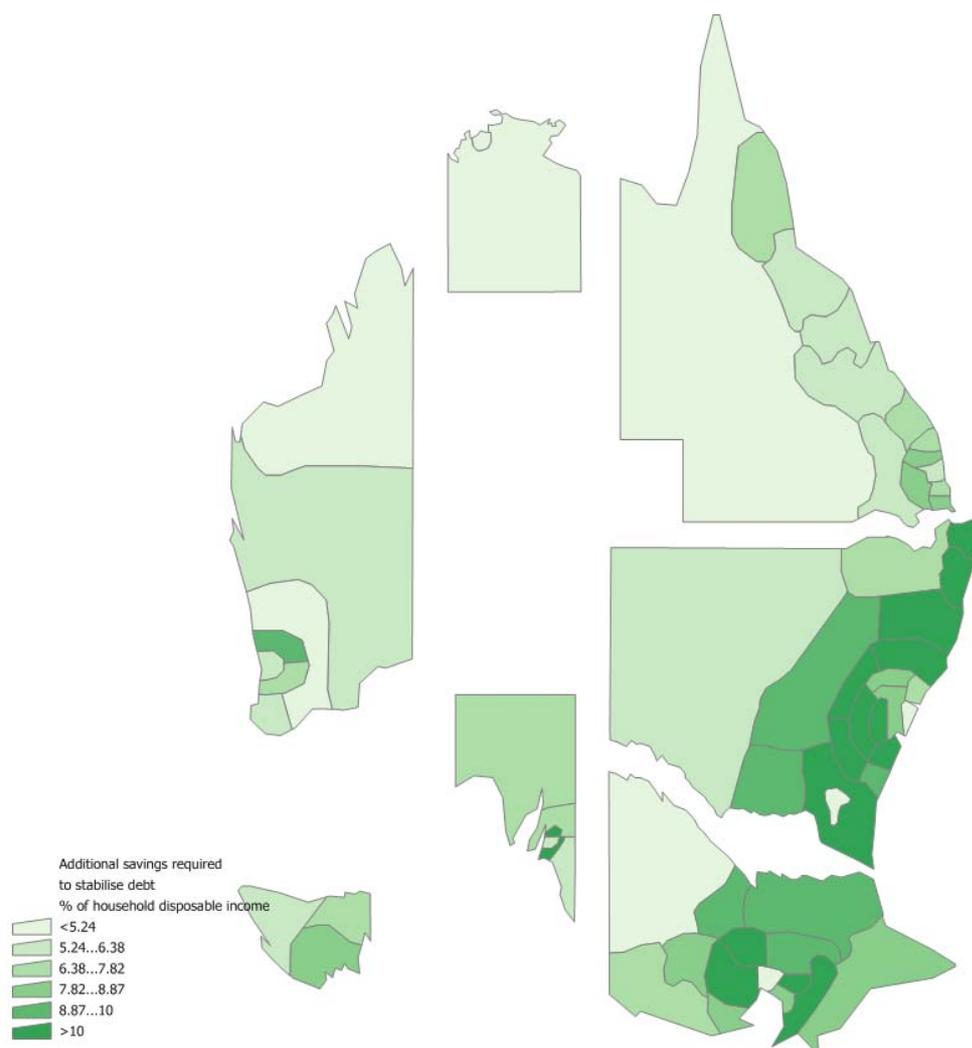
We can identify two types of region with low exposure.

- ❑ Regions where low exposure is primarily due to low debt – the resource-based regions in particular, but also some of the farming regions.
- ❑ Regions where low exposure is primarily due to high income, which gives the cash flow to cover middle levels of debt: the ACT, Inner Melbourne and Sydney Eastern Beaches are the prime examples.

Readers of past SOR reports will not be surprised to find that the regions where consumption has to be suppressed severely in order to stabilise debt are the indebted outer suburbs – particularly where land-boom mortgages are balanced by poor and declining incomes. The regions most severely affected are Sydney Outer South West and Sydney Outer West. Other regions with poor consumption prospects include several more of the Sydney regions (particularly Parramatta Bankstown and the Old West), two Melbourne regions (Outer South East and West) and Adelaide North (here due not so much to indebtedness as to limited incomes). Dispersed suburban regions in SEQ and Perth are not so exposed, reflecting resource-boom incomes – here the current situation could change quickly. Lifestyle regions are moderately exposed, though exposure is higher in the New South Wales lifestyle regions than in the Queensland ones. Similarly most of the independent cities are moderately exposed, but the two New South Wales examples (Hunter and Illawarra) are worse off than the independent cities elsewhere.

These calculations assume that the necessary increase in household saving will be carried out primarily by indebted households. This provides first-round identification of regions at risk. However, the multiplier effects of reductions in consumption threaten to reduce incomes, and hence lead to a second and more general round of reductions in consumption. This requires a more general consideration of the economic position.

Additional savings required to stabilise debt – % of household disposable income



9.7 The general design of a macroeconomic strategy for reductions in both economic vulnerability and CO₂ intensity

If a major economic crisis is to be avoided, the following objectives will have to be achieved.

- (i) Reduction of the current account deficit.
- (ii) A substantial increase in the household savings ratio.
- (iii) An increase in public sector net borrowing to offset the increase in household savings and so finance the continuing through reduced current account deficit.
- (iv) Stabilisation and the reduction in the share of banks' foreign liabilities as a share of total assets.
- (v) Convincing industry that the long-term growth rate of Australian industry is around 2.5 to 3.0 per cent.

(vi) A reduction in CO₂ intensity at a rate consistent with (for energy) CO₂ emissions falling to 80 per cent below 2000 levels by 2050.

(i) will be extremely difficult if the Treasury's terms of trade forecasts are realised, but if it is not achieved the Australian banks' holdings of foreign liabilities as a proportion of total financial assets will steadily increase until the point is reached when an Icelandic type meltdown is triggered.

If (ii) is not achieved, then the debt to income and debt service ratios of Australian household will reach levels that will force the required savings ratio at the cost of a very large sector of households paying more than 35 per cent of their income in rent and debt service payments. The result would be a degree of inequality that will threaten social stability. The debt forced adjustment in the savings ratio may be by steady grind down but could well be by meltdown. By the mid 2020s, the size of the debt-constrained household class could well be approaching a third of all households.

If (iii) is not achieved, in the context of (ii) being achieved, excess capacity and unemployment will result. If household savings increases by 6 per cent of GDP, then government net borrowing will have to increase by a similar amount. However the greater the reduction in the current account deficit, the less the required increase in public borrowing.

If (iv) is not achieved, then the Icelandic solution could well be triggered.

If (v) is not achieved, then the capacity will not be put in place to maintain employment as a percentage of the population.

If (vi) is not achieved, in the context of an ever more demanding CO₂ reduction target, it will be more difficult to achieve (i) to (v) and therefore could, by itself, trigger a meltdown.

What has to be achieved, as the Brotherhood of St Laurence (2008) report quantifies, will be difficult but not impossible. For success, as the Brotherhood of St Laurence report makes clear, all instruments of policy will have to be employed.

As the Brotherhood of St Laurence report also makes clear, in theory at least, (vi) can be achieved at a macroeconomic cost similar to Treasury's estimation. However, this requires everything to go right and, in particular, for policy to engineer the required substitution of investment for consumption. If this is resisted, however, then higher inflation, the diversion of investment resources from capacity expansion to CO₂ reduction, and the transfer of production overseas, will increase the cost of CO₂ abatement considerably, to at least three to five times the Treasury's estimate.

In the context of the vulnerability of the Australian economy, the probability is that inefficient implementation of CO₂ abatement policies will result in large economic cost. To avoid this outcome, CO₂ reduction complementary measures should be fully integrated into the general policy framework reducing along with the area of economic vulnerability. That is, policy design for tax, infrastructure, financial sector controls and regulations, monetary policy, trade policy and investment incentives etc. should be designed with reference to both the reduction in economic vulnerability and reduction in CO₂ intensity objectives.

The CO₂ permit price profile should then be set as a fixed price profile at a level (increasing over time) which assists in the achievement of the macroeconomic objectives (i) to (v), and supports the achievement of the complementary measures outlined in the previous chapter, but is below the level that will significantly undermine the expectations of long run growth of the Australian economy and trigger large scale run down of the quality of the capital stock employed by Australian industry as a prelude to relocation overseas. Further analysis will be required to determine this price, but it is likely to be in the region of \$40 a tonne of CO₂.

Regulations will need to be employed, ranging from mandating the type of CO₂ plant intensity used in electricity production through to eliminating the availability of consumer durables that do not satisfy energy efficiency targets.

Above all else the approach to policy must be bold, and extensive in scope and resourcing. Over reliance on a small number of instruments and a narrow focus for policy will only result in failure.

In this context it should be noted that the Treasury analysis may well be simply self serving. Reliance on the price mechanism only means that no competing policy bodies will rise to challenge the supremacy of Treasury. The challenges ahead are so severe that all areas of Government will have to play a role. Continuation of the silly policy power games of the past where ideological selection for economic policy support is based on motives of power and control will result in economic meltdown.

Reference

P.J. Brain (2008), 'Governing the Market: Threats to Australia's Stability and Security', in Australian Senate Occasional Lecture Series, August.

10. The impact of emissions trading on regional households

In the 2007-08 *State of the Regions* (SOR) report (Chapter 2) NIEIR estimated the regional impact of carbon pricing. In the current report we do not repeat that assessment, but provide a more detailed account of how emissions trading will impact at the household level. We then conclude the chapter with a brief assessment of the regional scope for 'no regrets' measures, comprising improved home insulation and the replacement of lighting and white goods with energy-efficient equipment.

Energy (gas, electricity) prices over the period 2008-2020 will be determined by three main factors.

1. **Underlying prices:** average prices for electricity are rising **without carbon pricing** as drought conditions and rising operating and capital (for new plants and refurbishments) costs are placing upward pressure on wholesale prices.

Average prices have risen from \$30-35/MWh levels in 2004-06 to \$45-55/MWh in 2007 and 2008. And forward contract prices over 2009-10 are in a similar \$45-55/MWh range. Off-peak prices are also rising and this will increase retail prices.

Similarly, underlying gas prices will rise without emissions trading as operational costs rise and international prices begin to affect domestic prices.

2. **Time-of-use tariff introduction** for electricity enabled by the roll-out of smart/interval meters over 2010-15 will tend to reduce off-peak prices and increase peak prices. Time of use rates may reduce off-peak rates and increase peak and intermediate rates (which would accelerate the phase-out of day rate electrical resistance water heaters).
3. **The introduction of emissions trading** will increase average, peak and off-peak prices. The extent of the price increase will depend on the design of the emissions trading scheme, particularly the emissions liable for CO₂e (carbon dioxide equivalent of covered emissions sources) pricing and the cap set for the included sectors.

10.1 ETS impacts³

10.1.1 Introduction

Electricity and gas prices under emissions trading will depend on the design of the scheme: the cap set, the timing of the cap (time to attain the cap), the sectors covered by emissions trading, offsets rules and non-emissions trading (complementary) measures that accompany the scheme. The lower the cap the higher will tend to be the impact on energy prices.

The more sectors covered the lower will tend to be the impact on energy prices (but if fugitive emissions are included coal and gas input prices into electricity production will be higher) as other sectors will have to contribute to the cap attainment. The greater the number of offset activities from sectors sourced outside the cap that can contribute to cap attainment, the lower will tend to be the impact on energy prices (offsets from agricultural activities and from the Kyoto flexible mechanisms: Clean Development Mechanism and Joint Implementation). The Garnaut Report and the Federal Government's Green Paper on the Carbon Pollution Reduction Scheme of July 2008 do not foresee a significant domestic offset contribution as their proposed sector coverage is wide.

³ Graham Armstrong, National Economics associate and Director Saturn Corporate Resources Pty Ltd.

The wider the extent of effective complementary measures (from energy efficient improvement renewables, research and development) the lower will tend to be the impact on energy prices (although renewable electricity mandates, such as the Mandated Renewable Electricity Target, will add to electricity prices at the retail level⁴ until fossil electricity prices rise above renewable electricity prices).

10.1.2 Peak and off-peak electricity prices

Currently **off-peak electricity** (10:00 p.m. to 7:00 a.m.) in most regions is met by coal plants except in the Northern Territory and to some extent in South Australia and Western Australia (in Tasmania with Basslink in place hydro water is conserved for peak operation and off-peak power is mainly imported from Victoria).

Under emissions trading, as permit prices rise, a level will be reached where coal cannot compete with gas plants in off-peak periods. Gas plants will have to operate at higher capacity factors and coal plants at lower capacity factors in order for the emissions cap to be attained. To maximise net revenues coal plants will run in periods where pool prices are higher.

Under National Electricity Market rules off-peak demands are met at a price where the marginal bidder, whose bid is necessary to meet demand, has a short run marginal cost (that is, the cost of producing an extra kilowatt hour of electricity, including CO₂e costs, with given plant) lower than the market price at that particular time. In addition some off-peak power is, and will continue to be, met by intermittent generators. Currently peak electricity (that is, outside off-peak) may be broken down into several periods (intermediate/shoulder, daily peak, summer peak, etc.). Currently demands in these periods are met by a combination of coal, gas and renewables. In high peak periods (mainly on hot summer days) the marginal generators (those providing the last MWhs required to meet demands) are generally open cycle gas turbines with perhaps some scheduled hydro generators.

Under emissions trading open cycle gas turbines will still be the high peak suppliers because of their quick-start capabilities (coal generators cannot respond to rapid demand increases). When the spot price exceeds the CO₂e price adjusted short run marginal cost of these generators, bids will reflect the prices open cycle gas turbines need to cover their long run average costs at their anticipated capacity factors.

The conclusion of the above discussion is that electricity prices in each period will rise to at least the level at which the marginal generator required to meet demand will cover that generator's short run marginal costs. The marginal generators will, over time, have to meet their long run average costs by operating in periods where the prices determined by short run marginal costs gives them enough net revenues to enable their capital as well as operating costs can be covered. But their capital costs will depend on their asset values: the lower the asset value the lower will be the excess net revenues over short run marginal cost to service the asset value (capital costs). Asset values will drop if these excess (over short run marginal cost) net revenues are insufficient to service current asset capitalisation. Asset values may drop towards zero at which point if revenues cannot cover short run marginal costs the plant will cease operation.

This is the dilemma faced by the higher greenhouse gas intensive generators and by policy makers trying to balance energy security and climate change concerns.

⁴ The overall impact of MRET will depend, however, on its impact on wholesale prices which will tend to be depressed due to increased competition among fossil generators for a smaller fossil fuel generation share.

Energy efficiency improvement through electricity price increases and complementary policies (that is, initiatives in addition to emissions trading) will reduce the contribution the electricity generation mix will have to make to cap attainment. For example, if electricity demands were reduced to 1990 levels and an electricity emissions cap were imposed at the 1990 electricity emissions level no change in the 1990 generation mix would be required. But going below that cap a generation mix change would be required. (Note the 2008 generation mix is different to the 1990 mix: in Victoria the 1990 mix had a higher proportion of gas generation.)

Renewable electricity generation increases will have a similar impact. That is, if all electricity demand increases since 1990 had been met by renewable generation, electricity generation emissions would be at 1990 levels.

10.1.3 Gas prices

As indicated above, gas prices will increase under business-as-usual (that is, without emissions trading) due to general cost increases and global gas price pressures. Under emissions trading gas prices charged to users will increase to the extent that upstream (before point of use) emissions are included in emissions trading. Upstream gas emissions comprise:

- fugitive emissions from gas wells and processing plants and pipeline and meter leakages; and
- emissions from energy sources (electricity for pumping, etc. and transport, etc. as well as fuels used upstream) used in the processing and pipelining of gas.

CO₂e prices applied to these emissions sources will add to the price of gas. Emissions factors for gas on a full fuel cycle basis are available from the Department of Climate Change, National Greenhouse Accounts Factors publication (January 2008).

The fugitive emissions discussion we are concerned with here, are the Scope 3 (indirect) emissions, that is, the emissions from the extraction, production and transport of gas.

Scope 1 emissions are those for combustion of gas by the end-user.⁵

For example, if a Victorian gas generator bought gas at \$5/GJ and if the CO₂e price at that time were \$20/t CO₂e, the price of the gas would rise to \$5 (20 x 0.0050) = \$5.12/GJ. The generator would be responsible for the purchasing permits to cover combustion emissions which will depend on combustion efficiency. For a combined cycle gas turbine emitting at 0.4t CO₂e/MWh (based on Scope 1 emissions) the total impact (Scope 1 plus Scope 3) would be 20 x 0.0568 = \$1.15/GJ used resulting in an electricity cost increase of about \$7/MWh.

For a Victorian household heating water with natural gas, the combustion of the gas would cause the price of gas to rise from about \$12/GJ to \$(12 + 0.057 x 20) = \$13.15/GJ at \$20/t CO₂e.

Emissions factors for gas are set out in Table 10.1. Small users are defined as consuming less than 100,000 gigajoules per year.

⁵ Note that under the Green Paper proposals gas retailers (**not** users emitting <25,000t CO₂e/year, such as households and SMEs) would have to be liable for permits to cover emissions from combusted gas.

Table 10.1 Emissions factors (EFs) for the consumption of natural gas (kg CO₂e/GJ)

State or Territory	Small user			Large user		
	EF for scope 1 A	EF for scope 3 B	Full fuel cycle EF = A+B C	EF for scope 1 D	EF for scope 3 E	Full fuel cycle EF = A+B F
Gaseous fuels						
Natural gas – New South Wales and Australian Capital Territory	51.3	14.8	66.1	51.3	14.2	65.5
Victoria	51.3	5.9	57.3	51.3	5.8	57.1
Queensland	51.3	6.0	57.3	51.3	5.4	56.8
South Australia	51.3	19.4	70.7	51.3	18.6	69.9
Western Australia	51.3	7.6	58.9	51.3	7.0	58.3
Tasmania	51.3	–	–	51.3	5.8	57.1
Northern Territory	51.3	5.7	57.1	51.3	5.7	57.0

Notes: All emissions factors incorporate relevant oxidation factors.
a. Energy measured as gross calorific equivalent.
b. The EF for scope 3 is indirect emissions from the extraction, production and transport of the specified fuel.
c. Under international guidelines, the CO₂ released from combustion of biogenic carbon fuels is not reported under facility totals.

Source: Department of Climate Change (2008).

10.1.4 Emissions trading (CPRS) scenarios

Currently a number of emissions trading scenarios have been examined by the Garnaut Review and by the Federal Government. However, the two most likely scenarios are:

- ❑ a 5-10 per cent emissions reduction below 2000 levels by 2020, leading to a 50-60 per cent emissions reduction on 2000 levels by 2050; and
- ❑ a 15-25 emissions reduction below 2000 levels by 2020, leading to a 60-90 per cent emissions reduction by 2050.

Out to 2020, residential (household) energy price increases are typified by impacts of the business-as-usual and the 10 and 20 per cent emissions reductions from 2000 levels by 2020 compared with where emissions trading is not introduced.

	Percentage increase from 2008	
	Electricity	Gas
Business-as-usual	20	18
10 per cent	39	26
20 per cent	41	35

These price increases translate into an impact for an average Victorian household using 6 MWh of electricity and 50 GJ of gas where gas and electricity are available (electricity only cases are examined below) as follows (in 2008 dollars).

	2008		2020	Per cent increase from business-as-usual
Electricity				
Business as usual	\$960	(20% increase)	\$1,142	–
10 per cent			\$1,334	17
20 per cent			\$1,354	19
Total increase (Business as usual plus average CPRS)			\$380	40
Gas				
Business as usual	\$600	(18% increase)	\$708	–
10 per cent			\$750	6
20 per cent			\$800	13
Total increase (Business as usual plus average CPRS)			\$175	30
TOTAL (gas and electricity)				
Business as usual	\$1,560		\$1,850	–
10 per cent			\$2,084	13
20 per cent			\$2,154	16
Total increase (Business as usual plus average CPRS)			\$559	36

Although not generally recognised, the above example indicates significant price increases are expected even without emissions trading.

10.1.5 Impacts on regions outside capital cities

Under emissions trading, even though gas prices will rise, natural gas will remain the lower cost energy source for water and space heating in most regions where it is available (very low availability in many regions and overall in Tasmania).

ABS data (cat. 4602) indicates that in 2005 in all States gas as the main source of energy used was much lower outside capital cities, for example 43.6 per cent in capital cities compared with 21.2 per cent in regional areas and in Victoria (which has the highest average space load in Australia) 91.8 per cent compared to 53.9 per cent. Wood on the other hand was the main source of energy used in non-capital city regions and will be unaffected by emissions trading.

In these non-capital city regions, apart from wood which is being increasingly constrained by wood harvesting regulations, space heating costs could be lowered by increased attention to insulation addition and draft sealing (around doors, windows, wall vents and open fire places), and by reverse cycle/split systems/heat pumps which inherently have high efficiency (300 to 500 per cent compared to 100 per cent with electric resistance and 80-95 per cent for high efficiency gas space heaters). Selection of the highest efficiency system as indicated by their star ratings is very important.

For water heating gas is by far the most economical option in gas areas but in non-gas areas solar water heating and heat pumps (both attract rebates which vary with State and location in the State) are the lowest cost option.

For example, in Victoria in Zone 3 (milder parts of the State) for a medium water use household, current estimates (by National Economics) of water heating costs for a range of systems are presented below.

	2008 \$'s/year		Emissions (tCO ₂ e) per year
	Current	2020	
Electric peak	670	940	5.2
Electric off-peak	380	530	5.6
Gas storage 5 star	200	260	1.1
Gas storage 3 star	240	310	1.3
LPG storage 5 star	820	1,060	1.2
LPG storage 3 star	950	1,230	1.4
Gas instantaneous 5 star	165	215	0.9
Gas instantaneous 3 star	190	250	1.0
LPG instantaneous 5 star	600	780	1.0
LPG instantaneous 3 star	700	910	1.1
Solar electric average efficiency	110	125	1.3
Solar gas average efficiency	70	77	0.4
Solar LPG average efficiency	220	240	0.5

NOTE there is a wide range of systems available, particularly solar systems, averaging about a 70 per cent solar contribution.

The estimates above indicate that solar system operating costs are much lower than electric resistance system costs and lower than natural gas costs (LPG costs are highest: they tend to follow world oil prices).

However, the total (capital plus operating) costs of solar systems are much higher (x3 to 4) and for a household the economics of solar water heating depend on system rebates available (in Victoria higher for regional areas).

It must be noted that under emissions trading, off-peak electricity prices, traditionally the economic choice for water heating in non-gas areas (where it is more expensive than gas) could almost double by 2020 under emissions trading. This price increase is due to the impact of emissions trading on coal generation which in most States will be displaced by gas generation as the main generation source in off-peak periods.

In all States in 2005 electric resistance (off-peak, peak) was the dominant energy source for water heating in non-capital city regions, except in Western Australia and Tasmania where peak electricity dominated water heating. Now and particularly in the future peak electricity is/will be a very expensive way to heat water.

For space cooling evaporative systems (although they use significant amounts of water) will be the lowest cost cooling mode (except for fans and good passive solar house design) followed by high star rated (+4) split (reverse cycle/heat pump) systems.

In the electric appliance area there has been substantial improvement in the energy efficiency of refrigerators (the major appliance energy user in households) over the past ten years. For an average size refrigerator (450 litres) from about 1,100 kWh/year for the ten year old refrigerator to about 430 kWh/year for a 4.5 star refrigerator sold today. In Victoria the difference in annual operating costs is currently about \$107 and in 2020 is expected to be about \$150. Purchase of high star rating appliances is recommended: there is not a good correlation between star rating and cost of a refrigerator. Similar principles apply to other appliances. For lighting the introduction of new standards will eliminate incandescent lights by 2010 and also many inefficient low voltage (halogen) downlights.

10.2 Approaches to offsetting energy price increases under an ETS/CPRS

10.2.1 Cash subsidies as proposed in the Federal Green Paper

The Federal Government's Green Paper on the Carbon Pollution Reduction Scheme in July 2008 committed to offsetting the impact on households of introducing the emissions trading: wholly for households of less than \$50,000 annual income and partly for households with annual incomes of \$50,000-\$150,000, by cash grants.

The cash grant per year could be used by the household at the household's discretion.

10.2.2 Tied or partly tied grants

The discretionary expenditure grant proposed in the Green Paper could be used by households to increase energy expenditures and, therefore:

- (i) might make them worse off, for example by purchasing inefficient TVs, electronic equipment, other energy intensive items; and
- (ii) would not contribute to greenhouse gas abatement goals.

Alternatively, as suggested by National Economics, the Brotherhood of St Laurence and the Garnaut Review, financial assistance to purchase goods and services which reduce energy use and household greenhouse gas emissions could be provided. For example, for addition of insulation, air sealing or replacement of inefficient and emissions intensive water heaters, space heaters and appliances.

The assistance could be directed to low income households or more generally.

This approach might be more expensive than the untied cash grant approach in the short and medium-terms, but has the potential to produce relatively low cost abatement and thus reduce the cost of attaining a given emissions cap.

10.2.3 Development of a national energy efficient/fuel substitution program for residences

From 1 January 2009, such a residential program will be operating in Victoria, South Australia and New South Wales (also applies to the commercial and industrial sectors in New South Wales). These programs mandate reductions in greenhouse gas emissions in customers' premises by energy retailers, thereby reducing energy outlays by households and their contribution to emissions. These programs could be expanded into a national program, similar to the Carbon Emissions Reduction Target which operates in the United Kingdom alongside the European Emissions Trading System.

A worrying trend in government central agencies in Australia (that is, State and Federal Treasury and Finance Departments) is the belief that responses to energy price increases brought about by emissions trading will eliminate the need for specific energy efficiency initiatives. Analysis and experience accumulated over the past thirty years refutes this view: price increases alone do not address barriers to cost effective abatement (in both economic and greenhouse gas abatement terms).

10.2.4 Other approaches

Complementary initiatives such as more stringent Minimum Energy Performance Standards would, over time as the stock of energy using household equipment turns over, contribute to offsetting the energy price increases under emissions trading (and business-as-usual). The strengthened standards would apply to new and retrofitted building shells, rented/leased buildings and when a property were sold, space and water heating equipment, cooling equipment, appliances, lighting and electronic equipment. Minimum Energy Performance Standards is an ongoing program but its development could be accelerated and strengthened.

For successful implementation of approaches (2) and (3) above, and mandatory disclosure of a residence's energy performance when rented or sold, a sound and credible energy rating tool has to be developed.

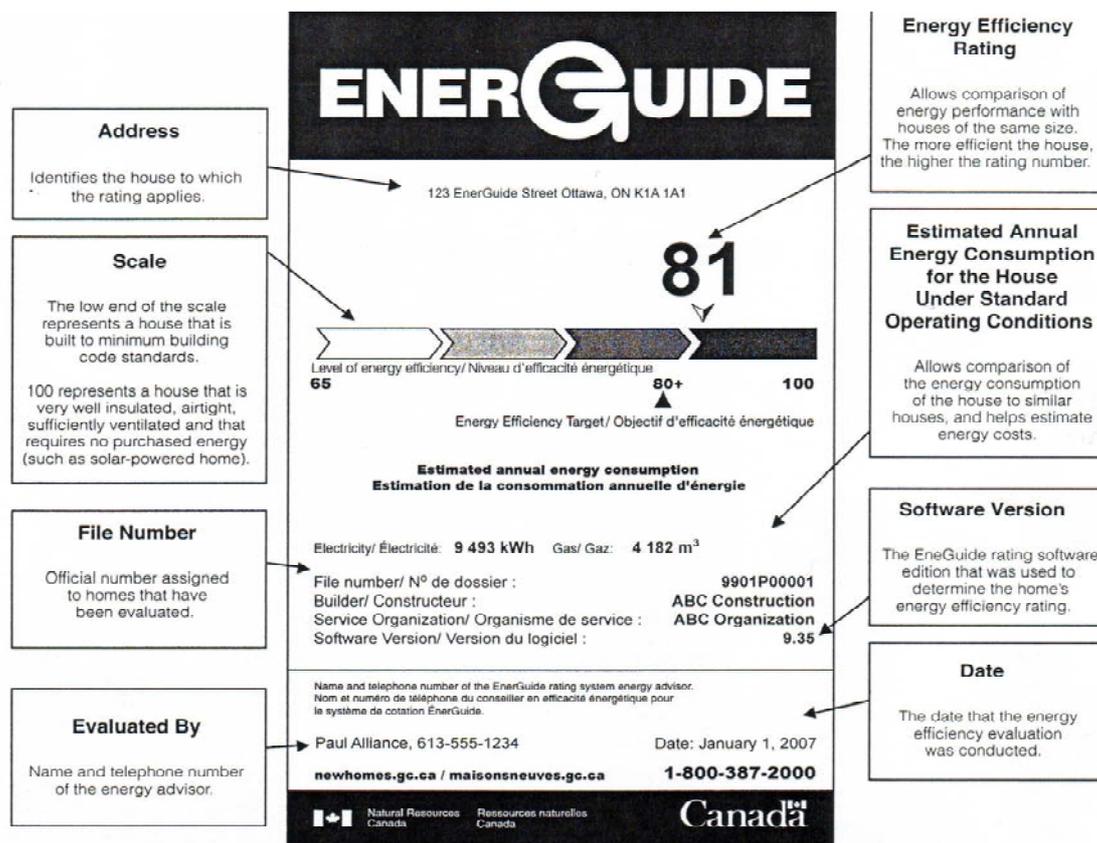
Currently a range of tools are available – NatHers, Nabers, FirstRate5, AccuRate – for specific purposes, but a harmonised and widely recognised approach is required, though not necessarily “a one tool/rating system fits all” approach.

In Canada, a national Energuide rating tool is available for application to new and existing residences and used by 750 nationally accredited auditors (audit report format attached). Federal residential retrofit grants are available for up to \$5,000, conditional on an audit prioritising retrofit actions being undertaken at the householder's expense. However these audits, costing about \$300, are often subsidised (around 50 per cent) by Provincial (state governments). A similar, but not as comprehensive, approach is being developed under the Federal Green Loans Program.

10.2.5 Summary

The introduction of emissions trading and underlying drivers under business-as-usual will significantly increase energy prices applying to households over the next 10 years and beyond.

However, a range of actions supported by government initiatives can reduce the impact on household budgets and at the same time cost effectively reduce greenhouse gas emissions, in all regions of Australia.



10.3 The scope for household energy efficiency improvements

As noted above, an important way in which to reduce the impact of increasing energy prices on household budgets is to take advantage of the scope for improved energy efficiency in household operation. It will be recalled from Chapter 3 that assessments of emission-abatement opportunities include a substantial tranche of 'no regrets', or negative-cost, abatements, most of which would result from improvements in energy-efficiency, and many of which apply at the household level. A common feature of these abatements is that an initial payment is required to install energy-efficient equipment, but that the cost can be recouped in reduced energy bills. There are two important assumptions involved in calculating whether equipment replacement is negative-cost. One is the discount-rate assumption – future energy cost savings have to be discounted back to the present to calculate whether the purchase of energy-efficient equipment reduces costs overall. For current purposes we assume a real rate of interest of 6 per cent. The other is the assumption about when energy-efficient equipment is purchased. For white goods we assume that the choice to buy energy-efficient equipment is made only when the existing equipment (a fridge, washing machine, water heater etc.) has broken down; the cost of energy-efficient equipment is accordingly assessed as the difference between a high-efficiency machine and the cheapest machine. For lighting and home insulation we assume that energy-efficiency equipment is retrofitted up to the point where the retrofit cost is estimated to be negative-cost at a 6 per cent discount rate.

The scope for negative-cost household energy efficiency improvements depends on a number of factors, including the following.

1. Demands for energy-services: that is, for lighting, hot water, home heating, air-conditioning and the services of white goods. Improved energy efficiency means that current demands can be met in full with less energy than is used at present.

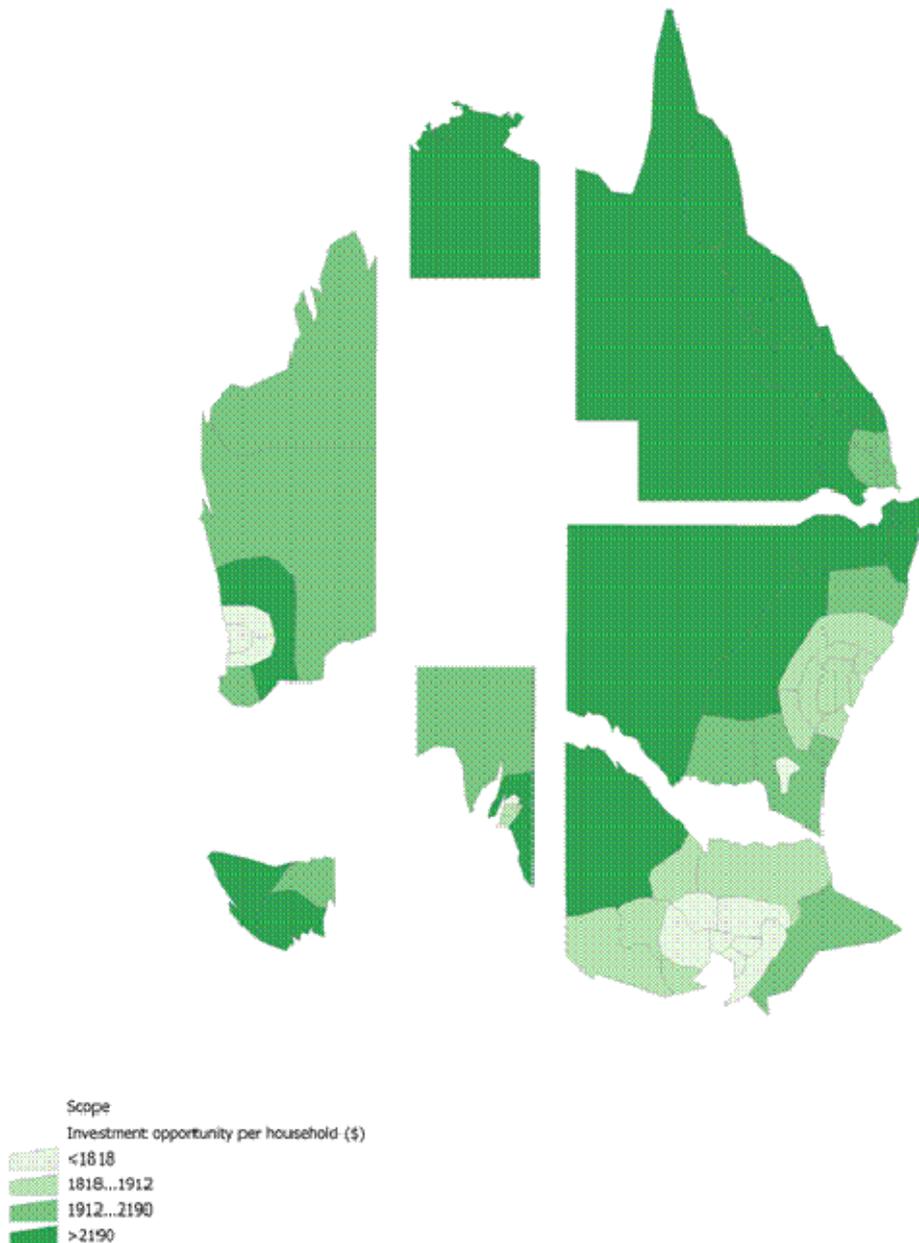
2. The inherited energy-efficiency of the housing stock and stock of household energy-using equipment in relation to state-of-the-art levels of efficiency. The gap between the two is a measure of the opportunity for energy saving by improvements in efficiency.
3. The capital cost of investments to improve energy efficiency, per item of equipment.
4. The prices of the various kinds of energy used by each household – chiefly the price of electricity and the price of gas.

We have some data on (1) above, patchy data on (2) and quite good data on (3) and (4). NIEIR has collected these data, and on this basis estimated the scope, by region, for improvements in household energy efficiency which are negative-cost at a 6 per cent discount rate.

In all cases upfront investment is required, and the following map (Investment opportunity per household) shows the regional pattern of the scope for investment in negative-cost household energy efficiency. In interpreting this map, it should be remembered that the upfront investment excludes any costs which may be incurred in motivating households to take advantage of the opportunities. The scope for investment in household energy efficiency is least in the ACT and in Melbourne, reflecting a judgement that in these cities the average house is already quite energy efficient. In particular, the scope for improving energy efficiency in home heating by switching from electricity to gas has already been largely exploited, even if work remains to be done in improving home insulation. At the opposite extreme, the scope for investment in energy efficiency is generally higher in country areas, especially along the Queensland coast and in the Northern Territory. This is because many of the efficiency improvements available in these regions are no more than marginally economic at the 6 per cent discount rate. Though in general households are tardy in responding to market incentives to improve their energy efficiency, they are particularly tardy when the incentive is weak. It is likely that there is considerable scope for improvements in household energy-efficiency in the tropics, particularly as regards methods of cooling. (It is beyond the scope of this paper to go into methods to encourage people to acclimatise to the tropics, so that they are happy with fans rather than requiring air-conditioning.)

The energy savings available from improved energy efficiency can be translated into reduced demands for gas and electricity, which in turn can be priced and converted into dollar savings. The resulting patterns are shown in the following map (Annual savings per household). Potential savings from improved household energy efficiency are concentrated in southern Australia, mainly because it is cooler and the returns to improved home insulation are particularly high. This puts the various Melbourne regions in a particularly advantageous position – for relatively low efficiency-improvement investment the average household there has the potential to reap relatively high cost savings. Potential cost savings are also high in Tasmania and the SA Mallee-South East. They are not, however, nearly so high in the ACT, which is cool but where it is believed that the houses are already quite well insulated. The potential cost savings are not nearly so great in tropical Australia, because under current technologies it is harder to improve the energy-efficiency of air-conditioning than of home heating.

Investment opportunity per household



Note: The investment opportunity per household is an estimate of the average amount which households in each region could invest in home energy efficiency with a return of at least 6 per cent a year.

In this section we have so far considered the economic scope for household energy-efficiency improvements – that is, investments which are justified in terms of cost savings. A further step is to calculate the emissions abatement which may be expected from the improvement in energy efficiency. Further data is required, particularly on the carbon-intensity of electricity supply. Interstate differences in carbon emissions per kilowatt-hour of electricity consumed (peak and off-peak) dominate the regional pattern, and we accordingly present the following estimates on a state basis. Data is not available to move below the whole-state level at all reliably.

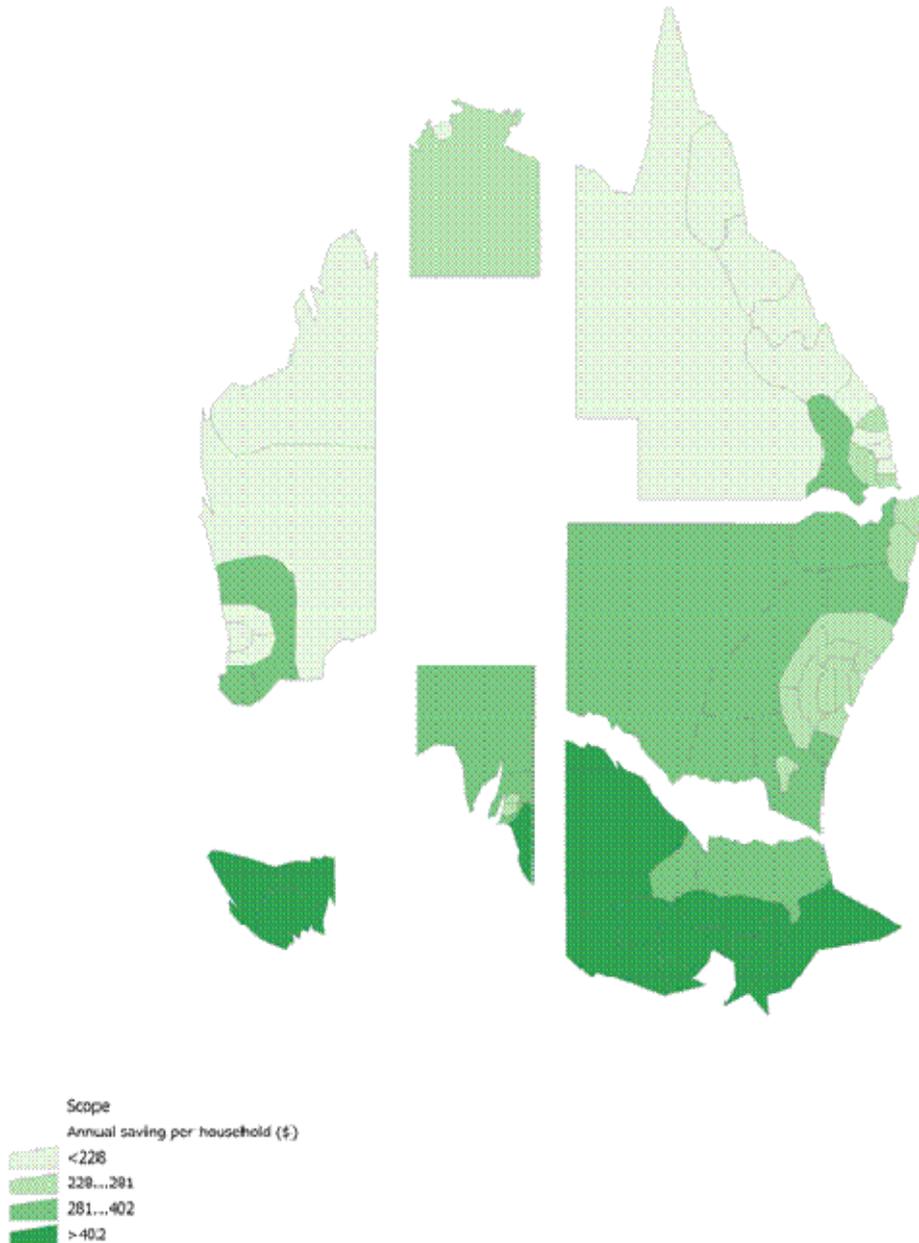
Table 10.2 Potential negative cost emissions reductions from household energy efficiency improvements	
State/Territory	Potential in tonnes CO₂ per household p a
NSW	2.9
Vic	5.8
Qld	1.8
SA	2.6
WA	2.0
Tas	0.6
NT	1.1
ACT	2.9

Source: National Economics estimates.

The high level of household savings in Tasmania is not matched by high reductions in emissions, because of continuing high firewood usage (from a greenhouse point of view emission-free) and the low emissions intensity of the Tasmanian electricity supply. The opposite applies in Victoria, where the electricity supply is emission-intensive. Relatively low abatements in northern Australia reflect relatively low reductions in energy use, coupled in the case of the Northern Territory with high reliance on relatively low-emissions gas-based electricity.

Table 10.3 Scope by zone			
Zone	Payback (years)	Average investment opportunity per household	Average annual savings per household
Knowledge	6.9	\$1,881	\$274
Lifestyle	9.5	\$2,325	\$246
Dispersed	5.9	\$1,827	\$309
Industrial City	6.7	\$2,151	\$320
Resource	9.3	\$2,225	\$239
Rural	5.6	\$2,177	\$388

Annual saving per household



Note: Savings per household are an estimate of the average reduction in household energy costs which would be achieved if all households in the region adopted all energy efficiency investment opportunities with returns of at least 6 per cent a year.

10.4 Emissions trading and energy efficiency

It is all very well for engineers to tell us that there is considerable scope for low-cost emissions abatement through improvements in energy efficiency. As we have already emphasised, these opportunities exist because households and businesses have so far failed to avail themselves of them, even though they make good financial sense at current prices. The reasons for this failure include poor information, inertia, divided incentives (the landlord/tenant problem) and financial constraints (households and small businesses which cannot afford capital investment of any kind, including in energy efficiency, even when it would bring quick returns).

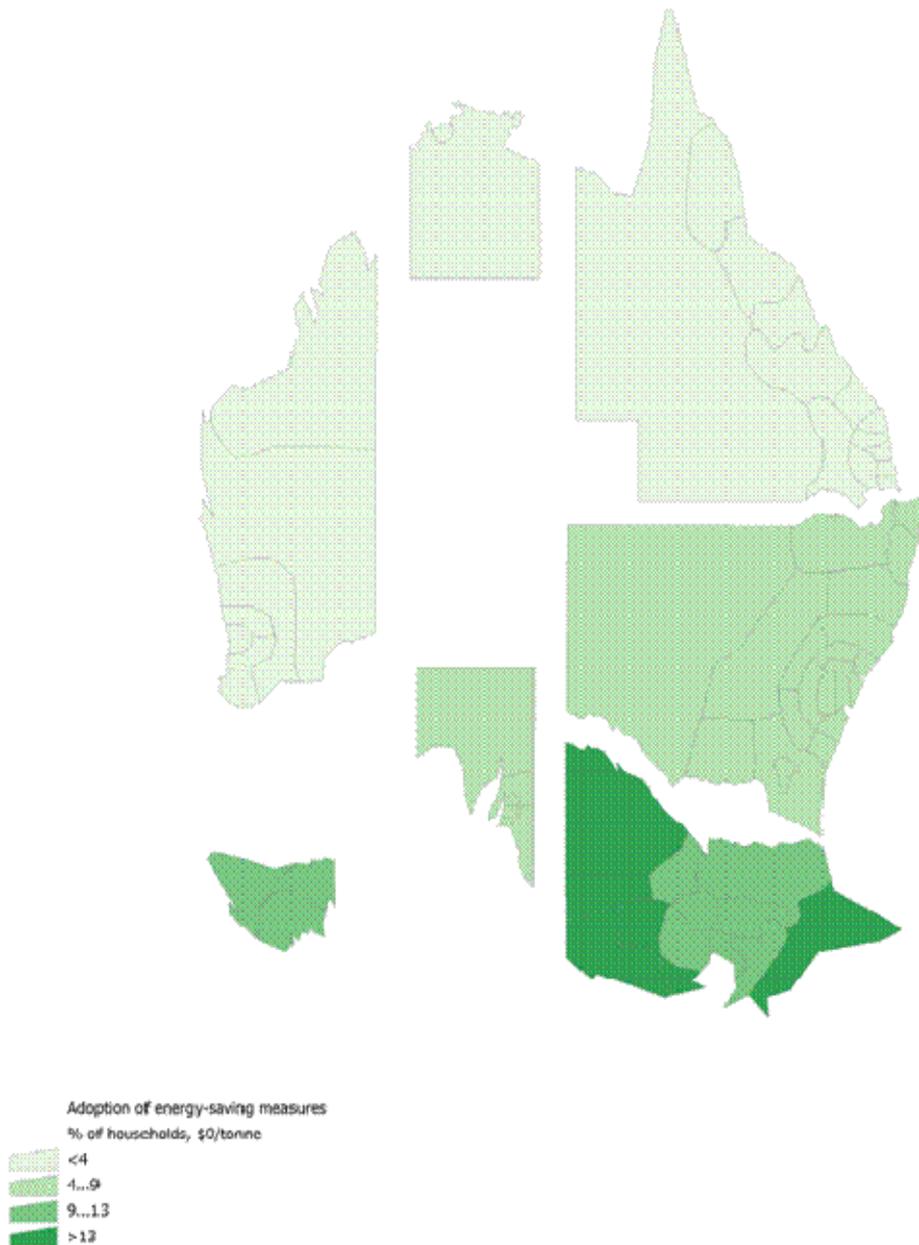
The Treasury line is that the increased price of emissions brought about by emissions trading should be the sole policy used to implement emissions abatement. To assess the effectiveness of this in the implementation of energy efficiency, NIEIR has conducted some preliminary modelling. We do not dispute the hypothesis that the higher energy prices brought about by emissions trading will increase the financial incentive to energy efficiency. The question at issue is: how effective will it be? To provide a preliminary answer, we have drawn on the experience of economists working in the promotion of energy efficiency to draw up the following rules, applicable to households (not to business).

- Very few households will retrofit energy efficient technologies when the rate of return is only 6 per cent.
- In any year, about 5 per cent of households will retrofit energy-efficient technologies which promise a 10-year payback. These retrofits will mostly occur in the course of renovations.
- In any year, about 50 per cent of owner-occupier households will retrofit energy-efficient technologies which promise a one-year payback.
- About 30 per cent of owner-occupier households, and all landlords, will not retrofit energy-efficient technologies unless the capital is gifted to them. The owner occupiers in this position are those who simply cannot find the cash for capital investment, while the landlords are acting rationally – they do not get any savings in energy costs, so why invest?
- Take-up rates for intermediate rates of return were interpolated.

These rules were then applied to the array of potential negative-cost household energy abatements considered in Section 9.3 above. Two findings are of significance.

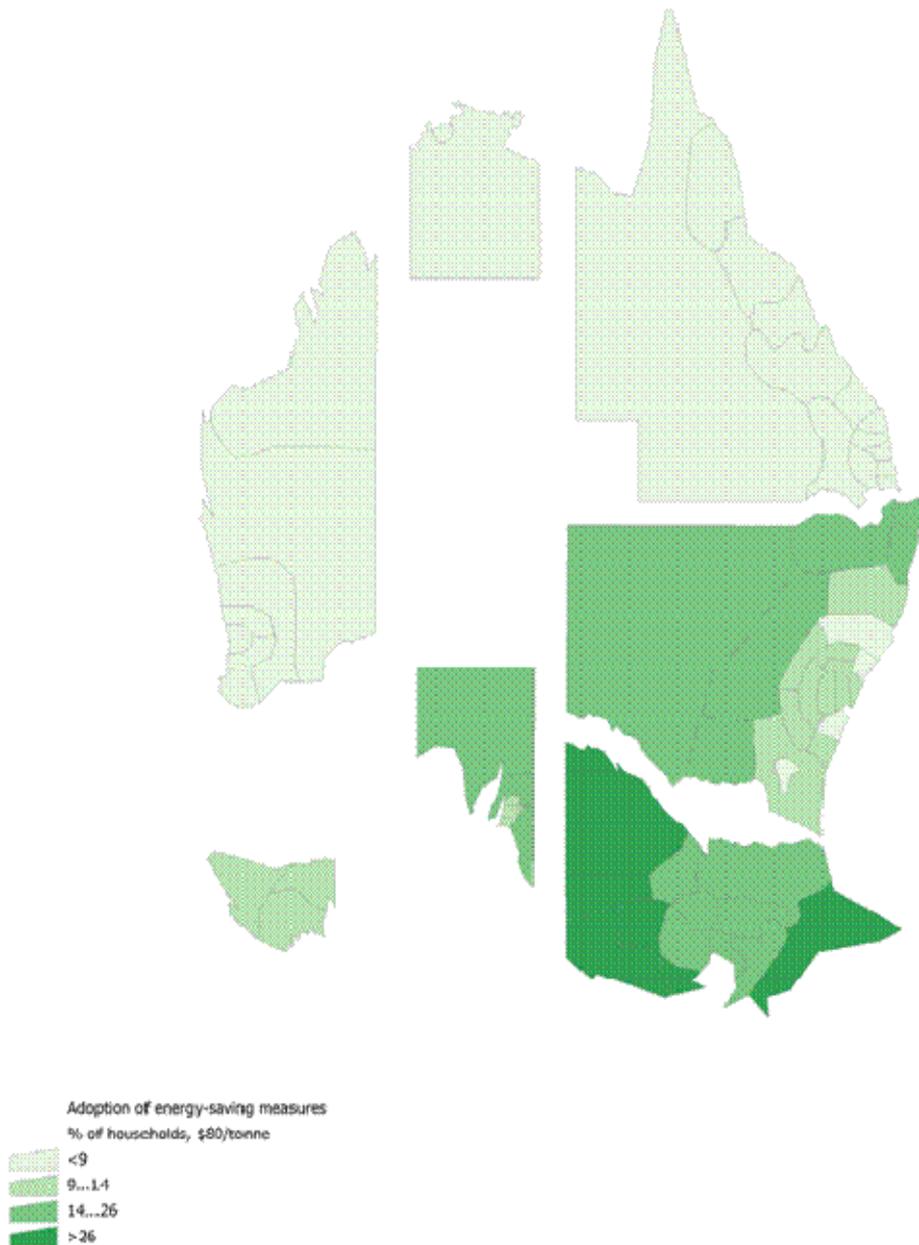
- At current prices – that is, without emissions trading – the current fairly slow rate of take-up of energy efficient technologies may be expected to continue. Across the regions, the rate of take-up is expected to vary from very low to around 15 per cent a year. The high take-up regions are those with energy-efficiency options offering short payback periods – chiefly Victorian regions with high returns from home insulation. The low take-up regions are all of Western Australia, the Northern Territory and Queensland, where most of the negative-cost options have fairly long payback periods.
- It will take an emissions-trading carbon price of around \$80 a tonne of CO₂ (in other words, a price rather higher than is currently being contemplated) to double the take-up of negative-cost energy efficiency technologies. The geographic pattern of take-up is the same as in the current-price case, the difference being that the rate of take-up is accelerated. However, the acceleration is limited. Even at \$80 a tonne the rate of adoption of the technologies rises to 30 per cent a year only in a limited number of regions.

Adoption of energy saving measures – per cent of households – \$0/tonne



Note: This map shows the expected proportion of energy efficient investment opportunities yielding a 6 per cent return or more which will be taken up, per annum, without carbon pricing.

Adoption of energy saving measures – per cent of households – \$80/tonne



Note: This map shows the expected proportion of energy efficient investment opportunities yielding a 6 per cent return or more (without carbon pricing) which will be taken up, per annum, at a CO₂ price of \$80 a tonne.

As time passes two things will happen.

- ❑ New negative-cost opportunities will be added to the array.
- ❑ Old negative-cost opportunities will be crossed off the list as households avail themselves of them.

It would be optimistic to expect that the new opportunities will keep ahead of the old – particularly when items such as home insulation are an important part of the old array, and need be done only once. To this extent, therefore, negative-cost energy efficiency opportunities are once-off, and are due to catching up with changes in technology. Even under current prices most of them will eventually be availed of, and the policy opportunity lies in accelerating take-up. As regards this class of abatement opportunity, the problem with emissions trading is that it does not accelerate take-up very rapidly. We accordingly argue that there is a strong case for supplementing emissions pricing with additional measures to accelerate take-up of opportunities in energy efficiency. This analysis accordingly supports the arguments put at a more theoretical level in Chapter 8.

10.5 Industrial emissions by region

A guide to energy emissions by industry can be derived using the same methodology as was employed last year to obtain direct and indirect emissions.

The methodology is as follows. The basic data is taken from National Economics' *"The CO₂ content of Australian production and financial demand – 2004-05"*, for the National Emissions Trading Taskforce, 2007. This report provides the direct and indirect CO₂ content of production by 102 industries.

The estimates are then broken down into State CO₂ content per \$million of production by using the CO₂ content of the different types of energy supply published by the Australian Greenhouse Office, with the adjustment that the National Electricity Market (NEM) will tend to reduce the differentials in electricity CO₂ content between the States in the NEM.

The next step is to convert the CO₂ per \$million of production in CO₂ per person employed for the 102 industries. This is then broken down into the regional level by the share of employment by industry and region.

The emissions allocated are energy emissions, industrial process emissions and fugitive emissions. From the associated map the regions with the highest CO₂ emissions are:

- ❑ the Resource regions; and
- ❑ the Industrial regions of the metropolitan areas and independent cities.

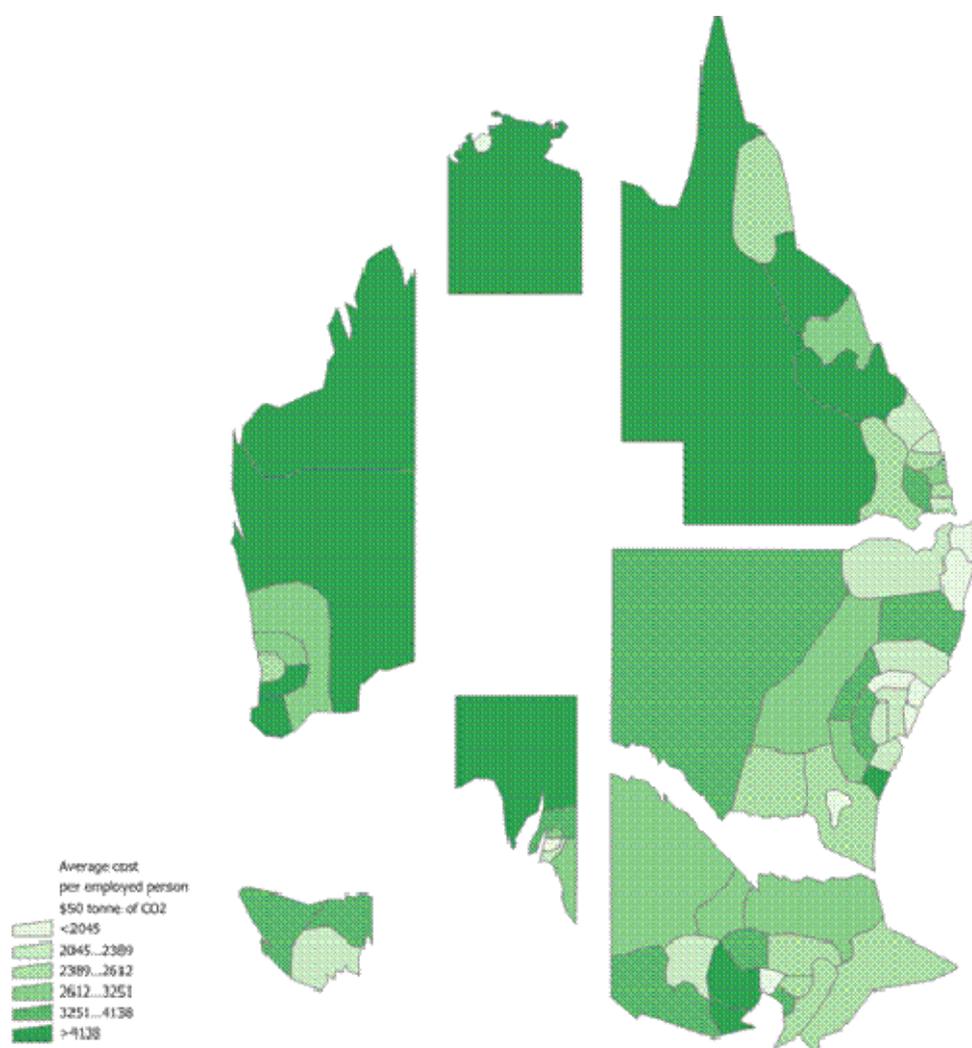
A CO₂ price of \$50 a tonne would result in \$6,000 to \$8,000 additional cost per person employed. The industrial regions would incur an additional cost per worker of between \$4,000 and \$5,000. The central areas will incur costs of \$2,000 per person employed or less.

The other data gives average direct household emissions excluding transport fuels. This is added to the industrial economies per household to give an indication of overall regional vulnerability to carbon prices.

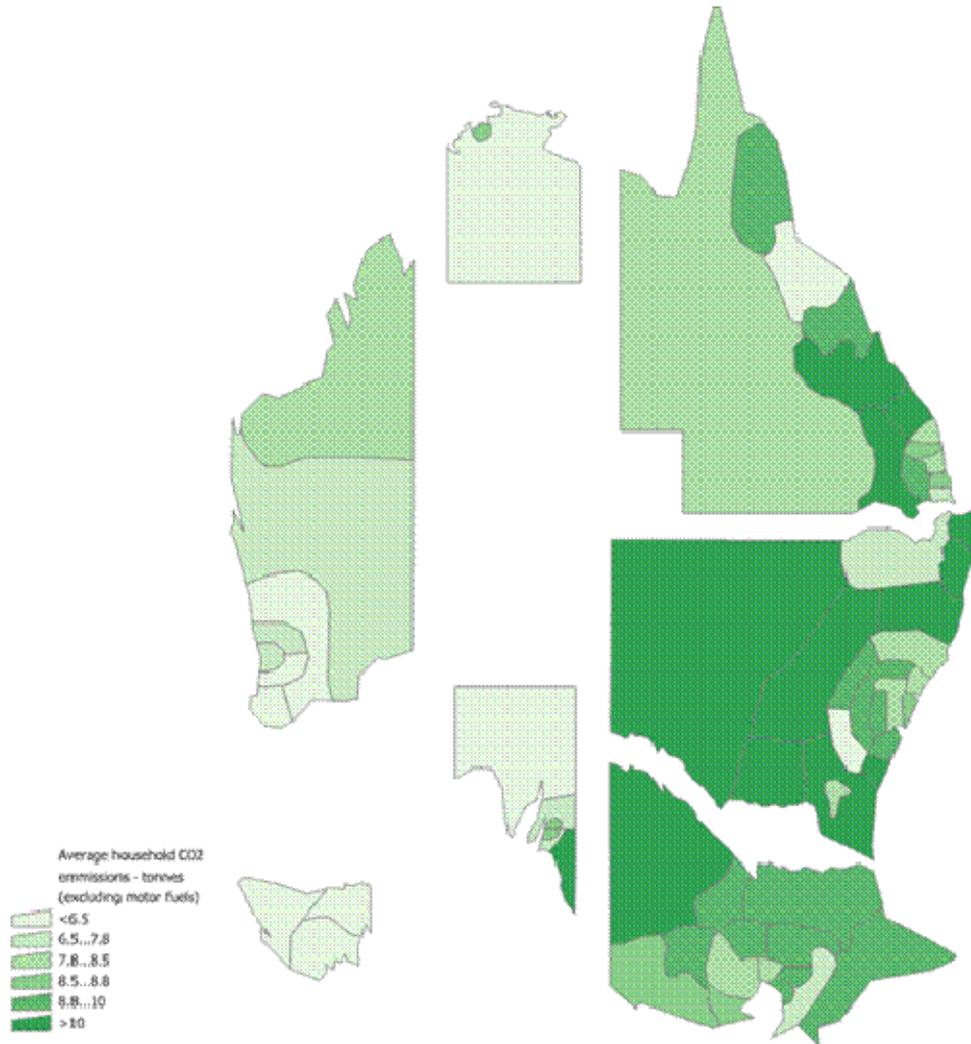
Table 10.4 CO₂ emissions by industry and household

	Average direct household CO ₂ emissions - tonnes (excluding motor fuels)	Average industry CO ₂ emissions per employed person direct and indirect domestic emissions	Average cost per employed person \$50 tonne of CO ₂	Total direct household and indirect industry emissions per household
Dispersed metro	8.3	58.2	2911	95.2
Independent city	9.4	70.6	3529	98.9
Knowledge-intensive regions	8.3	49.2	2458	82.2
Lifestyle regions	11.6	40.9	2046	56.5
Resource-based	9.7	145.7	7284	199.1
Rural	9.0	68.3	3415	84.2

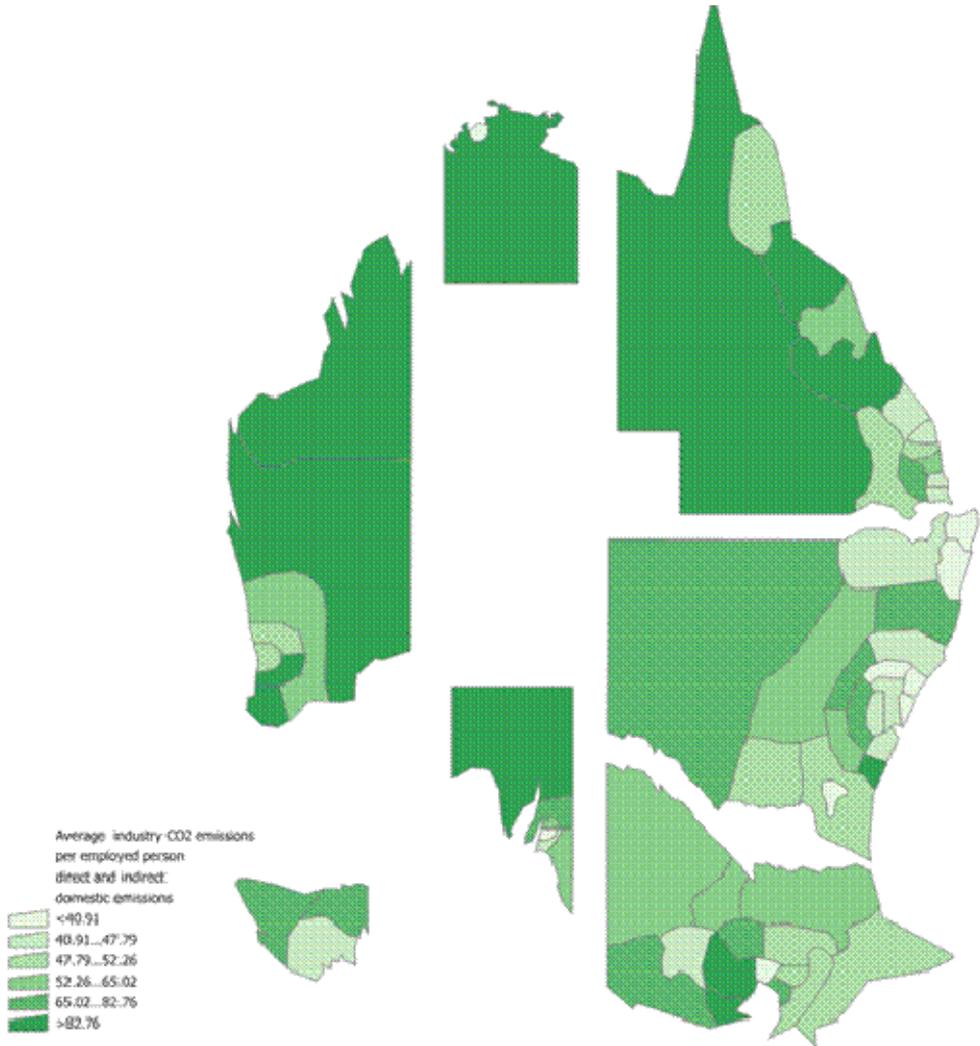
Average cost per employed person – \$50 tonne of CO₂



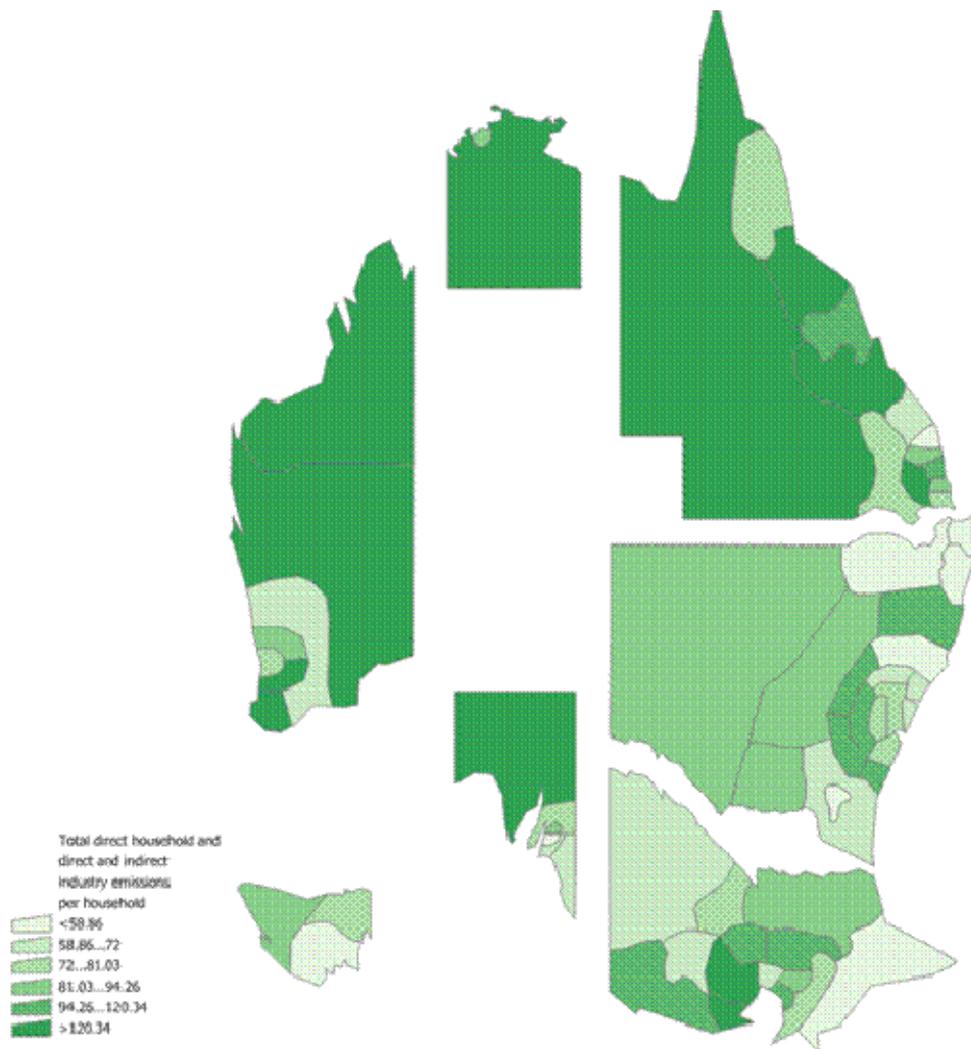
Average household CO₂ emissions – tonnes (excluding motor fuels)



Average industry CO₂ emissions per employed person – direct and indirect domestic emissions



Total direct household and direct and indirect industry emissions per household



11. Climate change: the potential role of councils

This chapter forms an introduction to the case studies in Chapter 12 and an overview of some of the ways in which local government can play an important role in developing policies and actions to address the implications of climate change. We saw in Chapter 7 that the *Garnaut Climate Change Review* fails to mention local government in the context of emissions abatement (or mitigation), though coastal councils are accorded a role in town planning to reduce the costs of adaptation to climate change. In the Commonwealth Treasury's companion piece to the Garnaut report, *Australia's Low Pollution Future*, and in some chapters of the Garnaut report itself, the Commonwealth is urged to concentrate on emissions trading its sole response to climate change. However, other chapters of the Garnaut report make it clear that emissions abatement will involve a great deal more than imposing a price on emissions and waiting passively for the market to respond.

As we saw in Chapter 10, the more the Commonwealth and States broaden their effort beyond emissions trading, the greater the opportunities for local government to become involved in policy formulation and implementation. We therefore begin this chapter with a summary of Garnaut's chapters on policies complementary to emissions trading.

11.1 Opportunities for local government involvement derived from the Garnaut report

Garnaut devotes three chapters to market failures ancillary to the diabolical market failure which is climate change, and the unpriced emissions which are causing it. Government action to counter these failures would support emissions trading (or indeed any form of emissions pricing), leading to faster abatement at less cost. The ancillary market failures are in three groups.

- Information barriers.
- The challenge of innovation.
- Network infrastructure to support business and household decisions.

Information barriers

Market economics' main explanation for failures to respond to price changes is that they are due to information barriers. The reasoning goes that if it is in my financial interests to take an action and I don't, it must be because I lack necessary information. It cannot be because I am too lazy, or too cussed, or take a perverse delight in ignoring market signals – that would contradict the assumption that people are rational.

To give people their due, it is a simple fact that only a miniscule proportion of the world's stock of information can fit into any particular human head, of which only part will come to the surface when a decision is to be made. Again, decisions are often only made when something happens so that we stop procrastinating. I may have cash to spare, and be perfectly well aware that a new hot water heater will reduce my electricity consumption and pay for itself in a year or two through reduced electricity bills, but not bother to do so till the old one breaks down. The literature is full of instances of cases where households could reduce their costs and businesses could increase their profitability by emissions reducing actions, but fail to do so. The obvious answer, in an age dominated by advertising, is public information, including such requirements as star-rating of equipment and publicity for the benefits of energy efficiency. Australian local governments have already been active in this area.

If information is to be disseminated, it has to be created. Emissions trading will impose major demands on accountants, engineers and other management personnel in business and government. If the supply of funds for emissions abatement is limited, a great deal of project assessment will be required to ensure that the funds are spent for maximum abatement impact. Disclosures of emissions intensity, and rational business decisions on abatement, will require the development of carbon accounting. These needs will require the training of specialised personnel. There will be an important opportunity for the re-training of personnel made redundant by the inevitable reforms in the finance sector.

Cost-effective emissions abatement requires the adoption and operation of new technologies. This will likewise require the training of specialised personnel, all the way from scientific research to tradespeople qualified to install and maintain the new devices. The International Energy Agency calculates that the cost of training personnel is at least a third of the investment requirements of new technologies. It is easy to overlook this cost when estimating investment requirements. Councils should remember the need for emissions-abatement trade and professional skills when lobbying for improved education facilities in their areas.

An area where market economists are at home is that of principal-agent problems, principally the landlord-tenant problem where the landlord provides the building but the tenant pays to heat and cool it. Theoretically the rents of poorly-insulated buildings should be less than those which cost less to heat and cool, but in practice tenants tend to have little bargaining power. The traditional solution to this problem is building energy efficiency standards. Many governments have extended the minimum performance standard approach beyond buildings to a wide range of appliances and even to motor cars. As administrators of building and town planning standards, councils are central to all endeavours in this area.

Innovation

It is common ground between all analysts that technological advance has a major contribution to make in reducing emissions while maintaining economic activity. Garnaut argues that emissions trading will provide an incentive to develop low-emissions technologies, and the International Energy Agency agrees, though the incentive will not be strong until the new low emissions technology is on the verge of commercial adoption. There is also broad agreement that governments need to fund basic research in emissions related areas, and will have to foster the development, demonstration and commercialisation of emissions saving technologies. The means of fostering include financial assistance and price guarantees. Going beyond Garnaut, it has been argued that investor risk can be reduced by providing a long-term guarantee that the emissions trading price will not fall below specified levels, at least as regards the technology developer. This, of course, is anathema to market economists, but may turn out to be the only way to gain the long-term benefits of lower-cost abatement through new technologies. An Australian example is the Mandated Renewable Electricity Target.

Local government does not usually think of itself as running innovation policies, but all actions designed to extend the knowledge-economy locally are innovation-friendly.

Network infrastructure

Most CO₂ emissions arise through the use of privately-owned equipment, ranging from power stations down to cars, heaters and computers. Each item of equipment has its technical built-in emissions ratio, and this strongly influences its emissions rate per unit output. True, power stations can emit more or less per kWh according to how well they are maintained, and cars emit more or less per kilometre driven according to the circumstances and style of driving, but the design of the equipment remains a fundamental driver of its performance. Emissions trading is accordingly expected to act, mainly, through its influence on equipment choice, which market economists believe should be a wholly private matter.

Private equipment choices are influenced by many considerations other than energy efficiency. Households can be swayed by all manner of personal preferences, plus income, plus advertising. Businesses likewise have their expectations of markets and of complementary costs. Among the considerations for both households and businesses is the question of infrastructure complementary to the private asset. Where these complementary assets are in public ownership, or are strongly regulated, or otherwise require public decisions, Garnaut and market economists generally are willing to consider changing the current investment rules to favour emissions abatement.

The areas covered include the following.

- ❑ Opportunities for low emissions electricity generation are often site-specific. Governments can improve the economics of generation at these sites by ensuring that they are well-connected to the bulk transmission grid, arranging for new construction if necessary. Local government can assist with site acquisition and is well-practised in adjudicating land use conflicts.
- ❑ Opportunities for carbon sequestration and storage depend on piping the captured CO₂ to sequestration sites. Garnaut argues that governments should assist with the planning and construction of these pipelines.
- ❑ Opportunities for emissions reductions in transport depend on infrastructure availability. It is not possible to switch from motoring to public transport if the public transport isn't there; similarly it is not possible to switch freight from road to rail if the rail isn't there. Garnaut takes issue with nearly a century of Commonwealth transport policies by questioning the concentration on road finance. Although not mentioned, local government is obviously at the centre of local transport policy.
- ❑ The design of new urban settlements, and the retrofitting of old ones, can affect both their vulnerability to future climate change and the opportunities of residents to reduce their emissions. Once again, though not mentioned, local government is central.

The only role that Garnaut explicitly recommends for local government is, significantly, not concerned with emissions abatement, but with the amelioration of the effects of climate change. The role he envisages for local government is that of preventing urban development in coastal areas at risk of damage from storm surges, and constructing defensive works. However, as we have just seen the complementary measures which are required if the financial incentives generated by emissions trading include substantial areas of local government responsibility. Again, as we saw in Chapter 10, there is a great deal that local government can contribute to a national program of emissions abatement.

11.2 A change in national priorities?

We saw in Chapter 5 that the need to respond to climate change has become urgent at the same time as the instabilities which have been accumulating in the world financial system for a couple of decades have brought the system to partial collapse. We have argued that Australia cannot avoid responding to both crises, preferably together so that the response to the one complements the response to the other. As charted in Chapter 10, the national response will have to involve the following.

- ❑ An increase in investment, particularly in emissions abatement equipment, skills and infrastructure, but also in updating the national economic base.
- ❑ A reduction in overseas borrowing, requiring an increase of exports and relative reduction in imports.
- ❑ Taken together these two requirements imply a massive increase in national savings – household, business and government.

The reduction in imports will involve reduced purchases of commodities regarded as necessities (such as petroleum), reduced purchases of manufactured consumer goods, and reduced overseas travel. The increase in savings will again involve reduced purchases of goods and services – preferably mainly imported goods and services, to match the reduction in overseas borrowing.

This required response is going to be very difficult to achieve. There are two related pitfalls. The first is that the costs of the response will be increased by un-necessary unemployment; the other that an unfair proportion of the costs will be borne by low-income people. However, supposing that these costs are avoided, what can local government do to minimise the adverse impact?

The answer is that, without knowing it, local government is already doing a great deal, chiefly by its activities in community-building. The more people take delight in each other's company; the more they derive their enjoyment of life from local services and the less they rely on imported goods, the more they will be insulated from the need to increase saving. Though the obvious local government response to the need to reduce greenhouse gas emissions is to participate in the complementary measures suggested by Garnaut and others, it is arguable that its most critical response would be to continue its efforts in community creation – both because community activities are substitutes for activities with high emissions and import content, and because community creates resilience which reduces the cost of change.

In addition to its general role in building community, local government continues to play an important role in developing climate change mitigation and adaptation strategies and by encouraging, both business and households, to reduce their greenhouse emissions. Local government plays an important role in policy development with State and Federal Governments and through its interaction with community groups. The aim of all local government is to develop policies and planning regulations that assist the community in adapting to climate change.

The concepts surrounding mitigation policies are well understood, with community groups, such as the Mount Alexander Sustainability Group, featured in a case study in last year's *State of the Regions* (SOR) report, working to reduce emissions at the local level. This is one form of community action that should be closely supported by local government.

Policies that recognise the impact of climate change and influence the way planning and building regulations are determined, so that the impacts of climate change, such as sea level rise, are factored in to future planning regulations, are known as adaptation strategies. Adaptation strategies are very difficult for local government to deal with in isolation, as a state and national framework on which to base decisions is essential. This is because of the complexity of climate change science, the scale of the issues and the often inter-related nature of the issues facing adjoining local government areas and the States more broadly.

To be really effective in determining policy at the local level, local government requires a strong policy framework from State and Federal Governments. There are internal issues also, both within local governments themselves and within local government areas. Modifying changes in behaviour to actions that take into account climate change will require local governments to increasingly take on a leadership role in informing councillors, council staff and local residents of the issues relating to climate change. While many local governments have been proactive in facing up to climate change issues, local governments are also subject to changes in policy direction at the local level because elected officials and senior management change, these internal changes can lead to changes in emphasis and in the priority that climate change has in local government thinking.

The 2007 SOR report outlined the positive nature of the contribution of local government to tackling climate change; it is, however, worth making the point that local government still has a significant task ahead in informing councillors, council staff and local households about the serious nature of the impacts, both at the local and national level, of climate change.

11.3 Building communities for the future

A key task for local government will be to oversee the development of communities that are more sustainable in terms of their environmental impacts. From an economic point of view, sustainability benchmarks can be regarded as a response to a number of trends that need to be recognised in policy development.

- ❑ Emissions trading and its complementary policies will play a major role in shaping communities in terms of built form, density, public transport, the introduction of new technologies to improve energy efficiency and waste management, but to name a few. Initially, the major increases are expected in the price of electricity (as it moves from coal to gas and renewable) and transport fuels (peak oil). However, the eventual ceiling price increases for electricity and heating may be less than for transport fuels, since the latter are difficult to source from renewables. In other words, price changes for the different forms of energy are expected to follow different paths.
- ❑ The near-certainty of an increase in the price of water is due basically to the increase in demand impacting against a resource flow which is given by nature, and which is likely to decline due to climate change. The ceiling price will be set by desalination, and may be expected to increase as greenhouse emissions penalties are imposed. This, incidentally, gives a price to potable water savings and will increase the incentive to develop grey water recycling and storm water systems to provide water for sports grounds, parks and gardens and other public amenities.
- ❑ A trend to dissatisfaction with motor vehicle transport has arisen for a number of reasons apart from their emissions intensity. One is its poor safety record, another, its rising cost due to peak oil. A third problem is its propensity to congestion, which can be analysed as the product of the failure to charge for road space coupled with the high land demands of motor vehicles. The local government response will be to continue to develop walking and cycling tracks that are separate from the roadways used by motor vehicles, and should include road management to favour low emissions travel.
- ❑ A trend to dissatisfaction with high rates of waste generation again in part reflects the energy and emissions costs of dealing with waste, but also the rising costs of landfill as convenient sites are filled up. The response here will be to engage businesses to encourage more appropriate packaging of goods, to continue the engagement with residents in the recycling and waste sorting process and to adopt new technologies and processes in terms of waste management.

Local government faces the issue that, after a century of favourable trends, it takes a long time for households to absorb the new realities imposed by climate change. The challenge for local government is to ensure both new building developments as well renovations to existing building stocks occur in ways which anticipate future energy and water prices and the limitations of motor vehicle transport.

11.4 A stronger and more integrated local economy

Substantial social economic and environmental costs are associated with ‘old model’ sprawl, particularly in the major urban centres. Alternative patterns of development have higher concentrations of infrastructure, more local jobs and services, reduced travel times and an improved quality of life, all features that will shape policy in relation to councils’ planning considerations. If communities are developed to high standards, with a goal to improved efficiency in energy savings across the different components of built form and on journeys to and from work, there will be savings to the community in the additional costs imposed by climate change.

The way in which communities are developed and how well they are located in relation to employment nodes will determine their sustainability from both economic and environmental perspectives. Urban nodes that create a focus for employment, services, living and social interaction are referred to as activity centres. In metropolitan areas, local government has an important role in conjunction with the State and Commonwealth in ensuring that such centres are both knowledge hubs and true centres of community.

Away from Australia’s capital cities, previous SOR reports have demonstrated that the regional centres which contributed strongly to improved economic performance have been those that had high employment growth relative to population growth. This has occurred because the regional centres have developed diversified lifestyle and cultural choices for residents, concentrated on diversification of their businesses sectors and developed export capacity in business and education services to surrounding regions. The growth of Australia’s major regional centres, and how these regional centres are able to offset some of the growth and sustainability issues of the major capital cities as well as their own rural hinterlands, also represents an important new phase in Australia’s path towards greater sustainability.

Like their metropolitan activity centre counterparts, regional centres should also set objectives in their future development strategies to include:

1. a reduction in the number of trips in a car that residents make to access employment, services and amenity by appropriate development and local employment integration;
2. encouraging the development of better public transport services; and
3. improving non-motorised access by providing pathways and cycle paths that are safe and pleasant to use and independent of any major road infrastructure.

The environmental benefits (including greenhouse) of creating a stronger local economic system, with higher capture of expenditures at the local level and by reducing the travel distances, will be captured by integrating future growth more intensively at the local level. Use of new technologies and energy efficient buildings will lower household running costs due to direct annual savings in energy, water, transport and other household costs. The social benefits of amenity and closer communities should flow on.

11.5 Local government and climate change initiatives

Producing better outcomes in the face of climate change relies on a broad range of strategies, both in terms of mitigation and adaptation. Not all strategies that are aimed at reducing the impacts of climate change are complex; some can be relatively simple and are based very much on actions taken at the local level.

For example, local governments can make a difference by integrating actions to reduce greenhouse emissions into their existing daily activities as follows.

1. Include climate change information across the various channels of communication with local residents. Poorer households are particularly disadvantaged, as are the elderly, in terms of their capacity to carry out simple work on the places they live in, so they too can reduce greenhouse emissions and energy costs. There may be a number of cheap and easy things that council staff can advise residents on, in relation to retrofitting housing for low income families. Simple things like fixing spaces under doors can have a significant impact when measuring the benefit of these actions across the total housing stock. So the message is, when council staff, come into contact with these more vulnerable households, they should use every opportunity to ensure people understand the issues and understand some of the actions that can be taken to reduce energy consumption. More needs to be done than just compensating low income households and local government may find itself in an ideal position to make a difference.
2. Value community input and the local community groups by attending their meetings on a regular basis and consider ways of working with, or at least providing some funding for relevant projects.
3. Diffuse knowledge about climate change at the local level. local government can play a role by including information about climate change in newsletters, posters in council buildings, and through engagement with the local media. The kinds of things to promote are very simple, getting residents to reduce energy use, sign up for Green Power, walk instead of drive, use public transport more often, turn off lights and pay more attention to insulating and retrofitting houses.
4. Work with builders and renovators to ensure that new houses and renovations, if at all possible, exceed current regulations in terms of their energy efficiency. This is about having highly trained staff who can impart their knowledge to builders at the local level. There is little point in creating a housing stock today, which needs to be retrofitted tomorrow;
5. Push the envelope by looking at world's best practice in terms of the built form and raising the bar in terms of planning regulations State-wide.
6. Inform residents about the various government, community schemes and rebates which assist residents to retrofit houses and to install solar hot water systems and other renewable energy options.

11.6 Local government and community strategies

The case studies in the next chapter outline what local government and community group are doing to address climate change are these strategies are summarised here.

Lake Macquarie City Council is implementing a range of specific strategies to achieve emissions reduction targets through its' Sustainable Living program, these include:

- waste reduction strategies including capture and reuse of landfill methane for electricity generation, diversion of green waste to worm farm, kerbside recycling and kerbside reusable goods;
- negotiating a regional waste management contract for materials collection and reuse;
- negotiating bulk uptake of Green Power for the council and for residents;
- participation in refit program for energy and water saving devices to be fitted to residential properties, and at key Council facilities;

- sustainable living workshops focusing on educating individuals about green building design, solar energy, rainwater tanks and biodiversity;
- ongoing introduction of energy efficient vehicles to the council fleet, and strategic purchase of offsets for emissions from vehicle fleet;
- introduction of more efficient street lighting for the City, such as solar and light-emitting diode technologies;
- catalysing the development of green energy production and associated industries; and
- introducing footprint analysis software as a sustainable purchasing tool to rank alternative products by their life-cycle impacts.

In relation to the threat of sea level rise, the Lake Macquarie City Council Sea Level Rise Preparedness and Adaptation Policy requires the Council to:

- adopt the 0.91 m sea level rise figure for the purposes of risk assessment, policy development, community empowerment, and planning and development decisions;
- monitor, review and manage risks associated with climate change relating to local government functions;
- review the adopted sea level rise planning figure, subject to state government recommendations and new scientific evidence;
- conduct community consultation and empowerment activities relating to climate change mitigation and adaptation; and
- develop, implement and review the Lake Macquarie Sea Level Preparedness and Adaptation Schedule as a tool to manage Council's adaptation response.

Hobart City Council has made sustainable transport a key focus of its climate change mitigation efforts. Starting with awareness-raising initiatives – such as sponsoring Sustainable Transport Days (and then Weeks) – the Council has progressively:

- promoted Walking School Buses;
- prepared an Integrated Bicycle Network Plan in consultation with cycling groups;
- appointed a Sustainable Transport Officer; and
- circulated a draft Sustainable Transport Strategy for the Greater Hobart region.

The City of Onkaparinga Climate Change strategy consists of a number of 'strategic themes' around which policies are developed:

- Leadership;
- Prepare for Change and Manage Uncertainty;
- Protecting Resources and Ecosystems;
- Build Knowledge and Support Action;
- Community Health and Well Being; and
- Creating a Low Emissions City.

These are but a few of the many local government initiatives already under way across Australia.

11.7 Renewable energy⁶

In view of the importance of renewable energy as a technique for reducing greenhouse gas emissions, we finish this chapter with a brief discussion of what it is.

Among the energy sources of coal, natural gas, oil, solar, wind, etc. renewable energy forms are distinguished by their non-depleting or regenerating characteristics, while non-renewable energy forms like coal, oil and natural gas, are depleting or non-regenerating. Also, renewable energy forms produce no, or very few, greenhouse gas emissions in their conversion of their source (wind, sun, etc.) into useful energy. But like non-renewable energy forms their equipment (wind turbines, solar panels and cells, etc.) contain embedded emissions in the material they are comprised of.

Biomass (organic material) energy, although it will produce greenhouse gas emissions from combustion (direct or from gasification), is regarded as a renewable energy form (from landfill gas, sugar cane wastes, wood) because the carbon dioxide emissions from its use are similar to the carbon dioxide emissions taken up (sequestered) during the production (growth) of the biomass.

Renewables are used for the production of heat (solar hot water, combustion of timber wastes for wood drying kilns) or for the production of electricity (from hydro, wind, solar photovoltaics, geothermal, etc.).

In Australia about 10 per cent of electricity is produced from renewables (mainly hydro) and about 5 per cent of hot water is produced from solar energy. Renewable energy is supported under the Mandated Renewable Energy Target now being increased to an additional (to 1997 production) 45,000 GWhs taking renewables to a 20 per cent proportion of electricity sales in 2020. Solar hot water is supported as part of the Target and through a range of State and Federal programs. Information regarding the eligibility of municipal governments for installation of renewable equipment should be sought from State agencies such as Sustainability Victoria in Victoria, as rebates and grants for demonstration programs could change significantly in the next 12 months as governments prepare to adjust policies under the Federal Government's Carbon Pollution Reduction Scheme (emissions trading). However, it is very likely that support for renewables will increase and that their competitiveness will improve markedly under carbon (CO₂e) pricing.

The economics of renewables vary significantly: hydro is the most competitive provided there is water flow, followed by solar hot water, wind, biomass, geothermal, then solar electricity (where costs are high but reducing). Wind and solar are intermittent sources which only operate when wind and solar conditions are favourable and hence they operate, on average, fewer hours per year (20-40 per cent of the year) than sources such as geothermal (as yet no plant operating in Australia) and biomass which technically can operate at over 80 per cent capacity factors (that is, in a base load mode like coal and gas generators).

Local government can assist emissions reduction in electricity supply by encouraging householders to use Green Power, the Mount Alexander Sustainability Group describe the benefit thus; 'Green Power is a very good way to radically reduce greenhouse emissions. The amount of electricity used in the average household results in around six tonnes of CO₂ being emitted each year. If a household takes up 100 per cent Green Power, net emissions can be reduced to zero as the energy retailer must purchase the equivalent amount of renewable energy from renewable suppliers, especially wind farms'. The group makes the point that the customer should check bills carefully to ensure they are getting the percentage of Green Power they had requested. With this proviso, the cost of switching to Green Power is 'not much more than a cup of coffee per week and it's the biggest bang you can get for your buck if you want to reduce your emissions'.

⁶ Graham Armstrong, National Economics associate and Director Saturn Corporate Resources Pty Ltd.

Local government also has the capacity to encourage the generation of renewable energy at the local level. Opportunities to develop renewable energy can be from a range of sources, these are wind, if the wind profile is correct, solar, from biomass, from land fill and farm waste from such sources as piggeries. Land fill sites may offer local government considerable scope to generate electricity and it may be effective for local governments to work together to bulk purchase the required technologies for generating electricity from landfills. If they have not already done so local governments could organise an audit of local resources to indentify which renewable energy sources in the local area are the most suitable for use in renewable energy generation.

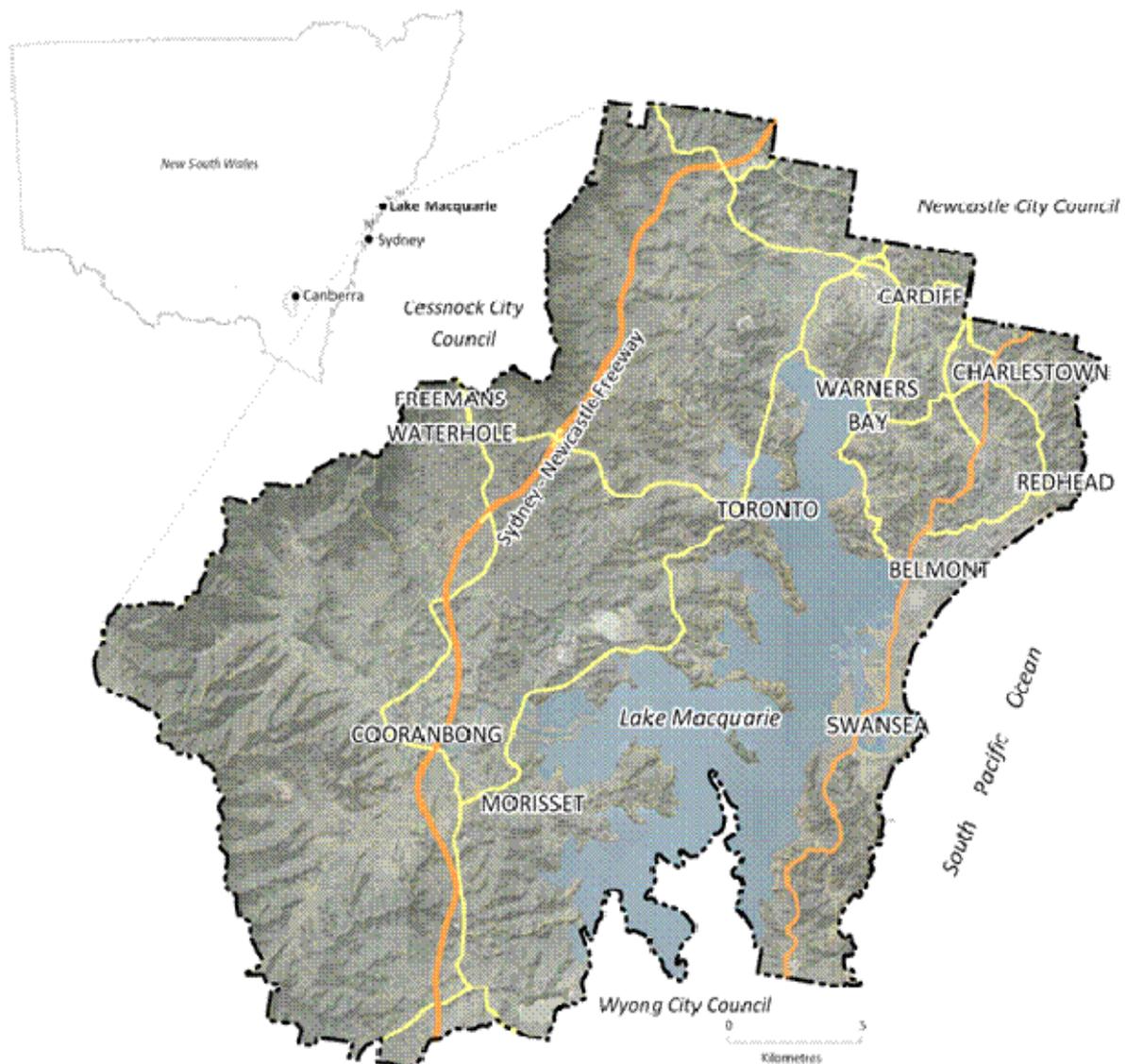
12. Climate change case studies

12.1 Climate change mitigation and adaptation in Lake Macquarie⁷

12.1.1 Background

The City of Lake Macquarie is a coastal local government area (LGA) situated in the Hunter region of New South Wales (see map below). The total area of the LGA is 787 km², of which around 15 per cent is occupied by a large estuarine lagoon (Lake Macquarie). It is the fourth largest city in New South Wales, with a population of 191, 955 (ABS 2006). The LGA is a hub for small to medium businesses, but also contains two coal-fired power stations that provide around 30 per cent of New South Wales's electricity requirements.

Location of Lake Macquarie local government area



⁷ Lake Macquarie City Council Sustainability Department.

These targets equate to a 90 per cent reduction in emissions over a 30-year planning horizon. The baseline carbon footprints for LMCC and the City have been established, which identify the contributing sectors to the footprint and prioritise opportunities for footprint reduction. A range of cross-cutting strategies have been established to facilitate footprint reduction including stakeholder partnering and community empowerment. LMCC is implementing a range of specific strategies to achieve the targets through its' Sustainable Living program, which include:

- waste reduction strategies including capture and reuse of landfill methane for electricity generation, diversion of green waste to worm farm, kerbside recycling and kerbside reusable goods;
- negotiating a regional waste management contract for materials collection and reuse;
- negotiating bulk uptake of Green Power for LMCC and residents;
- participation in refit program for energy and water saving devices to be fitted to residential properties, and at key LMCC facilities;
- sustainable living workshops focusing on educating individuals about green building design, solar energy, rainwater tanks and biodiversity;
- ongoing introduction of energy efficient vehicles to the LMCC fleet, and strategic purchase of offsets for emissions from vehicle fleet;
- introduction of more efficient street lighting for the City, such as solar and light-emitting diode technologies;
- catalysing the development of green energy production and associated industries; and
- introducing footprint analysis software as a sustainable purchasing tool to rank alternative products by their life-cycle impacts.

12.1.3 Adapting to climate change

At the global level, the response to climate change is moving towards adaptation. This is because, even with extreme emissions reduction strategies, an accelerated global warming will continue to be experienced for at least the next century, including a substantial rise in sea levels.

LMCC has taken a proactive approach to this problem by adopting a sea level rise figure of 0.91 metres by 2100 for planning purposes (LMCCc). This planning figure represents the upper limit of the projected sea level rise range for New South Wales of 0.18 metres to 0.91 metres by 2100 (New South Wales DECC 2007). As the existing mean water level of Lake Macquarie is 0.1 metres above the Australian height datum (mAHD), this projected rise in sea level would raise the mean water level of the lake to around 1 mAHD. Preliminary analysis indicated that, when combined with a 1 in 100 year flood event, this sea level rise would increase lake water level to about 2.5 mAHD.

To address potential threats to residents associated with sea level rise, LMCC has adopted a Lake Macquarie Sea Level Rise Preparedness and Adaptation Policy. This policy requires LMCC to:

- adopt the 0.91 m sea level rise figure for the purposes of risk assessment, policy development, community empowerment, and planning and development decisions;
- monitor, review and manage risks associated with climate change relating to local government functions;
- review the adopted sea level rise planning figure, subject to state government recommendations and new scientific evidence;

- ❑ conduct community consultation and empowerment activities relating to climate change mitigation and adaptation; and
- ❑ develop, implement and review the Lake Macquarie Sea Level Preparedness and Adaptation Schedule as a tool to manage LMCC's adaptation response.

The Lake Macquarie Sea Level Preparedness and Adaptation Schedule is currently being implemented. It involves 37 specific risk management measures including modelling of impacts, planning policy, emergency preparedness, community education and empowerment, and adaptation works.

This sea level rise adaptation strategy is the first step in a process to evaluate the risks to the Lake Macquarie LGA from climate change. A similar approach is underway to develop preparedness and adaptation strategies for changes in average rainfall and temperature, and the frequency and intensity of extreme rainfall, wind and extreme temperature events.

12.1.4 Conclusions

LMCC has acknowledged the significant potential ramifications of predicted climate change to the Lake Macquarie LGA. The risk management strategies that have been adopted address both mitigation and adaptation elements of potential impacts. The key mitigation strategy is to reduce LMCC and City carbon emissions by 3 per cent per annum, while the focus of adaptation is on planning for a 0.91 metre rise in sea level. Future adaptation strategies will address changes in frequency and intensity of rainfall, wind and extreme temperature events, as well as average temperatures and rainfall.

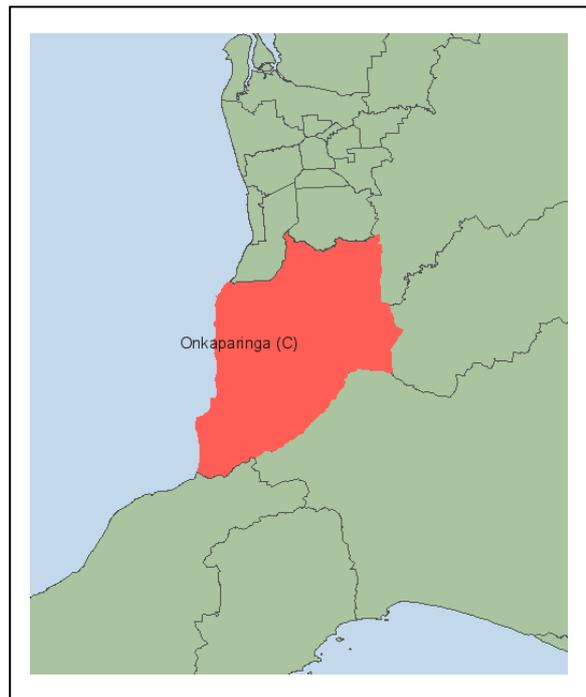
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12.2 The City of Onkaparinga Climate Change Strategy 2008-13⁸

Located on the southern fringes of metropolitan Adelaide, and at the gateway to the Fleurieu Peninsula, the City of Onkaparinga has recognised that it plays a key role in climate change adaptation and mitigation. With a population set to grow by some 35,000 to 40,000 residents over the next 20 years, Onkaparinga has used a target based approach, to reduce its emissions and prepare for the environmental, economic and social impacts of climate change, while ensuring that the community's well being is enhanced. A Climate Change Strategy has been prepared to identify priority emissions reduction and adaptation responses over the next five years. Of note is the fact that the strategy is financed via a dedicated Climate Change Response Fund.

Onkaparinga's Climate Change Strategy 2008-13 is one of a set of issue specific strategies that support the City's Community Plan 2028. Other strategies focus on transport and water resource issues.



Onkaparinga promotes its strengths in areas such as tourism, wine, food, a clean green environment, diverse geography and well situated location. When conducting its broader strategic planning, the Council recognised the need to address the uncertainty surrounding rapidly changing climate science and how the Onkaparinga community will be affected.

A 2006 CSIRO report on the impacts of climate change for the Adelaide and Mt Lofty region found the area faces an increase in temperature of between 0.4 and 1.2 degrees by 2030 and 0.8 – 3.5 degrees by 2070 and a reduction in rainfall of between 1 and 10 per cent by 2030 and 3 – 30 per cent by 2070. With the initial formation of a specialist Science Panel to help Council and the community sort through the science and decipher how exactly global warming would affect the City, the direct impacts on the Onkaparinga community were identified.

The warming and drying will affect the municipality's water availability and thus water dependent ecosystems including agriculture and horticulture. Sea level rise, storm surges and intense weather events such as storm surges and bushfires will affect natural resource and built infrastructure. Work undertaken by the Adelaide and Mount Lofty Ranges Natural Resources Management Board identified that the most pressing adaptation issues in the region relate to coastal, bushfire, biodiversity and water resources management.

About 1 in 5 of the Onkaparinga population are considered disadvantaged by way of income levels. People living in the outer regions of the municipality experience higher fuel, energy and food prices, and are further affected because of the lack of alternative transport options. Social equity and community connection are important motivators for building community resilience to climate change.

⁸ Dominique La Fontaine.

In the lead up to the development of the Climate Change Strategy the Council has made some significant achievements in the area of emissions mitigation. As a participant in the Cities for Climate Protection, the council has met its target of reducing emissions by 20 per cent of 1997-98 levels by 2007, three years earlier than planned. Green power purchases for the Council's five largest energy consuming buildings will increase from 50 per cent in 2008 to 100 per cent by 2010. Street lighting is already powered by 20 per cent green power. Increasing use of smaller and also hybrid vehicles is another mitigation strategy. A range of water conservation, coastal protection and community and business initiatives have also already been instigated.

12.2.1 Strategic themes and foundation projects

The Onkaparinga Climate Change strategy consists of six 'strategic themes' that were identified through an extensive community engagement process and with input from the Science Panel. Within each of these themes are a range of actions that are to be undertaken throughout the next five years and also a number of prioritised 'Foundation Projects', which are intended to drive successful implementation of the Strategy. Council will report on progress regularly and a comprehensive review of the strategy will take place in 2010. A number of the actions offer opportunities for partnerships with other local governments, government agencies and universities.

Leadership is identified as Strategic Theme 1, recognising the need for Council to take an active leadership role in emissions reduction and adaptation whilst supporting business and the community to do the same. The City of Onkaparinga Carbon Neutral Project will, by 2013, implement a range of energy efficiency, renewable energy and carbon offsetting tasks to achieve carbon neutrality for the City itself. The Target includes the organisation's waste, energy and transport related emissions, but excludes emissions from outsourced services in the first instance.

To continually improve the community's understanding of climate change impacts and then prepare the community for the changes that will occur, the second strategic theme, *Prepare for Change and Manage Uncertainty*, will maintain input from the Scientific Panel and importantly recommends that a Panel be formed to advise all South Australian local governments on climate change risk. Council also aims to advocate for a State-wide review of flood protection standards and hydrological modelling. The Foundation Project will comprehensively review and recommend actions that will address the risk to Council's operations and services. The Federal Government's Local Adaptations Pathways Program⁹ will provide funding for this Foundation Project and the Federal Government's climate change adaptation tools will be used for the assessment. By 2013, it is intended that a comprehensive vulnerability assessment for the City has been undertaken in conjunction with the state government.

Keystone species play a pivotal role in ecosystems and predicting their behaviour in the face of climate changes is the aim of the Biodiversity Modelling Foundation Project conducted under the Strategic Theme 3, *Protecting Resources and Ecosystems*. Also, included here is the Local Biodiversity and Carbon Offset Foundation Project which will assess the potential for achieving carbon offset benefits through bio-sequestration in Onkaparinga. These actions aim to have comprehensive plans to protect biodiversity by 2013.

To increase community awareness of climate change by 2013, Strategic Theme 4, *Build Knowledge and Support Action* will help the community participate in climate change solutions. The Community Energy Foundation Project will investigate the viability and support for a community owned renewable energy infrastructure.

⁹ *Local Adaptations Pathways Program* (<http://www.climatechange.gov.au/impacts/localgovernment/index.html>).

Community Health and Well-Being (Strategic Theme 5) covers how the community is prepared for and protected from the health effects of climate change, including the serious consequences of extreme weather events such as bushfire, drought and storms. Along with an emergency planning review, planning to manage risks to health and exploring how local food systems might change, the Foundation Project will involve collaboration with the Flinders University to develop a Community Well Being Monitor that will measure the success of the overall Community Plan 2008 -2028. Comprehensive plans to protect community well being are to be in place by 2013.

Creating a Low Emissions City (Strategic Theme 6) will proactively promote Onkaparinga as a low emissions city by using planning laws to require emissions reduction in new buildings and housing developments, reducing emissions in the City's transport system and helping the food and wine sector to adapt to climate change. To meet growing demand for industrial land, the Strategy's Carbon Park Foundation Project will become the home of the next generation of emissions reduction industries. The Carbon Park will provide renewable energy and fuel generated on-site, enable synergy with neighbouring clean tech operations, provide access to ultra-pure desalinated water, harvested rainwater and recycled water. The Carbon Park brand will also be positioned to provide marketing benefits. Currently, the City of Onkaparinga is investigating the geotechnical and environmental characteristics of the proposed site and a commercial review of the project, including a market implementation strategy. The studies are expected to be completed by early 2009 after which Council's further endorsement will be sought.

12.2.2 Financing the strategy

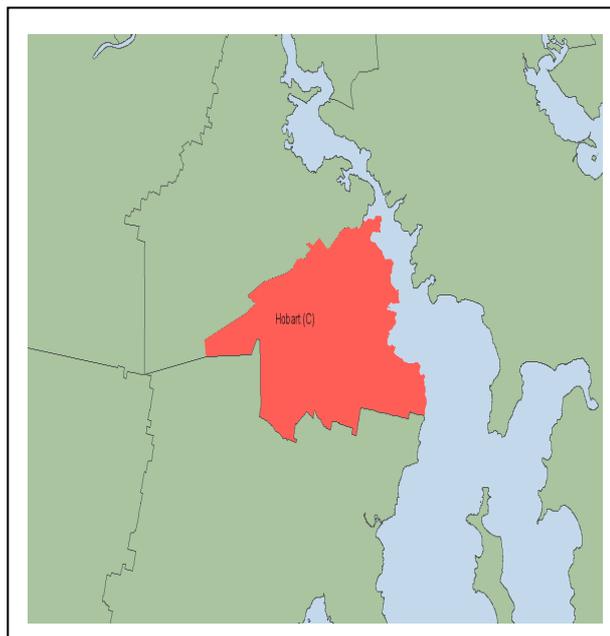
The Council has established the Climate Change Response Fund (CCRF) to finance the implementation of the projects and capital works.

The CCRF has been established by a one off rate increase of 1 per cent which will be allocated annually on an ongoing basis. The fund will be rolled over annually to ensure a longer term strategic approach to expenditure. The CCRF is viewed as an investment in the development of the low carbon economy for the Onkaparinga community. One of the actions is to undertake long-term investment modelling and analysis of the CCRF and will include an investigation of the impact of the Federal Government's proposed Carbon Pollution Reduction scheme, to commence in 2010, on the CCRF priorities in future years. For 2008-09 a total of \$610,000 from the CCRF has been allocated to fund projects and capital climate change actions. Other funding sources will be accessed to contribute to action implementation.

At a local level, the uncertainty surrounding climate change is extremely problematic. This uncertainty can however also present opportunities if a strategic approach to the challenges is undertaken. Keeping abreast of what the fast moving science is saying about climate change impacts is a challenge in its own right; so too is ensuring the harmful effects are minimised and possible economic opportunities can be exploited. A regularly reviewed strategic approach, measured against performance indicators and financed by a dedicated long-term funding stream is exactly the proactive approach local government is ideally suited to take.

12.3 Hobart City Council – Climate change engagement¹⁰

Hobart is perhaps best known as the destination of one of the world's great yacht races, the Sydney-Hobart. Others will know it for the annual *Taste of Tasmania* or as a holiday destination for those keen to explore its historic buildings and colonial past. What is not so well known is that Hobart hosts the largest concentration of climate scientists in Australia, including the Nobel Peace Prize winning Dr Nathan Bindoff. In Hobart you will find CSIRO's Division of Marine and Atmospheric Research, the Australian Government Antarctic Division, the Antarctic Climate and Ecosystem Cooperative Research Centre (CRC), the Bureau of Meteorology and the University of Tasmania, including its climate modelling arm, the Tasmanian Partnership for Advanced Computing. This is not to mention the other research work on climate change that other nations undertake in the Southern Ocean whose vessels work out of the port of Hobart.



Perhaps inspired by this, Hobart City Council made an early start in tackling climate change and has become a leader in the field. Hobart was the first Council in Tasmania to join the *Cities for Climate Protection* (CCP) program in 1999. Since then, the city has gone on to reduce its corporate greenhouse gas emissions by a remarkable 75 per cent, and plans a further 30 per cent reduction by 2020. The Council has also endorsed a motion which aims to achieve zero net emissions by 2020. So how did all this happen? What can other Councils learn from Hobart's experience?

12.3.1 The Five 'A's

Through trial and error, Hobart City has identified the 'five-As' of climate change: Abatement, Accounting, Adaptation, Advocacy and Awareness.

Abatement is of prime importance as it directly reduces emissions that harm the atmosphere. Hobart slashed its emissions by installing a 140 kWh cogeneration plant at its Macquarie Point Waste Water Treatment Plant in 2004, followed by the installation of initial flaring mechanisms, and then later of cogeneration facilities, at a second site, its McRobies Gully Landfill. The Council has calculated the latter facility alone has destroyed methane equivalent to nearly 135,000 t CO₂-e since its installation – noting that methane has a global warming potential of 23 times that of CO₂. These facilities have also generated over 17,000 MWhrs of electricity since commissioning, backing out generation from the grid. This is valuable even in Tasmania – traditionally a hydro State where low rainfalls drought have forced 20 per cent of the State's power to be imported from the mainland's high emissions electricity supply and increasing gas-fired electricity generation locally.

¹⁰ Dominique La Fontaine.

Other abatement action included the establishment of an Energy Management Team that oversees energy procurement, efficiency and conservation, alternative energy sources, offsets and energy action plans. It also oversees an Energy Reserve Fund of \$50,000 a year which is allocated for efficiency projects not covered by other budget allocations. Currently the Council, in conjunction with energy retailer Aurora Energy, is conducting a trial of high-efficiency street lighting using compact fluorescent and T5 lamps in two locations, which will run for 18 months and will be followed by a survey of residents. Finally, under the abatement heading, Hobart has made its key event, the *Taste of Tasmania*, carbon neutral by purchasing offsets through the Australian Government *Climate Friendly* initiative.

In terms of *accounting*, Hobart attributes a good part of its success to the structured approach adopted by the CCP, and strongly recommends this program to other Councils. Hobart worked through CCP milestones 1 – 5, systematically documenting its inventory of emissions, creating a baseline forecast, for both the corporation and the community, developing and then implementing a Local Action Plan, and finally reworking its inventory to close the loop. These steps took three years to complete and culminated in a 2002 decision to graduate to the CCP-Plus program - an ongoing commitment to action on climate change.

An important element of the accounting process are the annual estimates the Council prepares of its corporate emissions and the updates of community data based on census findings from CCP. The estimates, determined using CCP software, provides valuable insight into emissions trends and therefore into opportunities to reduce community emissions through some of the other ‘As’, such as advocacy and awareness-raising, but also through a range of policies and programs. Examples of the latter include preparing (since 2001) energy efficiency guidelines for home builders and designers, and offering a range of financial incentives. For example, since 2006, energy efficient houses and extensions have been eligible for a 100 per cent rebate of the Council’s planning and building application fees. Since 2007 more than 120 ratepayers have accessed a \$500 Council rebate for installing solar hot water systems.

As a city squeezed between Mount Wellington and the Derwent Estuary, with low density and a tree and sea-change hinterland, Hobart has made sustainable transport a key focus of its climate change mitigation efforts. Starting with awareness-raising initiatives – such as sponsoring Sustainable Transport Days or Weeks – the Council has progressively:

- promoted Walking School Buses;
- prepared an Integrated Bicycle Network Plan in consultation with cycling groups;
- appointed a Sustainable Transport Officer; and
- circulated a draft Sustainable Transport Strategy for the Greater Hobart region.

The Council is also represented on a state government working group for the installation of compressed natural gas (CNG) filling at service stations in Hobart and Launceston, and has committed to the purchase of two waste removal trucks powered by CNG should the refuelling stations go ahead.

The *advocacy* and *awareness-raising* take the form of an ongoing, multi-faceted program. Areas covered are as diverse as a Bushcare Program (support for community revegetation and weed control initiatives), a Community Grants Program to support a series of community workshops on climate change (delivered by Sustainable Living Tasmania), and a ‘Beat the Winter Chills and Bills’ program, including displays and workshops for both the community and Council staff and Aldermen.

Although the reduction of both corporate and community emissions remains a key focus, in recent years there has been a growing awareness of the need to include *adaptation* strategies in the overall climate change policy mix. The Council is establishing a Climate Adaptation Team, to implement measures from the CCP Local Government Climate Adaptation Toolkit and the (former) Australian Greenhouse Office's Climate Change Adaptations Actions for Local Government guide. The Council is also supporting the *Climate Futures for Tasmania – Infrastructure* initiative - a collaborative project with the Antarctic Climate & Ecosystems CRC, infrastructure owners and engineering consultants, **Pitt & Sherry**. The project will match state-of-the-art and fine-scale (11km² grid) climate projections for Tasmania out to 2100 (prepared by the CRC) with engineering expert systems, to enable infrastructure investment decisions and management regimes to take into account future climate conditions.

Finally, Hobart City is aware that, even with its own efforts to reduce its corporate emissions and to encourage the wider Hobart community to do likewise, the challenge of climate change is wider than any one city or region. Therefore its advocacy role extends to engagement with other councils, the Local Government Association of Tasmania's Climate Change Reference Group, the Tasmanian State Climate Change Office, and a range of national and international initiatives, including *Your Home, Your Future* and ICLEI's *Local Governments for Sustainability* program. The Hobart City Council would encourage the Councils of the Greater Hobart area and across the Southern Tasmania Region, who have not already joined the CCP, to do so and is looking to working with them toward a collective community based program of climate and sustainability action.

Lord Mayor Rob Valentine believes that Hobart can not only build on its own successful initiatives in relation to climate change, but with commitment and persistence contribute to the challenges of tackling climate change faced by the entire community and indeed the globe.

12.4 Working together – The Central Victorian Greenhouse Alliance

The Central Victorian Greenhouse Alliance (CVGA) is an incorporated association (created in 2000) made up of fourteen local governments, seven important regional businesses and government and community organisations. The core objective of CVGA is to co-ordinate actions that reduce greenhouse gas emissions. CVGA activities include:

1. raising awareness of climate change;
2. initiating and co-ordinating projects;
3. facilitating networks, partnerships and corporate ventures;
4. sourcing project funding; and
5. providing a forum for discussion.

Member councils are:

Buloke Shire	Loddon Shire
Campaspe River Shire	Macedon Ranges Shire
Central Goldfields Shire	Mount Alexander Shire
City of Ballarat	Northern Grampians Shire
City of Greater Bendigo	Pyrenees Shire
Gannawarra Shire	Rural City of Ararat
Hepburn Shire	Swan Hill Rural City Council

The Central Victorian Greenhouse Alliance



Corporate members are:

Bendigo Access Employment	North Central CMA
Bendigo Bank	Origin Energy
Bendigo Health Care Group	University of Ballarat
La Trobe University	

The principal that not responding to climate change through adaptation and mitigation makes a region less competitive makes the role of CVGA increasingly important. CVGA believe that a future based on renewable energy will:

1. boost the regions competitiveness;
2. that change an innovation will improve the regions long-term sustainability;
3. create new kinds of employment and skills; and
4. enhance the local environment.

CVGA targets are to reduce greenhouse gas emissions in central Victoria to 30 per cent below 2000 levels by 2010 and then to move to zero net emissions by 2020. These targets are to be realised by a switch to renewable energy, various energy efficiency measures and sequestration.

The regions advantages are seen to be:

1. Access to renewable energy resources, particularly solar, wind and biomass;
2. Potential to sequester carbon and potential for further offsets through re-vegetation programmes;
3. Innovative communities; and
4. The capacity in terms of available space to build renewable energy generating operations.

12.4.1 The Central Victorian Solar Cities Project

The Central Victorian Solar Cities Project (managed by the CVGA consortium members) is one of seven such projects being trialled across Australia to create new approaches to energy production and consumption.

CVGA describe the benefits of the Solar Cities Project as:

1. helping reduce energy consumption;
2. to drive leading edge solar technologies;
3. to reward energy efficiency; and
4. showcase the benefits of wiser energy choices.

12.4.2 Community groups in the CVGA region

Local community action groups in the CVGA region	Description (from group websites)
<p>Bendigo Sustainability Group (BSG) www.bendigostustainability.org.au</p>	<p>Inaugural meeting held in April 2008</p> <p><i>Purpose</i></p> <ol style="list-style-type: none"> 1. To undertake actions that sustain the natural environment. 'Sustaining' is understood to mean protection and enhancement of natural environmental components or ecosystems including air, water, biodiversity and energy in a way that ensures ongoing viability of natural systems in a balanced relationship with human life. 2. To create a supportive platform of understanding, inspiration, action and hope from which the wider Bendigo Community can grow a sustainable future together. 3. Be a catalyst for sustainability action by bringing together the community and linking with and building on efforts of existing environmental groups. 4. To assist community members in undertaking bold new sustainability initiatives. 5. Be a conduit for linking and networking through information exchange (e.g. newsletter, web) and gatherings (e.g. forums, workshops, celebrations). 6. Provide inspiration and information on sustainability in the general community and to our leaders through raising awareness about both the impacts on our environment and opportunities in resolving these. 7. Assist individuals to connect with their environment and to know that they can make a difference. 8. Secure funding and human resources to assist in undertaking the organisation's activities. 9. To establish and maintain a public fund to be called the 'Sustain Bendigo Fund' for the specific purpose of supporting the environmental objects/purposes of the Bendigo Sustainability Group.
<p>Ballarat Renewable Energy and Zero Emissions Group (BREAZE) www.breaze.org.au</p>	<p>BREAZE was established in December 2006, starting with 40 members, the group has an emphasis on engaging and supporting the Ballarat community, implementing actions, working with partners and advocating government policies that embrace climate change.</p>
<p>Hepburn Renewable Energy Association (HREA) www.hrea.org.au</p>	<p>HREA is a community based, non profit association dedicated to building sustainable community connections. Established in 2005 to facilitate the creation of Australia's first community-owned wind park, HREA has become the eyes, ears and voice of sustainability in Hepburn Shire.</p>
<p>Mount Alexander Sustainability Group (MASG) www.masg.org.au</p>	<p>MASG has over 500 members: local people taking action to combat climate change. We employ four staff, supported by volunteers at the <u>MASG office in Castlemaine</u>, central Victoria.</p>

12.5 The International Energy Agency – Passive energy houses

The International Energy Agency (IEA), founded in 1974, was established within the framework of the Organisation for Economic Co-operation and development (OECD). IEA's purpose is the implementation of an international energy program.

Recommendations by the IEA to the G8 summits 2006-08 included policy measures for buildings. Buildings account for about 40 per cent of all energy use in OECD countries.

IEA's recommendations in relation to buildings were:

- building codes for new buildings to embody energy efficiency;
- passive energy houses and zero energy buildings;
- policy packages to promote energy efficient in existing buildings;
- building certification schemes; and
- energy efficiency improvements in glazed areas.

The IEA also recommended that energy utilities could play an important role in promoting end user efficient use of energy.

The IEA Information Paper, Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings, March 2008. The report is substantial, but some key points are worth noting.

1. That the energy efficiency of new buildings determines energy consumption over a long period and that improvements to energy efficiency are relatively easy at planning stage and far harder after construction is complete.
2. That energy efficiency requirements in building codes serve as efficiency targets with buyers and renters now taking a much harder look at a buildings energy consumption profile, spurring demand for energy efficient buildings.
3. Because the energy consumption of buildings is so high, at around 40 per cent of total energy use, countries can significantly reduce energy costs, cut greenhouse emissions and the need for imported energy. Energy efficiency is seen as the best way to establish energy security.
4. That energy efficiency is not just the choice of the individual owner because the energy efficiency of new buildings will last a lifetime and that lost opportunities at the construction phase will require remediation and significant additional costs at a later date.
5. New buildings are unlikely to be renovated in early use so set the benchmark for renovations which would normally aim to bring older buildings up to the present standard.
6. If incorporated into the early design stage energy efficiency measures are far cheaper, an example might be increasing the thickness of insulation layers at a marginal additional cost.

The report goes on to say that many elements influence the energy performance of a building and that building codes will usually integrate the building envelope and heating and ventilation systems, other appliances and renewable energy are rarely included. Energy requirements are primarily set for the building and building shell. The most advanced building codes include all the aspects of a buildings energy use including lighting, installed equipment and appliances as well as renewable energy options.

12.5.1 Passive energy houses

The IEA Information Paper, Energy Efficiency Requirements in Building Codes, Energy Efficiency Policies for New Buildings describes a passive house as a building in which ‘a comfortable indoor climate’ can be achieved without a traditional cooling and heating system. Passive houses use far less energy, calculated for most countries as 70 – 90 per cent less energy than a house with traditional heating and cooling systems. The first passive house was built in Darmstadt in Germany in 1990. Standards and conditions for passive house construction are set by the Passive House Institute in Darmstadt.

Passive houses must be highly insulated, designed without thermal bridges (parts of the construction that allow heat and energy to escape), triple glazing with specially treated glass, elimination of drafts to make the building airtight, with highly efficient mechanical ventilation and use innovative heating solutions such as heat exchange systems. While passive houses are a European and cool climate innovation it is none the less possible to adapt and extend the principles and ideas used in the European passive house to design and construction across Australia’s regions.

The IEA information paper reports that in parts of Southern Germany and Austria passive houses are now in sufficient supply to be available on the market and in Upper Austria passive houses have a 7 per cent share of the market for one family houses. In Upper Austria, with its relatively mild climate, there is a strong shift to low energy houses which are forecast to dominate the built domestic housing market. This shift has been driven by a strong policy to promote the construction of passive houses which include subsidies (which can only be obtained by the owner), certification schemes and a range of actions by energy agencies. Passive building construction innovation is now migrating across to public buildings, schools and offices.

What is also worthy of note is that supply firms benefit from the opportunity to develop new products to meet the demand for passive houses, these products will also have rapidly growing opportunities for export. The building trades in Austria and Germany also benefit from an increasing range of skills and knowledge which creates a value add and more opportunity to develop new skills and careers in this industry sector.

Passive houses can be different to our understanding of the definition of a zero energy building in that they are designed in detail and in their total form to be passive in the use of energy. Zero energy buildings could be traditional buildings which have undergone a retrofit of their water heating systems and electricity generation to renewable sources of energy.

Among its recommendations the IEA information paper recommends that ‘best practice and demonstration buildings such as passive houses and zero energy buildings should be encouraged and supported to help these buildings penetrate the market. National targets should be set to ensure that these buildings represent the market for new buildings in 2020.

12.5.2 A sample audit of existing housing stock (including newly built houses)

A worthwhile and informative task for councillors, senior local government executives and staff involved in building design and regulation would be to analyse a sample of housing stock within their LGA against a set of criteria to identify how many low energy/zero energy houses are present, how the actual built form complies to best practice standards, eaves, verandas, the position of buildings, use of air-conditioning, level of insulation and the number of poorly designed and inappropriate houses. Such a sample review will be an indicator as to how effective local governments have been developing a low energy housing stock for their State and Territory planning and building legislation and communities. Remember how the outcome could impact on the future competitiveness and cost structure of the local government area.

12.6 Germany: A national approach and climate change policy leadership

The impacts of climate change across Germany's regions vary significantly. Germany's relatively moderate climate may provide a greater degree of tolerance to climate change in at least some of Germany's regions. This degree of tolerance is probably not a feature for many of Australia's regions which face far harsher consequences from climate change. Germany still however faces major climate change threats which differ across lowland, inland, coastal and Alpine regions. The impact of possible drought will affect agriculture and forestry, changeable climatic conditions in the form of greater variations in climate, meaning more extreme climate events, may impair transport systems. While changes in climate will bring the kinds of health risks outlined in the 2007 *State of the Regions* (SOR) and will require closer monitoring of the nation's water supply.

The German Federal Government adopted new energy conservation regulations in April 2007, superseding the 2002 Energy Conservation Ordinance. The new energy conservation regulations make the EC Energy Performance of Buildings Directive into national law. The regulations require energy certificates for existing buildings. One aspect of the new regulations is to encourage investment and a return on investment in energy saving measures over the shorter term. This policy benefits the householder by cutting energy costs as well as achieving the goal of reduced emissions. The German Federal Government, through introducing energy certificates, believes it will stimulate investment in the construction sector and related environmental technologies and create more jobs and more highly skilled jobs in the process. The certificate will also be an important competitive instrument on the property market as energy efficiency will become a key marketing tool and an important decision-making criterion for those buying a house.

The New Energies Heating Law from 1 January 2009, mandates the installation of renewable energy technologies for the heating of all new houses. The requirement is that households meet 14 per cent of their total energy consumption from renewable energy sources. Existing houses will also be retrofitted so that achieve a minimum of 10 per cent of their heating and water heating from renewable sources. These new laws will stimulate an associated effort in further insulating houses and mean that the German Government will be providing some \$350 million Euros per annum to households towards the cost of installing the mandated renewable energy systems.

To date 24 German cities have established low emissions zones to mitigate air pollution by fine particles. The purpose of the low emissions zones is to stop cars and trucks with high emissions of fine particulate matter entering the zones. Additional zones will be added in 2009 and 2010. This policy places pressure on firms and individuals with substandard vehicles to upgrade their vehicles to more efficient forms.

The management of waste in Germany has also been a feature of the nation's environmental protection strategies. From mid 2005 untreated waste in Germany could no longer be placed in landfills. New policies stated that waste should be pre-treated by mechanical, biological methods or by incineration. Once treated waste can be placed in landfills. German policy means that ecological disasters such as leaching of toxic materials or gasses harmful to the atmosphere are avoided. The tight controls on waste management, including increasing levels of recycling, have made a significant contribution to climate protection.

Germany has been very proactive in developing policies in relation to adapting to or mitigating the impacts of climate change. It is appropriate to acknowledge Germany's leadership role. Germany has a culture of innovation and of high design and engineering standards. The German Federal Government was also quick to understand the significance of climate change at the national and international level. What is interesting is that in creating a first mover advantage in terms of climate change innovation, Germany has also had significant success in developing an export market in environmental products and services. The greatest growth in German exports over the last three years has been in the area of renewable energy manufactures and technology, rising by almost 25 per cent per annum. Demand internationally for German measurement and control systems and other environmental protection

systems means that Germany is the world leader in this sector, ahead of both the United States and Japan. Exports from Germany of environmental protection products are now around 60 billion Euros.

The chairman of Germany's Federal Environment Agency stated that 'The encouraging development in exports of environmental protection products has more than just a positive effect on international environmental protection efforts, it is beneficial to the national economy and creates jobs in Germany. This success would not be possible without demanding and progressive environmental policy'.

12.7 The cost of loss of biodiversity, climate change and conserving remaining natural habitat

Occurring in parallel with and closely related to climate change, the loss of biodiversity also represents a significant cost to the world economy, and like climate change, will have a range of serious impacts. Australia's regions have a significant opportunity to benefit from retaining existing areas of native vegetation and biodiversity as well as repairing environments that have been damaged by the practices of the past. Dr Don White, chair of the Nature Conservation Council of New South Wales, says of Australia's native forests:

"Native forests are more resilient to climate change due to their biodiversity, and they act as natural filters cleaning our air and water. Our forests continue to be destroyed for short-term gain despite their significant contribution to fighting climate change."

These forests are also important carbon sinks and studies in Australia are now starting to identify the immense value of native forests because of their capacity to sequester carbon.

The Convention on Biological Diversity (CBD) was held in Bonn, Germany in May 2008. CBD was first established at the Earth Summit in Rio de Janeiro in 1992. Leading up to this ninth conference of the parties (COP9), the German Government proposed, at a meeting of the G8+5 Environment Ministers in Potsdam, in March 2007 that a study 'The economics of ecosystems and biodiversity' should be commissioned. At the UN conference in Bonn the German Environment Minister, Sigmar Gabriel, stated that "*protecting biodiversity is one of the most important global challenges*".

The Bonn conference brought together 5,000 delegates from government, NGOs and international observers (many of these economists) and was hosted by Germany as part of the international effort to counteract the ongoing destruction of species and environment.

In the international context protecting biodiversity, as a major policy objective, sits alongside that of policies to mitigate climate change. The two issues are closely related in their capacity to create significant economic harm if policy objectives are not met.

The economics of ecosystems and biodiversity report (TEEB) can be regarded as the equivalent of climate change's Stern Report (Lord Stern is a member of the TEEB advisory board). The first part of the biodiversity report was launched at the May meeting in Bonn. In an interview on DW radio TEEB project leader Pavan Sukhdev made the following comments;

"We certainly have found that in our initial review of biomes and habitats, like forests, that there are large values being lost today, which would make a significant dent in peoples' welfare and wellbeing. We are talking about several percentage points of GDP. I will tell the conference that food and water are at risk. I will tell them that 6-8 per cent of GDP just on forests (is at risk) and this means that we are actually talking about the total livelihood of two billion of the world's poor. I will tell them that the fisheries are basically going to die out in 40 years time and that does not just mean \$80 to \$100 billion worth of lost fishing income, but also lost protein for the world's billion poorest people. How are you going to cure the problem of health for these people? How are you going to provide income and livelihood to the two billion poorest who depend on this? These are massive problems."

12.8 Potential for the growth environmental protection jobs in Australia

The October 2008 Australian Conservation Foundation (ACF) and ACTU joint report *Green Gold Rush*, October 2008, quotes from OECD, *Environmental Innovations and Global Markets*, 2008. 'For environmental technologies to penetrate and succeed in global markets, it is important that they succeed domestically. Thus, well designed environmental policies that spur innovation, and government measures that contribute to creating and consolidating domestic markets for environmental technologies constitute a success in global markets'. The ACF/ACTU report estimates that the global green products and services market will double from the current figure \$US1.4 trillion per annum to \$US2.7 trillion by 2020. The report selects six green market segments as representing major opportunities for Australian business; renewable energy, energy efficiency, sustainable water systems, biomaterials, green buildings and water and water recycling. The report estimates, that if the domestic market is supported by appropriate legislation an additional 500,000 jobs could be created by 2030 (using their business-as-usual baseline).

12.9 Summary of key points

The case studies highlight the following.

- ❑ Adaptation strategies are an increasingly important mechanism for managing future climate change impacts, and for local government, adaptation strategies require that buildings and land planning are regulated to the highest possible environmental protection standards.
- ❑ Close attention to building regulations and building efficiency regulations can bring big benefits in reducing carbon emissions. The most advanced building codes include all the aspects of a buildings energy use including lighting, installed equipment and appliances as well as renewable energy options.
- ❑ Mitigation strategies are an important component of local government action in the face of climate change.
- ❑ The importance of engaging the community in climate change mitigation strategies. The opportunities for carbon offsets and conservation and environment remediation need to be understood by the community. Local government can play a role in promoting growth in these areas.
- ❑ Local government requires a strong framework of environmental protection policy and regulation from State and Federal Governments. Local government cannot go it alone and needs a level playing field that encourages joint actions and effective and realistic funding arrangements.
- ❑ That best practice in imposing environmental protection regimes will provide opportunity for Australian businesses in both domestic and export markets. There will be a global shift of jobs to green industries as new market opportunities open up. First mover advantage and technological knowhow will be important drivers.
- ❑ There is a need to act now to avoid greater costs of remediation in the future.

APPENDIX 1

THE REGIONS REVISED

Appendix 1: The regions revised

The first *State of the Regions* report in 1998 divided Australia into 58 regions, based largely on ABS statistical divisions cobbled together with an eye as to how they would fit into the regional typology proposed in that report. Regular readers will be familiar with the regional typology.

- ❑ Core metro regions were defined as the LGAs containing the metropolitan CBDs and those of their immediate neighbours judged to be exhibiting city centre vibrancy. These regions were distinguished as areas to watch for developments in the knowledge economy.
- ❑ Production zones were defined as groups of LGAs with prominent manufacturing activities. These regions were distinguished as areas highly sensitive to the decline of manufacturing and hence to government policies to arrest this decline and to assist with restructuring.
- ❑ Dispersed metropolitan regions comprised the rest of the metropolitan areas. Being neither knowledge-economy nor manufacturing, they were basically commuter residential suburbs.
- ❑ Lifestyle regions were defined as areas depending on tourism and retirement migration for their economic development.
- ❑ Resource-based regions were defined as those depending on mining and energy production for their economic development.
- ❑ Finally, rural regions were defined as those depending on rural production for their economic development. Essentially they were a residual category of non-metropolitan regions lacking manufacturing, mining or retirement migration.

Over the decade of *State of the Regions* reports the fortunes of the different types of region have been broadly as follows.

- ❑ The core metro regions prospered. More specifically, the knowledge economy became the foundation of economic growth, and regions with knowledge-economy characteristics enjoyed rising productivity, rising incomes and a land boom.
- ❑ Neither the Commonwealth nor the state governments did much to help the production zones, which accordingly did their best to hitch their fortunes to the knowledge-economy regions. The Melbourne and Sydney production regions were particularly successful at this, resulting in transport congestion as commuter traffic increased between these regions and the metropolitan core. The Adelaide production region was less successful, simply because the Adelaide CBD was less dynamic than its Eastern and Western states counterparts. The Hunter, meanwhile, refashioned itself into a combination of a resource-based region and a provincial city pursuing the knowledge economy in its own right.
- ❑ The dispersed metropolitan regions likewise did their best to benefit from their proximity to the core metro regions with their knowledge economies. The distinction between the production and dispersed regions accordingly narrowed.
- ❑ Lifestyle regions experienced a qualified boom: a surge of construction and retirement migration feeding off the land boom in the metropolitan areas, accompanied by a lag in employment development. Given the physical attractions of these regions, it should have been relatively simple to infuse them with knowledge-economy production, but this turned out to be harder than expected. However, the Gold Coast made the transition.

- ❑ The fortunes of the resource-based regions continued to be tied to world mineral prices. Early in the decade they went through a quiet period, but recently they have boomed. Though resources are now exploited using world-class technology, the resource-based regions themselves have not become major centres for the knowledge economy – instead, the related technological developments have been developed in the world’s major innovation centres, mediated through the core metropolitan areas which are connected by air to the resource regions.
- ❑ The fortunes of the rural regions are likewise tied to international trade, but also reflect the weather. Though there has recently been a boom in world commodity prices, the benefit to Australia’s rural regions has been patchy due to the combined effects of a high exchange rate and drought. Despite a state government tradition of trying to decentralise knowledge into the country (first represented by agricultural colleges, now by dispersed universities) these regions have not become centres for the knowledge economy.

The decision ten years ago to define regions by their relationship to the knowledge economy has proved to be sound, to the point where this relationship is now dominant as a determinant of regional economic prospects. We may therefore propose a revised classification.

- ❑ Core metropolitan regions, identified by knowledge characteristics as evidenced by patent applications. These are as close as Australia gets to the knowledge regions of the global economy. Most of these regions are core metropolitan not only in the sense of being centres of the knowledge economy, but in location – by and large, Australia has not experienced the US phenomenon of the migration of the knowledge economy to selected outer suburbs.
- ❑ Lifestyle regions, related to the knowledge economy principally via tourism and retirement migration from the metropolitan areas, though often with aspirations to join the knowledge economy in their own right following the lead of Gold Coast.
- ❑ Dispersed metropolitan regions (or perhaps commuter metropolitan) – regions whose relationship to the knowledge economy is via a nearby core metropolitan area, whether by commuting or by business relationships.
- ❑ Non-metro city regions – regions whose relationship to the global knowledge economy is mediated through an independent city which does not have core metropolitan status. In descending order of 2006 population (in 000s), cities which do not meet the criteria for core metro regions are Newcastle (289 plus other urban areas in the Hunter region), Wollongong (234 plus other urban areas in the Illawarra region), Geelong (137 plus semi-urban areas nearby), Townsville (129, fairly stand-alone), Hobart (129, again fairly stand-alone), Cairns (98, plus surrounding semi-urban areas), Toowoomba (95, fairly stand-alone), Darwin plus Palmerston (90, plus semi-urban surrounding areas), Ballarat (78 plus surrounding semi-urban areas), Bendigo (76, plus considerable semi-urban development between Bendigo and Melbourne), Albury/Wodonga (73, fairly stand-alone), Launceston (71, fairly stand-alone), Mandurah (68, rapidly becoming part of Metropolitan Perth), Mackay (66, fairly stand-alone). In this list, Albury/Wodonga is something of an embarrassment due to its straddling a state boundary, which automatically places it in two regions. Where to place the city-size cut-off is a moot point, and likewise how much allowance should be for the overall urbanisation of the region and the extent of ex-urban settlement, which may have knowledge-economy characteristics. As an example, the Bendigo region may have a stronger claim to be considered a city region than the Darling Downs (Toowoomba), given that the Bendigo region includes other substantial towns and much of it is an ex-urban commuter belt for Melbourne, whereas Toowoomba is located in a region which is otherwise largely agricultural. Setting the bar at 75,000 and making no further judgements, we have Hunter, Illawarra, Vic Geelong, Queensland North, Hobart/South Tasmania, Queensland Cairns, Darling Downs, Darwin, Vic Ballarat and Vic Bendigo.

- ❑ Resource regions, taking ‘resource’ as a synonym for mining – regions (not already distinguished) in which mining and related transport, mine support and mineral processing account for a substantial proportion of employment. Not all mining regions are included: for example, NSW Hunter is an independent city, indicating that it has the urban focus to be an outpost of the knowledge economy in its own right. Resource regions, by contrast, lack such centres – though some may be developing. Their relationship to the knowledge economy is as users rather than developers.
- ❑ Rural regions, taking rural as indicating agricultural and pastoral production – regions in which rural activities account for a substantial proportion of employment. Though governments have endeavoured to provide these regions with knowledge infrastructure, they lack substantial groups of research and development personnel – at least as measured by patents issued, though individual LGAs may rank quite favourably due, perhaps, to the presence of agricultural research stations or dispersed tertiary institutions. Despite these exceptions, their relationship to the knowledge economy is mainly as users.

This classification leaves the possibility that there will be leftover regions – regions which have a mixture of lifestyle, resource, rural and ex-urban activities. We have attempted to meet this by setting the regions in a hierarchy of relationships to the knowledge economy. The result is that the residual categories (chiefly dispersed metropolitan and rural) tend to be mixed, with some members on the boundary of other region types and others quintessentially communities of commuters or farmers.

Having in mind this classification, we are in a position to review the region boundaries. The regions were last reviewed in 2001, when the number was increased to 64 and a number of boundary changes were made, mainly to reflect state planning practice. Within-region affinity was also taken into account. Two prior judgements informed the changes – regions should end at state/territory boundaries, they should not split local government areas and they should be contiguous areas with a reasonable likelihood of internal interaction. These principles remain as foundations for the present classification, and mean that many of the 2001 regions remain unchanged. However, the number has increased to 65.

The present revision of regional boundaries was precipitated by local government reform in Queensland. The reforms created several new regional councils which crossed the boundaries of our former regions. A second precipitating factor was the introduction, from 2007-08, of YOURPLACEWEB, which allows the download for nominal cost of *State of the Regions* indicators at LGA level and allows the user to create regional statistics for any group of LGAs. This means that it is no longer so crucial that the reported regions should reflect state planning regions. This increases the scope to define regions based on socio-economic affinity. A further concern was to take into account the results of the 2006 Census, reducing the size of some of the more populous regions and increasing that of the less populous. Target population ranges were adopted: for metropolitan regions 300 000 to 600 000 and in the non-metropolitan regions 100,000 to 300,000. In re-drawing the boundaries we also have in mind affinity with the regional groupings considered above. However, this was not an overarching principle. For example, placing Burdekin shire in Mackay region would have emphasised the agricultural nature of Mackay region and the city characteristics of North Queensland region, but would have flown against the linkages between Burdekin and Townsville.

The new regions reflect our population targets, with the following exceptions.

- ❑ The City of Brisbane, with over a million residents, is a single local government area and so could not be split.
- ❑ The Hunter and Illawarra regions in NSW have larger populations than we target for non-metropolitan regions, but have been treated as single regions in view of their substantial economic and social unity.

- ❑ SEQ West Moreton is a metropolitan region in that it lies within the extended SEQ metropolitan area. However it has a population more appropriate for a rural than for a metropolitan region. This has been allowed to stand, partly because much of the region is rural, and also because it has a bond of affinity – much of it consists of Ipswich and its hinterland.
- ❑ Two new Sydney regions – Eastern Beaches and Northern Beaches – have lower populations than the metropolitan target, but have been distinguished due to their strong regional identity.
- ❑ The new Queensland Resource region (97,000 population), the new NSW Far West region (96,000 population) and the WA Pilbara-Kimberley region (79,000 population) all have populations below the target minimum. These regions are already very large in area, and cannot be further enlarged without including areas with quite different characteristics.

A consequence of these targets was that one extra metropolitan region was recognised in each of SEQ and Melbourne with two extra in Sydney, largely balanced by a reduction one non-metropolitan region in each of Queensland, NSW and Victoria. The total number of regions increases to 65. It may be noted that, as a consequence of the changes to local government in Queensland, there are now five single-LGA regions (the ACT plus four in Queensland). An additional three regions comprise just two LGAs. At the other extreme, the trend towards local government amalgamation has not proceeded west of the 129th meridian and the WA Wheatbelt-Great Southern region still boasts no less than 56 LGAs.

The following regions resulted.

Australian Capital Territory

As in the 2001 review this Territory comprises a single region. Respect for state/territory boundaries precludes the recognition of a greater Canberra urban area.

New South Wales

The major change in non-metropolitan NSW has been to replace the Murray and Murrumbidgee regions with a new Riverina region. However, the western parts of these two former regions have been incorporated into an expanded Far West region, and the eastern parts into the Southern Tablelands. The original reason for distinguishing Murray and Murrumbidgee was to align with state planning regions, and as remarked in the introduction this is not now as imperative as it was in 2001. We have instead sought to define the Riverina as a farming region. We list the non-metropolitan regions of NSW from south-east via the west to the north-east.

The **NSW Illawarra** region has not been changed, and despite its increasing integration into Sydney is still defined as a centre in its own right. It is possible that its future lies as a sub-centre in a greater NSW megalopolis stretching from Canberra up the north coast. Its relationships to the knowledge economy run via Sydney.

The former NSW South East region has been expanded into **NSW Southern Tablelands** by adding several LGAs located on the south west slopes and formerly in Murray or Murrumbidgee. This region is partly rural but has been increasingly influenced by overflow from Canberra and tourism from Sydney. It is in fact a prime example of a mixed country region, with elements of rural, tourism and ex-urban activity. Its links to the knowledge economy run via both Sydney and Canberra.

NSW Riverina is a new largely rural region comprising most of the eastern parts of the former Murray and Murrumbidgee regions. For a century it has had an identity as a major part of the wheat-sheep belt, plus important irrigation areas. Its links to the knowledge economy run via its towns and research stations and links to both Melbourne and Sydney.

The former NSW Far and North West region was never very satisfactory in that it ranged from relatively well-watered hills to semi-desert. The decision has accordingly been made to create a new **NSW Far West** region characterised by low and unreliable rainfall – basically pastoral country, though with some cropping along its eastern fringe and several small irrigation areas. Both cropping and irrigation are marginal in the sense of seriously dependent on the luck of the seasons. There are mineral resources, with distant connections to the knowledge economy.

The **NSW Central West** region has been expanded to include the better-watered parts of the former Far West and North West region. It remains dependent on rain-fed agriculture. The Bathurst-Orange growth centre never became an integrated whole, and as a result the region is somewhat cut off from the knowledge economy.

The remaining NSW regions are unchanged, namely:

- ❑ **NSW North:** Like the Central West, NSW North is basically agricultural area which lacks a major independent city, and accesses the knowledge economy via research stations, the university in Armidale and the somewhat distant core metropolitan area in Sydney.
- ❑ **NSW Richmond Tweed:** This region is related to Brisbane and Sydney by tourism and retirement. In common with many resort areas it has a nascent knowledge economy.
- ❑ **NSW Mid North Coast:** This region is related mainly to Sydney by tourism and retirement, and again by the beginnings of a knowledge economy.
- ❑ **NSW Hunter:** This former production region has diversified, with a strong resources base. It is developing knowledge-economy capacity, and also has close relationships with Sydney.
- ❑ **NSW Central Coast:** Poor transport links between the Central Coast and Sydney have hampered the extension of commuting and of knowledge-based activities related to the Sydney core, and the region retains its historic identity as a tourism and retirement area.

Ever since the first *State of the Regions* report the Sydney Metropolitan Area has been notable for the wide divergence in population between its regions. We accordingly revise these towards greater equality.

The former Global Sydney region was originally delineated to emphasise the way in which Sydney was shining on both sides of the harbour. Closer examination of the pattern of patent generation has resulted in the definition of a new **Sydney Central** region, which incorporates the main spine of the former Global Sydney from Botany to Ryde, plus the harbour side portion of the former Inner West region (Canada Bay and Leichardt), less the Eastern suburbs and Mosman (which do not have as intense a level of research and development activity).

A new **Sydney Eastern Beaches** region has been split from the former Global Sydney region. It has a smaller population than we target for metropolitan regions, but is basically a commuter-residential area for the adjacent Central region. This is not to deny that it has significant knowledge-economy activity in its own right (it includes the University of NSW and has many knowledge-based businesses) but rather to note that this activity is secondary to residential and less concentrated than in Central Sydney.

The former Sydney Outer North region was a little over our target population and was split in two by Middle Harbour. The lack of road connections between the Manly-Warringah area and the rest of Sydney has resulted in the development of an unusually self-contained metropolitan community, which we now recognise as the **Sydney Northern Beaches** region. As with the Eastern Beaches, this is a region with significant knowledge-economy activity in its own right.

Sydney Outer North comprises the remainder of the former Sydney Outer North after subtraction of the northern beaches. It has a strongly growing fringe in Baulkham Hills. Though adjacent to Central Sydney, it is as yet mainly residential with quite high levels of knowledge-economy activity.

The new **Sydney Old West** region is the former Inner West significantly enlarged by the incorporation of Marrickville and Canterbury (which no longer have the distinction of being heavily oriented to manufacturing) but reduced by the transfer of Leichardt and Canada Bay to Sydney Central. It has significantly less research and development activity than the regions to its east, north and west.

Sydney Parramatta Bankstown comprises the rump of the former Sydney Mid West region, reduced in size to comparability with the other metropolitan regions. In Parramatta it centres on an unusually strong metropolitan sub-centre, though not as yet core metro. It has quite high levels of research and development activity.

Sydney Outer South West is the former Sydney Outer South West with the addition of Liverpool ex the former Mid West region. It is painfully distant from the action of Central Sydney.

Sydney Outer West is the former Sydney Outer West with the addition of Blacktown ex the former Mid West region. It is also a long, congested commute from Central Sydney.

Sydney South is unchanged, reflecting a strong regional identity. It is very much a commuter region with isolated patches of research and development activity.

Victoria

Non-metropolitan Victoria includes one region, Gippsland, which defines itself because it lies between the sea and a range of high mountains. The rest of the non-metropolitan areas of the state have fairly fluid regional boundaries. Victoria is notable for the rather limited amount of research and development activity outside the Melbourne metropolitan area. We consider the regions in an arc from north-east to south-west.

Vic North East comprises the whole of the former Ovens Hume region plus most of the former Goulburn region – i.e. apart from two shires transferred to the new Bendigo region. The former Ovens Hume and Goulburn regions were both low in population, and both included a mixture of hills and plains. The new North East region comprises those parts of Victoria north of the Dividing Range and accessed from Melbourne via Seymour – the Hume Highway. Though parts of the region are close enough to Melbourne to experience spillover effects, it is basically a rural region, accessing the knowledge economy via Melbourne.

Vic Bendigo is based on the former Loddon region but moved a little to the east, with the transfer of Central Goldfields to Ballarat and the gain of Mitchell and Campaspe from the former Goulburn region. It thus comprises the city of Bendigo plus its immediate hinterland, and the country between Melbourne and Bendigo. The region thus comprises a major provincial city plus peri-metropolitan country strongly influenced by Melbourne and Bendigo. It accesses the knowledge economy via Melbourne.

Vic Ballarat is similarly based on the former Central Highlands region with the addition of Central Goldfields, transferred from the former Loddon region. It comprises the city of Ballarat plus its immediate hinterland, and the country between Melbourne and Ballarat. Like its neighbour to the north-east, it comprises a major provincial city plus peri-metropolitan country strongly influenced by Melbourne and Ballarat, accessing the knowledge economy via Melbourne.

Vic Mallee Wimmera has been left unchanged. Though it has failed to achieve population growth, it still meets the minimum population criterion. It has a strongly rural identity, and is distant from the knowledge economy which it accesses via Melbourne.

Vic Geelong comprises the former Barwon region less all non-urban LGAs west of Geelong. These have been transferred to Victoria West. Geelong thus becomes a largely urban region, which (like Illawarra in NSW) is becoming strongly integrated with the neighbouring metropolitan area. Again like Illawarra (and unlike the Hunter region) it only just beginning to venture into knowledge economy activities in its own right.

Vic West: the former West plus several shires transferred from the former Barwon region. Though it includes a coastal strip which is a playground for Melbourne and is experiencing some semi-urban expansion from both Ballarat and Geelong, the West remains a basically rural region, distant from the knowledge economy.

Vic Gippsland is unchanged, its separate identity enforced by the Victorian Alps which separate it from the rest of the state. Because of this relative isolation, it has a strongly-developed sense of regional identity. It accesses the knowledge economy via Melbourne.

The Victorian metropolitan regions have likewise been reorganised to take into account the outwards growth of Melbourne. We start with the central region, then work round the outskirts from west to east.

Despite recent population growth in the city centre, the former Melbourne Inner region had a population towards the low end of our metropolitan target range. The new region of **Melbourne Central** has been created by adding Glen Eira to the former Melbourne Inner region. It would have been preferable to add Boroondarra, on the grounds of greater penetration of knowledge-economy activities, but this would have left Glen Eira as an isolated orphan in the system of regions.

Melbourne Mid South East is a new region incorporating parts of the former Melbourne East, Melbourne South and Westernport regions. It consists of four LGAs: Bayside, Monash, Kingston and Greater Dandenong. This region was for the most part built-up during the post war decades with much of this development targeting lower to middle income workers. The region was known for its manufacturing base but is now better known for its educational facilities and its ethnically diverse population. This region would appear to be in process of transformation from a manufacturing to a knowledge economy and has a significant level of research and development activity.

Melbourne Outer South East comprises an arc of outer suburbs, all of which were formerly included in the Westernport region. It includes a growing urban fringe with some agriculture, distant from the core metropolitan action and with a fairly low level of research and development activity.

The former Melbourne East region was way above the target population. Monash has been transferred to the new Melbourne Mid South East region and Manningham to the new Melbourne North East region. This leaves a group of commuter suburbs which were mainly built up in the forty years after the second world war: Whitehorse, Maroondah and Knox and most of Boroondarra – admittedly the core of this municipality is older. This group forms a new **Melbourne Inner East** region which is now fully built-up, is generally a residential area of moderate to high socio-economic status, and has a long established tradition of commuting to the city centre – with much of the commuting by rail. It has a moderate level of knowledge-economy activity, ramping up to fairly high in Boroondarra.

Melbourne North East is a new region comprising mainly outer suburbs in an arc to the north and east of the metropolitan area. It includes Yarra Ranges, which was previously included in the Westernport region despite a serious lack of affinity with that region, plus three other metropolitan fringe LGAs: Manningham, Nillumbik and Whittlesea. The fifth LGA included, Banyule, has recently become fully built up. This region has its outer suburban status in common, though the opportunities available in different parts of the fringe may cause it to develop in different directions: Whittlesea is well placed for transport connections to the rest of Australia, while Yarra Ranges is a cul-de-sac in the foothills of the Victorian Alps. For the present, however, the region is on the fringe of the knowledge economy.

The former **Melbourne North** region has been shifted a little to the west with the incorporation of Moonee Valley and the removal of Banyule and Nillumbik. The region still stretches from Central Melbourne to the metropolitan boundary, where vigorous growth is in progress. Formerly a manufacturing area, it now relates to knowledge core by commuting.

Similarly fringe growth has been proceeding rapidly in the former **Melbourne West** region. The region has been adjusted by transfer of Moonee Valley to Melbourne North. Formerly heavily dependent on manufacturing, the region is increasingly related to the Melbourne core by commuting. It has yet to develop significant research and development activity in its own right.

Queensland

Apart from changes made necessary by local government amalgamations, the main changes to the Queensland regions have been the creation of a single region for the sparsely-populated part of the state, and the reorganisation of regions within the state's metropolitan area. In Queensland it is no longer regarded as appropriate to talk of the Brisbane metropolitan area, but rather of the Brisbane metropolitan region, or preferably of South East Queensland (SEQ) – a mega-region with several independent urban centres. We follow this usage, and distinguish six regions within SEQ. A similar treatment in NSW would include the Illawarra, Central Coast and Hunter as part of the East Central NSW mega-region, and in Victoria would include Geelong, Ballarat and Bendigo in a Port Phillip mega-region. We consider the non-metropolitan regions first.

The former Far North Queensland region is a state planning region comprising Cairns and its hinterland. This hinterland is strongly divided into a small high rainfall area and a large monsoonal zone with relatively low rainfall. The wet part of Far North Queensland supports rain forest, intensive farming (traditionally mostly sugar) and urban development. The dry part is sparsely populated except for the Torres Strait Islands, and a high proportion of its population is indigenous. The contrast between these two areas is so strong that the region has been split, with wet part comprising the new region of **Qld Cairns**. The dry part has too small a population to stand by itself, and it has been added to the new Qld Resource region. Though it has an independent city, Qld Cairns is physically distant from the nearest core metropolitan regions far to the south. It has a moderate level of research and development activity.

Queensland North comprises the former Queensland north less the former Bowen shire, transferred to Mackay in response to local government boundary changes. This is essentially the region centred on Townsville. Like Qld Cairns it has an independent city with a reasonable track record in knowledge economy activities, but is a long way from the nearest core metropolitan region.

Queensland Mackay has been changed only to accommodate local government boundary changes, in this case a gain of the former Bowen shire from North Queensland region. It is physically distant from the nearest core metropolitan region.

Queensland Fitzroy has been revised only to accommodate local government boundary changes: it has gained the northern part of the former Taroom shire from the former Agricultural South West and the former Miriam Vale from Wide Bay Burnett, and lost the former Jericho to the new resource region. If Gladstone and Rockhampton were one urban area this region would be classified as an independent city region, but the two urban centres of the region are traditional rivals. The region accesses the knowledge economy through Brisbane.

As for the other coastal Queensland regions, **Queensland Wide Bay Burnett** has been changed only to accommodate local government boundary changes, in this case the loss of the former Miriam Vale shire to Fitzroy. Considered as a rural area this region is related to the knowledge economy via Brisbane, while considered as a tourist and retirement area (now its dominant characteristic) the region is related to more than one core region to the south.

Queensland Darling Downs is the former Agricultural South West re-named after minor boundary change – the loss of the northern part of the former Taroom shire to Queensland Fitzroy. The name Darling Downs is preferred, even though the region extends into the Brigalow, since this name draws attention to its identity as the hinterland of Toowoomba, the acknowledged capital of the downs. The region has an independent city with a reasonable track record in knowledge economy activities, and is reasonably close to the SEQ metropolitan core.

The former Queensland Pastoral and North West regions were both low in population, and had much in common with the low-density parts of the Far North. They have accordingly been amalgamated to form a single **Queensland Resource** region, which is very large in area but not in population. The region is way outback from the knowledge economy.

The recent reorganisation of local government in Queensland did not affect **SEQ Brisbane City**, which as a single LGA has to form a region by itself, as before. Taking Brisbane as a whole prevents separate identification of the smaller area which is Brisbane's core knowledge economy.

SEQ Brisbane South has been split from the former Gold Coast region to cover the southern outer suburbs of Brisbane, now incorporated as the expanded Logan City plus Redland. Though still heavily dependent on commuting, these suburbs are beginning to be directly involved in the knowledge economy.

SEQ Gold Coast thus becomes a single-LGA region, comprising Gold Coast city. This is an up-and-coming knowledge economy in its own right – the first in Australia to have been developed wholly since the coming of the motor vehicle, and hence the closest Australian approximation to a US-type edge city.

SEQ Moreton Bay comprises the former Brisbane North region, unchanged in area but now a single LGA, and still heavily dependent on commuting. It has a moderate level of research and development activity.

SEQ Sunshine Coast is the former Sunshine Coast region, unchanged in area but now a single LGA. It has ambitions to follow the Gold Coast into the knowledge economy, but as yet relates to that economy chiefly through tourism and retirement.

SEQ West Moreton has been revised only to accommodate local government boundary changes. It gains the southern part of the former Beaudesert shire (ex the former Gold Coast region), and remains centred on Ipswich. Apart from the branches of the University of Queensland, it has been slow to engage with the knowledge economy.

South Australia

In the three eastern states so far reviewed a region has been transferred from the non-metropolitan to the metropolitan area. Metropolitan growth in South Australia has been relatively subdued, so the former distribution of three metropolitan and three country regions remains. Again, judged by patent applications South Australia has been slow to avail itself of the opportunities of the knowledge economy, particularly outside central Adelaide. We take the opportunity to redefine the state's regions, and also to align them more closely with the pattern of knowledge activity.

The former SA South East was a low-population region, so the Mallee LGAs to the immediate north have been added from the former Murraylands region, plus Kangaroo Island to form a new region, SA **Mallee-South East**. This remains a rural region with a low level of research and development.

The northward extension of Mallee-South East reduces the size of the Murraylands region, leaving essentially the Riverland component. These Riverland LGAs have been added to the rural LGAs north of Adelaide which were previously in SA Eyre and Yorke to create a new SA **Mid North Riverland** region. This new region also includes essentially rural LGAs formerly in Adelaide Plains and Barossa LGA formerly in Adelaide Outer. This region again has a low level of research and development activity.

With these transfers to Mid North Riverland, the former Eyre and Yorke region is reduced to the SA West Coast, the Iron Triangle and the remote north. The reduced region (which has a population similar to Mallee South East) has been named SA **Spencer Gulf**. This again is a region with a low level of knowledge economy activity, sourcing its knowledge requirements via Adelaide.

The boundaries of Adelaide Central have been redrawn to include the main LGAs generating patent applications in South Australia. Campbelltown and Prospect have been replaced by West Torrens to create a new **Adelaide Inner** region. The eight LGAs in this region account for a high proportion of total South Australian patent applications.

The northern suburbs of Adelaide, all of which were included in the former Adelaide Plains region are a former manufacturing region which has made a very troubled and tentative transition towards the knowledge economy. The former region has been trimmed by the transfer of Mallala and Light (on its outer northern fringe) to Mid North Riverland, and by the transfer of West Torrens to Adelaide Inner. On the other hand, Campbelltown, Prospect and Tea Tree Gully have been added. The seven LGAs of the **Adelaide North** region thus formed are notable for a low level of patent applications, despite efforts to integrate them into the knowledge economy.

The former Adelaide Outer has been reduced by the transfer of Barossa to the new Mid North Riverland region. The remainder, now renamed **Adelaide South**, comprises the hill suburbs of Adelaide and adjacent exurban areas, partly commuter but with retirement and tourism characteristics. The level of research and development activity is generally low.

Western Australia

As already remarked, Western Australia retains its established local government boundaries, so no reorganisation of regions has been required on that account. Again, the regions meet our population criteria, except for Pilbara Kimberley, which has been treated as a special case. Accordingly change has been minimal.

WA Gascoyne Goldfields remains unchanged as a resource-based region. It has a moderate level of research and development activity, but is otherwise related to the knowledge economy via Perth.

WA Peel South West remains unchanged, despite the incursion of the Perth Metropolitan area across its northern boundary and the mixture of resource-based, rural and lifestyle activities carried out in the rest of the region. It has attracted a moderate level of knowledge-based activity, and relates to the knowledge economy via Perth.

WA Pilbara Kimberley remains unchanged as a resource-based region with little knowledge-based activity in its own right. The nearest core metropolitan areas are a long way away in Perth, and there is not much formal research and development activity.

WA Wheatbelt-Great Southern remains unchanged as a rural region. It has a moderate level of knowledge-based activity spread through its small-population LGAs, but otherwise relies on Perth.

Perth Central remains unchanged except that the region now includes Melville – a change which recognises the spread of research and development into that LGA. It is the core of the knowledge economy in Western Australia.

Perth Outer North is unchanged as a commuter region with a respectable level of research and development activity in its own right.

Perth Outer South is also unchanged save for the transfer of Melville to Perth Central. It has its own quite high level of knowledge activity.

Tasmania

There was no need to make any changes in Tasmania, where the three regions correspond to the three parts of the island commonly recognised.

Tasmania Hobart South is unchanged, though no longer classified as core metropolitan due to its lack of intensive research and development activity. Hobart is an independent city but not an overall knowledge hub, whatever may be true in specialised areas.

Tasmania North is unchanged. Launceston is below our population hurdle for an independent city, but the region has some city-region characteristics. Thanks to Bass Strait, the region is effectively distant from the nearest core metropolitan region.

Tasmania North West is likewise unchanged, and likewise remains a largely rural/resource based region distant from the nearest core metropolitan area.

Northern Territory

There was again no need to make any changes in the Northern Territory.

NT Darwin is unchanged, though no longer classified as core metropolitan. Its nearest (albeit distant) knowledge economy hub is Singapore.

NT Lingiari is likewise unchanged, though local government reform has considerably changed the list of constituent councils. The region has little knowledge-economy activity.

A1.1 Regional classification

The regions have been allocated as follows.

Knowledge-intensive regions

Six capital city core regions: ACT, Sydney Central, Melbourne Central, SEQ Brisbane City, Adelaide Inner and Perth Central, plus SEQ Gold Coast, Sydney Northern Beaches, Sydney Eastern Beaches, Sydney Parramatta-Bankstown and Melbourne Inner South East. (11)

Lifestyle regions

NSW Mid North Coast, NSW Richmond Tweed, NSW Central Coast, Qld Sunshine Coast, Qld Wide Bay Burnett. (5)

Dispersed metro

Sydney Old West, Sydney Outer North, Sydney Outer West, Sydney Outer South West, Sydney South, Melbourne West, Melbourne North, Melbourne North East, Melbourne East, Melbourne Outer South East, SEQ South, SEQ Moreton Bay, SEQ West Moreton, Adelaide North, Adelaide South, Perth Outer North and Perth Outer South. (17)

Independent city

NSW Hunter, NSW Illawarra, Victoria Geelong, Victoria Ballarat, Victoria Bendigo, Queensland North, Queensland Cairns, Queensland Darling Downs, Tasmania Hobart and NT Darwin. (10)

Resource-based

NSW Far West, Queensland Resource, Queensland Fitzroy, SA Spencer Gulf, WA Pilbara Kimberley, WA Gascoyne Goldfields and NT Lingiari. (7)

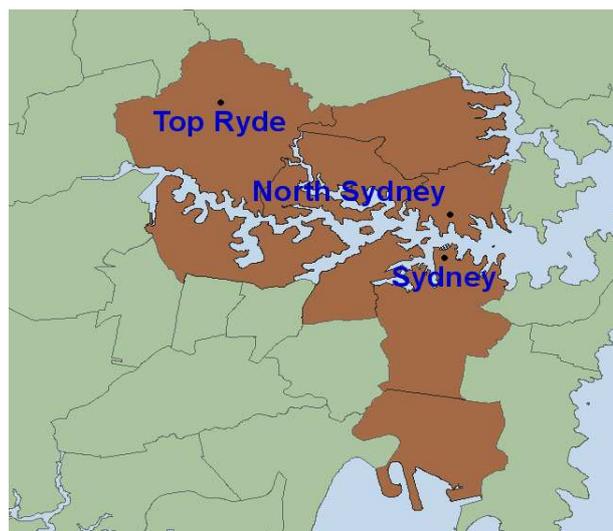
Rural

NSW North, NSW Central West, NSW Riverina, NSW Southern Tablelands, Victoria North East, Victoria Mallee Wimmera, Victoria West, Victoria Gippsland, Queensland Mackay, SA Mallee South East, SA Mid North Riverlands, WA Wheatbelt Great Southern, WA Peel South West, Tasmania North and Tasmania North West. (15)

APPENDIX 2

REGIONAL INDICATORS

Sydney Central



Sydney Central clusters around the middle reaches of Port Jackson – the area of the old port plus the steep slopes and ridgetops overlooking the harbour. The region extends south through an area of former factories, now largely redeveloped to offices and flats, then further south to the shore of Botany Bay, where Sydney port and airport share a cramped site. The port of Sydney has abandoned its even more cramped former harbourside site, making way for considerable office, entertainment and high-rise residential redevelopment. This has extended the Sydney CBD westward, providing an additional axis to the older line of business developments along the north shore ridge. The two lines of extension come together again at Ryde, where Macquarie University catalysed the development of knowledge-economy businesses. The region also boasts an older and larger knowledge economy precinct around Sydney University at the south-western end of the CBD.

Major centres:

Sydney, North Sydney, Top Ryde

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	568	579	589	599	609	621	2.0%	1.7%	1.7%	1.6%	2.1%	1.8%	1.9%
Households	212	216	219	221	222	224	2.0%	1.7%	0.9%	0.5%	0.8%	1.5%	0.6%
NIEIR Workforce	322	329	338	350	361	367	2.2%	2.7%	3.5%	3.1%	1.8%	2.8%	2.5%
NIEIR Employment	307	314	324	337	348	356	2.4%	3.2%	3.9%	3.2%	2.3%	3.2%	2.7%
NIEIR Unemployment	14.6	14.3	13.3	12.5	12.8	11.4	-1.7%	-7.2%	-5.8%	2.2%	-11.2%	-4.9%	-4.8%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	4.5%	4.4%	3.9%	3.6%	3.5%	3.1%	-0.2	-0.4	-0.4	0.0	-0.5	-0.3	-0.2
Headline Unemployment	4.3%	4.2%	3.7%	3.5%	3.5%	3.1%	-0.1	-0.5	-0.2	0.0	-0.4	-0.3	-0.2
NIEIR Structural U/E	7.4%	7.1%	6.8%	6.3%	6.1%	5.9%	-0.3	-0.3	-0.5	-0.1	-0.2	-0.4	-0.2

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	16,660	17,318	18,766	19,558	20,423	21,227	29,324	29,894	31,864	32,664	33,559	34,169	5.5%	4.2%
Taxes Paid	5,739	5,962	6,605	6,861	7,287	7,679	10,101	10,291	11,215	11,459	11,973	12,361	6.1%	5.8%
Benefits	1,658	1,810	1,890	1,818	1,852	1,873	2,918	3,124	3,210	3,036	3,043	3,015	3.1%	1.5%
Business Income	2,835	3,082	3,231	3,445	3,567	3,739	4,989	5,321	5,487	5,753	5,861	6,018	6.7%	4.2%
Interest Paid	1,313	1,741	2,142	2,558	3,180	4,046	2,312	3,005	3,637	4,273	5,226	6,512	24.9%	25.8%
Property Income	4,562	5,264	5,836	6,282	6,874	8,037	8,030	9,086	9,910	10,491	11,296	12,937	11.3%	13.1%
Disposable Income	20,343	21,543	23,013	23,857	25,761	27,193	35,807	37,188	39,076	39,844	42,330	43,772	5.5%	6.8%
Rank							4	5	4	4	3	4		
%Rank #1							89%	86%	84%	84%	84%	82%		
Business Value Added	19,495	20,400	21,997	23,003	23,990	24,966	34,314	35,214	37,351	38,417	39,420	40,187	5.7%	4.2%
Rank							2	3	2	2	2	2		
%Rank #1							99%	97%	96%	95%	97%	96%		
Business Productivity							62,656	64,046	67,060	67,508	68,201	69,368	2.5%	1.4%
Rank							3	5	4	4	4	4		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Sydney Central

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.08%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	2.07%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.04%	0.08%
Parenting Payment - Single (aged 25+)	0.08%	0.19%
Unemployed Long Term	0.55%	1.52%
Unemployed Short Term	0.71%	1.26%
Youth Allowance - Non Student	0.55%	0.78%
Youth Allowance Student	0.09%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	8.1%	61
2004	8.4%	61
2005	8.2%	61
2006	7.6%	61
2007	7.2%	61
2008	6.9%	60

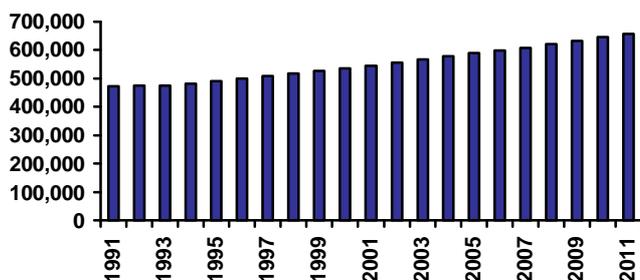
BABY BOUNCE

	Per cent	Rank
2002	1.12%	56
2003	1.14%	53
2004	1.15%	53
2005	1.19%	44
2006	1.27%	37
2007	1.28%	35
Bounce 2005-06	0.08%	3
Actual Change 2005-06 (Number)	589	2
Bounce 2006-07	0.01%	25
Actual Change 2006-07 (Number)	185	18

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	14
Aged migration	0.0	55
Population growth rate, 55+	0.0	62
Demographic stress	-0.3	63
Dominant locations	0.9	21
Family / Youth migration	36.0	17
Fertility bounce, 1996-2005	0.0	2
Fertility, babies % pop, 2005	0.0	45
Working elderly	0.3	19
SUSTAINABILITY SCORE	73.7	21

Population Profile



POPULATION

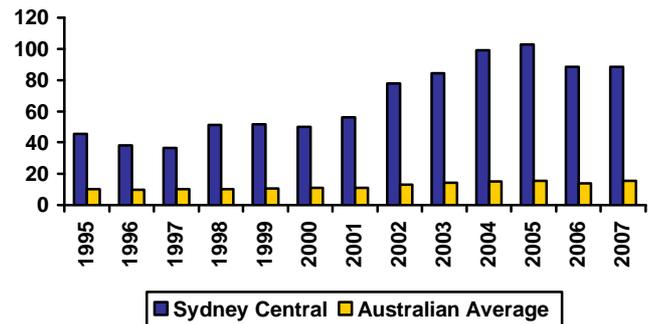
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	473	475	476	481	490	500	508	517	527	535	545	556	568	579	589	599	609	621	633	645	657

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	378.00	46.56	1
Average p.a. per capita	68.14	12.58	1
Hi Tech p.a. (1994-2007)	155.82	12.70	1
Hi Tech p.a. per capita	28.04	3.15	1
Info. Tech p.a. (1994-2007)	80.18	4.98	1
Info. Tech p.a. per capita	14.19	1.17	1
Average per capita (1994-2001)	50.87	10.80	1
Average per capita (2001-2007)	89.24	14.68	1
2001-07 avg./1994-01 avg.	1.75	1.35	3

Note: Per capita = 100,000 people

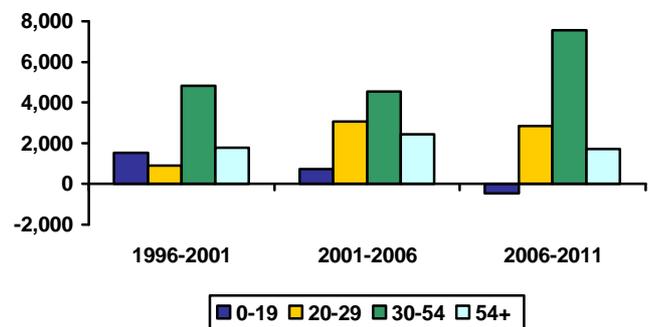
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	21.0%	20.6%	19.4%	17.3%
Age 20-29	18.8%	18.1%	19.0%	19.5%
Age 30-54	38.9%	40.1%	40.3%	42.5%
Age 55+	21.3%	21.1%	21.3%	20.7%
Population Change (average between years)				
Age 0-19		1,507	750	-456
Age 20-29		905	3,056	2,840
Age 30-54		4,839	4,546	7,558
Age 55+		1,763	2,442	1,696
Average Annual Growth		1.7%	1.9%	1.9%

Population Change by Age Group



Sydney Central

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	773	807	4	7	61%	60%
Value of Property and Unincorporated Business	557	548	5	5	69%	68%
Value of Financial Assets	289	454	13	11	47%	60%
Value of Household Liabilities	73	195	24	60	146%	260%
Disposable Income after Debt Service Costs	82	92	6	6	73%	76%
Household Debt Service Ratio	10%	22%	5	30	136%	152%
Household Debt to Gross Income Ratio	0.72	1.45	5	30	136%	152%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	31,524	37,232	16,230	7,662	6,635	8,204
20 to 29		27,065	19,964	31,310	31,490	26,197
30 to 54		83,173	58,191	33,809	24,726	28,067
55+		87,512	14,949	8,284	2,265	14,279

Note: This data has been benchmarked to the Estimated Residential Population.

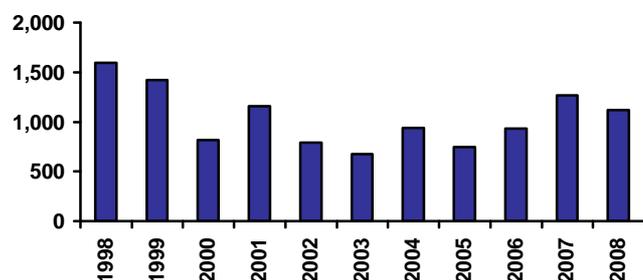
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	1,536	1,601	987	990	744	-43%
Non Residential	2,505	1,860	1,914	2,177	1,758	5%
Total	4,040	3,461	2,902	3,167	2,502	-17%
Value per capita \$2005/06						
Residential	2,844	2,752	1,622	1,593	1,175	-47%
Non Residential	4,657	3,188	3,146	3,505	2,776	-1%
Total	7,501	5,940	4,768	5,098	3,951	-22%
Rank (value per capita)						
Residential	3	5	23	25	28	
Non Residential	3	5	4	3	2	
Total	1	2	6	3	3	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,594	1,423	820	1,160	792	677	936	747	931	1,268	1,117
Rank	5	12	28	10	14	26	16	28	11	8	17

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	21.6	23.3	23.4	23.0	22.8	22.3
Rank	31	32	30	36	38	39

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	4535
Rank	1

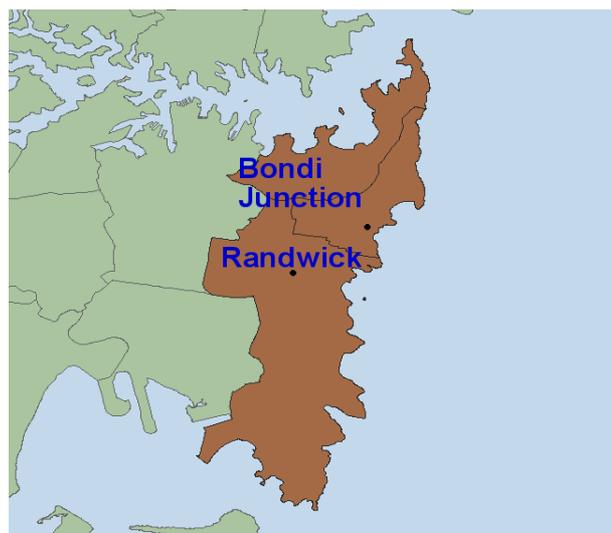
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	152	156	155
Mining	406	512	526
Manufacturing	4,688	5,202	5,335
Utilities	56	61	77
Construction	2,506	2,519	2,611
Wholesale	10,553	11,884	11,865
Retail	6,256	6,895	5,483
Hospitality	650	637	1,956
Transport	390	2,014	2,086
Communication	416	665	690
Finance	15,182	18,404	18,739
Property & Business	8,361	18,278	15,998
Government	413	403	405
Education	621	629	674
Health & Community	1,214	1,652	1,706
Cultural & Recreational	1,037	1,537	3,527
Personal Services	1,207	1,843	2,071

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Sydney Eastern Beaches



The ocean beaches between Port Jackson and Botany Bay are backed by cliffs and sandstone hills which, being unsuitable for factories, were developed as residential areas. They remain residential with some of them very up market indeed, and most of them undergoing gradual redevelopment at increasing density. The region is mainly a commuter zone for Sydney Central, though it has its own knowledge-economy hub at the University of New South Wales.

Major centres:

Bondi Junction, Randwick

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	242	242	242	244	247	249	-0.1%	0.3%	0.8%	1.1%	0.9%	0.3%	1.0%
Households	88	88	89	89	90	90	0.3%	0.7%	0.5%	0.4%	0.2%	0.5%	0.3%
NIEIR Workforce	136	136	138	140	140	142	0.3%	1.2%	1.5%	0.5%	1.6%	1.0%	1.0%
NIEIR Employment	129	130	132	135	135	138	1.3%	1.6%	1.8%	0.5%	2.1%	1.5%	1.3%
NIEIR Unemployment	6.9	5.7	5.2	4.9	4.8	4.2	-18.0%	-8.1%	-6.1%	-1.5%	-13.2%	-10.9%	-7.6%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	5.1%	4.2%	3.8%	3.5%	3.4%	2.9%	-0.9	-0.4	-0.3	-0.1	-0.5	-0.5	-0.3
Headline Unemployment	5.0%	4.0%	3.4%	3.1%	3.1%	2.6%	-1.0	-0.6	-0.3	0.0	-0.5	-0.6	-0.3
NIEIR Structural U/E	6.3%	5.9%	5.6%	5.3%	5.4%	5.2%	-0.4	-0.3	-0.3	0.0	-0.1	-0.3	-0.1

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	6,759	7,008	7,533	7,862	8,030	8,350	27,968	29,016	31,097	32,209	32,524	33,510	5.2%	3.1%
Taxes Paid	2,382	2,488	2,799	2,949	3,003	3,153	9,855	10,302	11,555	12,081	12,161	12,655	7.4%	3.4%
Benefits	682	733	748	716	727	731	2,821	3,035	3,089	2,933	2,945	2,933	1.7%	1.0%
Business Income	1,633	1,761	1,939	2,024	2,038	2,122	6,757	7,291	8,005	8,293	8,253	8,515	7.4%	2.4%
Interest Paid	506	673	832	997	1,244	1,577	2,094	2,788	3,433	4,085	5,038	6,330	25.4%	25.8%
Property Income	3,029	3,447	3,850	4,048	4,328	5,094	12,534	14,271	15,891	16,584	17,530	20,443	10.2%	12.2%
Disposable Income	9,751	10,412	11,259	11,590	12,370	13,381	40,349	43,108	46,478	47,479	50,100	53,702	5.9%	7.5%
Rank							1	1	1	1	1	1		
%Rank #1							100%	100%	100%	100%	100%	100%		
Business Value Added	8,392	8,769	9,472	9,887	10,068	10,472	34,725	36,307	39,103	40,502	40,778	42,026	5.6%	2.9%
Rank							1	1	1	1	1	1		
%Rank #1							100%	100%	100%	100%	100%	100%		
Business Productivity							64,147	66,197	70,470	72,254	73,176	74,546	4.0%	1.6%
Rank							1	1	1	1	1	1		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Sydney Eastern Beaches

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.08%	0.11%
Disability Support (aged 21-24)	0.08%	0.12%
Disability Support (aged 25+)	1.69%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.08%	0.19%
Unemployed Long Term	0.64%	1.52%
Unemployed Short Term	0.56%	1.26%
Youth Allowance - Non Student	0.50%	0.78%
Youth Allowance Student	0.08%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	7.0%	65
2004	7.0%	64
2005	6.6%	65
2006	6.2%	65
2007	5.9%	65
2008	5.5%	65

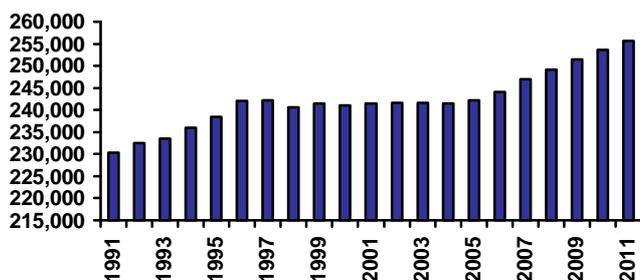
BABY BOUNCE

	Per cent	Rank
2002	1.09%	61
2003	1.11%	56
2004	1.13%	56
2005	1.18%	51
2006	1.26%	38
2007	1.40%	15
Bounce 2005-06	0.08%	1
Actual Change 2005-06 (Number)	227	20
Bounce 2006-07	0.14%	1
Actual Change 2006-07 (Number)	385	6

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.8	55
Share of population under 55	0.8	24
Aged migration	0.0	59
Population growth rate, 55+	0.0	65
Demographic stress	-0.2	51
Dominant locations	0.8	27
Family / Youth migration	12.0	28
Fertility bounce, 1996-2005	0.0	1
Fertility, babies % pop, 2005	0.0	44
Working elderly	0.3	18
SUSTAINABILITY SCORE	65.5	28

Population Profile



POPULATION

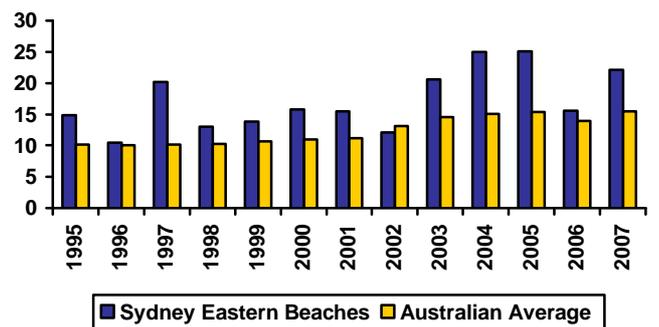
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	230	232	234	236	238	242	242	241	241	241	241	242	242	242	242	244	247	249	251	254	256

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	42.70	46.56	21
Average p.a. per capita	17.66	12.58	10
Hi Tech p.a. (1994-2007)	17.47	12.70	12
Hi Tech p.a. per capita	7.21	3.15	6
Info. Tech p.a. (1994-2007)	7.84	4.98	12
Info. Tech p.a. per capita	3.23	1.17	4
Average per capita (1994-2001)	14.45	10.80	11
Average per capita (2001-2007)	20.52	14.68	11
2001-07 avg./1994-01 avg.	1.42	1.35	20

Note: Per capita = 100,000 people

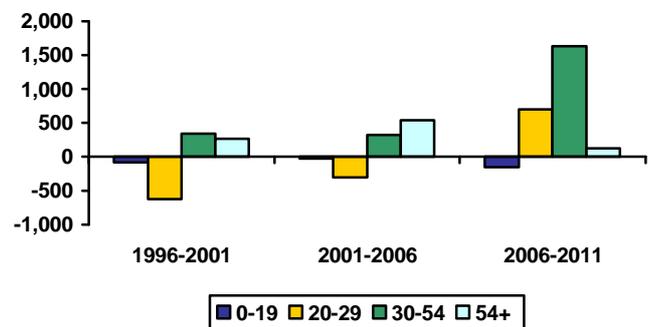
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	21.1%	20.9%	20.7%	19.4%
Age 20-29	19.5%	18.3%	17.5%	18.0%
Age 30-54	37.5%	38.3%	38.5%	40.0%
Age 55+	21.9%	22.5%	23.4%	22.5%
Population Change (average between years)				
Age 0-19		-87	-28	-155
Age 20-29		-625	-298	703
Age 30-54		337	317	1,636
Age 55+		260	537	122
Average Annual Growth		0.0%	0.2%	0.9%

Population Change by Age Group



Sydney Eastern Beaches

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	1261	1352	1	1	100%	100%
Value of Property and Unincorporated Business	810	800	1	1	100%	100%
Value of Financial Assets	516	749	3	2	84%	99%
Value of Household Liabilities	65	197	16	61	129%	263%
Disposable Income after Debt Service Costs	100	121	4	2	89%	99%
Household Debt Service Ratio	7%	18%	1	6	100%	122%
Household Debt to Gross Income Ratio	0.53	1.16	1	6	100%	122%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	13,234	16,380	7,484	2,787	3,131	3,782
20 to 29		11,408	9,446	9,387	12,477	8,746
30 to 54		33,430	23,372	10,382	10,126	11,511
55+		40,436	6,633	2,155	897	6,905

Note: This data has been benchmarked to the Estimated Residential Population.

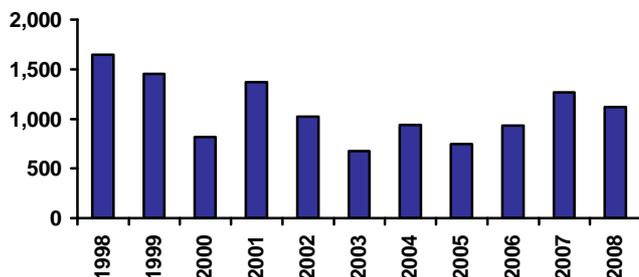
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	356	307	331	298	219	-8%
Non Residential	167	330	177	149	105	-57%
Total	522	637	508	447	324	-33%
Value per capita \$2005/06						
Residential	1,474	1,266	1,340	1,196	872	-10%
Non Residential	690	1,362	716	596	417	-58%
Total	2,164	2,629	2,056	1,792	1,289	-35%
Rank (value per capita)						
Residential	22	41	34	43	44	
Non Residential	22	41	51	58	59	
Total	22	20	42	49	55	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,646	1,452	818	1,367	1,025	677	936	747	931	1,268	1,117
Rank	4	10	29	3	5	26	16	28	11	8	17

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	21.6	23.3	23.4	23.0	22.8	22.3
Rank	31	32	30	36	38	39

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	466
Rank	18

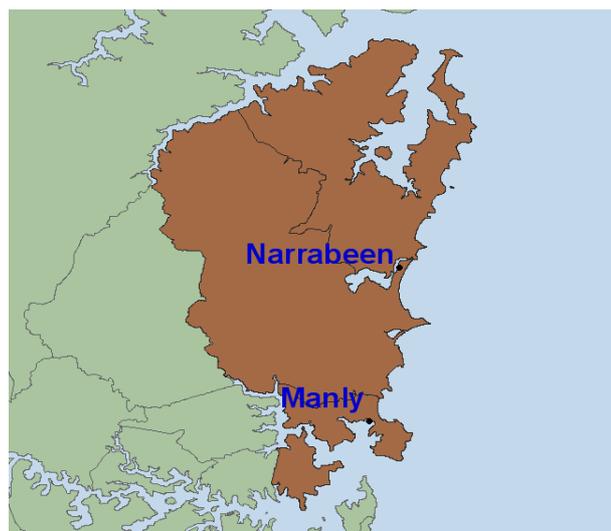
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	27	26	27
Mining	26	27	26
Manufacturing	443	509	518
Utilities	0	0	0
Construction	577	573	588
Wholesale	1,744	1,862	1,869
Retail	1,305	1,467	1,161
Hospitality	101	101	349
Transport	54	255	256
Communication	40	56	61
Finance	2,641	2,883	2,915
Property & Business	1,259	2,248	1,682
Government	29	30	29
Education	137	135	142
Health & Community	428	532	541
Cultural & Recreational	230	292	642
Personal Services	264	371	410

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Sydney Northern Beaches



The ocean beaches between Port Jackson and Broken Bay are similar to those south of Port Jackson in the same iconic Sydney way, complete with backing sandstone escarpment. However, there is a crucial difference: they are cut off from the Sydney CBD, not only by Port Jackson, but by the equally deep sandstone gulch of Middle Harbour. Road capacity between the region and the rest of Sydney is very constrained, and there is no rail connection. The result is an unusually self-contained metropolitan community, with a fair level of knowledge-economy activity in its own right. However, the region still depends at core on commuting to Sydney Central. The region also includes Mosman, which lies between the Northern Beaches proper and Sydney Central, but is distinguished from Sydney Central by being largely residential.

Major centres:

Manly, Narrabeen

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	260	260	261	263	265	268	0.1%	0.4%	0.7%	1.0%	1.1%	0.4%	1.0%
Households	91	92	93	93	94	94	0.8%	0.8%	0.6%	0.4%	0.5%	0.8%	0.4%
NIEIR Workforce	144	145	146	148	151	153	0.5%	1.1%	1.1%	1.8%	1.9%	0.9%	1.9%
NIEIR Employment	139	140	142	143	146	149	0.7%	1.2%	1.2%	2.0%	1.9%	1.0%	2.0%
NIEIR Unemployment	4.9	4.7	4.5	4.5	4.2	4.3	-5.6%	-2.5%	-1.7%	-5.1%	1.3%	-3.3%	-1.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	3.4%	3.2%	3.1%	3.0%	2.8%	2.8%	-0.2	-0.1	-0.1	-0.2	0.0	-0.1	-0.1
Headline Unemployment	2.9%	2.7%	2.7%	2.7%	2.4%	2.3%	-0.2	0.0	0.0	-0.3	-0.1	-0.1	-0.2
NIEIR Structural U/E	4.0%	4.0%	3.8%	3.6%	3.7%	3.6%	0.0	-0.2	-0.2	0.2	-0.1	-0.2	0.0

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	7,408	7,669	8,186	8,419	8,687	8,958	28,535	29,499	31,369	32,039	32,747	33,406	4.4%	3.2%
Taxes Paid	2,506	2,622	2,851	2,950	3,063	3,206	9,654	10,087	10,924	11,227	11,546	11,957	5.6%	4.3%
Benefits	691	754	777	745	758	764	2,662	2,899	2,977	2,836	2,856	2,847	2.5%	1.2%
Business Income	1,384	1,496	1,497	1,559	1,587	1,667	5,333	5,756	5,737	5,935	5,982	6,215	4.0%	3.4%
Interest Paid	573	762	941	1,128	1,410	1,750	2,207	2,931	3,605	4,295	5,315	6,528	25.3%	24.5%
Property Income	2,772	3,213	3,539	3,782	4,111	4,898	10,679	12,359	13,561	14,392	15,498	18,267	10.9%	13.8%
Disposable Income	9,850	10,508	11,115	11,397	12,302	13,318	37,942	40,423	42,594	43,375	46,373	49,666	5.0%	8.1%
Rank							2	2	2	2	2	2		
%Rank #1							94%	94%	92%	91%	93%	92%		
Business Value Added	8,792	9,165	9,683	9,978	10,274	10,625	33,869	35,255	37,106	37,974	38,729	39,621	4.3%	3.2%
Rank							3	2	3	3	3	3		
%Rank #1							98%	97%	95%	94%	95%	94%		
Business Productivity							62,223	64,434	67,360	68,589	69,204	70,209	3.3%	1.2%
Rank							4	3	2	2	2	3		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Sydney Northern Beaches

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.09%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	1.14%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.09%	0.19%
Unemployed Long Term	0.60%	1.52%
Unemployed Short Term	0.29%	1.26%
Youth Allowance - Non Student	0.31%	0.78%
Youth Allowance Student	0.03%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	7.0%	63
2004	7.2%	63
2005	7.0%	63
2006	6.5%	63
2007	6.2%	63
2008	5.7%	64

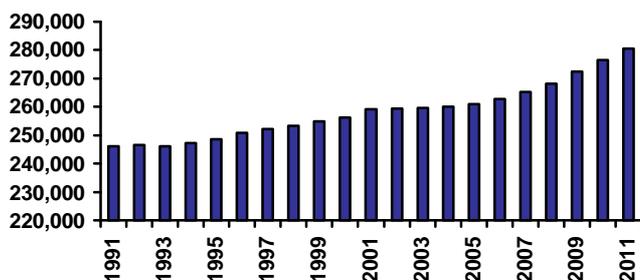
BABY BOUNCE

	Per cent	Rank
2002	1.26%	31
2003	1.28%	28
2004	1.28%	28
2005	1.31%	26
2006	1.38%	21
2007	1.43%	13
Bounce 2005-06	0.07%	5
Actual Change 2005-06 (Number)	209	24
Bounce 2006-07	0.05%	16
Actual Change 2006-07 (Number)	163	20

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	36
Aged migration	0.0	41
Population growth rate, 55+	0.0	56
Demographic stress	-0.1	39
Dominant locations	1.0	1
Family / Youth migration	24.0	22
Fertility bounce, 1996-2005	0.0	6
Fertility, babies % pop, 2005	0.0	22
Working elderly	0.3	10
SUSTAINABILITY SCORE	75.3	16

Population Profile



POPULATION

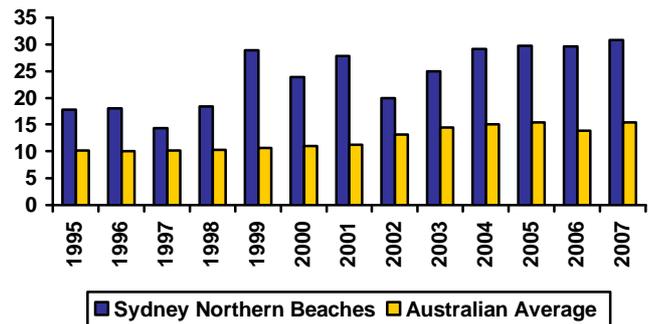
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	246	247	246	247	249	251	252	253	255	256	259	259	260	260	261	263	265	268	272	277	281

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	63.35	46.56	14
Average p.a. per capita	24.61	12.58	7
Hi Tech p.a. (1994-2007)	16.49	12.70	14
Hi Tech p.a. per capita	6.38	3.15	8
Info. Tech p.a. (1994-2007)	7.86	4.98	11
Info. Tech p.a. per capita	3.02	1.17	6
Average per capita (1994-2001)	21.15	10.80	6
Average per capita (2001-2007)	27.91	14.68	8
2001-07 avg./1994-01 avg.	1.32	1.35	33

Note: Per capita = 100,000 people

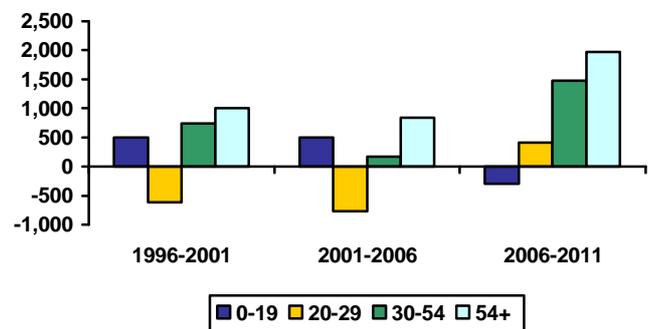
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	24.4%	24.5%	25.1%	23.0%
Age 20-29	14.4%	12.7%	11.1%	11.1%
Age 30-54	37.8%	38.0%	37.8%	38.1%
Age 55+	23.5%	24.7%	25.9%	27.8%
Population Change (average between years)				
Age 0-19		496	497	-292
Age 20-29		-611	-764	413
Age 30-54		741	167	1,471
Age 55+		1,008	835	1,972
Average Annual Growth		0.6%	0.3%	1.3%

Population Change by Age Group



Sydney Northern Beaches

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	1163	1235	2	2	92%	91%
Value of Property and Unincorporated Business	780	726	2	2	96%	91%
Value of Financial Assets	459	733	6	3	75%	97%
Value of Household Liabilities	76	223	28	64	151%	298%
Disposable Income after Debt Service Costs	102	122	3	1	91%	100%
Household Debt Service Ratio	8%	20%	3	16	114%	136%
Household Debt to Gross Income Ratio	0.60	1.30	3	16	114%	136%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	17,429	25,687	9,724	4,536	3,040	2,750
20 to 29		12,418	7,515	7,607	4,933	3,385
30 to 54		43,610	21,700	15,255	8,850	6,211
55+		50,386	7,192	4,573	897	5,061

Note: This data has been benchmarked to the Estimated Residential Population.

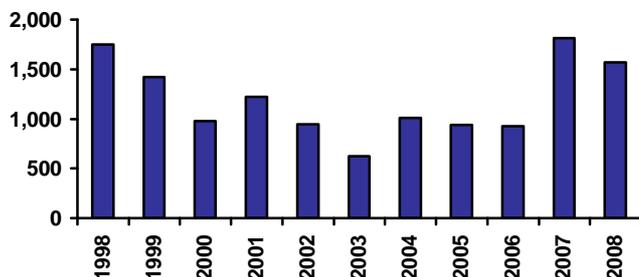
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	329	361	264	289	237	-27%
Non Residential	172	154	156	197	170	13%
Total	500	515	419	486	407	-15%
Value per capita \$2005/06						
Residential	1,277	1,386	994	1,079	869	-29%
Non Residential	669	591	587	733	623	10%
Total	1,946	1,977	1,581	1,812	1,492	-18%
Rank (value per capita)						
Residential	31	36	52	47	45	
Non Residential	31	36	58	46	36	
Total	33	42	57	47	43	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,749	1,424	978	1,222	943	621	1,006	941	927	1,811	1,572
Rank	3	11	13	8	7	36	12	13	14	2	6

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	20.9	22.6	22.4	22.4	22.1	21.4
Rank	36	38	41	41	41	45

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	892
Rank	9

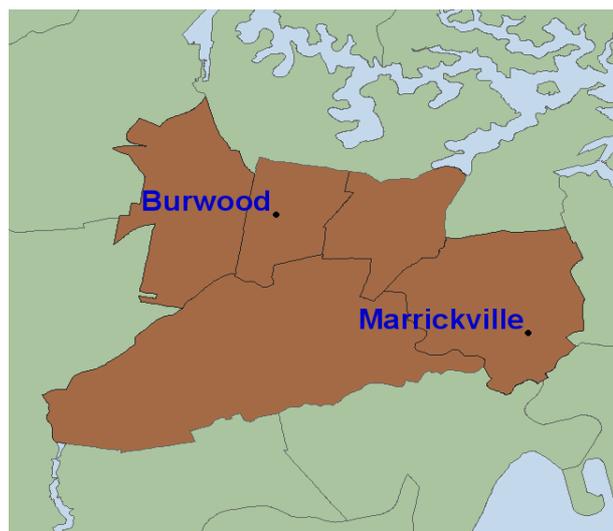
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	49	47	54
Mining	22	24	25
Manufacturing	1,308	1,434	1,440
Utilities	9	9	10
Construction	1,274	1,274	1,307
Wholesale	2,299	2,610	2,637
Retail	1,769	1,949	1,683
Hospitality	77	81	308
Transport	62	190	190
Communication	67	76	75
Finance	2,640	2,955	3,018
Property & Business	1,531	3,181	2,579
Government	27	25	23
Education	116	126	136
Health & Community	354	443	458
Cultural & Recreational	245	323	754
Personal Services	259	424	479

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Sydney Old West



The Sydney Old West comprises suburbs to the south-west of the CBD which were fully developed before the Second World War. As originally developed, the suburbs ranged from a low-status industrial area around Marrickville to a mansion belt at Strathfield, but these different origins have been subsumed by common characteristics. The Old West is close to Sydney Central, with good public transport, and has hence been gentrifying as a commuter residential zone. Its redevelopment towards higher densities has been much less rapid than in the inner-harbour suburbs to its immediate north, and unlike them it has failed to become an extension of Sydney Central. It has significantly less research and development activity than the surrounding regions.

Major centres:

Burwood, Marrickville

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	313	314	315	318	323	327	0.1%	0.6%	1.0%	1.4%	1.3%	0.5%	1.4%
Households	106	106	107	108	108	108	0.9%	0.7%	0.4%	0.1%	0.1%	0.7%	0.1%
NIEIR Workforce	153	155	155	157	159	162	1.3%	0.2%	0.9%	1.5%	1.9%	0.8%	1.7%
NIEIR Employment	142	144	145	148	150	152	0.8%	1.2%	1.8%	1.1%	1.6%	1.3%	1.4%
NIEIR Unemployment	10.8	11.5	10.1	9.0	9.7	10.2	6.8%	-12.2%	-11.4%	8.2%	5.1%	-6.0%	6.7%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	7.0%	7.4%	6.5%	5.7%	6.1%	6.3%	0.4	-0.9	-0.8	0.4	0.2	-0.4	0.3
Headline Unemployment	5.9%	6.6%	5.6%	4.9%	5.3%	5.5%	0.6	-1.0	-0.7	0.4	0.2	-0.3	0.3
NIEIR Structural U/E	13.2%	12.6%	12.2%	11.9%	11.6%	11.2%	-0.6	-0.3	-0.3	-0.3	-0.5	-0.4	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	5,968	6,139	6,439	6,646	6,812	7,035	19,059	19,581	20,423	20,880	21,098	21,517	3.6%	2.9%
Taxes Paid	1,672	1,705	1,809	1,861	1,936	2,014	5,340	5,440	5,737	5,848	5,995	6,160	3.6%	4.0%
Benefits	1,201	1,302	1,333	1,258	1,261	1,252	3,834	4,153	4,229	3,953	3,905	3,828	1.6%	-0.3%
Business Income	933	984	1,002	1,046	1,062	1,064	2,978	3,140	3,179	3,287	3,289	3,253	3.9%	0.8%
Interest Paid	631	799	937	1,067	1,263	1,567	2,016	2,548	2,972	3,352	3,913	4,792	19.1%	21.2%
Property Income	1,087	1,190	1,294	1,432	1,564	1,695	3,471	3,795	4,106	4,499	4,844	5,184	9.6%	8.8%
Disposable Income	7,302	7,500	7,770	7,935	8,367	8,386	23,316	23,923	24,644	24,930	25,914	25,649	2.8%	2.8%
Rank							26	28	28	33	30	32		
%Rank #1							58%	55%	53%	53%	52%	48%		
Business Value Added	6,901	7,123	7,441	7,692	7,874	8,099	22,037	22,721	23,602	24,167	24,387	24,770	3.7%	2.6%
Rank							19	21	21	21	20	22		
%Rank #1							63%	63%	60%	60%	60%	59%		
Business Productivity							47,664	48,789	50,403	51,214	51,832	52,456	2.4%	1.2%
Rank							13	14	14	15	16	18		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Sydney Old West

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.09%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	2.76%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.10%	0.19%
Unemployed Long Term	1.19%	1.52%
Unemployed Short Term	1.30%	1.26%
Youth Allowance - Non Student	0.94%	0.78%
Youth Allowance Student	0.19%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	16.4%	39
2004	17.4%	39
2005	17.2%	37
2006	15.9%	42
2007	15.1%	43
2008	14.9%	47

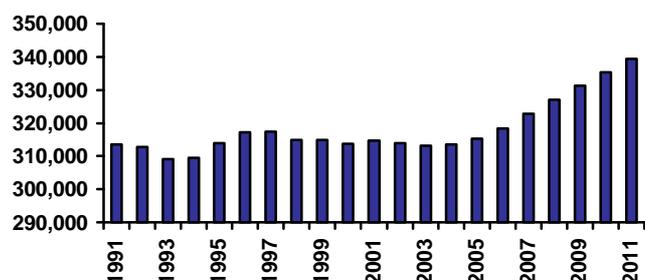
BABY BOUNCE

	Per cent	Rank
2002	1.24%	34
2003	1.28%	26
2004	1.30%	25
2005	1.33%	23
2006	1.38%	22
2007	1.44%	12
Bounce 2005-06	0.06%	14
Actual Change 2005-06 (Number)	218	22
Bounce 2006-07	0.06%	9
Actual Change 2006-07 (Number)	261	10

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.6	57
Share of population under 55	0.8	19
Aged migration	0.0	52
Population growth rate, 55+	0.0	62
Demographic stress	-0.1	49
Dominant locations	1.0	1
Family / Youth migration	7.0	29
Fertility bounce, 1996-2005	0.0	4
Fertility, babies % pop, 2005	0.0	26
Working elderly	0.2	53
SUSTAINABILITY SCORE	76.9	8

Population Profile



POPULATION

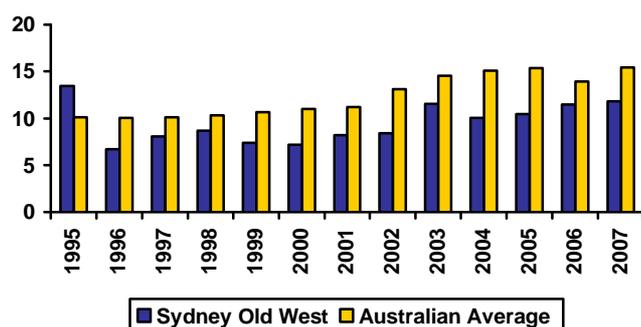
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	313	313	309	309	314	317	317	315	315	314	315	314	313	314	315	318	323	327	331	335	339

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	30.61	46.56	29
Average p.a. per capita	9.71	12.58	29
Hi Tech p.a. (1994-2007)	9.20	12.70	21
Hi Tech p.a. per capita	2.93	3.15	16
Info. Tech p.a. (1994-2007)	4.08	4.98	18
Info. Tech p.a. per capita	1.29	1.17	13
Average per capita (1994-2001)	8.49	10.80	30
Average per capita (2001-2007)	10.91	14.68	29
2001-07 avg./1994-01 avg.	1.28	1.35	41

Note: Per capita = 100,000 people

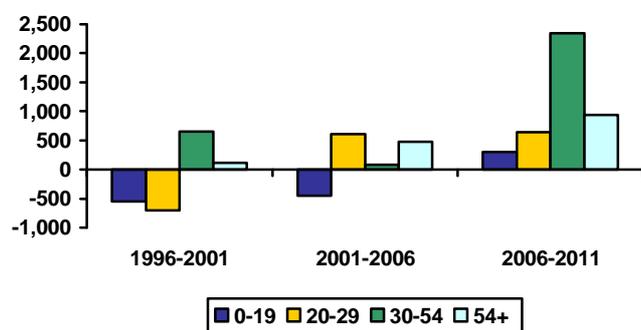
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	25.7%	25.0%	24.0%	23.0%
Age 20-29	16.0%	15.0%	15.8%	15.7%
Age 30-54	37.2%	38.5%	38.2%	39.2%
Age 55+	21.2%	21.5%	22.0%	22.0%
Population Change (average between years)				
Age 0-19		-551	-452	296
Age 20-29		-702	610	636
Age 30-54		650	75	2,344
Age 55+		114	472	940
Average Annual Growth		-0.2%	0.2%	1.3%

Population Change by Age Group



Sydney Old West

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	507	478	13	23	40%	35%
Value of Property and Unincorporated Business	438	421	8	15	54%	53%
Value of Financial Assets	147	224	29	36	24%	30%
Value of Household Liabilities	78	167	35	55	156%	222%
Disposable Income after Debt Service Costs	63	60	24	35	56%	50%
Household Debt Service Ratio	13%	26%	22	57	184%	183%
Household Debt to Gross Income Ratio	0.97	1.75	22	57	184%	183%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	19,609	27,710	12,452	3,303	4,179	4,845
20 to 29		20,146	11,173	8,210	13,266	7,369
30 to 54		55,473	28,297	11,503	10,207	10,457
55+		53,088	7,215	2,358	1,155	6,283

Note: This data has been benchmarked to the Estimated Residential Population.

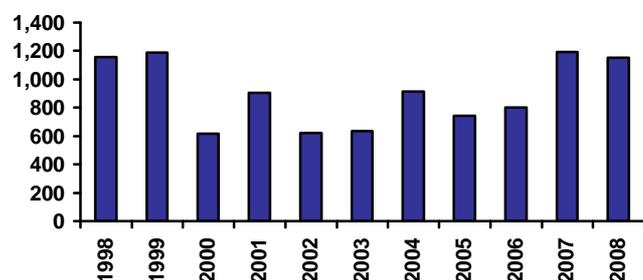
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	186	241	153	132	92	-48%
Non Residential	197	148	119	127	105	-21%
Total	382	389	272	259	197	-38%
Value per capita \$2005/06						
Residential	590	765	474	404	278	-50%
Non Residential	626	470	369	390	316	-24%
Total	1,216	1,236	844	794	595	-40%
Rank (value per capita)						
Residential	59	60	64	65	65	
Non Residential	59	60	65	65	64	
Total	58	62	65	65	65	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,158	1,190	618	906	622	637	913	741	800	1,193	1,152
Rank	16	19	52	22	33	34	20	32	17	16	13

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	21.6	23.4	23.5	23.1	23.0	22.4
Rank	30	31	28	35	37	38

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	401
Rank	23

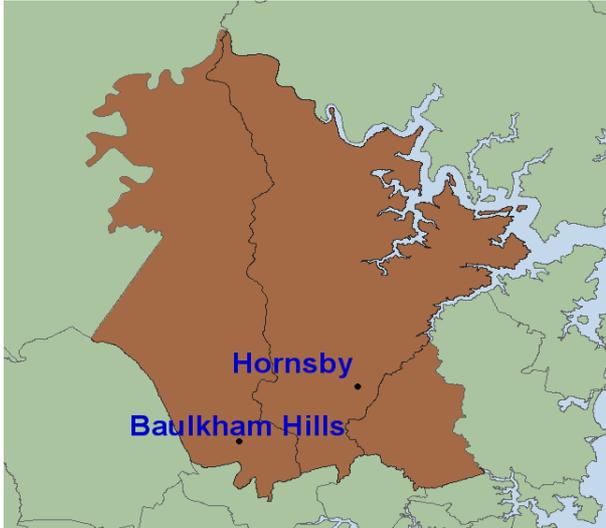
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	20	17	21
Mining	15	16	16
Manufacturing	1,419	1,558	1,587
Utilities	2	2	2
Construction	902	915	954
Wholesale	2,217	2,440	2,414
Retail	1,730	1,898	1,726
Hospitality	60	60	215
Transport	119	280	282
Communication	32	51	55
Finance	1,306	1,553	1,570
Property & Business	1,002	1,796	1,337
Government	21	20	20
Education	69	71	89
Health & Community	325	410	415
Cultural & Recreational	168	188	522
Personal Services	252	360	422

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Sydney Outer North



The dissected sandstone plateau which forms Sydney Suburban North lies between Sydney Central and the bushland and national parks of Broken Bay. The bushland is a wonderful scenic asset except when bushfires menace the urban area. The region mainly comprises residential suburbs for high-status commuters to Sydney Central, though knowledge-economy businesses are to be found in its commercial zones. It has a rapidly-growing extension, currently beyond the reach of commuter rail, in Baulkham Hills.

Major centres:

Hornsby, Baulkham Hills

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	418	422	425	427	431	436	0.9%	0.6%	0.6%	0.9%	1.2%	0.7%	1.1%
Households	128	130	132	132	132	133	1.7%	0.9%	0.4%	0.3%	0.5%	1.0%	0.4%
NIEIR Workforce	208	208	211	212	216	220	0.2%	1.3%	0.3%	1.9%	2.0%	0.6%	2.0%
NIEIR Employment	198	200	202	203	207	212	0.6%	1.4%	0.3%	2.2%	2.1%	0.8%	2.1%
NIEIR Unemployment	9.6	8.8	8.6	8.7	8.3	8.4	-8.5%	-1.6%	0.3%	-4.5%	1.2%	-3.3%	-1.7%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	4.6%	4.2%	4.1%	4.1%	3.8%	3.8%	-0.4	-0.1	0.0	-0.3	0.0	-0.2	-0.1
Headline Unemployment	3.5%	3.2%	3.4%	3.3%	2.8%	2.9%	-0.3	0.2	-0.1	-0.5	0.1	-0.1	-0.2
NIEIR Structural U/E	3.5%	3.4%	3.4%	3.3%	3.5%	3.4%	0.0	-0.1	-0.1	0.2	-0.1	0.0	0.0

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	10,913	11,091	11,698	11,772	12,074	12,424	26,090	26,289	27,552	27,565	28,026	28,488	2.6%	2.7%
Taxes Paid	3,643	3,684	3,953	3,940	4,072	4,265	8,709	8,733	9,309	9,225	9,452	9,779	2.6%	4.0%
Benefits	998	1,110	1,168	1,127	1,154	1,171	2,385	2,631	2,751	2,640	2,678	2,686	4.2%	1.9%
Business Income	1,765	1,933	1,996	2,064	2,068	2,202	4,219	4,581	4,701	4,834	4,800	5,048	5.4%	3.3%
Interest Paid	977	1,271	1,534	1,798	2,194	2,715	2,337	3,013	3,614	4,211	5,092	6,225	22.5%	22.9%
Property Income	3,783	4,212	4,593	4,889	5,290	6,179	9,044	9,984	10,818	11,448	12,278	14,169	8.9%	12.4%
Disposable Income	13,879	14,464	15,207	15,392	16,422	17,488	33,179	34,284	35,817	36,043	38,120	40,101	3.5%	6.6%
Rank							6	6	6	7	7	6		
%Rank #1							82%	80%	77%	76%	76%	75%		
Business Value Added	12,678	13,024	13,694	13,836	14,142	14,625	30,309	30,871	32,252	32,398	32,826	33,536	3.0%	2.8%
Rank							5	6	6	6	6	6		
%Rank #1							87%	85%	82%	80%	81%	80%		
Business Productivity							63,179	64,586	67,108	67,684	67,712	68,687	2.3%	0.7%
Rank							2	2	3	3	5	5		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Sydney Outer North

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.07%	0.11%
Disability Support (aged 21-24)	0.08%	0.12%
Disability Support (aged 25+)	0.94%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.04%	0.08%
Parenting Payment - Single (aged 25+)	0.07%	0.19%
Unemployed Long Term	0.43%	1.52%
Unemployed Short Term	0.25%	1.26%
Youth Allowance - Non Student	0.26%	0.78%
Youth Allowance Student	0.04%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	7.2%	62
2004	7.7%	62
2005	7.7%	62
2006	7.3%	62
2007	7.0%	62
2008	6.7%	62

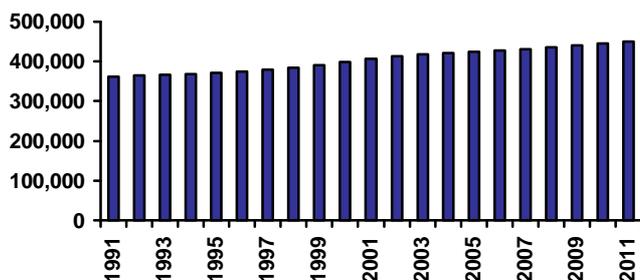
BABY BOUNCE

	Per cent	Rank
2002	1.07%	64
2003	1.06%	62
2004	1.05%	63
2005	1.07%	63
2006	1.12%	62
2007	1.12%	60
Bounce 2005-06	0.05%	19
Actual Change 2005-06 (Number)	237	18
Bounce 2006-07	0.00%	31
Actual Change 2006-07 (Number)	43	32

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	29
Aged migration	0.0	37
Population growth rate, 55+	0.1	27
Demographic stress	0.0	33
Dominant locations	1.0	1
Family / Youth migration	14.0	27
Fertility bounce, 1996-2005	0.0	17
Fertility, babies % pop, 2005	0.0	57
Working elderly	0.4	5
SUSTAINABILITY SCORE	76.2	12

Population Profile



POPULATION

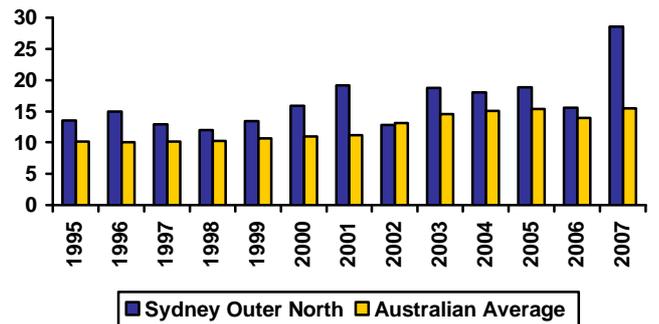
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	362	364	366	368	371	374	379	384	390	398	407	413	418	422	425	427	431	436	441	446	450

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	70.11	46.56	11
Average p.a. per capita	17.30	12.58	12
Hi Tech p.a. (1994-2007)	23.06	12.70	9
Hi Tech p.a. per capita	5.66	3.15	10
Info. Tech p.a. (1994-2007)	9.81	4.98	9
Info. Tech p.a. per capita	2.37	1.17	9
Average per capita (1994-2001)	14.31	10.80	12
Average per capita (2001-2007)	20.09	14.68	12
2001-07 avg./1994-01 avg.	1.40	1.35	22

Note: Per capita = 100,000 people

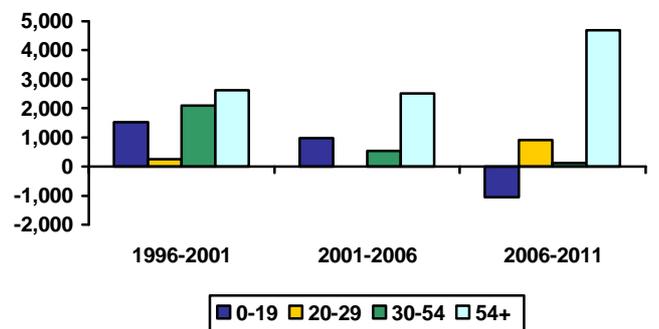
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.6%	30.0%	29.7%	27.0%
Age 20-29	11.6%	11.0%	10.5%	10.9%
Age 30-54	37.3%	36.9%	35.8%	34.1%
Age 55+	20.5%	22.1%	24.0%	28.0%
Population Change (average between years)				
Age 0-19		1,515	979	-1,044
Age 20-29		239	4	900
Age 30-54		2,098	535	115
Age 55+		2,633	2,513	4,702
Average Annual Growth		1.7%	1.0%	1.1%

Population Change by Age Group



Sydney Outer North

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	1135	1085	3	3	90%	80%
Value of Property and Unincorporated Business	758	688	3	3	94%	86%
Value of Financial Assets	477	639	4	5	78%	85%
Value of Household Liabilities	101	242	59	65	201%	323%
Disposable Income after Debt Service Costs	107	109	2	3	95%	90%
Household Debt Service Ratio	10%	23%	8	37	143%	157%
Household Debt to Gross Income Ratio	0.75	1.50	8	37	143%	157%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	25,700	53,661	13,602	17,144	6,916	3,655
20 to 29		28,594	6,858	12,980	4,120	2,639
30 to 54		78,555	19,472	34,490	10,652	5,459
55+		78,717	7,834	9,934	1,529	4,544

Note: This data has been benchmarked to the Estimated Residential Population.

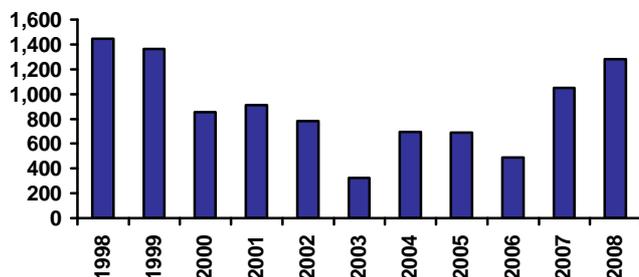
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	822	783	486	570	459	-36%
Non Residential	315	380	381	366	291	-9%
Total	1,137	1,163	867	936	750	-27%
Value per capita \$2005/06						
Residential	2,045	1,856	1,128	1,308	1,041	-38%
Non Residential	783	898	883	838	660	-12%
Total	2,829	2,755	2,012	2,146	1,701	-29%
Rank (value per capita)						
Residential	9	16	45	37	34	
Non Residential	9	16	31	35	32	
Total	12	16	43	36	36	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,444	1,364	853	909	783	327	694	688	491	1,051	1,283
Rank	8	14	23	20	15	60	35	38	38	20	11

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	22.8	24.9	24.8	24.4	23.7	23.2
Rank	23	22	21	22	30	33

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	1277
Rank	6

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	108	112	106
Mining	50	54	57
Manufacturing	1,206	1,338	1,349
Utilities	9	9	8
Construction	1,897	1,902	1,966
Wholesale	3,174	3,606	3,614
Retail	1,979	2,155	1,925
Hospitality	35	34	241
Transport	106	259	265
Communication	68	91	98
Finance	3,726	4,191	4,221
Property & Business	2,045	4,399	3,621
Government	21	21	22
Education	207	212	228
Health & Community	552	707	720
Cultural & Recreational	209	277	864
Personal Services	286	502	546

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Sydney Outer South West



Lying an hour or more from Sydney Central by the fastest commuter service, Sydney Outer South West is painfully distant from the action. It began its urban life in the post-war period as an extension of the manufacturing areas in the Sydney Parramatta Bankstown Region, but when manufacturing faltered as a basis for economic growth, increased its orientation towards long-distance commuting. The resulting stress on the transport system has been a serious constraint. The outer parts of the region are still devoted to water reserves, hobby farms and coal mines.

Major centres:

Liverpool, Campbelltown

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	403	405	408	411	415	419	0.4%	0.8%	0.7%	1.1%	1.0%	0.6%	1.0%
Households	119	120	121	121	121	121	0.5%	0.5%	0.2%	0.1%	0.0%	0.4%	0.1%
NIEIR Workforce	202	203	205	209	213	217	0.6%	1.2%	1.7%	1.9%	2.0%	1.2%	2.0%
NIEIR Employment	185	186	190	193	195	201	0.3%	2.2%	1.8%	0.7%	3.3%	1.4%	2.0%
NIEIR Unemployment	16.2	16.8	15.2	15.3	18.0	15.8	3.9%	-9.9%	1.0%	17.4%	-12.3%	-1.9%	1.5%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.0%	8.3%	7.4%	7.3%	8.5%	7.3%	0.3	-0.9	-0.1	1.1	-1.2	-0.2	0.0
Headline Unemployment	6.5%	6.5%	5.9%	5.8%	6.7%	5.7%	0.0	-0.6	-0.1	0.9	-1.0	-0.2	-0.1
NIEIR Structural U/E	12.5%	12.4%	11.9%	11.7%	11.6%	11.2%	-0.1	-0.5	-0.2	-0.1	-0.4	-0.3	-0.3

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	7,737	7,936	8,384	8,603	8,745	9,140	19,199	19,607	20,561	20,956	21,079	21,818	3.6%	3.1%
Taxes Paid	2,059	2,068	2,183	2,201	2,280	2,421	5,110	5,108	5,354	5,361	5,497	5,779	2.2%	4.9%
Benefits	1,464	1,641	1,710	1,687	1,764	1,825	3,632	4,055	4,193	4,109	4,252	4,356	4.8%	4.0%
Business Income	754	786	794	792	754	767	1,870	1,943	1,946	1,930	1,817	1,832	1.7%	-1.6%
Interest Paid	930	1,151	1,322	1,474	1,712	2,104	2,307	2,843	3,242	3,592	4,127	5,023	16.6%	19.5%
Property Income	955	1,026	1,125	1,251	1,357	1,407	2,370	2,535	2,760	3,047	3,272	3,358	9.4%	6.0%
Disposable Income	8,803	8,981	9,360	9,508	9,908	9,994	21,843	22,190	22,953	23,162	23,883	23,856	2.6%	2.5%
Rank							42	47	47	49	48	50		
%Rank #1							54%	51%	49%	49%	48%	44%		
Business Value Added	8,491	8,722	9,178	9,395	9,498	9,907	21,069	21,550	22,507	22,886	22,896	23,650	3.4%	2.7%
Rank							23	24	25	25	27	25		
%Rank #1							61%	59%	58%	57%	56%	56%		
Business Productivity							45,229	46,284	47,743	48,024	48,395	48,917	2.0%	0.9%
Rank							24	25	25	28	30	36		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Sydney Outer South West

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.10%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	2.80%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.08%	0.08%
Parenting Payment - Single (aged 25+)	0.26%	0.19%
Unemployed Long Term	1.97%	1.52%
Unemployed Short Term	1.22%	1.26%
Youth Allowance - Non Student	0.88%	0.78%
Youth Allowance Student	0.39%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	16.6%	35
2004	18.3%	33
2005	18.3%	30
2006	17.7%	31
2007	17.8%	30
2008	18.3%	32

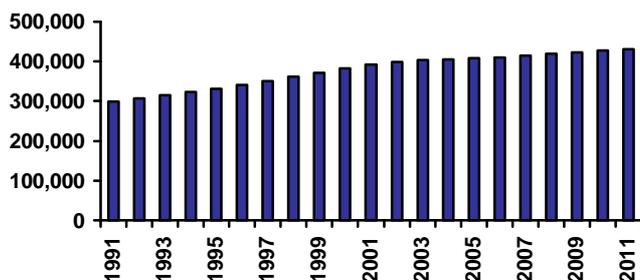
BABY BOUNCE

	Per cent	Rank
2002	1.54%	6
2003	1.53%	5
2004	1.51%	6
2005	1.52%	6
2006	1.59%	5
2007	1.54%	7
Bounce 2005-06	0.07%	6
Actual Change 2005-06 (Number)	327	12
Bounce 2006-07	-0.05%	46
Actual Change 2006-07 (Number)	-130	53

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	4
Aged migration	0.0	55
Population growth rate, 55+	0.0	47
Demographic stress	0.0	31
Dominant locations	0.8	26
Family / Youth migration	1.0	34
Fertility bounce, 1996-2005	0.0	51
Fertility, babies % pop, 2005	0.0	5
Working elderly	0.3	24
SUSTAINABILITY SCORE	69.5	25

Population Profile



POPULATION

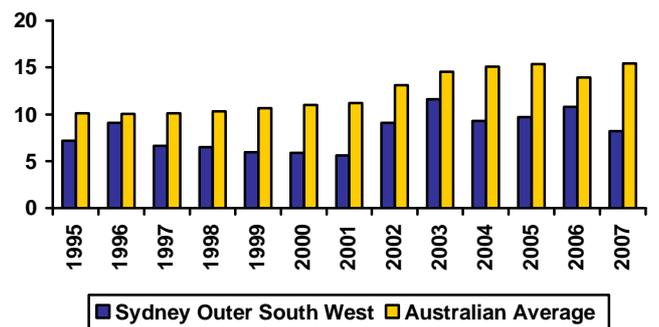
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	298	307	315	323	331	340	350	361	371	382	393	399	403	405	408	411	415	419	423	427	431

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	31.02	46.56	28
Average p.a. per capita	8.13	12.58	41
Hi Tech p.a. (1994-2007)	6.44	12.70	29
Hi Tech p.a. per capita	1.68	3.15	34
Info. Tech p.a. (1994-2007)	2.21	4.98	30
Info. Tech p.a. per capita	0.56	1.17	30
Average per capita (1994-2001)	6.99	10.80	42
Average per capita (2001-2007)	9.57	14.68	39
2001-07 avg./1994-01 avg.	1.37	1.35	28

Note: Per capita = 100,000 people

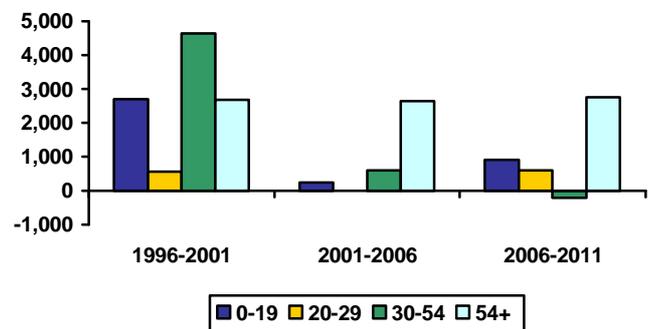
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	36.2%	34.8%	33.6%	33.0%
Age 20-29	14.9%	13.6%	13.1%	13.1%
Age 30-54	36.1%	37.2%	36.3%	34.4%
Age 55+	12.8%	14.4%	17.0%	19.5%
Population Change (average between years)				
Age 0-19		2,692	241	898
Age 20-29		574	-6	598
Age 30-54		4,641	612	-214
Age 55+		2,675	2,640	2,761
Average Annual Growth		2.9%	0.9%	1.0%

Population Change by Age Group



Sydney Outer South West

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	297	289	41	59	24%	21%
Value of Property and Unincorporated Business	296	319	17	28	37%	40%
Value of Financial Assets	112	169	51	54	18%	22%
Value of Household Liabilities	111	198	63	63	221%	265%
Disposable Income after Debt Service Costs	65	62	23	31	58%	51%
Household Debt Service Ratio	18%	30%	59	64	249%	208%
Household Debt to Gross Income Ratio	1.31	1.99	59	64	249%	208%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	32,461	56,106	18,571	13,173	3,239	7,905
20 to 29		27,868	14,895	14,236	3,524	5,243
30 to 54		82,551	24,633	21,794	4,820	9,515
55+		51,766	5,788	6,308	874	5,246

Note: This data has been benchmarked to the Estimated Residential Population.

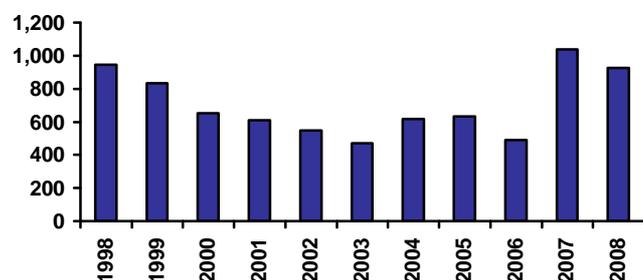
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	724	472	352	358	268	-31%
Non Residential	269	383	551	533	407	30%
Total	992	854	902	890	674	-4%
Value per capita \$2005/06						
Residential	1,882	1,161	847	854	632	-33%
Non Residential	698	940	1,328	1,271	962	26%
Total	2,580	2,102	2,175	2,125	1,594	-7%
Rank (value per capita)						
Residential	12	47	58	56	57	
Non Residential	12	47	14	15	15	
Total	15	38	36	40	40	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	945	833	653	611	548	469	618	632	490	1,036	926
Rank	25	33	48	48	39	54	43	44	39	21	28

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	22.3	24.2	24.4	24.2	23.8	23.2
Rank	26	26	22	26	27	32

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	342
Rank	25

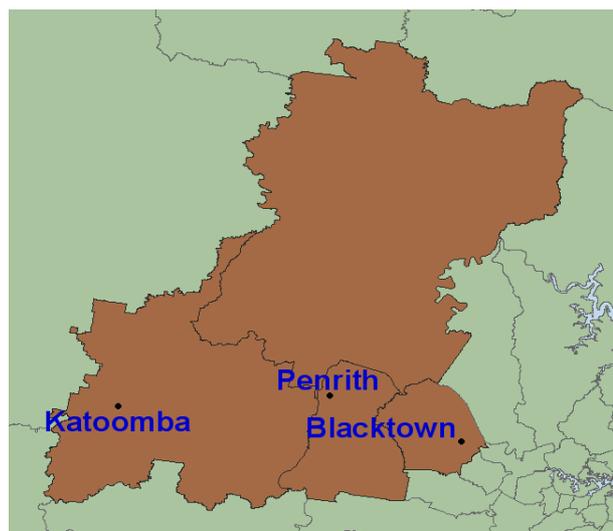
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	80	78	76
Mining	26	35	35
Manufacturing	1,160	1,231	1,309
Utilities	5	5	4
Construction	1,269	1,279	1,326
Wholesale	1,436	1,579	1,605
Retail	1,293	1,368	1,314
Hospitality	53	54	167
Transport	293	375	380
Communication	13	26	27
Finance	868	1,029	1,053
Property & Business	686	1,247	932
Government	21	19	23
Education	73	82	101
Health & Community	246	308	328
Cultural & Recreational	99	115	356
Personal Services	130	223	281

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Sydney Outer West



The upper reaches of the Hawkesbury River were first settled for farming, and during the Second World War gained a couple of defence airfields. After the war they gained urban development from the extension of manufacturing, and as manufacturing faltered, continued to grow as commuter suburbs. Unfortunately they are a long way from the Sydney CBD, but have potential to benefit from relative proximity to the Ryde extension of Sydney Central – the problem being poor transport connections. Across the Hawkesbury/Nepean the region includes extensive national parks and the strip of resort/commuter settlement along the Blue Mountains ridge.

Major centres:

Blacktown, Penrith, Katoomba

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	588	590	592	596	602	609	0.2%	0.4%	0.6%	1.0%	1.2%	0.4%	1.1%
Households	184	186	187	188	188	189	1.0%	0.8%	0.2%	0.2%	0.3%	0.7%	0.3%
NIEIR Workforce	319	322	324	325	330	336	1.0%	0.6%	0.2%	1.6%	1.9%	0.6%	1.7%
NIEIR Employment	293	295	299	301	305	310	0.7%	1.3%	0.5%	1.5%	1.7%	0.9%	1.6%
NIEIR Unemployment	25.8	26.8	24.9	24.0	24.6	25.8	3.9%	-7.0%	-3.4%	2.6%	4.7%	-2.3%	3.6%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.1%	8.3%	7.7%	7.4%	7.5%	7.7%	0.2	-0.6	-0.3	0.1	0.2	-0.2	0.1
Headline Unemployment	5.7%	6.1%	5.6%	5.3%	5.3%	5.9%	0.3	-0.5	-0.3	0.0	0.6	-0.1	0.3
NIEIR Structural U/E	11.6%	11.3%	11.2%	11.2%	11.0%	10.4%	-0.3	-0.1	0.0	-0.2	-0.6	-0.1	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	12,408	12,765	13,397	13,590	13,948	14,379	21,089	21,641	22,611	22,805	23,166	23,600	3.1%	2.9%
Taxes Paid	3,362	3,409	3,581	3,591	3,766	3,928	5,714	5,779	6,045	6,026	6,255	6,446	2.2%	4.6%
Benefits	2,186	2,432	2,530	2,504	2,628	2,732	3,716	4,123	4,269	4,202	4,365	4,484	4.6%	4.4%
Business Income	1,263	1,348	1,334	1,357	1,329	1,321	2,147	2,285	2,251	2,278	2,208	2,168	2.4%	-1.4%
Interest Paid	1,486	1,813	2,051	2,250	2,567	3,159	2,526	3,074	3,462	3,776	4,263	5,185	14.8%	18.5%
Property Income	1,596	1,691	1,914	2,134	2,343	2,499	2,712	2,867	3,230	3,581	3,892	4,101	10.2%	8.2%
Disposable Income	14,048	14,372	14,982	15,188	16,132	16,193	23,875	24,367	25,287	25,486	26,792	26,577	2.6%	3.3%
Rank							24	25	26	27	22	25		
%Rank #1							59%	57%	54%	54%	53%	49%		
Business Value Added	13,672	14,113	14,730	14,947	15,277	15,700	23,236	23,926	24,862	25,082	25,373	25,767	3.0%	2.5%
Rank							12	14	15	14	15	18		
%Rank #1							67%	66%	64%	62%	62%	61%		
Business Productivity							46,087	47,235	48,736	49,202	49,670	50,246	2.2%	1.1%
Rank							18	20	19	22	23	26		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Sydney Outer West

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.11%	0.11%
Disability Support (aged 21-24)	0.10%	0.12%
Disability Support (aged 25+)	3.02%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.10%	0.08%
Parenting Payment - Single (aged 25+)	0.29%	0.19%
Unemployed Long Term	1.94%	1.52%
Unemployed Short Term	1.10%	1.26%
Youth Allowance - Non Student	0.87%	0.78%
Youth Allowance Student	0.38%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	15.6%	44
2004	16.9%	43
2005	16.9%	41
2006	16.5%	38
2007	16.3%	39
2008	16.9%	38

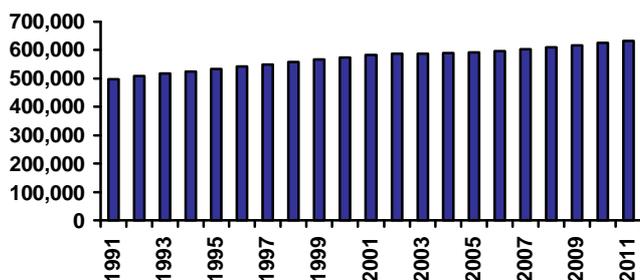
BABY BOUNCE

	Per cent	Rank
2002	1.52%	7
2003	1.51%	6
2004	1.49%	7
2005	1.51%	7
2006	1.56%	6
2007	1.51%	9
Bounce 2005-06	0.06%	12
Actual Change 2005-06 (Number)	399	7
Bounce 2006-07	-0.05%	48
Actual Change 2006-07 (Number)	-214	59

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	7
Aged migration	0.0	52
Population growth rate, 55+	0.0	43
Demographic stress	-0.1	34
Dominant locations	0.9	23
Family / Youth migration	-5.0	41
Fertility bounce, 1996-2005	0.0	47
Fertility, babies % pop, 2005	0.0	6
Working elderly	0.3	15
SUSTAINABILITY SCORE	72.2	23

Population Profile



POPULATION

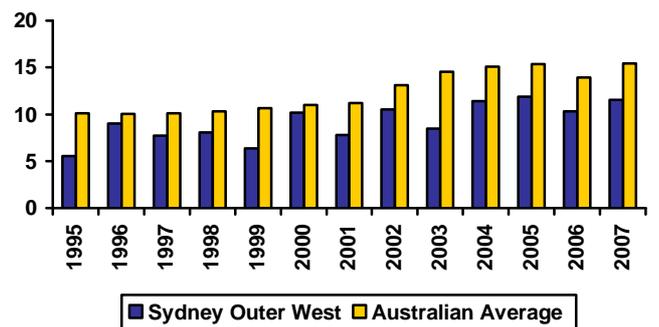
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	498	508	517	524	532	542	550	557	566	574	582	587	588	590	592	596	602	609	617	625	632

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	53.32	46.56	17
Average p.a. per capita	9.29	12.58	33
Hi Tech p.a. (1994-2007)	12.02	12.70	16
Hi Tech p.a. per capita	2.08	3.15	24
Info. Tech p.a. (1994-2007)	4.74	4.98	17
Info. Tech p.a. per capita	0.81	1.17	23
Average per capita (1994-2001)	8.14	10.80	34
Average per capita (2001-2007)	10.78	14.68	30
2001-07 avg./1994-01 avg.	1.32	1.35	32

Note: Per capita = 100,000 people

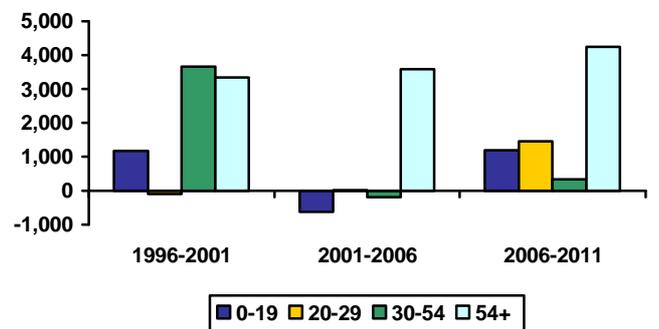
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	34.9%	33.5%	32.2%	31.3%
Age 20-29	14.5%	13.4%	13.1%	13.5%
Age 30-54	36.5%	37.2%	36.1%	34.3%
Age 55+	14.1%	15.9%	18.6%	20.9%
Population Change (average between years)				
Age 0-19		1,175	-629	1,184
Age 20-29		-101	23	1,452
Age 30-54		3,664	-195	335
Age 55+		3,342	3,579	4,248
Average Annual Growth		1.4%	0.5%	1.2%

Population Change by Age Group



Sydney Outer West

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	304	326	37	52	24%	24%
Value of Property and Unincorporated Business	304	332	15	25	38%	42%
Value of Financial Assets	118	192	49	48	19%	25%
Value of Household Liabilities	118	197	65	62	235%	264%
Disposable Income after Debt Service Costs	65	68	22	19	58%	56%
Household Debt Service Ratio	18%	28%	62	63	260%	196%
Household Debt to Gross Income Ratio	1.37	1.87	62	63	260%	196%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	45,446	78,574	26,683	17,275	4,972	9,687
20 to 29		38,600	22,720	21,969	5,321	7,344
30 to 54		118,856	35,549	32,355	7,492	12,368
55+		83,901	8,645	9,715	1,306	7,156

Note: This data has been benchmarked to the Estimated Residential Population.

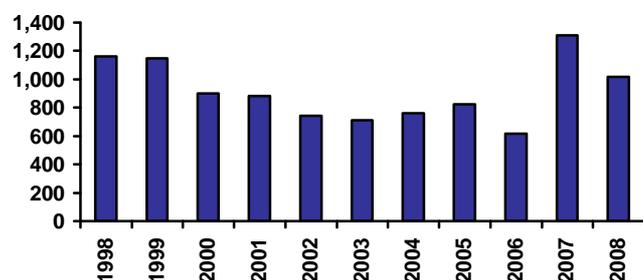
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	685	527	356	367	280	-36%
Non Residential	455	488	531	531	408	0%
Total	1,140	1,014	887	898	688	-19%
Value per capita \$2005/06						
Residential	1,189	891	591	603	454	-38%
Non Residential	790	824	882	872	661	-2%
Total	1,979	1,715	1,473	1,474	1,115	-21%
Rank (value per capita)						
Residential	37	57	63	62	63	
Non Residential	37	57	32	32	31	
Total	32	55	59	60	60	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,160	1,147	900	883	743	711	761	824	619	1,308	1,015
Rank	15	21	18	24	18	20	30	24	29	7	21

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	19.7	22.0	21.8	21.9	21.3	20.8
Rank	44	44	43	44	48	54

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	534
Rank	17

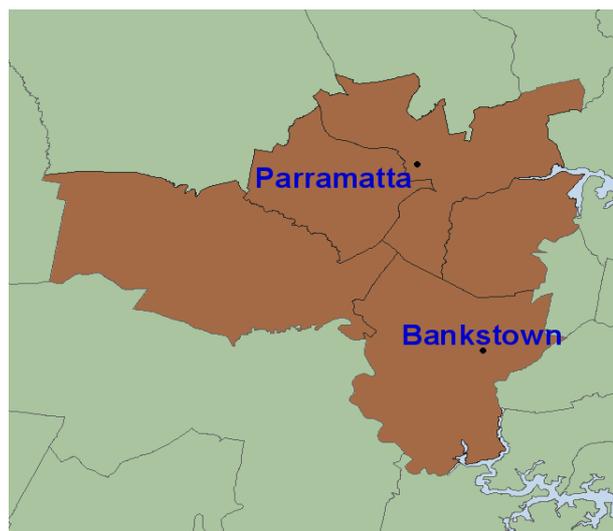
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	117	119	119
Mining	45	42	45
Manufacturing	1,813	1,915	1,961
Utilities	8	10	9
Construction	2,032	2,029	2,105
Wholesale	2,198	2,424	2,462
Retail	2,108	2,222	2,118
Hospitality	134	133	302
Transport	316	408	425
Communication	32	49	45
Finance	1,205	1,447	1,488
Property & Business	1,116	1,977	1,493
Government	23	21	22
Education	111	133	155
Health & Community	417	520	531
Cultural & Recreational	188	218	565
Personal Services	230	379	455

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Sydney Parramatta-Bankstown



The mid-Western suburbs are flat by Sydney standards. Urban expansion into these suburbs began after the First World War and accelerated after the Second, when they became Sydney's manufacturing belt. More recently some of the land devoted to manufacturing has been redeveloped, a notable example being the sports and office complex at Olympic Park. Manufacturing industry has left a heritage of commercial research and development activity, and the region also has major retail developments. However, no centre (not even Parramatta) has fulfilled hopes that a substantial rival will arise to the Sydney CBD. As a result the region depends on commuting to Sydney Central, straining its rail and road links in the process.

Major centres:

Parramatta, Bankstown

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	661	664	671	680	692	702	0.5%	1.0%	1.3%	1.8%	1.4%	0.9%	1.6%
Households	202	204	206	207	209	209	1.1%	0.9%	0.6%	0.6%	0.3%	0.9%	0.4%
NIEIR Workforce	302	303	304	306	311	316	0.5%	0.1%	0.7%	1.6%	1.7%	0.4%	1.7%
NIEIR Employment	275	276	280	281	283	290	0.7%	1.3%	0.3%	0.9%	2.4%	0.8%	1.7%
NIEIR Unemployment	27.3	27.1	23.6	24.8	27.2	25.8	-0.9%	-12.8%	5.4%	9.6%	-5.4%	-3.1%	1.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.0%	8.9%	7.8%	8.1%	8.8%	8.2%	-0.1	-1.1	0.4	0.6	-0.6	-0.3	0.0
Headline Unemployment	6.9%	6.8%	6.1%	6.4%	6.9%	6.2%	-0.1	-0.7	0.4	0.5	-0.7	-0.2	-0.1
NIEIR Structural U/E	16.7%	16.7%	16.5%	16.3%	16.1%	15.5%	0.0	-0.2	-0.1	-0.3	-0.5	-0.1	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	11,011	11,276	11,740	11,873	12,112	12,560	16,654	16,977	17,496	17,471	17,503	17,899	2.5%	2.9%
Taxes Paid	2,860	2,869	2,987	2,963	3,085	3,243	4,325	4,319	4,452	4,360	4,458	4,622	1.2%	4.6%
Benefits	2,720	2,982	3,091	2,972	3,031	3,056	4,114	4,490	4,606	4,373	4,380	4,355	3.0%	1.4%
Business Income	1,289	1,373	1,365	1,342	1,350	1,346	1,950	2,068	2,034	1,974	1,951	1,919	1.3%	0.2%
Interest Paid	1,247	1,553	1,794	2,009	2,341	2,861	1,887	2,339	2,673	2,957	3,383	4,078	17.2%	19.3%
Property Income	1,631	1,732	1,902	2,112	2,290	2,358	2,467	2,607	2,834	3,107	3,309	3,361	9.0%	5.7%
Disposable Income	13,533	13,834	14,266	14,248	14,956	14,939	20,467	20,828	21,261	20,967	21,614	21,288	1.7%	2.4%
Rank							52	56	57	59	61	62		
%Rank #1							51%	48%	46%	44%	43%	40%		
Business Value Added	12,300	12,649	13,105	13,215	13,461	13,907	18,603	19,044	19,530	19,446	19,454	19,817	2.4%	2.6%
Rank							44	50	51	55	46	52		
%Rank #1							54%	52%	50%	48%	48%	47%		
Business Productivity							44,135	45,099	46,171	46,414	46,845	47,266	1.7%	0.9%
Rank							31	37	37	42	45	48		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Sydney Parramatta-Bankstown

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.07%	0.11%
Disability Support (aged 21-24)	0.08%	0.12%
Disability Support (aged 25+)	3.29%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.15%	0.19%
Unemployed Long Term	1.71%	1.52%
Unemployed Short Term	1.65%	1.26%
Youth Allowance - Non Student	1.06%	0.78%
Youth Allowance Student	0.30%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	20.1%	14
2004	21.6%	14
2005	21.7%	11
2006	20.9%	9
2007	20.3%	14
2008	20.5%	15

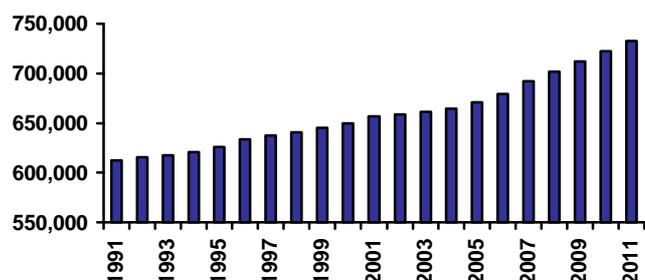
BABY BOUNCE

	Per cent	Rank
2002	1.33%	24
2003	1.35%	17
2004	1.35%	17
2005	1.39%	14
2006	1.46%	11
2007	1.52%	8
Bounce 2005-06	0.08%	4
Actual Change 2005-06 (Number)	642	1
Bounce 2006-07	0.06%	12
Actual Change 2006-07 (Number)	572	3

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	16
Aged migration	0.0	51
Population growth rate, 55+	0.0	59
Demographic stress	-0.1	42
Dominant locations	1.0	1
Family / Youth migration	73.0	7
Fertility bounce, 1996-2005	0.0	4
Fertility, babies % pop, 2005	0.0	10
Working elderly	0.2	56
SUSTAINABILITY SCORE	77.3	4

Population Profile



POPULATION

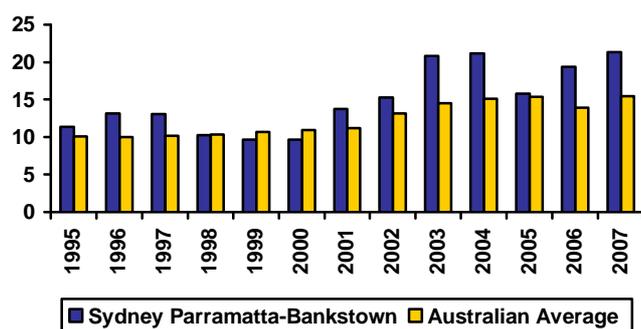
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	612	615	618	620	626	633	637	641	645	650	657	659	661	664	671	680	692	702	712	722	733

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	102.33	46.56	8
Average p.a. per capita	15.56	12.58	13
Hi Tech p.a. (1994-2007)	22.26	12.70	10
Hi Tech p.a. per capita	3.38	3.15	13
Info. Tech p.a. (1994-2007)	7.56	4.98	13
Info. Tech p.a. per capita	1.14	1.17	15
Average per capita (1994-2001)	12.02	10.80	16
Average per capita (2001-2007)	19.57	14.68	13
2001-07 avg./1994-01 avg.	1.63	1.35	5

Note: Per capita = 100,000 people

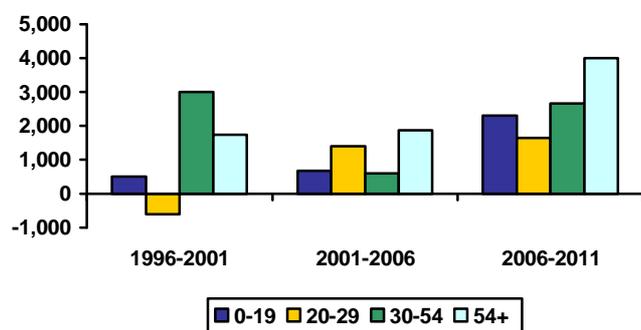
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.2%	29.5%	29.0%	28.5%
Age 20-29	15.0%	14.0%	14.5%	14.6%
Age 30-54	35.0%	36.1%	35.3%	34.5%
Age 55+	19.8%	20.5%	21.2%	22.4%
Population Change (average between years)				
Age 0-19		518	688	2,294
Age 20-29		-596	1,394	1,646
Age 30-54		3,007	595	2,662
Age 55+		1,743	1,872	3,996
Average Annual Growth		0.7%	0.7%	1.5%

Population Change by Age Group



Sydney Parramatta-Bankstown

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	376	337	22	48	30%	25%
Value of Property and Unincorporated Business	343	326	12	26	42%	41%
Value of Financial Assets	118	169	48	55	19%	22%
Value of Household Liabilities	85	157	45	50	170%	210%
Disposable Income after Debt Service Costs	61	55	27	55	54%	46%
Household Debt Service Ratio	15%	27%	37	61	206%	190%
Household Debt to Gross Income Ratio	1.08	1.82	37	61	206%	190%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	48,063	78,504	28,035	10,667	9,994	11,800
20 to 29		50,220	23,584	15,518	17,702	12,380
30 to 54		126,305	44,977	23,196	16,017	18,852
55+		110,281	13,326	6,668	2,648	10,828

Note: This data has been benchmarked to the Estimated Residential Population.

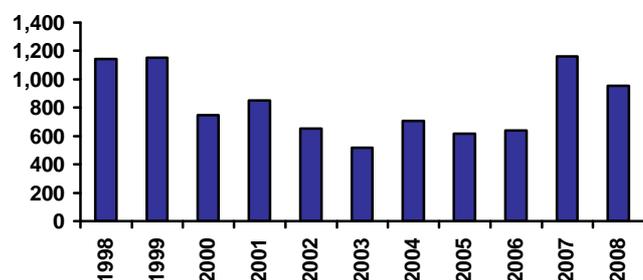
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	694	837	736	664	490	-25%
Non Residential	828	704	867	776	548	4%
Total	1,522	1,542	1,603	1,441	1,038	-12%
Value per capita \$2005/06						
Residential	1,065	1,252	1,064	947	688	-28%
Non Residential	1,272	1,052	1,253	1,106	769	-1%
Total	2,337	2,304	2,317	2,053	1,457	-16%
Rank (value per capita)						
Residential	42	42	49	54	54	
Non Residential	42	42	16	19	24	
Total	18	33	32	41	45	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,143	1,151	748	850	653	518	705	616	641	1,160	953
Rank	18	20	36	27	30	52	32	45	28	17	25

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	22.0	24.1	23.9	23.9	23.5	22.7
Rank	27	28	27	30	32	37

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	851
Rank	11

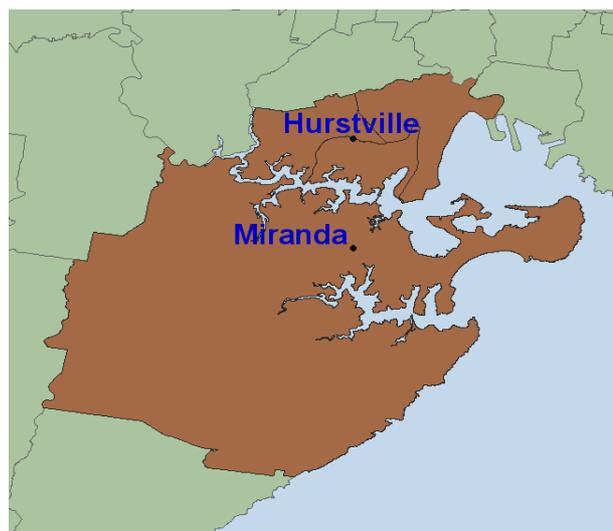
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	44	46	46
Mining	31	34	39
Manufacturing	3,477	3,816	3,952
Utilities	8	7	9
Construction	2,377	2,364	2,439
Wholesale	4,264	4,786	4,814
Retail	3,146	3,463	3,198
Hospitality	92	90	406
Transport	399	638	661
Communication	49	98	105
Finance	2,075	2,703	2,766
Property & Business	1,626	3,092	2,392
Government	48	50	51
Education	142	153	177
Health & Community	541	682	705
Cultural & Recreational	217	249	743
Personal Services	389	587	675

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Sydney South



The St George suburbs were mainly built up in the first half of the twentieth century and the Shire of Sutherland in the second half. The region has areas of manufacturing employment, research and development centres and the usual suburban retail centres. These are, however, far from sufficient to employ all residents. The region's frontage to Botany Bay does not have the social éclat of the shores of Port Jackson, hence its status as a mainly middle-status commuter zone focused on Sydney Central. Like the Sydney Suburban North, the region abuts onto bushland and national parks, which provide marvellous natural amenity when not the cause of bushfire scares.

Major centres:

Hurstville, Miranda

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	436	437	439	440	444	447	0.2%	0.3%	0.4%	0.9%	0.6%	0.3%	0.8%
Households	147	148	149	150	150	150	0.9%	0.7%	0.5%	0.2%	0.0%	0.7%	0.1%
NIEIR Workforce	230	230	233	237	238	243	-0.1%	1.6%	1.7%	0.5%	2.1%	1.1%	1.3%
NIEIR Employment	219	220	223	226	228	234	0.3%	1.3%	1.6%	0.8%	2.4%	1.1%	1.6%
NIEIR Unemployment	10.9	10.0	10.8	11.1	10.4	9.9	-8.3%	7.9%	3.1%	-6.0%	-5.1%	0.6%	-5.6%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	4.7%	4.4%	4.6%	4.7%	4.4%	4.1%	-0.4	0.3	0.1	-0.3	-0.3	0.0	-0.3
Headline Unemployment	3.8%	3.4%	3.6%	3.8%	3.5%	3.2%	-0.4	0.2	0.1	-0.3	-0.3	0.0	-0.3
NIEIR Structural U/E	7.0%	6.9%	6.6%	6.5%	6.4%	6.1%	-0.2	-0.2	-0.2	-0.1	-0.3	-0.2	-0.2

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	10,040	10,214	10,747	10,981	11,125	11,482	23,015	23,361	24,496	24,943	25,040	25,691	3.0%	2.3%
Taxes Paid	2,799	2,807	3,008	3,025	3,113	3,257	6,416	6,421	6,856	6,871	7,007	7,288	2.6%	3.8%
Benefits	1,408	1,549	1,604	1,515	1,520	1,507	3,229	3,542	3,656	3,442	3,420	3,373	2.5%	-0.3%
Business Income	1,254	1,308	1,353	1,356	1,357	1,380	2,875	2,991	3,085	3,080	3,054	3,088	2.6%	0.9%
Interest Paid	1,029	1,300	1,522	1,729	2,042	2,481	2,359	2,973	3,470	3,927	4,595	5,551	18.9%	19.8%
Property Income	2,348	2,537	2,812	3,044	3,300	3,705	5,383	5,803	6,410	6,914	7,429	8,290	9.0%	10.3%
Disposable Income	11,825	12,027	12,643	12,829	13,499	13,912	27,107	27,506	28,820	29,140	30,383	31,129	2.8%	4.1%
Rank							11	13	13	16	16	12		
%Rank #1							67%	64%	62%	61%	61%	58%		
Business Value Added	11,294	11,521	12,100	12,337	12,481	12,862	25,890	26,351	27,581	28,022	28,093	28,779	3.0%	2.1%
Rank							7	11	10	11	13	13		
%Rank #1							75%	73%	71%	69%	69%	68%		
Business Productivity							50,731	51,597	53,516	53,671	53,872	54,208	1.9%	0.5%
Rank							9	11	9	10	11	16		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Sydney South

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.07%	0.11%
Disability Support (aged 21-24)	0.07%	0.12%
Disability Support (aged 25+)	1.78%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.08%	0.19%
Unemployed Long Term	0.98%	1.52%
Unemployed Short Term	0.63%	1.26%
Youth Allowance - Non Student	0.54%	0.78%
Youth Allowance Student	0.12%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	11.9%	57
2004	12.9%	55
2005	12.7%	55
2006	11.8%	52
2007	11.3%	54
2008	10.8%	54

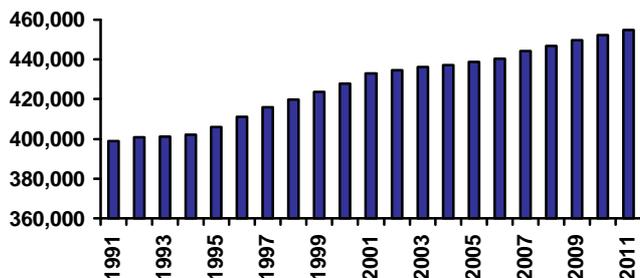
BABY BOUNCE

	Per cent	Rank
2002	1.22%	38
2003	1.22%	35
2004	1.21%	37
2005	1.23%	35
2006	1.29%	32
2007	1.33%	28
Bounce 2005-06	0.06%	11
Actual Change 2005-06 (Number)	281	16
Bounce 2006-07	0.04%	18
Actual Change 2006-07 (Number)	224	13

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	30
Aged migration	0.0	50
Population growth rate, 55+	0.0	58
Demographic stress	0.0	31
Dominant locations	1.0	1
Family / Youth migration	-11.0	52
Fertility bounce, 1996-2005	0.0	17
Fertility, babies % pop, 2005	0.0	33
Working elderly	0.3	35
SUSTAINABILITY SCORE	75.7	14

Population Profile



POPULATION

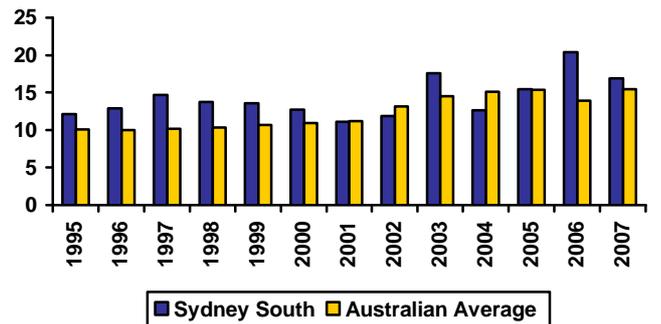
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	399	401	401	402	406	411	416	420	424	428	433	435	436	437	439	440	444	447	450	452	455

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	62.12	46.56	15
Average p.a. per capita	14.52	12.58	16
Hi Tech p.a. (1994-2007)	11.69	12.70	17
Hi Tech p.a. per capita	2.72	3.15	18
Info. Tech p.a. (1994-2007)	4.77	4.98	16
Info. Tech p.a. per capita	1.10	1.17	17
Average per capita (1994-2001)	12.85	10.80	15
Average per capita (2001-2007)	16.06	14.68	15
2001-07 avg./1994-01 avg.	1.25	1.35	48

Note: Per capita = 100,000 people

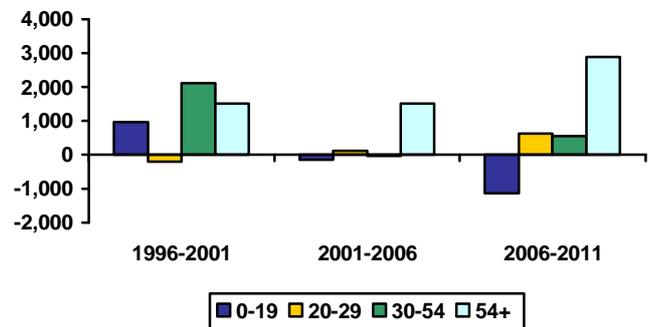
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	26.9%	26.7%	26.1%	24.0%
Age 20-29	14.2%	13.2%	13.1%	13.4%
Age 30-54	36.1%	36.7%	36.1%	35.5%
Age 55+	22.8%	23.4%	24.7%	27.1%
Population Change (average between years)				
Age 0-19		954	-147	-1,131
Age 20-29		-200	114	618
Age 30-54		2,112	-29	543
Age 55+		1,510	1,500	2,893
Average Annual Growth		1.0%	0.3%	0.7%

Population Change by Age Group



Sydney South

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	717	692	5	11	57%	51%
Value of Property and Unincorporated Business	586	543	4	6	72%	68%
Value of Financial Assets	225	343	17	16	37%	45%
Value of Household Liabilities	95	194	57	59	189%	259%
Disposable Income after Debt Service Costs	74	74	11	14	66%	61%
Household Debt Service Ratio	13%	25%	24	51	186%	175%
Household Debt to Gross Income Ratio	0.98	1.67	24	51	186%	175%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	27,300	48,709	17,769	6,545	3,503	4,868
20 to 29		28,414	15,709	11,059	9,092	5,860
30 to 54		82,359	34,926	18,401	7,796	9,012
55+		84,504	10,478	5,273	1,255	7,413

Note: This data has been benchmarked to the Estimated Residential Population.

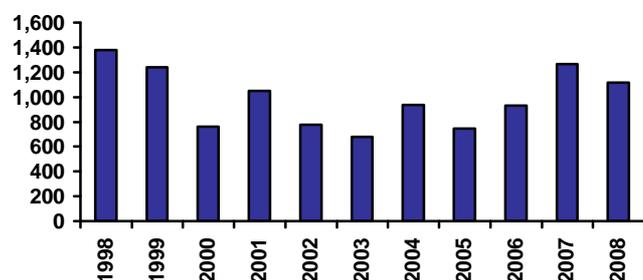
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	659	569	372	323	236	-46%
Non Residential	318	243	205	292	259	4%
Total	977	812	577	615	494	-31%
Value per capita \$2005/06						
Residential	1,535	1,299	836	722	524	-47%
Non Residential	743	554	461	654	575	2%
Total	2,277	1,853	1,298	1,376	1,099	-32%
Rank (value per capita)						
Residential	20	39	60	60	60	
Non Residential	20	39	63	55	46	
Total	19	48	62	62	61	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,378	1,241	762	1,052	777	677	936	747	931	1,268	1,117
Rank	11	16	35	11	17	26	16	28	11	8	17

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	21.6	23.3	23.4	23.0	22.8	22.3
Rank	31	32	30	36	38	39

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	572
Rank	15

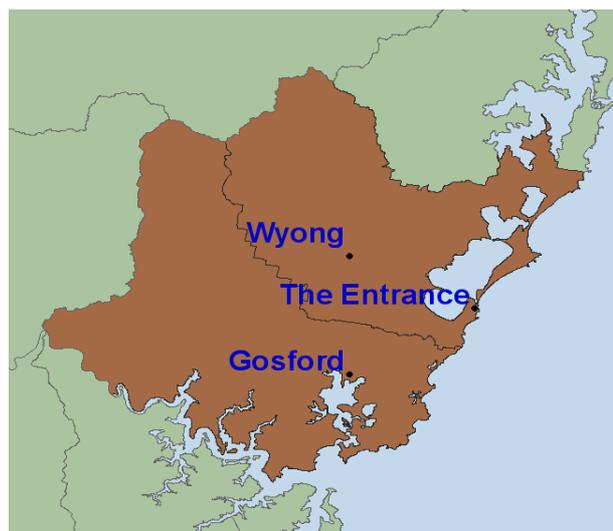
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	23	25	26
Mining	21	23	22
Manufacturing	1,422	1,530	1,538
Utilities	3	3	3
Construction	1,465	1,454	1,500
Wholesale	2,065	2,260	2,272
Retail	1,762	1,863	1,721
Hospitality	58	56	231
Transport	154	307	315
Communication	42	63	67
Finance	1,859	2,119	2,156
Property & Business	1,223	2,298	1,716
Government	17	16	18
Education	93	99	105
Health & Community	350	469	488
Cultural & Recreational	167	184	581
Personal Services	175	301	350

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NSW Central Coast



Historically, the Central Coast was neither Sydney nor Newcastle; an area of holiday and retirement homes beside beaches and backing into infertile sandstone hills. Over recent decades it has received overflow from Sydney: initially long-distance commuters and increasingly manufacturing, and its population now includes many young families.

Major centres:

Gosford, Wyong, The Entrance

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	301	302	303	305	306	308	0.3%	0.4%	0.5%	0.5%	0.5%	0.4%	0.5%
Households	109	112	114	117	119	121	2.8%	2.4%	2.1%	1.8%	1.7%	2.4%	1.7%
NIEIR Workforce	138	141	142	143	146	147	1.7%	0.8%	1.0%	1.9%	0.9%	1.2%	1.4%
NIEIR Employment	125	127	129	131	133	135	1.6%	1.3%	1.7%	1.3%	1.7%	1.6%	1.5%
NIEIR Unemployment	13.2	13.6	13.1	12.3	13.3	12.3	2.8%	-4.0%	-5.8%	7.9%	-7.1%	-2.4%	0.1%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.6%	9.7%	9.2%	8.6%	9.1%	8.4%	0.1	-0.5	-0.6	0.5	-0.7	-0.3	-0.1
Headline Unemployment	7.5%	7.5%	7.2%	6.4%	6.5%	6.1%	0.0	-0.3	-0.8	0.1	-0.4	-0.3	-0.2
NIEIR Structural U/E	15.6%	15.1%	15.1%	14.7%	14.5%	14.1%	-0.6	0.0	-0.3	-0.2	-0.5	-0.3	-0.3

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	4,903	5,075	5,289	5,463	5,580	5,732	16,277	16,805	17,449	17,927	18,212	18,612	3.7%	2.4%
Taxes Paid	1,343	1,381	1,433	1,466	1,516	1,568	4,458	4,571	4,729	4,811	4,948	5,092	3.0%	3.4%
Benefits	1,340	1,490	1,567	1,563	1,650	1,724	4,450	4,932	5,171	5,130	5,386	5,597	5.3%	5.0%
Business Income	761	803	792	834	823	795	2,527	2,660	2,612	2,736	2,687	2,581	3.1%	-2.3%
Interest Paid	579	732	858	976	1,153	1,417	1,922	2,424	2,832	3,202	3,764	4,599	19.0%	20.5%
Property Income	936	1,037	1,150	1,285	1,402	1,524	3,108	3,433	3,796	4,218	4,578	4,948	11.2%	8.9%
Disposable Income	6,533	6,785	7,030	7,249	7,688	7,769	21,689	22,464	23,192	23,788	25,092	25,227	3.5%	3.5%
Rank							44	43	44	45	39	35		
%Rank #1							54%	52%	50%	50%	50%	47%		
Business Value Added	5,664	5,879	6,081	6,297	6,403	6,527	18,803	19,465	20,062	20,663	20,898	21,193	3.6%	1.8%
Rank							42	44	46	44	37	40		
%Rank #1							54%	54%	51%	51%	51%	50%		
Business Productivity							44,687	45,663	46,752	47,532	47,813	48,075	2.1%	0.6%
Rank							27	30	32	33	36	45		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NSW Central Coast

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.10%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	3.90%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.09%	0.08%
Parenting Payment - Single (aged 25+)	0.22%	0.19%
Unemployed Long Term	2.13%	1.52%
Unemployed Short Term	1.34%	1.26%
Youth Allowance - Non Student	0.95%	0.78%
Youth Allowance Student	0.42%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	20.5%	12
2004	22.0%	10
2005	22.3%	7
2006	21.6%	8
2007	21.5%	9
2008	22.2%	7

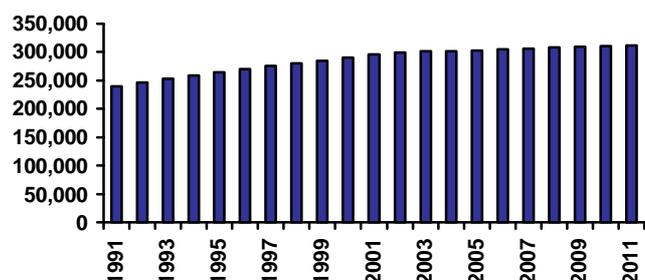
BABY BOUNCE

	Per cent	Rank
2002	1.21%	44
2003	1.20%	41
2004	1.18%	45
2005	1.19%	45
2006	1.24%	44
2007	1.20%	48
Bounce 2005-06	0.05%	21
Actual Change 2005-06 (Number)	164	31
Bounce 2006-07	-0.04%	45
Actual Change 2006-07 (Number)	-98	50

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	60
Aged migration	0.0	6
Population growth rate, 55+	0.1	7
Demographic stress	0.1	3
Dominant locations	1.0	1
Family / Youth migration	-36.0	63
Fertility bounce, 1996-2005	0.0	44
Fertility, babies % pop, 2005	0.0	37
Working elderly	0.2	63
SUSTAINABILITY SCORE	73.9	19

Population Profile



POPULATION

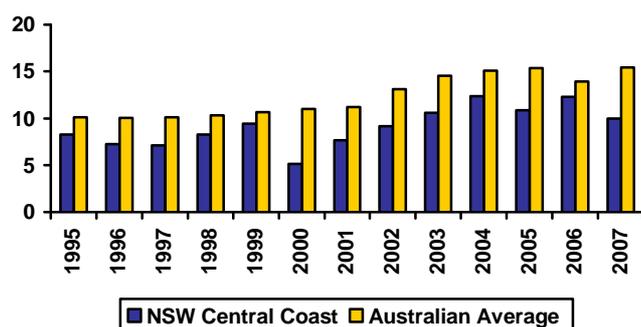
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	240	247	253	258	264	270	276	280	285	291	296	299	301	302	303	305	306	308	309	310	311

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	26.59	46.56	31
Average p.a. per capita	9.15	12.58	34
Hi Tech p.a. (1994-2007)	5.53	12.70	32
Hi Tech p.a. per capita	1.90	3.15	28
Info. Tech p.a. (1994-2007)	1.62	4.98	32
Info. Tech p.a. per capita	0.55	1.17	33
Average per capita (1994-2001)	7.77	10.80	37
Average per capita (2001-2007)	10.72	14.68	31
2001-07 avg./1994-01 avg.	1.38	1.35	27

Note: Per capita = 100,000 people

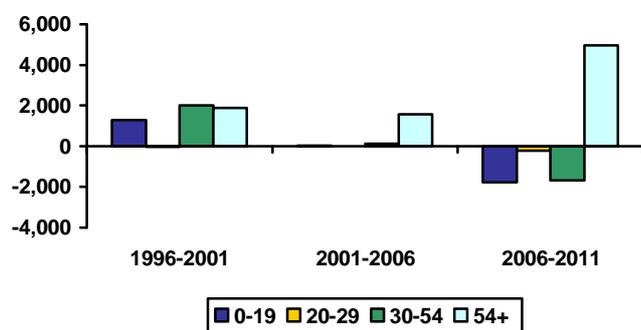
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	29.4%	29.0%	28.3%	24.8%
Age 20-29	10.8%	9.8%	9.5%	9.0%
Age 30-54	33.5%	34.0%	33.2%	29.8%
Age 55+	26.3%	27.2%	29.0%	36.4%
Population Change (average between years)				
Age 0-19		1,293	37	-1,764
Age 20-29		-33	1	-213
Age 30-54		2,014	107	-1,659
Age 55+		1,896	1,551	4,968
Average Annual Growth		1.8%	0.6%	0.4%

Population Change by Age Group



NSW Central Coast

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	363	355	24	46	29%	26%
Value of Property and Unincorporated Business	293	284	19	35	36%	36%
Value of Financial Assets	144	222	31	39	24%	29%
Value of Household Liabilities	74	151	25	47	147%	202%
Disposable Income after Debt Service Costs	55	57	46	53	49%	46%
Household Debt Service Ratio	14%	27%	32	59	201%	184%
Household Debt to Gross Income Ratio	1.06	1.76	32	59	201%	184%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	18,925	33,211	15,471	9,219	1,035	4,695
20 to 29		11,973	11,107	9,060	942	2,794
30 to 54		51,009	21,145	17,481	2,185	6,123
55+		58,850	9,190	12,125	643	7,559

Note: This data has been benchmarked to the Estimated Residential Population.

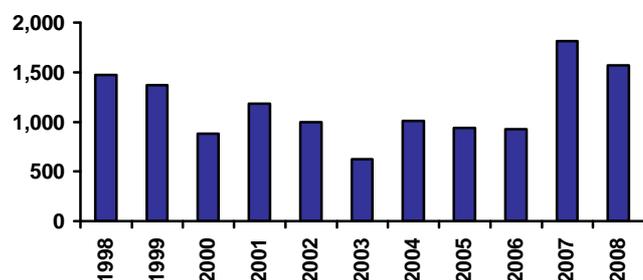
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	509	422	267	228	169	-48%
Non Residential	202	321	266	214	138	-36%
Total	711	743	533	442	307	-43%
Value per capita \$2005/06						
Residential	1,742	1,396	872	740	545	-49%
Non Residential	690	1,061	868	695	447	-37%
Total	2,431	2,457	1,740	1,435	992	-43%
Rank (value per capita)						
Residential	15	34	56	59	59	
Non Residential	15	34	33	52	57	
Total	17	26	52	61	62	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,470	1,371	883	1,184	995	621	1,006	941	927	1,811	1,572
Rank	7	13	19	9	6	36	12	13	14	2	6

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	20.9	22.6	22.4	22.4	22.1	21.4
Rank	36	38	41	41	41	45

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	275
Rank	30

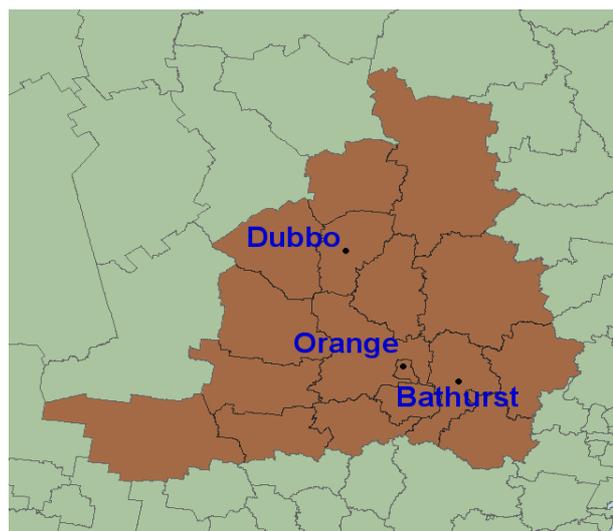
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	35	36	37
Mining	21	26	24
Manufacturing	545	587	612
Utilities	3	3	4
Construction	885	882	918
Wholesale	769	846	855
Retail	852	877	833
Hospitality	78	68	136
Transport	74	125	133
Communication	14	26	23
Finance	701	816	831
Property & Business	570	1,003	727
Government	10	12	11
Education	52	54	62
Health & Community	166	215	229
Cultural & Recreational	103	120	289
Personal Services	70	122	151

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NSW Central West



The watershed between the Murray-Darling basin and the coastal rivers wanders through the high country in the eastern part of the Central West, which consists partly of high plateaus and partly of slopes. Much of the higher country is forested (with plantation developments), and much of the rest is too hilly for cropping, but a fertile area round Orange has horticulture and quite intensive agriculture. Though it is connected to Sydney across the Blue Mountains, the eastern part of the region is something of a transport backwater – hence the difficulty of developing Bathurst and Orange as growth centres. By contrast, Parkes and Dubbo have the advantage of locations on the Newell Highway, and are developing into transport hubs. The region is outside commuter range of Sydney, and hobby farm development has been limited. On the eastern edge of the region, the coal mines around Lithgow supply power stations, cement works and the export market.

Major centres:

Bathurst, Orange, Dubbo

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	259	258	258	260	261	262	-0.3%	0.2%	0.6%	0.2%	0.4%	0.2%	0.3%
Households	90	92	94	96	97	99	1.9%	2.1%	2.0%	1.8%	1.7%	2.0%	1.7%
NIEIR Workforce	116	117	118	120	123	125	0.8%	1.0%	1.4%	2.2%	1.8%	1.0%	2.0%
NIEIR Employment	105	106	107	109	111	113	0.5%	0.9%	1.8%	2.3%	1.9%	1.1%	2.1%
NIEIR Unemployment	11.2	11.5	11.7	11.4	11.6	11.8	2.9%	1.9%	-2.9%	2.1%	1.7%	0.6%	1.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.6%	9.8%	9.9%	9.5%	9.5%	9.5%	0.2	0.1	-0.4	0.0	0.0	0.0	0.0
Headline Unemployment	5.2%	5.3%	5.2%	4.8%	4.9%	4.9%	0.0	0.0	-0.4	0.1	0.0	-0.2	0.1
NIEIR Structural U/E	17.6%	17.1%	16.8%	16.3%	15.7%	15.2%	-0.4	-0.4	-0.5	-0.6	-0.5	-0.4	-0.5

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,846	3,935	4,115	4,253	4,396	4,537	14,870	15,258	15,919	16,359	16,874	17,346	3.4%	3.3%
Taxes Paid	1,141	1,174	1,250	1,256	1,269	1,332	4,412	4,550	4,837	4,830	4,870	5,091	3.2%	3.0%
Benefits	1,121	1,264	1,289	1,286	1,362	1,433	4,335	4,901	4,989	4,948	5,229	5,478	4.7%	5.5%
Business Income	868	956	986	942	736	771	3,357	3,706	3,816	3,625	2,824	2,948	2.8%	-9.5%
Interest Paid	511	606	668	713	793	1,002	1,975	2,351	2,584	2,744	3,044	3,829	11.8%	18.5%
Property Income	674	724	842	937	1,030	1,170	2,608	2,807	3,260	3,602	3,955	4,472	11.6%	11.8%
Disposable Income	5,534	5,788	6,055	6,219	6,488	6,694	21,398	22,444	23,427	23,921	24,904	25,591	4.0%	3.7%
Rank							47	44	41	44	40	33		
%Rank #1							53%	52%	50%	50%	50%	48%		
Business Value Added	4,714	4,891	5,101	5,196	5,132	5,308	18,227	18,964	19,735	19,984	19,698	20,294	3.3%	1.1%
Rank							48	53	49	49	45	48		
%Rank #1							52%	52%	50%	49%	48%	48%		
Business Productivity							45,321	46,399	47,785	48,182	48,570	50,199	2.1%	2.1%
Rank							22	22	23	26	29	27		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NSW Central West

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.12%	0.11%
Disability Support (aged 21-24)	0.13%	0.12%
Disability Support (aged 25+)	4.32%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.11%	0.08%
Parenting Payment - Single (aged 25+)	0.27%	0.19%
Unemployed Long Term	1.78%	1.52%
Unemployed Short Term	1.56%	1.26%
Youth Allowance - Non Student	0.87%	0.78%
Youth Allowance Student	0.56%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	20.3%	13
2004	21.8%	11
2005	21.3%	12
2006	20.7%	10
2007	21.0%	10
2008	21.4%	10

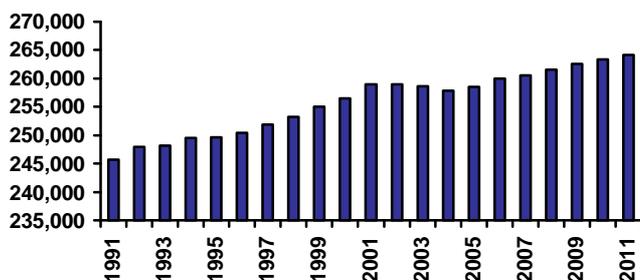
BABY BOUNCE

	Per cent	Rank
2002	1.36%	18
2003	1.35%	18
2004	1.33%	19
2005	1.33%	22
2006	1.37%	24
2007	1.28%	37
Bounce 2005-06	0.04%	27
Actual Change 2005-06 (Number)	125	41
Bounce 2006-07	-0.10%	60
Actual Change 2006-07 (Number)	-241	60

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.9	52
Share of population under 55	0.7	44
Aged migration	0.0	24
Population growth rate, 55+	0.0	40
Demographic stress	0.1	4
Dominant locations	0.5	45
Family / Youth migration	-27.0	61
Fertility bounce, 1996-2005	0.0	58
Fertility, babies % pop, 2005	0.0	23
Working elderly	0.3	30
SUSTAINABILITY SCORE	51.6	48

Population Profile



POPULATION

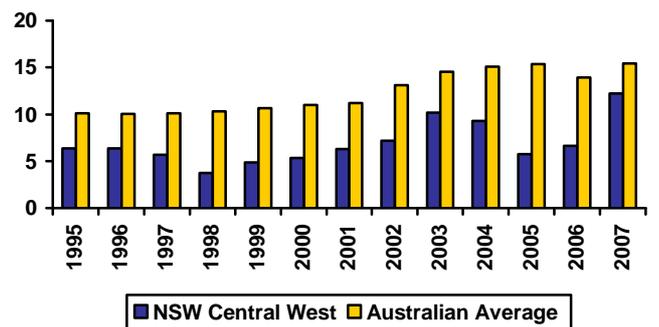
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	246	248	248	250	250	250	252	253	255	257	259	259	259	258	258	260	261	262	263	263	264

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	18.55	46.56	39
Average p.a. per capita	7.23	12.58	48
Hi Tech p.a. (1994-2007)	2.84	12.70	41
Hi Tech p.a. per capita	1.10	3.15	47
Info. Tech p.a. (1994-2007)	1.00	4.98	39
Info. Tech p.a. per capita	0.38	1.17	39
Average per capita (1994-2001)	5.73	10.80	51
Average per capita (2001-2007)	8.94	14.68	44
2001-07 avg./1994-01 avg.	1.56	1.35	8

Note: Per capita = 100,000 people

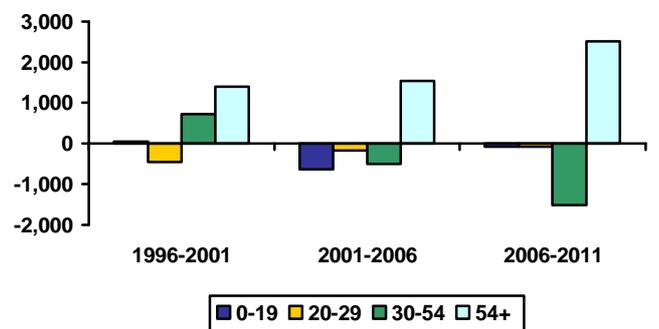
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	32.6%	31.6%	30.3%	29.6%
Age 20-29	11.5%	10.3%	9.9%	9.6%
Age 30-54	34.0%	34.3%	33.2%	29.8%
Age 55+	21.8%	23.8%	26.7%	31.0%
Population Change (average between years)				
Age 0-19		45	-632	-90
Age 20-29		-466	-184	-79
Age 30-54		725	-513	-1,518
Age 55+		1,400	1,542	2,507
Average Annual Growth		0.7%	0.1%	0.3%

Population Change by Age Group



NSW Central West

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	227	265	56	61	18%	20%
Value of Property and Unincorporated Business	186	185	53	60	23%	23%
Value of Financial Assets	129	210	42	42	21%	28%
Value of Household Liabilities	88	130	52	31	175%	173%
Disposable Income after Debt Service Costs	56	61	43	34	49%	50%
Household Debt Service Ratio	17%	23%	58	39	237%	160%
Household Debt to Gross Income Ratio	1.25	1.53	58	39	237%	160%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	17,441	28,822	14,770	9,951	559	3,808
20 to 29		8,586	11,425	8,563	480	2,779
30 to 54		45,163	18,824	13,529	895	5,009
55+		50,129	7,928	6,769	200	4,363

Note: This data has been benchmarked to the Estimated Residential Population.

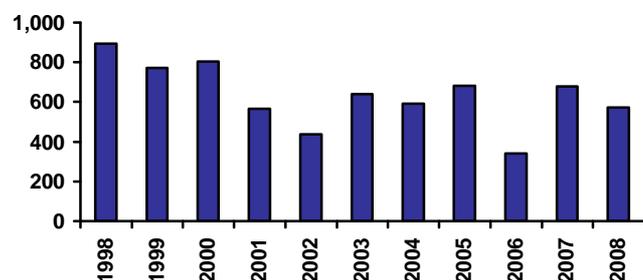
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	226	275	238	212	165	-26%
Non Residential	164	179	193	189	157	0%
Total	390	454	431	400	322	-15%
Value per capita \$2005/06						
Residential	880	1,062	913	809	627	-26%
Non Residential	638	692	740	721	599	-1%
Total	1,518	1,754	1,653	1,529	1,226	-16%
Rank (value per capita)						
Residential	51	53	55	58	58	
Non Residential	51	53	48	48	40	
Total	47	52	55	58	58	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	894	773	805	567	439	640	591	682	342	678	573
Rank	29	39	32	51	50	32	48	39	53	41	41

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	20.8	23.0	23.2	24.0	23.1	22.8
Rank	38	36	34	29	36	35

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	158
Rank	40

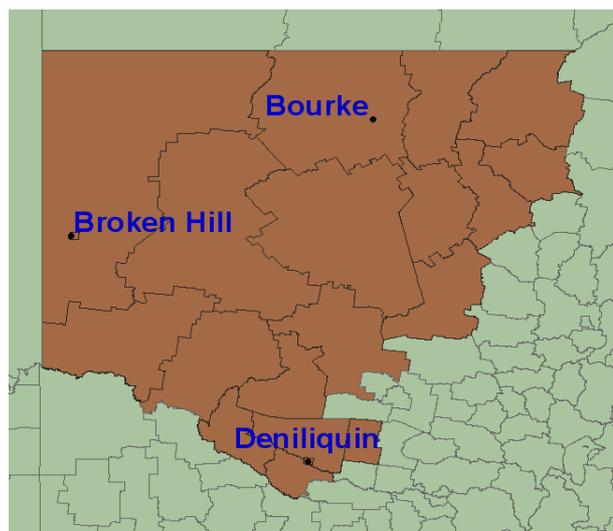
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	397	400	400
Mining	43	57	61
Manufacturing	496	505	520
Utilities	14	17	17
Construction	582	573	595
Wholesale	901	943	928
Retail	1,483	1,537	1,464
Hospitality	205	210	312
Transport	221	278	293
Communication	13	29	29
Finance	849	956	968
Property & Business	391	705	524
Government	51	50	50
Education	60	65	87
Health & Community	138	195	211
Cultural & Recreational	102	111	227
Personal Services	95	136	171

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NSW Far West



The Far West of NSW is characterised by low and unreliable rainfall, though its plains can be flooded when there is heavy rainfall in the Murray-Darling catchments. For the most part it is pastoral country – by long tradition sheep for wool, but gradually diversifying. In good seasons crops can be grown in the eastern parts of the region, and subject to water supply there are small irrigation areas, particularly along the Murray opposite Victoria. Broken Hill and Cobar have long been known for their mineral deposits, and the development of new mines has brought recent revival. Much of the region is closer to Adelaide than Sydney, and some is closer to Melbourne, geographic facts which are reflected in trading arrangements. The Aboriginal population of the region is substantial and increasing.

Major centres:

Bourke, Broken Hill, Deniliquin

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	100	99	97	97	96	96	-1.7%	-1.1%	-0.8%	-0.6%	-0.6%	-1.2%	-0.6%
Households	36	36	37	37	38	39	1.7%	1.7%	1.8%	1.7%	1.6%	1.7%	1.6%
NIEIR Workforce	42	42	42	42	42	42	0.0%	-0.6%	-0.2%	0.3%	0.8%	-0.2%	0.6%
NIEIR Employment	36	37	36	36	37	37	0.1%	-0.3%	0.2%	0.5%	0.8%	0.0%	0.6%
NIEIR Unemployment	5.7	5.6	5.5	5.4	5.3	5.4	-0.1%	-2.2%	-3.1%	-0.9%	1.3%	-1.8%	0.2%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	13.4%	13.4%	13.2%	12.8%	12.6%	12.7%	0.0	-0.2	-0.4	-0.2	0.1	-0.2	0.0
Headline Unemployment	7.2%	7.0%	6.6%	6.3%	5.8%	5.6%	-0.2	-0.4	-0.3	-0.5	-0.2	-0.3	-0.3
NIEIR Structural U/E	22.9%	22.2%	21.8%	20.7%	20.2%	19.7%	-0.6	-0.5	-1.1	-0.5	-0.5	-0.7	-0.5

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,214	1,239	1,281	1,310	1,339	1,377	12,107	12,573	13,150	13,547	13,932	14,413	2.6%	2.5%
Taxes Paid	466	487	500	479	442	472	4,654	4,941	5,133	4,955	4,603	4,937	0.9%	-0.8%
Benefits	521	599	564	550	578	612	5,198	6,080	5,789	5,692	6,015	6,405	1.8%	5.4%
Business Income	752	834	811	714	499	556	7,501	8,466	8,327	7,386	5,197	5,823	-1.7%	-11.7%
Interest Paid	187	213	225	231	247	317	1,864	2,160	2,310	2,391	2,572	3,318	7.4%	17.1%
Property Income	233	247	273	309	347	391	2,328	2,510	2,799	3,197	3,613	4,090	9.8%	12.4%
Disposable Income	2,412	2,587	2,578	2,542	2,503	2,613	24,059	26,251	26,456	26,299	26,043	27,348	1.8%	1.4%
Rank							22	18	21	26	28	20		
%Rank #1							60%	61%	57%	55%	52%	51%		
Business Value Added	1,965	2,073	2,093	2,024	1,838	1,933	19,608	21,039	21,477	20,933	19,129	20,236	1.0%	-2.3%
Rank							35	30	30	40	50	49		
%Rank #1							56%	58%	55%	52%	47%	48%		
Business Productivity							48,735	50,805	51,881	52,634	53,492	56,358	2.6%	3.5%
Rank							11	12	11	12	13	12		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NSW Far West

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.15%	0.11%
Disability Support (aged 21-24)	0.17%	0.12%
Disability Support (aged 25+)	5.22%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.08%	0.08%
Parenting Payment - Single (aged 25+)	0.28%	0.19%
Unemployed Long Term	1.95%	1.52%
Unemployed Short Term	1.98%	1.26%
Youth Allowance - Non Student	1.00%	0.78%
Youth Allowance Student	0.70%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	21.6%	8
2004	23.2%	7
2005	21.9%	9
2006	21.6%	7
2007	23.1%	5
2008	23.4%	5

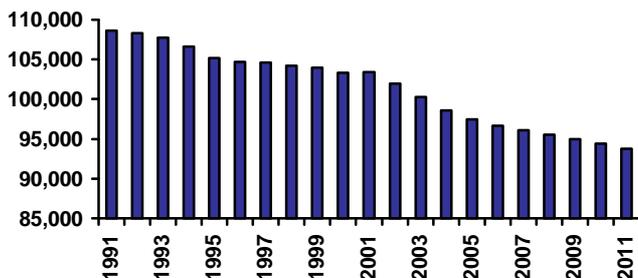
BABY BOUNCE

	Per cent	Rank
2002	1.43%	10
2003	1.42%	8
2004	1.39%	11
2005	1.39%	15
2006	1.41%	15
2007	1.26%	39
Bounce 2005-06	0.03%	49
Actual Change 2005-06 (Number)	15	62
Bounce 2006-07	-0.16%	64
Actual Change 2006-07 (Number)	-158	55

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.1	65
Share of population under 55	0.7	52
Aged migration	0.0	28
Population growth rate, 55+	0.0	57
Demographic stress	0.2	1
Dominant locations	0.5	43
Family / Youth migration	-26.0	58
Fertility bounce, 1996-2005	0.0	62
Fertility, babies % pop, 2005	0.0	19
Working elderly	0.3	31
SUSTAINABILITY SCORE	51.3	50

Population Profile



POPULATION

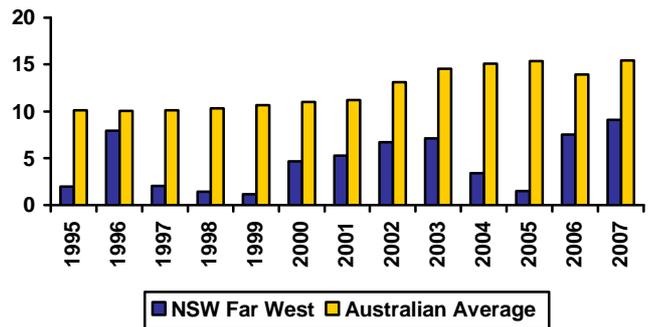
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	109	108	108	107	105	105	105	104	104	103	103	102	100	99	97	97	96	96	95	94	94

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	4.88	46.56	61
Average p.a. per capita	4.84	12.58	61
Hi Tech p.a. (1994-2007)	0.26	12.70	64
Hi Tech p.a. per capita	0.26	3.15	64
Info. Tech p.a. (1994-2007)	0.08	4.98	60
Info. Tech p.a. per capita	0.08	1.17	61
Average per capita (1994-2001)	3.90	10.80	62
Average per capita (2001-2007)	6.17	14.68	58
2001-07 avg./1994-01 avg.	1.58	1.35	7

Note: Per capita = 100,000 people

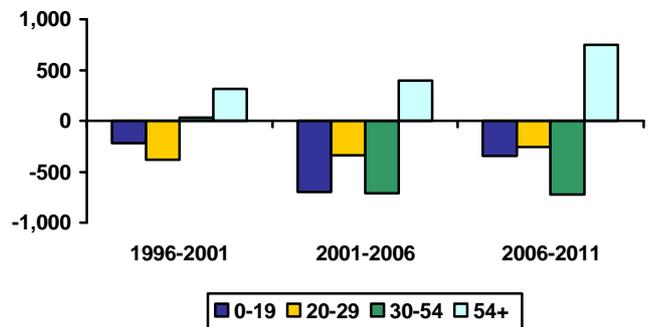
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.8%	30.1%	28.6%	27.6%
Age 20-29	12.1%	10.4%	9.4%	8.3%
Age 30-54	34.9%	35.4%	34.2%	31.5%
Age 55+	22.3%	24.1%	27.8%	32.7%
Population Change (average between years)				
Age 0-19		-218	-699	-348
Age 20-29		-383	-340	-255
Age 30-54		31	-709	-721
Age 55+		316	399	746
Average Annual Growth		-0.2%	-1.3%	-0.6%

Population Change by Age Group



NSW Far West

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	198	262	60	62	16%	19%
Value of Property and Unincorporated Business	153	160	65	65	19%	20%
Value of Financial Assets	133	209	40	43	22%	28%
Value of Household Liabilities	87	108	49	11	174%	144%
Disposable Income after Debt Service Costs	68	64	17	24	60%	53%
Household Debt Service Ratio	14%	19%	35	15	203%	135%
Household Debt to Gross Income Ratio	1.07	1.29	35	15	203%	135%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	6,653	10,956	3,751	3,653	149	1,501
20 to 29		3,515	2,736	3,599	178	1,053
30 to 54		18,610	5,100	6,050	363	1,918
55+		19,978	2,202	2,726	52	1,932

Note: This data has been benchmarked to the Estimated Residential Population.

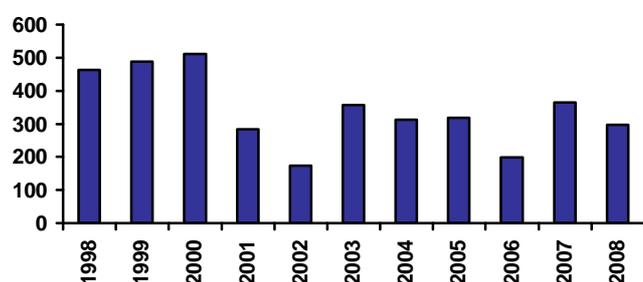
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	53	66	59	56	44	-19%
Non Residential	55	55	42	43	28	-31%
Total	107	121	101	99	72	-25%
Value per capita \$2005/06						
Residential	513	674	618	591	466	-17%
Non Residential	529	554	434	448	293	-29%
Total	1,042	1,228	1,052	1,039	760	-23%
Rank (value per capita)						
Residential	62	63	62	63	62	
Non Residential	62	63	64	63	65	
Total	62	63	63	64	64	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	464	488	512	284	174	357	312	319	199	365	297
Rank	58	58	58	65	64	59	63	63	63	63	61

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	24.9	26.4	26.8	26.9	26.7	26.7
Rank	15	13	13	11	11	10

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	52
Rank	60

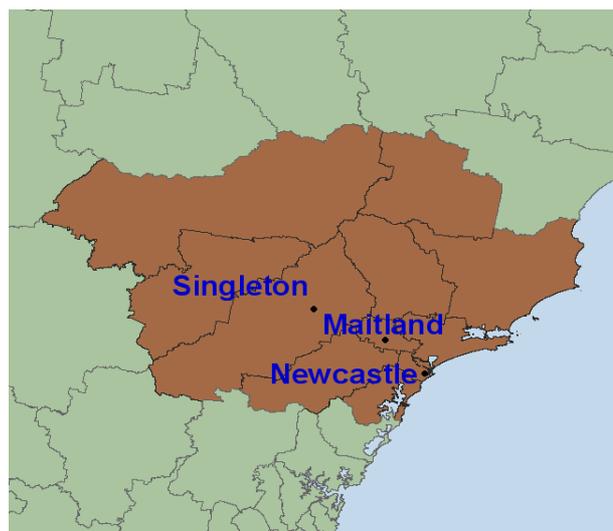
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	356	359	355
Mining	51	52	55
Manufacturing	194	203	210
Utilities	12	10	12
Construction	268	263	275
Wholesale	409	424	433
Retail	733	761	726
Hospitality	136	135	175
Transport	120	151	155
Communication	6	7	5
Finance	635	685	688
Property & Business	139	234	162
Government	32	27	29
Education	20	27	33
Health & Community	58	79	84
Cultural & Recreational	59	65	122
Personal Services	48	63	73

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NSW Hunter



The Hunter region centres on the City of Newcastle, which, despite its picturesque location, was always overshadowed by Sydney as a financial and administrative centre. The Port of Newcastle handles a wide variety of bulk freight, particularly coal mined within the region but also rural exports from the northern half of NSW. The region was also known for heavy industry, but this has shared in the general decline of Australian manufacturing. Parts of the region, like Port Stephens and Scone, are perhaps best thought of as extensions of the North Coast; hobby farm and retirement areas related directly to Sydney. The Hunter Valley vineyards have also been expanding.

Major centres:

Newcastle, Maitland, Singleton

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	601	605	612	618	624	632	0.8%	1.1%	1.0%	1.1%	1.2%	0.9%	1.1%
Households	212	217	222	226	230	234	2.1%	2.2%	1.9%	1.8%	1.8%	2.1%	1.8%
NIEIR Workforce	284	287	289	295	300	307	1.0%	1.0%	1.9%	1.7%	2.4%	1.3%	2.1%
NIEIR Employment	250	255	259	265	272	280	1.7%	1.6%	2.4%	2.5%	3.1%	1.9%	2.8%
NIEIR Unemployment	33.3	31.9	30.6	29.7	28.2	26.9	-4.3%	-3.9%	-2.9%	-5.1%	-4.8%	-3.7%	-4.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	11.7%	11.1%	10.6%	10.1%	9.4%	8.8%	-0.6	-0.5	-0.5	-0.7	-0.7	-0.5	-0.7
Headline Unemployment	7.8%	7.0%	6.5%	6.2%	5.7%	5.2%	-0.8	-0.5	-0.3	-0.5	-0.5	-0.5	-0.5
NIEIR Structural U/E	18.5%	17.8%	17.3%	16.6%	15.9%	15.2%	-0.7	-0.5	-0.7	-0.7	-0.7	-0.6	-0.7

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	10,138	10,490	11,041	11,551	11,937	12,453	16,882	17,332	18,052	18,705	19,117	19,714	4.4%	3.8%
Taxes Paid	2,862	2,936	3,093	3,239	3,368	3,560	4,765	4,850	5,057	5,245	5,393	5,636	4.2%	4.8%
Benefits	2,753	3,006	3,128	3,046	3,144	3,216	4,584	4,966	5,115	4,933	5,036	5,092	3.4%	2.8%
Business Income	1,286	1,390	1,390	1,492	1,474	1,525	2,141	2,296	2,273	2,416	2,361	2,414	5.1%	1.1%
Interest Paid	1,136	1,417	1,639	1,840	2,148	2,702	1,892	2,342	2,680	2,979	3,440	4,278	17.4%	21.2%
Property Income	1,769	1,962	2,232	2,561	2,880	3,285	2,946	3,242	3,650	4,148	4,612	5,201	13.1%	13.2%
Disposable Income	13,274	13,790	14,411	14,988	16,081	16,614	22,105	22,784	23,563	24,271	25,755	26,301	4.1%	5.3%
Rank							36	39	39	39	32	26		
%Rank #1							55%	53%	51%	51%	51%	49%		
Business Value Added	11,424	11,880	12,431	13,043	13,411	13,978	19,023	19,628	20,325	21,120	21,478	22,128	4.5%	3.5%
Rank							39	43	41	37	31	33		
%Rank #1							55%	54%	52%	52%	53%	53%		
Business Productivity							45,138	46,242	47,768	48,983	49,272	49,908	2.8%	0.9%
Rank							25	26	24	23	25	30		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NSW Hunter

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.13%	0.11%
Disability Support (aged 21-24)	0.12%	0.12%
Disability Support (aged 25+)	4.49%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.08%	0.08%
Parenting Payment - Single (aged 25+)	0.21%	0.19%
Unemployed Long Term	1.74%	1.52%
Unemployed Short Term	1.55%	1.26%
Youth Allowance - Non Student	0.86%	0.78%
Youth Allowance Student	0.50%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	20.7%	11
2004	21.8%	13
2005	21.7%	10
2006	20.3%	15
2007	19.6%	19
2008	19.4%	25

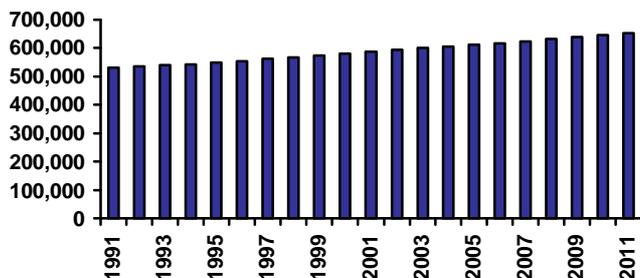
BABY BOUNCE

	Per cent	Rank
2002	1.21%	45
2003	1.21%	38
2004	1.19%	40
2005	1.21%	42
2006	1.26%	39
2007	1.18%	52
Bounce 2005-06	0.05%	15
Actual Change 2005-06 (Number)	411	6
Bounce 2006-07	-0.08%	55
Actual Change 2006-07 (Number)	-434	65

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	47
Aged migration	0.0	13
Population growth rate, 55+	0.1	24
Demographic stress	0.0	25
Dominant locations	0.6	35
Family / Youth migration	-9.0	49
Fertility bounce, 1996-2005	0.0	34
Fertility, babies % pop, 2005	0.0	36
Working elderly	0.2	60
SUSTAINABILITY SCORE	58.3	35

Population Profile



POPULATION

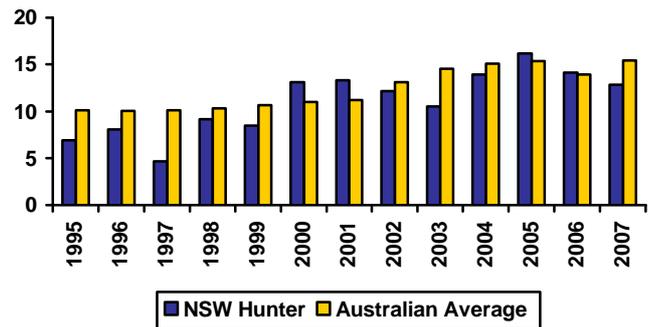
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	531	535	539	543	548	554	562	568	573	580	588	594	601	605	612	618	624	632	639	645	652

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	65.88	46.56	12
Average p.a. per capita	11.18	12.58	22
Hi Tech p.a. (1994-2007)	11.29	12.70	18
Hi Tech p.a. per capita	1.90	3.15	29
Info. Tech p.a. (1994-2007)	3.23	4.98	21
Info. Tech p.a. per capita	0.54	1.17	35
Average per capita (1994-2001)	9.48	10.80	23
Average per capita (2001-2007)	13.26	14.68	21
2001-07 avg./1994-01 avg.	1.40	1.35	23

Note: Per capita = 100,000 people

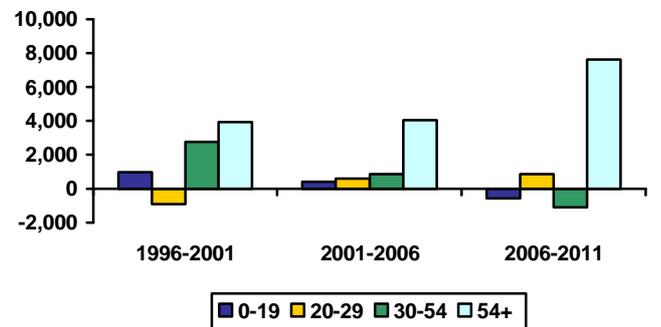
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	29.8%	28.9%	27.8%	25.9%
Age 20-29	12.6%	11.1%	11.1%	11.1%
Age 30-54	34.4%	34.8%	33.8%	31.2%
Age 55+	23.2%	25.2%	27.3%	31.7%
Population Change (average between years)				
Age 0-19		966	409	-582
Age 20-29		-891	587	879
Age 30-54		2,767	855	-1,091
Age 55+		3,931	4,045	7,639
Average Annual Growth		1.2%	1.0%	1.1%

Population Change by Age Group



NSW Hunter

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	293	367	43	43	23%	27%
Value of Property and Unincorporated Business	233	273	32	39	29%	34%
Value of Financial Assets	136	238	38	30	22%	32%
Value of Household Liabilities	76	144	27	42	151%	193%
Disposable Income after Debt Service Costs	56	62	41	32	50%	51%
Household Debt Service Ratio	14%	24%	36	45	204%	168%
Household Debt to Gross Income Ratio	1.08	1.61	36	45	204%	168%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	38,104	65,762	36,618	13,505	1,803	7,734
20 to 29		27,734	31,037	15,961	2,899	6,203
30 to 54		109,731	53,438	24,022	3,791	10,840
55+		122,348	21,830	12,868	660	10,676

Note: This data has been benchmarked to the Estimated Residential Population.

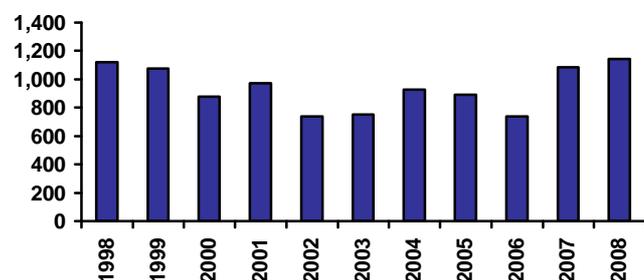
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	754	875	749	712	536	-24%
Non Residential	480	568	733	673	531	14%
Total	1,234	1,443	1,482	1,385	1,067	-9%
Value per capita \$2005/06						
Residential	1,292	1,438	1,199	1,127	839	-27%
Non Residential	822	933	1,174	1,065	832	10%
Total	2,115	2,370	2,373	2,193	1,671	-12%
Rank (value per capita)						
Residential	29	33	40	46	49	
Non Residential	29	33	19	22	21	
Total	25	31	31	34	37	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,122	1,076	880	973	739	750	928	893	737	1,084	1,144
Rank	22	22	20	15	19	18	19	16	20	18	14

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	22.6	24.2	24.3	24.3	23.9	23.0
Rank	24	25	23	24	25	34

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	563
Rank	16

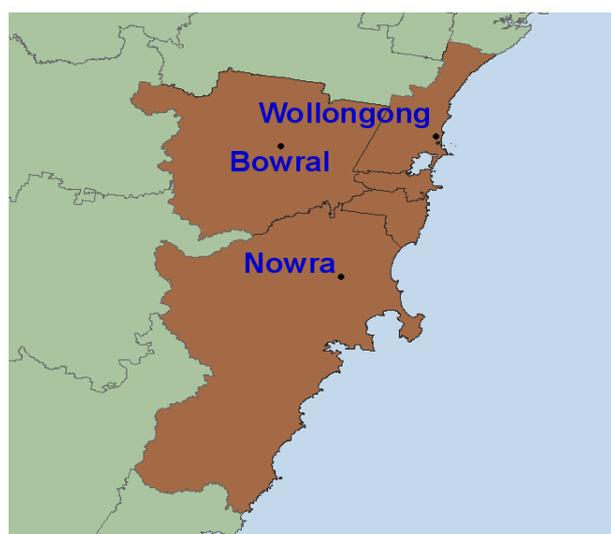
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	197	186	200
Mining	105	167	172
Manufacturing	1,232	1,262	1,322
Utilities	13	12	11
Construction	1,516	1,526	1,566
Wholesale	1,813	1,916	1,943
Retail	2,244	2,276	2,190
Hospitality	241	244	410
Transport	322	446	466
Communication	18	40	39
Finance	1,887	2,209	2,247
Property & Business	1,211	2,282	1,691
Government	35	33	32
Education	128	137	144
Health & Community	369	543	550
Cultural & Recreational	236	260	656
Personal Services	197	302	386

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NSW Illawarra



South of Sydney the coast and the sandstone cliffs of the Illawarra escarpment define an urban triangle. Under the cliffs lie coal seams, hence the development of heavy industry in the region. These seams are still mined, though the coal is now mostly extracted via shafts well back from the escarpment. Heavy industry also survives. Despite the transport costs imposed by the necessity to descend the escarpment, Port Kembla also exports coal and grain as well as serving local industry. The northern part of the region is within commuting range of Sydney South, while the part over the top of the escarpment includes water reserves and up-market hobby farms plus a cement works. Nowra is noted for its paper and flour mills, and again is the gateway to country valued as a rural retreat from Sydney.

Major centres:

Wollongong, Nowra, Bowral

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	407	409	412	415	418	421	0.4%	0.7%	0.7%	0.8%	0.8%	0.6%	0.8%
Households	142	146	150	153	157	161	2.8%	2.7%	2.4%	2.4%	2.2%	2.6%	2.3%
NIEIR Workforce	190	190	192	198	201	205	-0.1%	1.1%	3.0%	1.6%	1.7%	1.3%	1.7%
NIEIR Employment	167	169	172	178	180	186	1.3%	1.9%	3.0%	1.3%	3.2%	2.0%	2.3%
NIEIR Unemployment	23.1	20.8	19.7	20.4	21.2	18.9	-10.0%	-5.3%	3.3%	4.1%	-10.7%	-4.1%	-3.6%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	12.2%	11.0%	10.3%	10.3%	10.5%	9.3%	-1.2	-0.7	0.0	0.3	-1.3	-0.6	-0.5
Headline Unemployment	9.6%	8.4%	7.7%	8.0%	8.2%	6.9%	-1.2	-0.7	0.3	0.2	-1.3	-0.5	-0.6
NIEIR Structural U/E	16.4%	15.9%	15.6%	15.0%	14.6%	14.1%	-0.5	-0.3	-0.7	-0.3	-0.6	-0.5	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	6,882	7,137	7,528	7,822	8,022	8,403	16,898	17,450	18,280	18,861	19,189	19,944	4.4%	3.7%
Taxes Paid	1,904	1,958	2,082	2,101	2,185	2,329	4,675	4,787	5,055	5,067	5,225	5,528	3.3%	5.3%
Benefits	1,780	1,976	2,061	2,059	2,182	2,290	4,370	4,832	5,004	4,966	5,218	5,434	5.0%	5.4%
Business Income	888	937	1,027	941	934	973	2,180	2,292	2,493	2,269	2,235	2,310	1.9%	1.7%
Interest Paid	763	955	1,109	1,249	1,462	1,806	1,872	2,335	2,693	3,011	3,497	4,287	17.9%	20.3%
Property Income	1,279	1,463	1,594	1,808	2,026	2,310	3,141	3,576	3,869	4,359	4,845	5,483	12.2%	13.1%
Disposable Income	8,921	9,330	9,801	10,069	10,815	11,344	21,904	22,811	23,798	24,280	25,871	26,922	4.1%	6.1%
Rank							40	38	38	38	31	22		
%Rank #1							54%	53%	51%	51%	52%	50%		
Business Value Added	7,770	8,075	8,555	8,762	8,957	9,377	19,078	19,742	20,773	21,129	21,424	22,254	4.1%	3.4%
Rank							38	41	37	36	33	32		
%Rank #1							55%	54%	53%	52%	53%	53%		
Business Productivity							45,917	47,210	48,705	48,884	49,408	50,163	2.1%	1.3%
Rank							19	21	20	24	24	28		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NSW Illawarra

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.12%	0.11%
Disability Support (aged 21-24)	0.12%	0.12%
Disability Support (aged 25+)	3.91%	3.41%
Parenting Payment - Single (aged 16-20)	0.01%	0.00%
Parenting Payment - Single (aged 21-24)	0.06%	0.08%
Parenting Payment - Single (aged 25+)	0.19%	0.19%
Unemployed Long Term	1.77%	1.52%
Unemployed Short Term	1.52%	1.26%
Youth Allowance - Non Student	0.87%	0.78%
Youth Allowance Student	0.44%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	19.9%	16
2004	21.2%	16
2005	21.0%	15
2006	20.5%	13
2007	20.2%	15
2008	20.2%	18

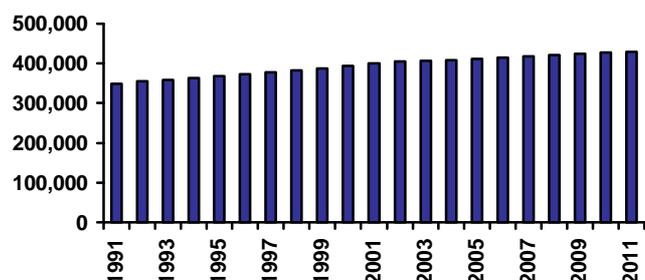
BABY BOUNCE

	Per cent	Rank
2002	1.18%	49
2003	1.18%	48
2004	1.15%	52
2005	1.16%	52
2006	1.21%	49
2007	1.12%	59
Bounce 2005-06	0.04%	25
Actual Change 2005-06 (Number)	217	23
Bounce 2006-07	-0.08%	54
Actual Change 2006-07 (Number)	-302	63

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	55
Aged migration	0.0	11
Population growth rate, 55+	0.1	21
Demographic stress	0.0	15
Dominant locations	0.6	34
Family / Youth migration	-39.0	65
Fertility bounce, 1996-2005	0.0	51
Fertility, babies % pop, 2005	0.0	45
Working elderly	0.2	62
SUSTAINABILITY SCORE	58.8	34

Population Profile



POPULATION

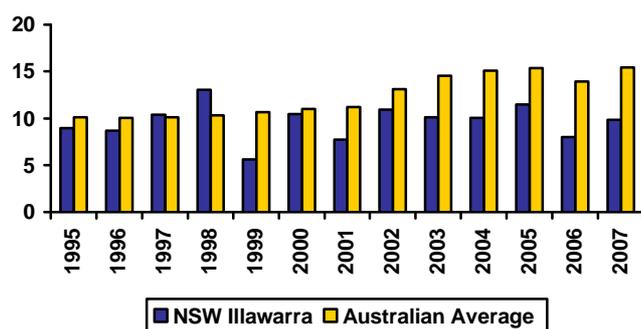
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	350	355	359	363	368	373	378	382	388	394	400	404	407	409	412	415	418	421	424	427	429

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	38.01	46.56	25
Average p.a. per capita	9.65	12.58	30
Hi Tech p.a. (1994-2007)	7.92	12.70	25
Hi Tech p.a. per capita	1.99	3.15	25
Info. Tech p.a. (1994-2007)	2.25	4.98	29
Info. Tech p.a. per capita	0.56	1.17	32
Average per capita (1994-2001)	9.46	10.80	24
Average per capita (2001-2007)	10.04	14.68	36
2001-07 avg./1994-01 avg.	1.06	1.35	59

Note: Per capita = 100,000 people

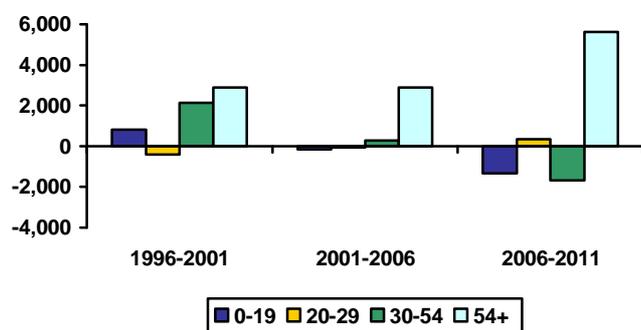
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.2%	29.2%	27.9%	25.4%
Age 20-29	12.2%	10.9%	10.4%	10.4%
Age 30-54	34.1%	34.4%	33.6%	30.5%
Age 55+	23.5%	25.5%	28.1%	33.7%
Population Change (average between years)				
Age 0-19		820	-177	-1,324
Age 20-29		-426	-70	330
Age 30-54		2,132	288	-1,663
Age 55+		2,899	2,902	5,608
Average Annual Growth		1.4%	0.7%	0.7%

Population Change by Age Group



NSW Illawarra

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	348	419	27	29	28%	31%
Value of Property and Unincorporated Business	280	313	23	29	35%	39%
Value of Financial Assets	143	253	32	25	23%	34%
Value of Household Liabilities	76	147	26	45	151%	196%
Disposable Income after Debt Service Costs	57	64	40	23	50%	53%
Household Debt Service Ratio	14%	24%	31	42	200%	164%
Household Debt to Gross Income Ratio	1.05	1.57	31	42	200%	164%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	25,050	47,338	22,850	8,268	1,535	5,344
20 to 29		18,948	19,346	7,905	3,141	3,892
30 to 54		75,223	34,363	14,940	2,877	7,136
55+		84,728	13,810	10,036	628	7,347

Note: This data has been benchmarked to the Estimated Residential Population.

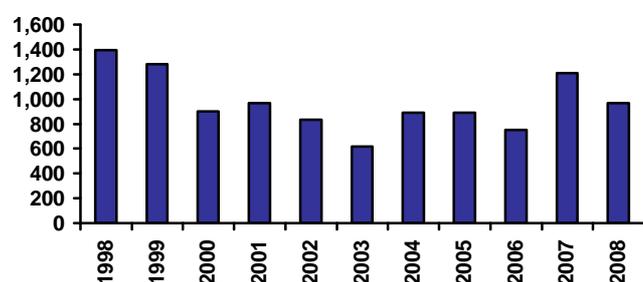
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	583	605	430	401	310	-37%
Non Residential	237	250	331	328	235	19%
Total	820	855	762	730	545	-21%
Value per capita \$2005/06						
Residential	1,471	1,475	1,029	953	731	-39%
Non Residential	600	610	793	779	554	16%
Total	2,071	2,084	1,822	1,731	1,284	-23%
Rank (value per capita)						
Residential	23	32	50	53	53	
Non Residential	23	32	41	39	49	
Total	29	40	50	52	56	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,393	1,283	902	965	835	619	888	891	752	1,208	969
Rank	10	15	17	16	11	38	21	17	19	14	24

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	19.4	21.2	21.2	21.1	20.9	20.5
Rank	45	45	45	47	53	57

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	359
Rank	24

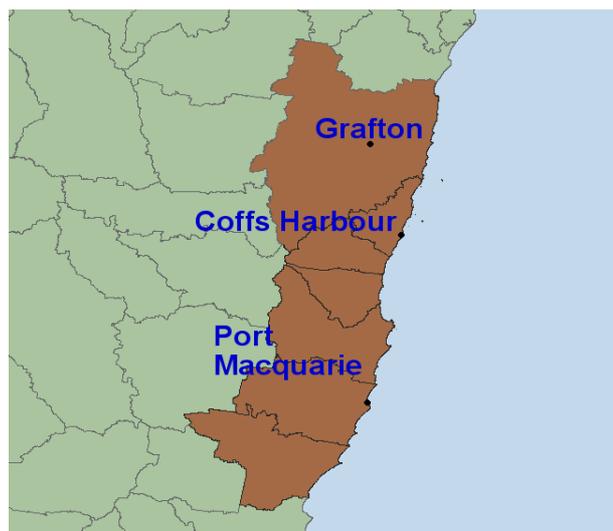
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	82	85	87
Mining	51	71	69
Manufacturing	768	805	828
Utilities	7	7	7
Construction	1,073	1,054	1,103
Wholesale	1,289	1,378	1,379
Retail	1,670	1,696	1,589
Hospitality	173	168	316
Transport	192	294	308
Communication	18	33	34
Finance	1,231	1,384	1,399
Property & Business	804	1,416	1,046
Government	11	10	9
Education	78	82	92
Health & Community	273	366	381
Cultural & Recreational	183	209	466
Personal Services	124	218	258

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NSW Mid North Coast



The Mid North Coast comprises of two main sub-regions. The first is the coastal belt of retirement and tourist developments including Port Macquarie and Coffs Harbour. The other is a series of well-watered valleys most of which have an important but flood-prone town located somewhat up-river from the coast (Taree, Kempsey, Grafton). Each of these towns is the supply centre for its valley, which includes areas of intensive river-flat agriculture. With the retirement exodus from Sydney, the coastal belt is gradually coming to dominate the region.

Major centres:

Coffs Harbour, Port Macquarie, Grafton

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	287	290	294	296	299	302	1.2%	1.1%	1.0%	1.0%	0.7%	1.1%	0.8%
Households	103	106	109	112	114	117	2.9%	2.8%	2.5%	2.2%	1.8%	2.8%	2.0%
NIEIR Workforce	116	119	120	122	125	129	2.6%	1.4%	1.7%	2.0%	3.4%	1.9%	2.7%
NIEIR Employment	99	103	104	105	108	113	3.4%	0.8%	1.3%	3.0%	4.2%	1.8%	3.6%
NIEIR Unemployment	16.1	15.8	16.7	17.3	16.7	16.4	-1.8%	5.5%	4.0%	-3.6%	-2.0%	2.5%	-2.8%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	13.9%	13.3%	13.9%	14.2%	13.4%	12.7%	-0.6	0.5	0.3	-0.8	-0.7	0.1	-0.7
Headline Unemployment	8.5%	8.0%	8.5%	8.9%	7.8%	7.2%	-0.5	0.5	0.3	-1.0	-0.6	0.1	-0.8
NIEIR Structural U/E	26.9%	25.6%	24.8%	24.1%	23.4%	22.3%	-1.3	-0.8	-0.7	-0.7	-1.0	-1.0	-0.9

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,155	3,322	3,464	3,552	3,702	3,914	10,997	11,439	11,796	11,982	12,361	12,982	4.0%	5.0%
Taxes Paid	830	877	909	922	952	1,033	2,894	3,019	3,094	3,109	3,180	3,425	3.5%	5.8%
Benefits	1,507	1,696	1,773	1,765	1,860	1,939	5,254	5,840	6,038	5,953	6,211	6,433	5.4%	4.8%
Business Income	688	765	745	782	762	843	2,400	2,633	2,536	2,637	2,544	2,797	4.3%	3.9%
Interest Paid	457	571	661	743	869	1,100	1,593	1,966	2,251	2,506	2,901	3,649	17.6%	21.7%
Property Income	733	791	912	1,066	1,221	1,412	2,555	2,724	3,105	3,596	4,078	4,684	13.3%	15.1%
Disposable Income	5,235	5,563	5,779	5,974	6,481	6,863	18,246	19,157	19,678	20,149	21,641	22,762	4.5%	7.2%
Rank							64	63	63	63	59	59		
%Rank #1							45%	44%	42%	42%	43%	42%		
Business Value Added	3,844	4,086	4,209	4,334	4,464	4,757	13,397	14,072	14,332	14,619	14,904	15,778	4.1%	4.8%
Rank							65	65	65	65	64	64		
%Rank #1							39%	39%	37%	36%	37%	38%		
Business Productivity							38,884	39,957	41,079	41,451	41,794	43,019	2.2%	1.9%
Rank							59	58	59	61	63	64		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NSW Mid North Coast

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.13%	0.11%
Disability Support (aged 21-24)	0.13%	0.12%
Disability Support (aged 25+)	5.40%	3.41%
Parenting Payment - Single (aged 16-20)	0.01%	0.00%
Parenting Payment - Single (aged 21-24)	0.09%	0.08%
Parenting Payment - Single (aged 25+)	0.25%	0.19%
Unemployed Long Term	2.28%	1.52%
Unemployed Short Term	2.51%	1.26%
Youth Allowance - Non Student	1.18%	0.78%
Youth Allowance Student	0.66%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	28.8%	1
2004	30.5%	1
2005	30.7%	1
2006	29.5%	1
2007	28.7%	1
2008	28.3%	2

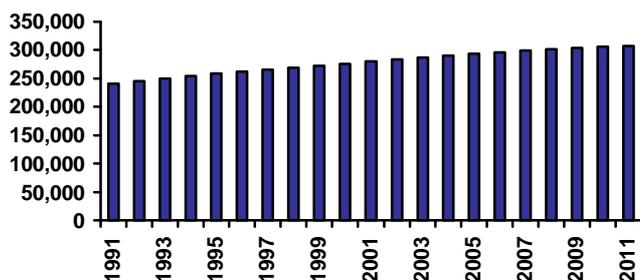
BABY BOUNCE

	Per cent	Rank
2002	1.07%	63
2003	1.06%	63
2004	1.03%	64
2005	1.04%	64
2006	1.08%	64
2007	0.97%	65
Bounce 2005-06	0.04%	26
Actual Change 2005-06 (Number)	150	33
Bounce 2006-07	-0.11%	61
Actual Change 2006-07 (Number)	-302	62

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	65
Aged migration	0.0	3
Population growth rate, 55+	0.1	6
Demographic stress	0.1	2
Dominant locations	0.4	58
Family / Youth migration	-38.0	64
Fertility bounce, 1996-2005	0.0	53
Fertility, babies % pop, 2005	0.0	64
Working elderly	0.2	65
SUSTAINABILITY SCORE	44.9	64

Population Profile



POPULATION

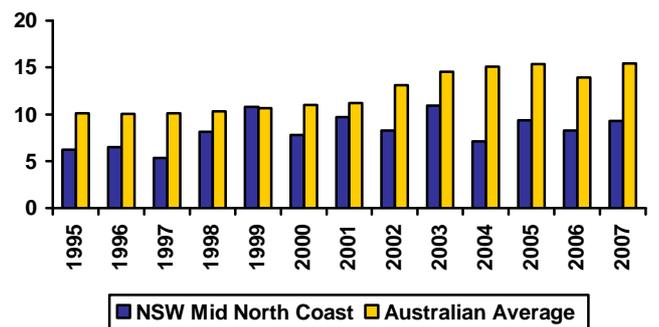
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	240	246	249	255	259	262	266	269	273	276	280	283	287	290	294	296	299	302	304	306	308

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	23.29	46.56	35
Average p.a. per capita	8.34	12.58	40
Hi Tech p.a. (1994-2007)	4.23	12.70	34
Hi Tech p.a. per capita	1.51	3.15	38
Info. Tech p.a. (1994-2007)	0.88	4.98	40
Info. Tech p.a. per capita	0.31	1.17	45
Average per capita (1994-2001)	7.84	10.80	36
Average per capita (2001-2007)	8.90	14.68	45
2001-07 avg./1994-01 avg.	1.13	1.35	57

Note: Per capita = 100,000 people

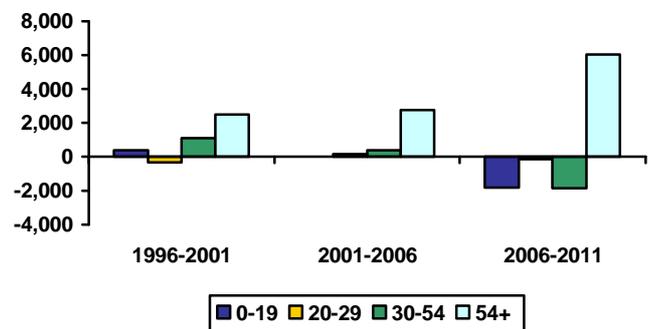
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.2%	29.0%	27.4%	23.5%
Age 20-29	8.8%	7.6%	7.4%	6.8%
Age 30-54	34.0%	33.8%	32.6%	28.4%
Age 55+	27.0%	29.7%	32.7%	41.3%
Population Change (average between years)				
Age 0-19		384	14	-1,808
Age 20-29		-351	139	-165
Age 30-54		1,113	378	-1,839
Age 55+		2,473	2,752	6,028
Average Annual Growth		1.3%	1.1%	0.7%

Population Change by Age Group



NSW Mid North Coast

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	240	306	54	55	19%	23%
Value of Property and Unincorporated Business	186	201	55	56	23%	25%
Value of Financial Assets	117	223	50	38	19%	29%
Value of Household Liabilities	63	118	12	17	125%	157%
Disposable Income after Debt Service Costs	43	51	63	61	39%	42%
Household Debt Service Ratio	15%	24%	47	44	217%	168%
Household Debt to Gross Income Ratio	1.14	1.60	46	44	217%	168%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	16,215	29,531	16,232	11,577	668	4,108
20 to 29		7,689	9,341	7,211	580	2,420
30 to 54		46,600	21,550	19,419	1,438	5,099
55+		63,506	12,479	14,638	531	5,656

Note: This data has been benchmarked to the Estimated Residential Population.

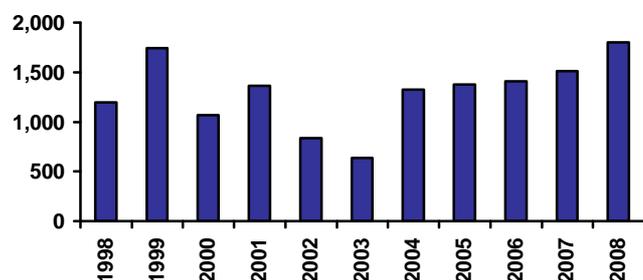
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	410	543	426	373	274	-34%
Non Residential	163	213	220	222	178	-3%
Total	573	756	646	595	452	-25%
Value per capita \$2005/06						
Residential	1,476	1,861	1,423	1,238	903	-36%
Non Residential	585	730	735	736	585	-6%
Total	2,061	2,591	2,158	1,974	1,488	-28%
Rank (value per capita)						
Residential	21	15	31	39	42	
Non Residential	21	15	49	45	43	
Total	30	21	38	44	44	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,198	1,742	1,067	1,366	839	639	1,325	1,377	1,410	1,512	1,799
Rank	14	7	9	4	9	33	7	2	4	6	3

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	23.3	24.4	24.2	23.7	23.9	23.3
Rank	21	24	25	32	26	31

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	161
Rank	38

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	88	96	94
Mining	22	21	22
Manufacturing	548	557	593
Utilities	5	5	8
Construction	646	644	665
Wholesale	756	802	800
Retail	1,315	1,345	1,250
Hospitality	214	213	317
Transport	133	217	223
Communication	5	18	19
Finance	926	1,011	1,028
Property & Business	477	793	544
Government	22	22	24
Education	57	57	61
Health & Community	222	291	292
Cultural & Recreational	129	132	267
Personal Services	82	137	175

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NSW North



The NSW North comprises three distinct sub-regions. The first area, around Tamworth, is a mixed-farming region, and Tamworth itself has significant commercial and resource-processing activity. The second area, the New England sub-region, is a high plateau devoted mainly to pasture for beef and wool. Armidale stands out as an academic centre. The third area, the North-West plains, comprise black-soil country which is farmed quite intensively. Crops include wheat, sorghum and cotton. Much of this agriculture depends on pumping from the local rivers. Sadly, flow is unreliable: the rivers sometimes flood, and in other years run dry.

Major centres:

Tamworth, Armidale, Moree

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	180	179	179	180	180	182	-0.6%	0.0%	0.7%	0.2%	0.6%	0.1%	0.4%
Households	63	64	65	67	68	69	1.6%	1.7%	1.9%	2.0%	1.8%	1.7%	1.9%
NIEIR Workforce	79	80	80	81	82	85	1.0%	0.9%	0.8%	1.1%	3.2%	0.9%	2.2%
NIEIR Employment	70	71	71	72	73	75	0.8%	0.8%	1.5%	1.1%	3.0%	1.0%	2.1%
NIEIR Unemployment	9.0	9.2	9.4	9.0	9.1	9.5	2.7%	1.6%	-4.2%	1.3%	4.5%	0.0%	2.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	11.4%	11.6%	11.7%	11.1%	11.1%	11.2%	0.2	0.1	-0.6	0.0	0.1	-0.1	0.1
Headline Unemployment	6.6%	6.7%	6.4%	5.8%	5.8%	5.8%	0.1	-0.2	-0.6	0.1	0.0	-0.3	0.0
NIEIR Structural U/E	18.9%	18.4%	18.1%	17.5%	17.0%	16.4%	-0.5	-0.4	-0.5	-0.6	-0.6	-0.4	-0.6

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	2,347	2,380	2,478	2,559	2,615	2,732	13,047	13,305	13,849	14,200	14,489	15,046	2.9%	3.3%
Taxes Paid	776	781	858	842	812	844	4,316	4,368	4,794	4,670	4,499	4,647	2.7%	0.1%
Benefits	800	903	917	910	961	1,012	4,445	5,046	5,122	5,051	5,324	5,573	4.4%	5.4%
Business Income	929	972	1,089	972	754	731	5,164	5,436	6,084	5,392	4,178	4,026	1.5%	-13.3%
Interest Paid	336	396	432	457	504	643	1,870	2,212	2,413	2,538	2,793	3,539	10.8%	18.5%
Property Income	502	526	621	706	808	986	2,789	2,942	3,470	3,920	4,477	5,431	12.1%	18.1%
Disposable Income	3,994	4,138	4,406	4,446	4,588	4,831	22,203	23,133	24,622	24,671	25,417	26,609	3.6%	4.2%
Rank							35	35	29	35	35	24		
%Rank #1							55%	54%	53%	52%	51%	50%		
Business Value Added	3,276	3,352	3,567	3,531	3,369	3,463	18,211	18,740	19,933	19,592	18,666	19,072	2.5%	-1.0%
Rank							49	54	48	53	56	58		
%Rank #1							52%	52%	51%	48%	46%	45%		
Business Productivity							44,392	45,563	47,204	47,604	48,067	49,973	2.4%	2.5%
Rank							29	32	29	31	33	29		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NSW North

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.13%	0.11%
Disability Support (aged 21-24)	0.13%	0.12%
Disability Support (aged 25+)	4.27%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.13%	0.08%
Parenting Payment - Single (aged 25+)	0.32%	0.19%
Unemployed Long Term	1.89%	1.52%
Unemployed Short Term	1.91%	1.26%
Youth Allowance - Non Student	0.86%	0.78%
Youth Allowance Student	0.64%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	20.0%	15
2004	21.8%	12
2005	20.8%	17
2006	20.5%	12
2007	20.9%	11
2008	20.9%	13

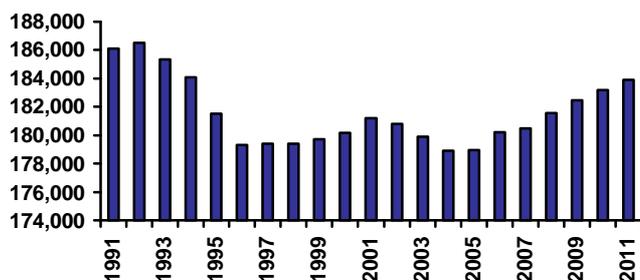
BABY BOUNCE

	Per cent	Rank
2002	1.30%	27
2003	1.32%	22
2004	1.32%	22
2005	1.35%	21
2006	1.41%	16
2007	1.21%	46
Bounce 2005-06	0.06%	13
Actual Change 2005-06 (Number)	119	43
Bounce 2006-07	-0.19%	65
Actual Change 2006-07 (Number)	-340	64

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.6	57
Share of population under 55	0.7	47
Aged migration	0.0	17
Population growth rate, 55+	0.0	40
Demographic stress	0.1	6
Dominant locations	0.4	48
Family / Youth migration	-13.0	53
Fertility bounce, 1996-2005	0.0	25
Fertility, babies % pop, 2005	0.0	23
Working elderly	0.3	25
SUSTAINABILITY SCORE	49.9	52

Population Profile



POPULATION

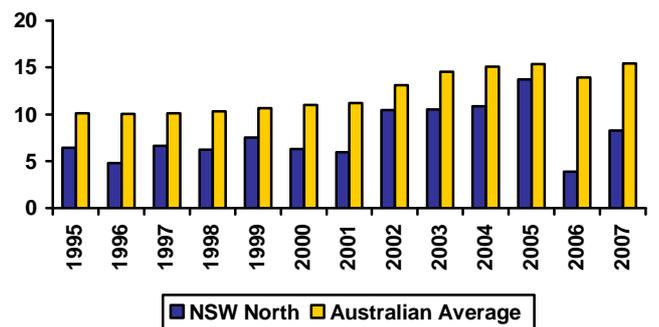
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	186	187	185	184	182	179	179	179	180	180	181	181	180	179	179	180	180	182	182	183	184

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	14.16	46.56	46
Average p.a. per capita	7.86	12.58	43
Hi Tech p.a. (1994-2007)	2.59	12.70	44
Hi Tech p.a. per capita	1.44	3.15	41
Info. Tech p.a. (1994-2007)	0.65	4.98	44
Info. Tech p.a. per capita	0.36	1.17	40
Average per capita (1994-2001)	6.78	10.80	43
Average per capita (2001-2007)	9.46	14.68	40
2001-07 avg./1994-01 avg.	1.40	1.35	24

Note: Per capita = 100,000 people

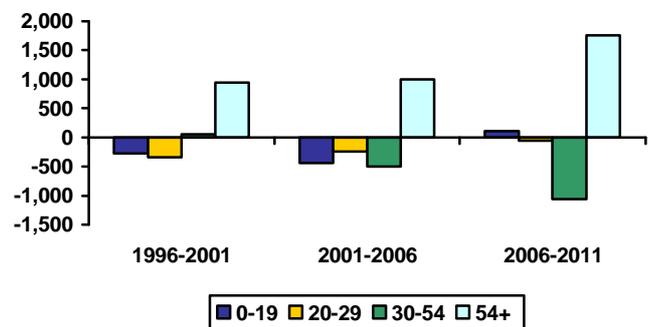
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	32.1%	31.1%	30.0%	29.7%
Age 20-29	11.5%	10.4%	9.8%	9.4%
Age 30-54	34.4%	34.2%	33.0%	29.5%
Age 55+	22.0%	24.3%	27.2%	31.5%
Population Change (average between years)				
Age 0-19		-275	-444	103
Age 20-29		-346	-250	-62
Age 30-54		50	-502	-1,059
Age 55+		942	1,001	1,757
Average Annual Growth		0.2%	-0.1%	0.4%

Population Change by Age Group



NSW North

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	224	300	57	57	18%	22%
Value of Property and Unincorporated Business	169	168	60	64	21%	21%
Value of Financial Assets	139	250	37	26	23%	33%
Value of Household Liabilities	84	118	39	18	167%	158%
Disposable Income after Debt Service Costs	58	64	36	26	51%	52%
Household Debt Service Ratio	16%	21%	50	22	222%	146%
Household Debt to Gross Income Ratio	1.17	1.39	50	22	222%	146%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	12,000	19,264	8,722	8,518	488	2,612
20 to 29		5,760	6,960	7,159	511	1,565
30 to 54		30,830	11,681	11,172	731	3,149
55+		35,019	5,348	5,476	134	3,109

Note: This data has been benchmarked to the Estimated Residential Population.

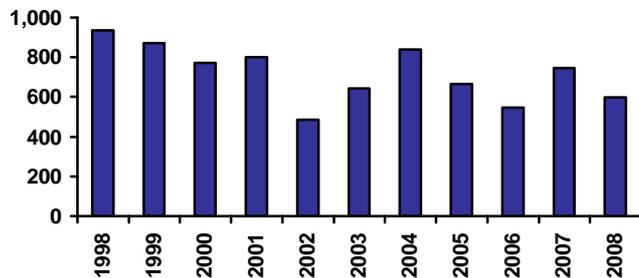
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	90	129	156	151	116	9%
Non Residential	74	79	119	122	91	40%
Total	164	208	275	273	207	21%
Value per capita \$2005/06						
Residential	497	720	867	832	636	8%
Non Residential	410	440	659	673	497	39%
Total	907	1,160	1,526	1,506	1,133	20%
Rank (value per capita)						
Residential	63	61	57	57	56	
Non Residential	63	61	54	54	53	
Total	64	64	58	59	59	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	935	871	773	800	485	642	841	664	547	747	598
Rank	26	30	34	31	44	31	25	40	34	34	38

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	22.3	23.8	24.3	24.3	23.7	23.4
Rank	25	29	24	23	29	29

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	146
Rank	44

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	464	469	470
Mining	30	33	33
Manufacturing	313	328	342
Utilities	7	6	5
Construction	393	394	401
Wholesale	736	765	769
Retail	976	1,000	951
Hospitality	119	131	188
Transport	153	212	217
Communication	6	10	8
Finance	751	830	838
Property & Business	298	559	404
Government	24	24	25
Education	41	43	54
Health & Community	98	138	147
Cultural & Recreational	84	91	182
Personal Services	73	92	124

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NSW Richmond Tweed



Richmond/Tweed is much closer to Brisbane than Sydney, and has increasingly become an extension of the Gold Coast. Its chief centre was and remains Lismore, which is located inland, but recent development has mostly been along the coast and in the nearby high-rainfall hills. Its economic base remains a mixture of retirement and agriculture, but there are signs of employment diversification as the economy of the Gold Coast extends southwards.

Major centres:

Lismore, Tweed Heads

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	222	225	227	230	233	236	1.1%	0.9%	1.4%	1.3%	1.2%	1.1%	1.3%
Households	79	80	81	83	84	86	1.9%	1.7%	1.9%	1.7%	1.4%	1.9%	1.6%
NIEIR Workforce	94	96	98	100	101	104	2.6%	1.4%	1.9%	1.6%	2.6%	2.0%	2.1%
NIEIR Employment	80	83	84	85	88	92	3.3%	1.1%	2.1%	3.6%	4.4%	2.2%	4.0%
NIEIR Unemployment	13.9	13.7	14.1	14.3	12.9	11.7	-1.7%	3.2%	1.0%	-9.8%	-9.5%	0.8%	-9.7%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	14.9%	14.2%	14.5%	14.3%	12.7%	11.2%	-0.6	0.3	-0.1	-1.6	-1.5	-0.2	-1.6
Headline Unemployment	9.2%	8.5%	8.6%	8.6%	7.2%	6.1%	-0.8	0.1	0.0	-1.5	-1.0	-0.2	-1.3
NIEIR Structural U/E	25.5%	24.4%	23.5%	22.2%	20.9%	19.7%	-1.1	-0.9	-1.2	-1.3	-1.2	-1.1	-1.3

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	2,477	2,610	2,703	2,807	2,941	3,114	11,141	11,613	11,914	12,202	12,619	13,201	4.3%	5.3%
Taxes Paid	667	704	727	754	766	825	3,002	3,132	3,205	3,278	3,287	3,496	4.2%	4.6%
Benefits	1,115	1,253	1,307	1,258	1,283	1,296	5,017	5,577	5,762	5,470	5,507	5,495	4.1%	1.5%
Business Income	687	730	739	794	762	841	3,092	3,249	3,256	3,453	3,269	3,566	4.9%	2.9%
Interest Paid	374	472	554	632	749	966	1,682	2,102	2,444	2,746	3,216	4,093	19.1%	23.6%
Property Income	612	685	788	952	1,134	1,411	2,754	3,048	3,475	4,138	4,865	5,980	15.8%	21.7%
Disposable Income	4,161	4,394	4,549	4,736	5,132	5,510	18,718	19,555	20,053	20,587	22,020	23,359	4.4%	7.9%
Rank							63	62	61	61	57	53		
%Rank #1							46%	45%	43%	43%	44%	43%		
Business Value Added	3,164	3,340	3,441	3,602	3,703	3,955	14,232	14,862	15,170	15,655	15,888	16,767	4.4%	4.8%
Rank							63	63	62	63	62	62		
%Rank #1							41%	41%	39%	39%	39%	40%		
Business Productivity							39,779	40,700	41,707	42,588	42,843	44,238	2.3%	1.9%
Rank							53	56	54	57	58	59		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NSW Richmond Tweed

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.13%	0.11%
Disability Support (aged 21-24)	0.13%	0.12%
Disability Support (aged 25+)	5.03%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.07%	0.08%
Parenting Payment - Single (aged 25+)	0.17%	0.19%
Unemployed Long Term	2.21%	1.52%
Unemployed Short Term	2.06%	1.26%
Youth Allowance - Non Student	1.10%	0.78%
Youth Allowance Student	0.50%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	26.8%	2
2004	28.5%	2
2005	28.7%	2
2006	26.6%	2
2007	25.0%	4
2008	23.5%	4

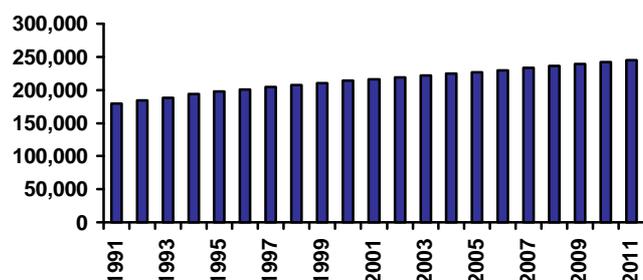
BABY BOUNCE

	Per cent	Rank
2002	1.11%	58
2003	1.10%	59
2004	1.07%	61
2005	1.09%	61
2006	1.12%	61
2007	1.06%	63
Bounce 2005-06	0.04%	29
Actual Change 2005-06 (Number)	126	39
Bounce 2006-07	-0.06%	49
Actual Change 2006-07 (Number)	-108	51

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	63
Aged migration	0.0	5
Population growth rate, 55+	0.1	5
Demographic stress	0.1	12
Dominant locations	0.4	54
Family / Youth migration	-17.0	54
Fertility bounce, 1996-2005	0.0	42
Fertility, babies % pop, 2005	0.0	62
Working elderly	0.2	58
SUSTAINABILITY SCORE	47.2	59

Population Profile



POPULATION

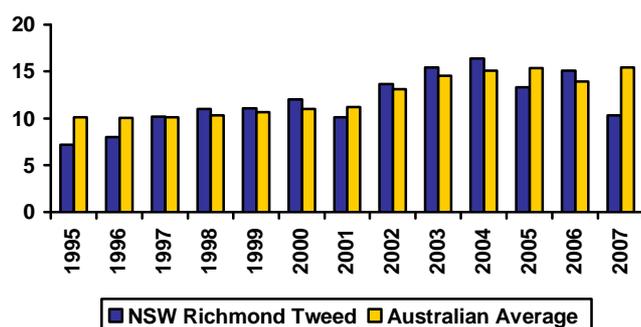
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	180	184	189	193	198	201	204	208	210	214	216	219	222	225	227	230	233	236	239	242	245

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	25.43	46.56	33
Average p.a. per capita	11.77	12.58	18
Hi Tech p.a. (1994-2007)	3.00	12.70	39
Hi Tech p.a. per capita	1.38	3.15	42
Info. Tech p.a. (1994-2007)	1.39	4.98	33
Info. Tech p.a. per capita	0.63	1.17	27
Average per capita (1994-2001)	10.40	10.80	18
Average per capita (2001-2007)	13.62	14.68	20
2001-07 avg./1994-01 avg.	1.31	1.35	36

Note: Per capita = 100,000 people

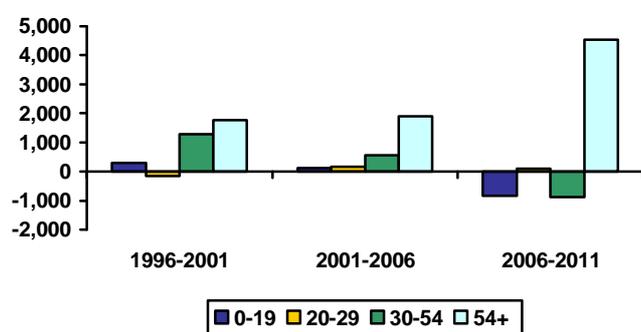
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.4%	28.8%	27.3%	24.0%
Age 20-29	9.7%	8.6%	8.5%	8.1%
Age 30-54	34.8%	35.3%	34.4%	30.6%
Age 55+	25.1%	27.3%	29.8%	37.3%
Population Change (average between years)				
Age 0-19		284	108	-833
Age 20-29		-156	150	83
Age 30-54		1,283	562	-871
Age 55+		1,753	1,894	4,538
Average Annual Growth		1.5%	1.2%	1.2%

Population Change by Age Group



NSW Richmond Tweed

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	277	418	44	30	22%	31%
Value of Property and Unincorporated Business	217	280	41	36	27%	35%
Value of Financial Assets	125	270	46	24	21%	36%
Value of Household Liabilities	65	133	17	34	130%	177%
Disposable Income after Debt Service Costs	45	52	62	58	40%	43%
Household Debt Service Ratio	15%	26%	45	53	216%	177%
Household Debt to Gross Income Ratio	1.14	1.69	45	53	216%	177%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	12,958	22,426	13,445	7,387	707	3,432
20 to 29		6,692	8,344	6,069	1,085	2,014
30 to 54		36,934	19,393	13,856	1,980	4,750
55+		44,853	10,145	8,299	531	4,764

Note: This data has been benchmarked to the Estimated Residential Population.

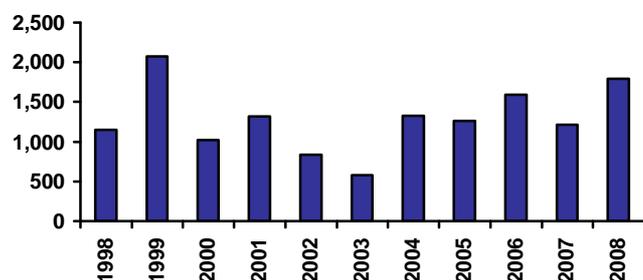
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	335	370	333	316	242	-20%
Non Residential	114	193	256	238	168	15%
Total	449	562	589	554	410	-8%
Value per capita \$2005/06						
Residential	1,562	1,637	1,428	1,341	1,011	-23%
Non Residential	531	850	1,099	1,009	704	10%
Total	2,093	2,488	2,527	2,349	1,715	-12%
Rank (value per capita)						
Residential	19	27	30	35	37	
Non Residential	19	27	20	25	27	
Total	27	25	27	29	34	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,146	2,072	1,021	1,318	835	579	1,326	1,262	1,593	1,214	1,790
Rank	17	4	10	6	10	49	6	5	3	13	4

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	24.3	25.0	24.9	24.2	24.5	23.9
Rank	19	21	20	28	21	27

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	160
Rank	39

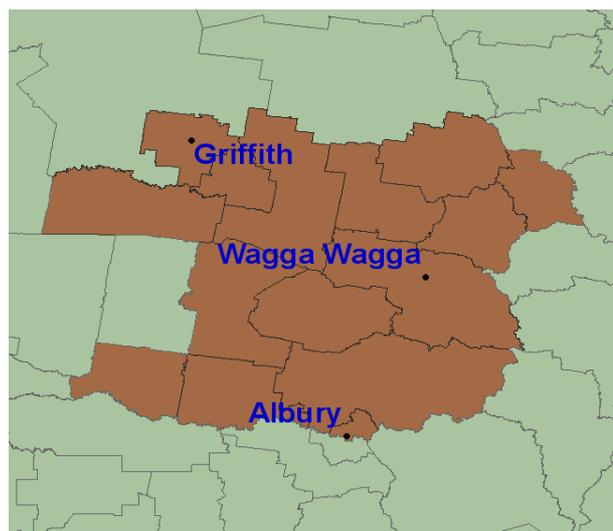
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	94	96	98
Mining	16	15	16
Manufacturing	430	459	476
Utilities	3	2	4
Construction	454	466	485
Wholesale	625	677	684
Retail	895	954	876
Hospitality	158	160	256
Transport	88	143	149
Communication	11	15	16
Finance	963	1,037	1,050
Property & Business	391	655	476
Government	15	14	15
Education	48	46	52
Health & Community	147	194	203
Cultural & Recreational	94	106	231
Personal Services	83	120	137

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NSW Riverina



The Riverina is quintessential Australian mixed farming country, for the most part gently undulating, with rainfall diminishing inland and subject to occasional drought. There are worries that recent droughts portend climate change. Though most of its agriculture is rain-fed, there are significant irrigation areas, notably the Murrumbidgee Irrigation Area with its wine industry. The region is split between economic allegiance to Sydney, which in general supplies Wagga, Griffith and the northern part of the region, and Melbourne, which supplies the southern half. This location between capitals results in the region being astride major national transport routes and is responsible for the location of logistics activity as well as rural processing.

Major centres:

Wagga Wagga, Albury, Griffith

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	208	208	210	212	214	215	0.2%	0.8%	1.2%	0.7%	0.8%	0.7%	0.7%
Households	72	73	75	77	78	79	1.8%	2.1%	2.0%	1.7%	1.5%	2.0%	1.6%
NIEIR Workforce	99	100	100	101	102	105	0.3%	0.3%	0.7%	1.7%	2.3%	0.4%	2.0%
NIEIR Employment	90	91	92	92	94	97	1.0%	0.7%	0.0%	2.7%	2.8%	0.5%	2.7%
NIEIR Unemployment	9.3	8.7	8.3	9.1	8.3	8.0	-6.4%	-4.1%	8.9%	-8.5%	-3.3%	-0.8%	-5.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.3%	8.7%	8.3%	9.0%	8.1%	7.7%	-0.6	-0.4	0.7	-0.9	-0.4	-0.1	-0.7
Headline Unemployment	5.6%	5.1%	5.0%	5.7%	4.8%	4.2%	-0.5	-0.2	0.7	-0.9	-0.6	0.0	-0.7
NIEIR Structural U/E	13.4%	13.2%	12.9%	12.7%	12.3%	11.9%	-0.2	-0.3	-0.2	-0.4	-0.4	-0.3	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,216	3,294	3,418	3,446	3,570	3,711	15,491	15,839	16,300	16,236	16,710	17,233	2.3%	3.8%
Taxes Paid	1,015	1,038	1,072	1,068	1,026	1,085	4,888	4,992	5,113	5,034	4,802	5,038	1.7%	0.8%
Benefits	833	937	963	983	1,066	1,148	4,014	4,505	4,591	4,634	4,988	5,331	5.7%	8.0%
Business Income	951	1,044	1,014	1,055	676	723	4,582	5,017	4,838	4,970	3,162	3,359	3.5%	-17.2%
Interest Paid	415	498	554	599	673	858	2,000	2,395	2,644	2,821	3,148	3,984	13.0%	19.7%
Property Income	610	670	747	840	930	1,082	2,940	3,224	3,562	3,959	4,353	5,027	11.2%	13.5%
Disposable Income	4,812	5,053	5,173	5,336	5,385	5,653	23,177	24,296	24,674	25,144	25,203	26,249	3.5%	2.9%
Rank							29	26	27	29	38	27		
%Rank #1							57%	56%	53%	53%	50%	49%		
Business Value Added	4,167	4,338	4,432	4,501	4,246	4,434	20,072	20,857	21,138	21,206	19,873	20,592	2.6%	-0.7%
Rank							30	33	33	34	43	45		
%Rank #1							58%	57%	54%	52%	49%	49%		
Business Productivity							44,780	45,707	46,959	47,099	47,491	48,637	1.7%	1.6%
Rank							26	28	31	37	41	41		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NSW Riverina

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.12%	0.11%
Disability Support (aged 21-24)	0.13%	0.12%
Disability Support (aged 25+)	3.32%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.08%	0.08%
Parenting Payment - Single (aged 25+)	0.23%	0.19%
Unemployed Long Term	1.61%	1.52%
Unemployed Short Term	1.21%	1.26%
Youth Allowance - Non Student	0.75%	0.78%
Youth Allowance Student	0.41%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	17.3%	34
2004	18.5%	29
2005	18.6%	29
2006	18.4%	27
2007	19.8%	18
2008	20.3%	16

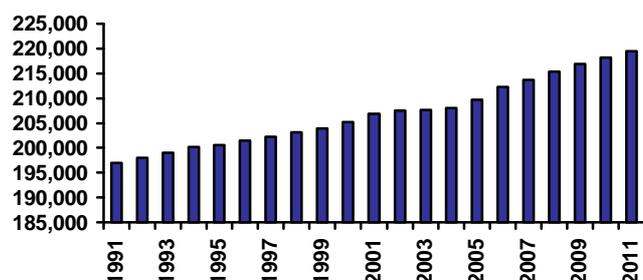
BABY BOUNCE

	Per cent	Rank
2002	1.34%	23
2003	1.33%	19
2004	1.31%	23
2005	1.32%	25
2006	1.36%	25
2007	1.28%	33
Bounce 2005-06	0.05%	20
Actual Change 2005-06 (Number)	137	35
Bounce 2006-07	-0.08%	53
Actual Change 2006-07 (Number)	-154	54

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	35
Aged migration	0.0	33
Population growth rate, 55+	0.0	43
Demographic stress	0.0	15
Dominant locations	0.5	43
Family / Youth migration	-7.0	44
Fertility bounce, 1996-2005	0.0	38
Fertility, babies % pop, 2005	0.0	21
Working elderly	0.3	34
SUSTAINABILITY SCORE	52.8	45

Population Profile



POPULATION

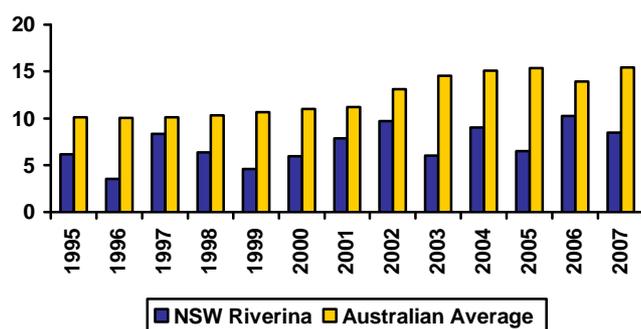
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	197	198	199	200	201	201	202	203	204	205	207	208	208	208	210	212	214	215	217	218	219

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	14.94	46.56	44
Average p.a. per capita	7.24	12.58	47
Hi Tech p.a. (1994-2007)	2.82	12.70	42
Hi Tech p.a. per capita	1.36	3.15	44
Info. Tech p.a. (1994-2007)	0.51	4.98	47
Info. Tech p.a. per capita	0.25	1.17	49
Average per capita (1994-2001)	6.56	10.80	46
Average per capita (2001-2007)	8.36	14.68	47
2001-07 avg./1994-01 avg.	1.27	1.35	44

Note: Per capita = 100,000 people

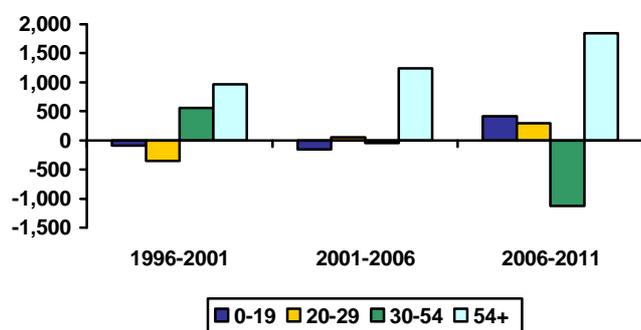
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	32.8%	31.7%	30.5%	30.5%
Age 20-29	12.4%	11.2%	11.1%	11.4%
Age 30-54	33.6%	34.1%	33.1%	29.5%
Age 55+	21.2%	23.0%	25.3%	28.7%
Population Change (average between years)				
Age 0-19		-91	-154	420
Age 20-29		-357	49	292
Age 30-54		563	-48	-1,124
Age 55+		963	1,236	1,845
Average Annual Growth		0.5%	0.5%	0.7%

Population Change by Age Group



NSW Riverina

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	250	302	50	56	20%	22%
Value of Property and Unincorporated Business	194	209	47	55	24%	26%
Value of Financial Assets	143	229	33	34	23%	30%
Value of Household Liabilities	87	136	48	36	174%	181%
Disposable Income after Debt Service Costs	60	63	28	29	54%	52%
Household Debt Service Ratio	16%	23%	49	40	220%	162%
Household Debt to Gross Income Ratio	1.16	1.54	49	40	220%	162%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	14,376	23,720	11,618	8,364	700	2,901
20 to 29		7,535	9,571	9,091	676	2,187
30 to 54		36,187	15,743	11,007	1,233	3,601
55+		38,722	6,518	5,122	168	3,183

Note: This data has been benchmarked to the Estimated Residential Population.

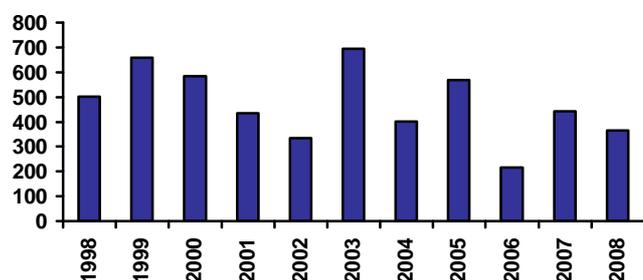
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	182	291	252	228	173	-25%
Non Residential	117	149	198	189	133	17%
Total	299	439	450	417	306	-11%
Value per capita \$2005/06						
Residential	887	1,388	1,179	1,059	798	-27%
Non Residential	569	709	929	877	614	14%
Total	1,455	2,096	2,107	1,936	1,412	-13%
Rank (value per capita)						
Residential	50	35	43	48	51	
Non Residential	50	35	27	30	39	
Total	50	39	40	45	48	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	502	658	584	434	334	695	400	568	215	443	366
Rank	54	48	54	60	55	23	59	49	62	55	53

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	20.7	23.1	23.2	24.3	24.0	24.3
Rank	39	35	33	25	24	23

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	167
Rank	36

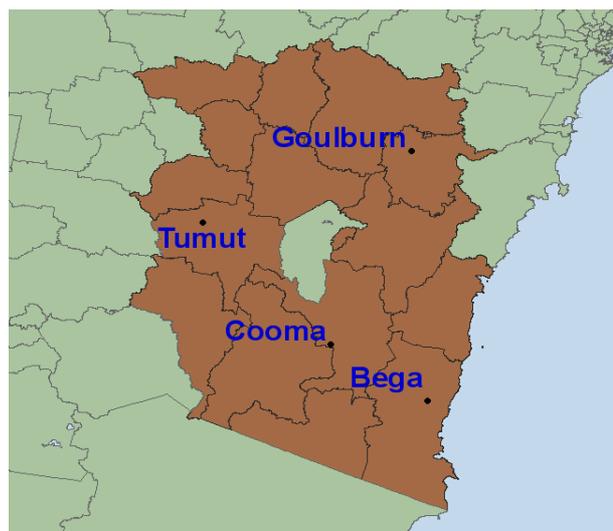
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	367	377	383
Mining	13	15	15
Manufacturing	501	497	543
Utilities	8	8	11
Construction	525	532	538
Wholesale	866	916	920
Retail	1,250	1,320	1,257
Hospitality	140	147	200
Transport	208	288	290
Communication	11	21	23
Finance	1,332	1,450	1,457
Property & Business	355	647	461
Government	21	22	21
Education	36	43	53
Health & Community	123	171	174
Cultural & Recreational	86	91	214
Personal Services	87	128	149

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NSW Southern Tablelands



The Southern Tablelands comprise an elevated plateau bounded to the east by coastal ranges and to the west by slopes down to the plains of the Riverina. The region is traditionally rural, but has been increasingly influenced by overflow from Canberra – the region surrounds the ACT. Tourism has also developed, to the coast in summer and the Australian Alps in winter. The region is well-connected to the national transport system: the Hume Highway from Melbourne to Sydney crosses its northern part while the Princes Highway runs along the coast. The coast range and the western slopes are increasingly devoted to plantation forestry, while the region's agriculture tends to be based on grazing rather than cropping, plus horticulture round Young.

Major centres:

Goulburn, Cooma, Bega

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	218	220	223	226	228	231	0.9%	1.2%	1.5%	0.9%	1.1%	1.2%	1.0%
Households	78	82	85	89	93	97	4.7%	4.6%	4.4%	4.1%	4.0%	4.5%	4.1%
NIEIR Workforce	103	104	105	106	108	108	0.9%	0.8%	1.5%	1.7%	-0.1%	1.1%	0.8%
NIEIR Employment	93	94	96	98	100	101	1.7%	1.6%	1.8%	2.4%	0.5%	1.7%	1.4%
NIEIR Unemployment	10.1	9.5	8.8	8.6	8.1	7.6	-6.7%	-7.4%	-1.6%	-5.8%	-6.7%	-5.3%	-6.2%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.8%	9.1%	8.4%	8.1%	7.5%	7.0%	-0.7	-0.7	-0.3	-0.6	-0.5	-0.6	-0.5
Headline Unemployment	5.4%	4.8%	4.5%	4.5%	4.1%	3.4%	-0.6	-0.4	0.0	-0.3	-0.8	-0.3	-0.6
NIEIR Structural U/E	15.3%	14.6%	14.1%	13.7%	13.1%	13.0%	-0.6	-0.5	-0.5	-0.6	0.0	-0.5	-0.3

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,353	3,475	3,708	3,812	3,962	4,030	15,360	15,775	16,631	16,853	17,360	17,465	4.4%	2.8%
Taxes Paid	1,029	1,052	1,109	1,113	1,134	1,176	4,714	4,777	4,975	4,923	4,970	5,097	2.7%	2.8%
Benefits	910	1,023	1,071	1,049	1,092	1,131	4,169	4,643	4,803	4,640	4,787	4,902	4.9%	3.8%
Business Income	859	865	819	796	664	738	3,936	3,927	3,673	3,519	2,909	3,201	-2.5%	-3.7%
Interest Paid	440	538	610	671	770	983	2,016	2,441	2,735	2,968	3,372	4,259	15.1%	21.0%
Property Income	671	739	850	974	1,111	1,312	3,074	3,353	3,811	4,308	4,867	5,685	13.2%	16.0%
Disposable Income	4,926	5,107	5,353	5,487	5,814	6,027	22,565	23,183	24,011	24,258	25,476	26,119	3.7%	4.8%
Rank							30	34	34	40	34	28		
%Rank #1							56%	54%	52%	51%	51%	49%		
Business Value Added	4,213	4,340	4,526	4,608	4,626	4,768	19,296	19,703	20,303	20,371	20,269	20,666	3.0%	1.7%
Rank							36	42	42	47	41	43		
%Rank #1							56%	54%	52%	50%	50%	49%		
Business Productivity							45,298	46,047	47,326	47,544	48,152	49,684	1.6%	2.2%
Rank							23	27	27	32	31	31		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NSW Southern Tablelands

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.11%	0.11%
Disability Support (aged 21-24)	0.12%	0.12%
Disability Support (aged 25+)	3.71%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.06%	0.08%
Parenting Payment - Single (aged 25+)	0.18%	0.19%
Unemployed Long Term	1.47%	1.52%
Unemployed Short Term	1.25%	1.26%
Youth Allowance - Non Student	0.87%	0.78%
Youth Allowance Student	0.39%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	18.5%	24
2004	20.0%	22
2005	20.0%	21
2006	19.1%	20
2007	18.8%	23
2008	18.8%	27

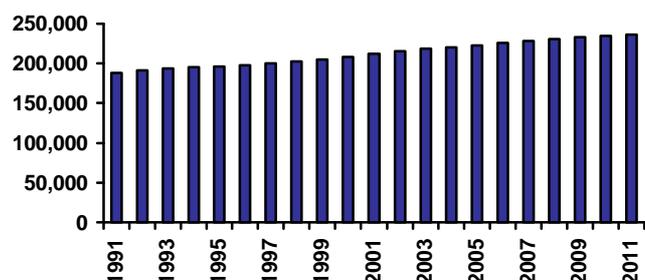
BABY BOUNCE

	Per cent	Rank
2002	1.18%	50
2003	1.17%	49
2004	1.15%	51
2005	1.18%	46
2006	1.22%	46
2007	1.13%	58
Bounce 2005-06	0.04%	31
Actual Change 2005-06 (Number)	125	40
Bounce 2006-07	-0.09%	58
Actual Change 2006-07 (Number)	-184	58

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	57
Aged migration	0.0	9
Population growth rate, 55+	0.1	21
Demographic stress	0.0	20
Dominant locations	0.3	60
Family / Youth migration	-6.0	43
Fertility bounce, 1996-2005	0.0	28
Fertility, babies % pop, 2005	0.0	41
Working elderly	0.3	40
SUSTAINABILITY SCORE	45.7	63

Population Profile



POPULATION

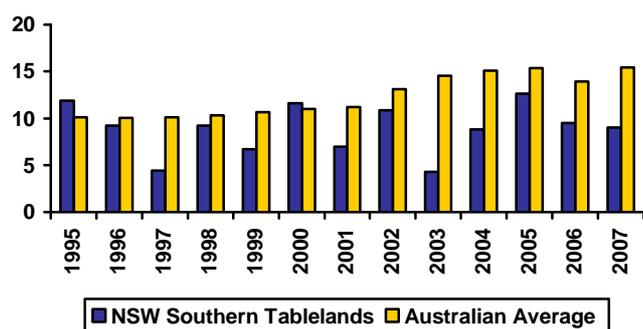
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	188	191	193	196	196	198	200	202	205	208	212	215	218	220	223	226	228	231	233	235	236

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	18.84	46.56	38
Average p.a. per capita	8.93	12.58	37
Hi Tech p.a. (1994-2007)	4.04	12.70	36
Hi Tech p.a. per capita	1.92	3.15	26
Info. Tech p.a. (1994-2007)	1.30	4.98	34
Info. Tech p.a. per capita	0.59	1.17	29
Average per capita (1994-2001)	8.87	10.80	26
Average per capita (2001-2007)	9.28	14.68	42
2001-07 avg./1994-01 avg.	1.05	1.35	60

Note: Per capita = 100,000 people

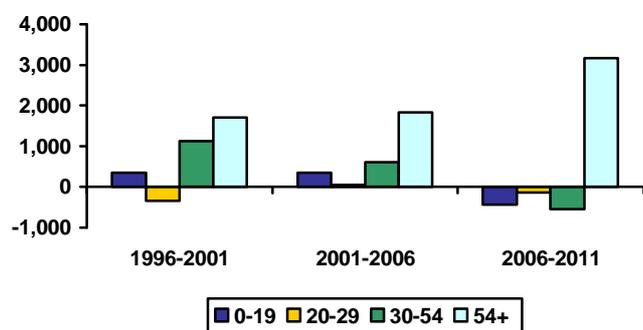
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	29.9%	28.7%	27.7%	25.6%
Age 20-29	10.7%	9.2%	8.7%	8.0%
Age 30-54	35.7%	36.0%	35.1%	32.4%
Age 55+	23.6%	26.1%	28.5%	33.9%
Population Change (average between years)				
Age 0-19		351	357	-437
Age 20-29		-343	48	-139
Age 30-54		1,125	597	-539
Age 55+		1,706	1,823	3,160
Average Annual Growth		1.4%	1.3%	0.9%

Population Change by Age Group



NSW Southern Tablelands

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	248	329	51	50	20%	24%
Value of Property and Unincorporated Business	191	219	49	52	24%	27%
Value of Financial Assets	139	249	36	27	23%	33%
Value of Household Liabilities	83	139	38	39	165%	186%
Disposable Income after Debt Service Costs	53	59	50	40	47%	49%
Household Debt Service Ratio	16%	25%	56	48	233%	171%
Household Debt to Gross Income Ratio	1.23	1.63	55	48	233%	171%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	13,693	23,223	10,645	8,917	656	3,215
20 to 29		7,231	7,565	6,825	578	2,240
30 to 54		39,036	15,440	16,186	1,412	4,896
55+		44,616	6,699	9,028	318	3,771

Note: This data has been benchmarked to the Estimated Residential Population.

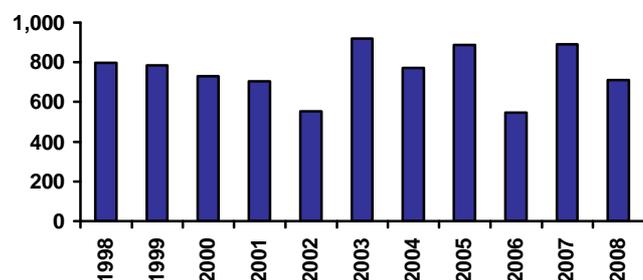
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	302	382	292	266	202	-34%
Non Residential	101	117	153	129	87	5%
Total	403	499	445	395	288	-25%
Value per capita \$2005/06						
Residential	1,435	1,723	1,279	1,154	866	-36%
Non Residential	484	528	669	557	372	1%
Total	1,920	2,250	1,948	1,711	1,239	-27%
Rank (value per capita)						
Residential	24	23	35	45	46	
Non Residential	24	23	52	61	62	
Total	35	36	47	54	57	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	797	785	731	705	554	919	771	889	548	892	710
Rank	38	37	41	36	37	11	29	18	33	26	34

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	16.3	18.1	18.4	18.9	18.5	19.2
Rank	60	59	60	59	62	61

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	154
Rank	41

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	209	224	221
Mining	27	29	31
Manufacturing	335	321	338
Utilities	11	11	12
Construction	532	531	551
Wholesale	599	633	638
Retail	1,031	1,055	971
Hospitality	215	215	300
Transport	130	186	196
Communication	11	21	25
Finance	809	892	895
Property & Business	374	604	441
Government	21	22	24
Education	42	48	57
Health & Community	144	175	175
Cultural & Recreational	94	108	222
Personal Services	73	113	129

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Melbourne Central



The Melbourne CBD is located at the former head of navigation on the Yarra River. The Port of Melbourne and adjacent logistics zone is still cheek-by-jowl with the city centre, though over the past decade the Docklands development has moved the boundary between the two by about a kilometre. In other directions city centre has decentralised into former inner suburbs, displacing factories as manufacturing has either closed down or shifted out. The region has the usual state-capital emphasis on finance and administration, and has extended considerably into knowledge economy activities. Through state investment it has also become a focus for sports and entertainment. In the process it has gentrified, with considerable redevelopment to higher density. Even so, the suburbs on the south-eastern fringe of the region remain quiet, leafy and somewhat distanced from the knowledge economy.

Major centres:

Melbourne, St Kilda, Malvern

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	439	449	459	470	480	491	2.4%	2.2%	2.3%	2.1%	2.3%	2.3%	2.2%
Households	176	181	185	187	190	193	3.0%	2.0%	1.5%	1.3%	1.5%	2.2%	1.4%
NIEIR Workforce	238	244	253	259	267	279	2.6%	3.8%	2.1%	3.1%	4.5%	2.8%	3.8%
NIEIR Employment	225	231	240	247	255	268	2.7%	4.0%	3.0%	3.4%	5.0%	3.2%	4.2%
NIEIR Unemployment	13.0	13.2	13.3	11.6	11.3	10.5	1.7%	0.8%	-13.4%	-2.0%	-7.5%	-3.9%	-4.8%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	5.5%	5.4%	5.3%	4.5%	4.2%	3.8%	-0.1	-0.2	-0.8	-0.2	-0.5	-0.3	-0.4
Headline Unemployment	4.7%	4.8%	4.8%	4.0%	3.9%	3.5%	0.1	0.0	-0.8	-0.1	-0.4	-0.2	-0.3
NIEIR Structural U/E	10.6%	10.1%	9.5%	8.9%	8.4%	7.8%	-0.5	-0.5	-0.6	-0.6	-0.6	-0.6	-0.6

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	10,545	11,120	11,939	12,646	13,393	14,360	24,043	24,751	25,991	26,915	27,914	29,243	6.2%	6.6%
Taxes Paid	3,841	4,117	4,458	4,697	5,007	5,403	8,758	9,165	9,705	9,997	10,435	11,003	6.9%	7.3%
Benefits	1,375	1,489	1,533	1,511	1,526	1,526	3,135	3,315	3,338	3,216	3,181	3,108	3.2%	0.5%
Business Income	2,737	3,026	3,157	3,306	3,364	3,608	6,240	6,735	6,873	7,037	7,012	7,347	6.5%	4.5%
Interest Paid	767	1,027	1,294	1,578	2,008	2,587	1,749	2,286	2,818	3,360	4,184	5,268	27.2%	28.0%
Property Income	4,205	4,815	5,190	5,564	6,290	8,078	9,587	10,717	11,297	11,842	13,110	16,451	9.8%	20.5%
Disposable Income	15,620	16,794	17,717	18,501	20,100	22,555	35,614	37,381	38,568	39,377	41,892	45,931	5.8%	10.4%
Rank							5	4	5	5	4	3		
%Rank #1							88%	87%	83%	83%	84%	86%		
Business Value Added	13,282	14,146	15,097	15,953	16,757	17,968	30,283	31,486	32,864	33,952	34,926	36,589	6.3%	6.1%
Rank							6	5	5	5	5	5		
%Rank #1							87%	87%	84%	84%	86%	87%		
Business Productivity							58,159	60,358	62,017	63,639	64,663	66,009	3.0%	1.8%
Rank							6	6	6	6	6	6		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Melbourne Central

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.09%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	2.41%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.04%	0.08%
Parenting Payment - Single (aged 25+)	0.08%	0.19%
Unemployed Long Term	0.68%	1.52%
Unemployed Short Term	1.08%	1.26%
Youth Allowance - Non Student	0.67%	0.78%
Youth Allowance Student	0.10%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	8.8%	59
2004	8.9%	60
2005	8.7%	60
2006	8.2%	59
2007	7.6%	60
2008	6.8%	61

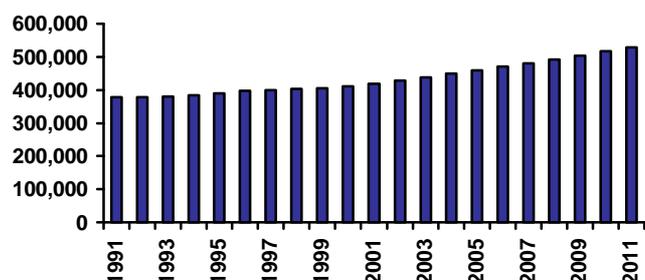
BABY BOUNCE

	Per cent	Rank
2002	1.09%	60
2003	1.08%	60
2004	1.10%	59
2005	1.11%	59
2006	1.15%	59
2007	1.17%	53
Bounce 2005-06	0.04%	28
Actual Change 2005-06 (Number)	304	15
Bounce 2006-07	0.03%	21
Actual Change 2006-07 (Number)	242	12

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	10
Aged migration	0.0	63
Population growth rate, 55+	0.0	64
Demographic stress	-0.3	64
Dominant locations	0.8	24
Family / Youth migration	24.0	22
Fertility bounce, 1996-2005	0.0	9
Fertility, babies % pop, 2005	0.0	63
Working elderly	0.3	23
SUSTAINABILITY SCORE	70.7	24

Population Profile



POPULATION

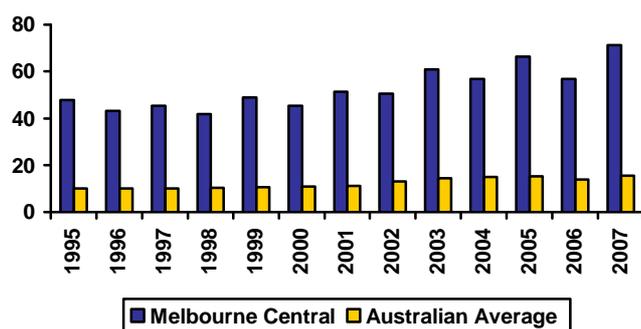
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	378	379	380	384	390	397	400	402	405	411	418	428	439	449	459	470	480	491	504	517	529

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	231.04	46.56	2
Average p.a. per capita	53.91	12.58	2
Hi Tech p.a. (1994-2007)	79.85	12.70	2
Hi Tech p.a. per capita	18.47	3.15	2
Info. Tech p.a. (1994-2007)	34.27	4.98	2
Info. Tech p.a. per capita	7.89	1.17	2
Average per capita (1994-2001)	46.75	10.80	2
Average per capita (2001-2007)	61.61	14.68	2
2001-07 avg./1994-01 avg.	1.32	1.35	34

Note: Per capita = 100,000 people

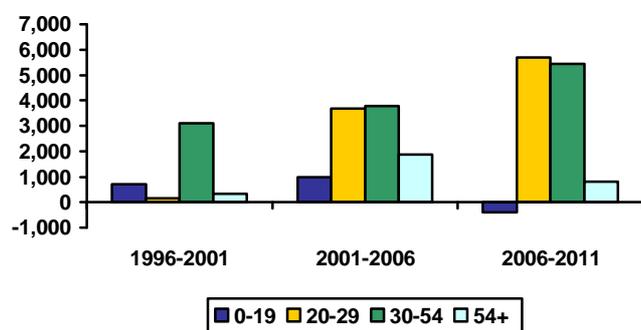
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	20.4%	20.2%	19.1%	16.6%
Age 20-29	20.9%	20.0%	21.7%	24.8%
Age 30-54	36.8%	38.6%	38.4%	39.4%
Age 55+	21.8%	21.1%	20.8%	19.3%
Population Change (average between years)				
Age 0-19		718	988	-396
Age 20-29		148	3,691	5,704
Age 30-54		3,107	3,787	5,444
Age 55+		327	1,872	810
Average Annual Growth		1.1%	2.4%	2.4%

Population Change by Age Group



Melbourne Central

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	693	830	7	6	55%	61%
Value of Property and Unincorporated Business	446	480	7	10	55%	60%
Value of Financial Assets	299	504	12	7	49%	67%
Value of Household Liabilities	52	154	3	48	103%	205%
Disposable Income after Debt Service Costs	80	98	7	5	71%	80%
Household Debt Service Ratio	7%	18%	2	7	103%	122%
Household Debt to Gross Income Ratio	0.54	1.17	2	7	103%	122%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	22,597	29,117	11,063	5,988	6,568	5,573
20 to 29		20,118	18,455	33,801	30,465	18,883
30 to 54		66,077	41,052	27,995	16,940	17,487
55+		65,976	12,562	6,627	1,481	10,962

Note: This data has been benchmarked to the Estimated Residential Population.

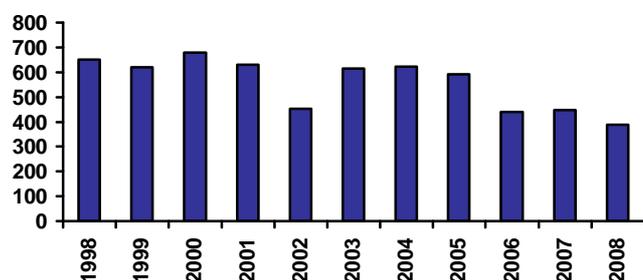
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	1,198	1,441	924	992	823	-37%
Non Residential	1,566	2,058	2,177	2,865	2,494	22%
Total	2,764	3,499	3,101	3,858	3,317	-2%
Value per capita \$2005/06						
Residential	2,875	3,186	1,925	2,021	1,633	-42%
Non Residential	3,768	4,536	4,538	5,835	4,947	13%
Total	6,643	7,722	6,463	7,856	6,579	-10%
Rank (value per capita)						
Residential	2	4	19	15	13	
Non Residential	2	4	1	1	1	
Total	2	1	1	1	1	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	651	620	679	630	454	614	622	592	439	447	389
Rank	48	53	45	45	47	40	42	48	44	54	52

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	19.3	20.4	21.4	20.8	21.8	21.7
Rank	46	48	44	49	44	44

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	2875
Rank	2

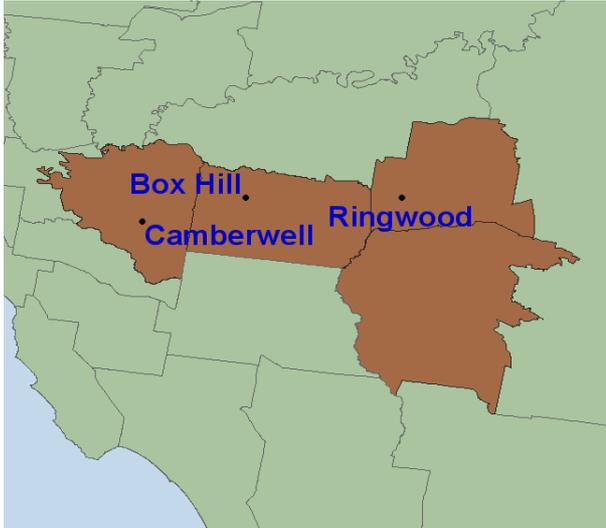
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	127	135	138
Mining	299	318	333
Manufacturing	4,156	4,575	4,642
Utilities	74	81	83
Construction	1,653	1,714	1,748
Wholesale	7,390	8,166	8,203
Retail	5,182	5,727	4,519
Hospitality	551	554	1,630
Transport	293	1,104	1,102
Communication	247	390	406
Finance	22,938	25,582	25,716
Property & Business	5,882	12,449	10,884
Government	290	277	273
Education	456	464	499
Health & Community	1,105	1,625	1,700
Cultural & Recreational	810	1,116	2,522
Personal Services	985	1,572	1,694

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Melbourne East



The railway line from the Melbourne CBD east to Ringwood and beyond provides an axis for this group of suburbs. The present municipality of Boroondarra began with the land boom of the 1880s and was for the most part built up by 1950; the suburbs further out began as commuter settlements along the railway line but filled up rapidly in the post-war period as motoring improved the accessibility of housing built away from the railway line. This change in relative accessibility was cemented in the past few decades by the construction of freeways along the creek valleys which bound the region to the north and to the south. Thus provided with transport, the region remains a commuter residential area for Melbourne Central, with some development of knowledge-economy activities in Boroondarra. It also retains the middle to high social status it originally derived from being located on gentle hills conducive to street plantings of plane trees.

Major centres:

Camberwell, Box Hill, Ringwood

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	558	559	562	566	570	574	0.3%	0.5%	0.7%	0.7%	0.7%	0.5%	0.7%
Households	192	193	194	195	195	196	0.5%	0.3%	0.4%	0.3%	0.3%	0.4%	0.3%
NIEIR Workforce	292	292	299	300	303	310	0.1%	2.3%	0.4%	0.8%	2.5%	0.9%	1.6%
NIEIR Employment	272	274	282	282	285	294	0.7%	3.0%	0.2%	1.0%	3.1%	1.3%	2.0%
NIEIR Unemployment	20.4	18.9	17.3	18.1	17.7	16.3	-7.4%	-8.2%	4.2%	-2.3%	-7.6%	-4.0%	-5.0%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	7.0%	6.5%	5.8%	6.0%	5.8%	5.3%	-0.5	-0.7	0.2	-0.2	-0.6	-0.3	-0.4
Headline Unemployment	5.0%	4.5%	4.1%	4.3%	4.0%	3.6%	-0.5	-0.4	0.2	-0.2	-0.4	-0.3	-0.3
NIEIR Structural U/E	7.3%	7.3%	7.1%	6.9%	6.8%	6.3%	0.0	-0.2	-0.2	-0.1	-0.4	-0.2	-0.3

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	11,770	12,288	13,004	13,469	13,820	14,410	21,110	21,978	23,143	23,796	24,239	25,095	4.6%	3.4%
Taxes Paid	3,704	3,888	4,188	4,352	4,476	4,650	6,644	6,954	7,453	7,689	7,851	8,098	5.5%	3.4%
Benefits	1,744	1,915	1,957	1,890	1,871	1,833	3,129	3,426	3,482	3,339	3,282	3,193	2.7%	-1.5%
Business Income	2,382	2,550	2,676	2,845	2,818	2,896	4,272	4,561	4,762	5,027	4,943	5,044	6.1%	0.9%
Interest Paid	1,202	1,486	1,728	1,944	2,280	2,863	2,155	2,658	3,076	3,435	3,998	4,985	17.4%	21.3%
Property Income	3,630	4,079	4,475	4,813	5,377	6,688	6,511	7,296	7,964	8,503	9,430	11,647	9.9%	17.9%
Disposable Income	15,778	16,654	17,564	18,152	19,187	20,507	28,301	29,787	31,260	32,069	33,651	35,712	4.8%	6.3%
Rank							7	8	9	9	8	7		
%Rank #1							70%	69%	67%	68%	67%	67%		
Business Value Added	14,151	14,838	15,679	16,314	16,639	17,307	25,382	26,539	27,905	28,822	29,181	30,139	4.9%	3.0%
Rank							9	10	8	9	9	10		
%Rank #1							73%	73%	71%	71%	72%	72%		
Business Productivity							51,118	53,261	54,659	56,802	57,367	57,862	3.6%	0.9%
Rank							8	8	8	8	8	10		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Melbourne East

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.08%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	1.96%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.09%	0.19%
Unemployed Long Term	0.89%	1.52%
Unemployed Short Term	0.62%	1.26%
Youth Allowance - Non Student	0.51%	0.78%
Youth Allowance Student	0.12%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	11.1%	58
2004	11.5%	58
2005	11.1%	58
2006	10.4%	57
2007	9.8%	57
2008	8.9%	57

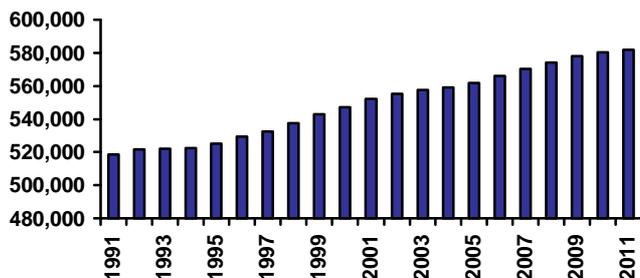
BABY BOUNCE

	Per cent	Rank
2002	1.20%	47
2003	1.18%	46
2004	1.19%	44
2005	1.18%	50
2006	1.20%	52
2007	1.22%	44
Bounce 2005-06	0.02%	52
Actual Change 2005-06 (Number)	186	28
Bounce 2006-07	0.02%	24
Actual Change 2006-07 (Number)	152	21

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	31
Aged migration	0.0	41
Population growth rate, 55+	0.0	51
Demographic stress	0.0	28
Dominant locations	1.0	1
Family / Youth migration	-26.0	58
Fertility bounce, 1996-2005	0.0	35
Fertility, babies % pop, 2005	0.0	53
Working elderly	0.3	13
SUSTAINABILITY SCORE	75.8	13

Population Profile



POPULATION

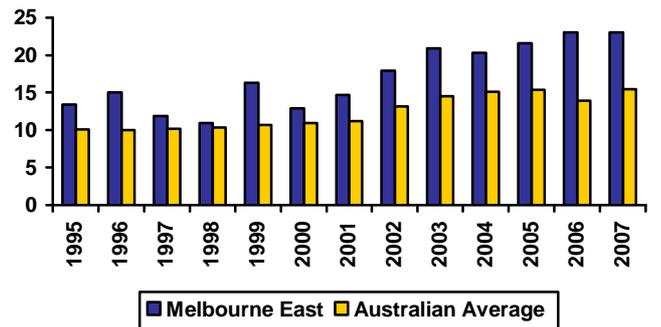
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	519	522	522	522	525	530	533	537	543	547	552	555	558	559	562	566	570	574	578	580	582

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	95.87	46.56	9
Average p.a. per capita	17.42	12.58	11
Hi Tech p.a. (1994-2007)	29.30	12.70	7
Hi Tech p.a. per capita	5.31	3.15	12
Info. Tech p.a. (1994-2007)	13.04	4.98	7
Info. Tech p.a. per capita	2.35	1.17	10
Average per capita (1994-2001)	14.13	10.80	13
Average per capita (2001-2007)	21.26	14.68	10
2001-07 avg./1994-01 avg.	1.50	1.35	14

Note: Per capita = 100,000 people

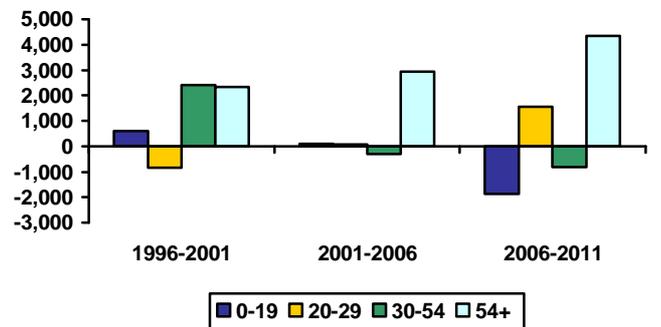
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	28.2%	27.6%	27.0%	24.7%
Age 20-29	14.1%	12.8%	12.5%	13.5%
Age 30-54	36.3%	37.0%	35.8%	34.1%
Age 55+	21.4%	22.6%	24.7%	27.7%
Population Change (average between years)				
Age 0-19		597	105	-1,869
Age 20-29		-838	61	1,543
Age 30-54		2,397	-307	-813
Age 55+		2,330	2,944	4,341
Average Annual Growth		0.8%	0.5%	0.6%

Population Change by Age Group



Melbourne East

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	622	790	9	8	49%	58%
Value of Property and Unincorporated Business	458	530	6	7	57%	66%
Value of Financial Assets	253	434	14	13	41%	58%
Value of Household Liabilities	89	173	54	57	178%	232%
Disposable Income after Debt Service Costs	74	88	10	7	66%	73%
Household Debt Service Ratio	13%	21%	20	21	179%	144%
Household Debt to Gross Income Ratio	0.94	1.37	20	21	179%	144%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	33,817	68,058	18,348	12,976	6,269	4,850
20 to 29		36,824	13,047	21,288	10,247	5,162
30 to 54		112,578	32,091	31,811	10,824	8,205
55+		106,909	11,913	10,603	1,456	8,749

Note: This data has been benchmarked to the Estimated Residential Population.

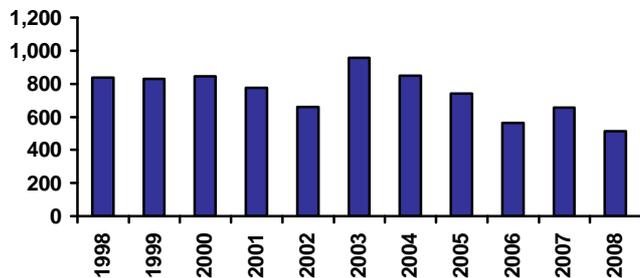
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	639	565	571	601	496	-2%
Non Residential	390	447	490	483	343	-2%
Total	1,029	1,012	1,061	1,084	839	-2%
Value per capita \$2005/06						
Residential	1,165	1,007	1,001	1,047	859	-4%
Non Residential	709	796	859	841	594	-4%
Total	1,874	1,803	1,861	1,887	1,453	-4%
Rank (value per capita)						
Residential	39	56	51	50	47	
Non Residential	39	56	34	34	41	
Total	38	50	49	46	46	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	836	830	844	775	659	956	847	742	562	654	514
Rank	33	34	24	32	28	8	24	31	32	43	46

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	18.0	19.3	20.3	20.2	20.9	21.1
Rank	53	55	55	54	54	50

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	1554
Rank	5

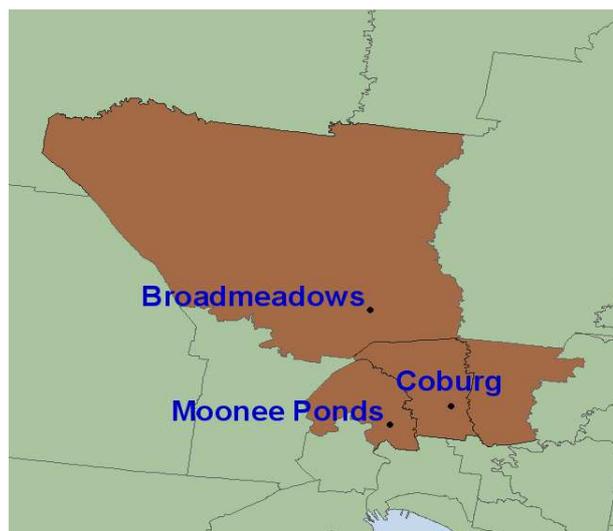
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	94	97	96
Mining	40	46	47
Manufacturing	3,094	3,394	3,463
Utilities	22	20	20
Construction	2,220	2,244	2,293
Wholesale	3,994	4,459	4,470
Retail	3,198	3,451	3,012
Hospitality	96	94	404
Transport	203	410	405
Communication	98	139	148
Finance	11,248	12,044	12,074
Property & Business	2,557	5,476	4,555
Government	30	31	32
Education	234	239	265
Health & Community	625	922	952
Cultural & Recreational	304	376	1,098
Personal Services	400	754	818

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Melbourne North



Melbourne North begins five kilometres north of the CBD, on the other side of Royal Park, and extends to the urban fringe, climbing gently all the way. Development was originally based on manufacturing and for over a century the region was working class, but the decline of manufacturing and proximity to Melbourne Central have resulted in gentrification and an increase in commuting. Melbourne airport is located near the boundary with Melbourne West, and logistics activities have been developing nearby. The region is noted for its ethnic diversity.

Major centres:

Moonee Ponds, Coburg, Broadmeadows

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	516	521	528	537	545	554	1.1%	1.3%	1.7%	1.4%	1.7%	1.4%	1.6%
Households	179	181	183	184	185	187	1.1%	1.1%	0.9%	0.7%	0.9%	1.0%	0.8%
NIEIR Workforce	253	256	263	266	272	279	1.2%	2.7%	1.3%	2.3%	2.4%	1.7%	2.3%
NIEIR Employment	229	232	238	242	252	259	1.4%	2.8%	1.7%	4.1%	2.8%	1.9%	3.4%
NIEIR Unemployment	23.8	23.7	24.2	23.6	19.7	19.3	-0.7%	2.1%	-2.2%	-16.6%	-2.1%	-0.3%	-9.7%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.4%	9.3%	9.2%	8.9%	7.2%	6.9%	-0.2	-0.1	-0.3	-1.6	-0.3	-0.2	-1.0
Headline Unemployment	7.1%	6.9%	7.2%	6.8%	5.5%	5.2%	-0.2	0.3	-0.4	-1.3	-0.3	-0.1	-0.8
NIEIR Structural U/E	16.4%	16.4%	15.6%	15.0%	14.3%	13.6%	0.0	-0.8	-0.6	-0.7	-0.7	-0.5	-0.7

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	8,928	9,426	9,963	10,409	11,057	11,555	17,313	18,082	18,858	19,380	20,300	20,860	5.2%	5.4%
Taxes Paid	2,366	2,497	2,673	2,758	2,973	3,082	4,587	4,790	5,060	5,136	5,457	5,565	5.3%	5.7%
Benefits	2,148	2,346	2,396	2,336	2,332	2,302	4,165	4,500	4,536	4,349	4,281	4,156	2.8%	-0.7%
Business Income	1,241	1,341	1,363	1,398	1,425	1,410	2,407	2,572	2,581	2,602	2,616	2,546	4.0%	0.5%
Interest Paid	985	1,221	1,421	1,597	1,867	2,337	1,909	2,342	2,690	2,973	3,427	4,219	17.5%	21.0%
Property Income	1,504	1,649	1,818	1,984	2,232	2,651	2,917	3,162	3,441	3,693	4,098	4,785	9.7%	15.6%
Disposable Income	11,030	11,566	12,023	12,345	13,224	13,457	21,390	22,187	22,756	22,984	24,277	24,293	3.8%	4.4%
Rank							48	48	50	53	46	47		
%Rank #1							53%	51%	49%	48%	48%	45%		
Business Value Added	10,169	10,767	11,327	11,806	12,482	12,965	19,720	20,654	21,439	21,982	22,916	23,405	5.1%	4.8%
Rank							34	34	31	30	26	26		
%Rank #1							57%	57%	55%	54%	56%	56%		
Business Productivity							43,653	45,615	46,720	47,901	48,650	49,178	3.1%	1.3%
Rank							36	31	33	29	28	35		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Melbourne North

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.09%	0.11%
Disability Support (aged 21-24)	0.10%	0.12%
Disability Support (aged 25+)	3.81%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.13%	0.19%
Unemployed Long Term	1.37%	1.52%
Unemployed Short Term	1.50%	1.26%
Youth Allowance - Non Student	0.90%	0.78%
Youth Allowance Student	0.26%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	19.5%	18
2004	20.3%	21
2005	19.9%	22
2006	18.9%	23
2007	17.6%	33
2008	17.1%	35

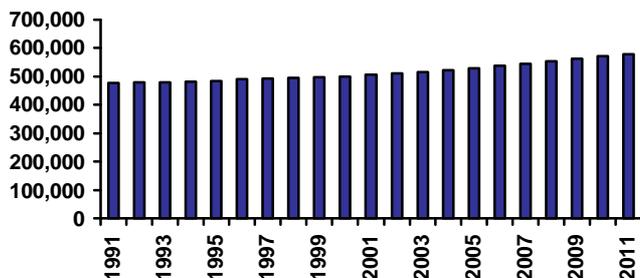
BABY BOUNCE

	Per cent	Rank
2002	1.34%	21
2003	1.33%	20
2004	1.35%	18
2005	1.35%	20
2006	1.39%	20
2007	1.47%	11
Bounce 2005-06	0.04%	33
Actual Change 2005-06 (Number)	321	13
Bounce 2006-07	0.08%	4
Actual Change 2006-07 (Number)	536	5

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	21
Aged migration	0.0	55
Population growth rate, 55+	0.0	61
Demographic stress	-0.2	56
Dominant locations	1.0	19
Family / Youth migration	40.0	15
Fertility bounce, 1996-2005	0.0	10
Fertility, babies % pop, 2005	0.0	20
Working elderly	0.2	64
SUSTAINABILITY SCORE	76.3	10

Population Profile



POPULATION

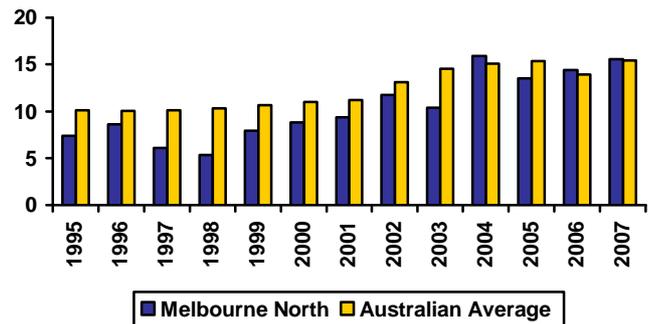
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	478	480	480	481	485	490	493	495	498	500	506	511	516	521	528	537	545	554	563	571	578

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	55.52	46.56	16
Average p.a. per capita	10.82	12.58	24
Hi Tech p.a. (1994-2007)	13.44	12.70	15
Hi Tech p.a. per capita	2.62	3.15	19
Info. Tech p.a. (1994-2007)	4.91	4.98	15
Info. Tech p.a. per capita	0.95	1.17	19
Average per capita (1994-2001)	8.15	10.80	33
Average per capita (2001-2007)	14.00	14.68	19
2001-07 avg./1994-01 avg.	1.72	1.35	4

Note: Per capita = 100,000 people

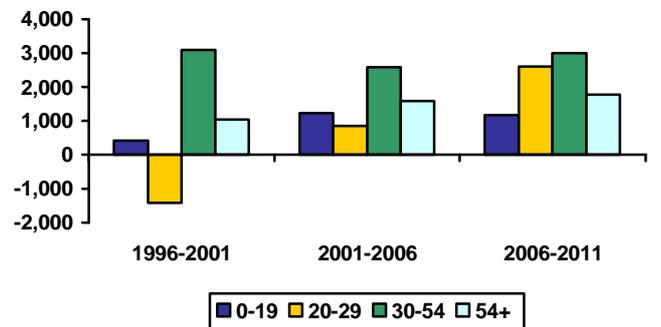
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	27.0%	26.6%	26.2%	25.2%
Age 20-29	16.6%	14.6%	14.6%	15.8%
Age 30-54	34.7%	36.7%	36.9%	36.8%
Age 55+	21.8%	22.1%	22.3%	22.2%
Population Change (average between years)				
Age 0-19		423	1,229	1,173
Age 20-29		-1,406	855	2,611
Age 30-54		3,096	2,585	3,005
Age 55+		1,038	1,586	1,767
Average Annual Growth		0.6%	1.2%	1.5%

Population Change by Age Group



Melbourne North

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	358	420	25	28	28%	31%
Value of Property and Unincorporated Business	344	401	11	17	42%	50%
Value of Financial Assets	92	164	56	56	15%	22%
Value of Household Liabilities	78	145	33	44	155%	194%
Disposable Income after Debt Service Costs	54	58	47	47	48%	47%
Household Debt Service Ratio	15%	25%	39	49	207%	172%
Household Debt to Gross Income Ratio	1.09	1.64	38	49	207%	172%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	34,926	58,622	17,359	10,480	4,252	7,155
20 to 29		33,169	16,493	22,552	13,521	9,007
30 to 54		104,733	34,682	28,083	9,668	12,563
55+		94,340	8,782	6,022	1,032	9,725

Note: This data has been benchmarked to the Estimated Residential Population.

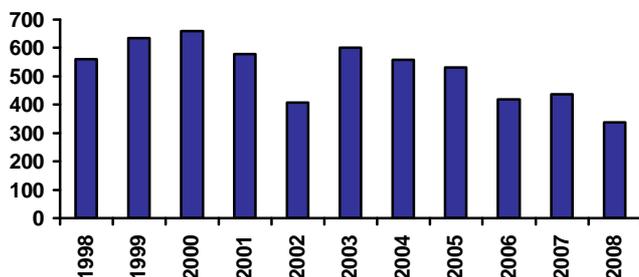
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	534	668	599	655	562	-9%
Non Residential	363	427	579	644	515	36%
Total	897	1,095	1,178	1,299	1,076	8%
Value per capita \$2005/06						
Residential	1,060	1,272	1,099	1,183	998	-14%
Non Residential	721	811	1,062	1,163	914	29%
Total	1,781	2,083	2,162	2,346	1,912	3%
Rank (value per capita)						
Residential	44	40	46	44	38	
Non Residential	44	40	22	17	17	
Total	41	41	37	30	27	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	560	636	660	578	407	600	559	532	419	436	337
Rank	52	51	46	50	52	43	50	53	46	56	57

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	18.4	19.8	20.9	20.3	21.3	21.2
Rank	49	51	49	52	47	47

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	636
Rank	13

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	62	65	64
Mining	21	22	23
Manufacturing	2,888	3,179	3,252
Utilities	7	7	7
Construction	1,645	1,682	1,723
Wholesale	2,673	2,947	2,983
Retail	2,707	2,957	2,617
Hospitality	93	91	374
Transport	329	713	726
Communication	30	57	57
Finance	5,116	5,627	5,635
Property & Business	1,306	2,270	1,775
Government	15	16	18
Education	132	142	153
Health & Community	568	722	740
Cultural & Recreational	218	255	628
Personal Services	350	554	626

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Melbourne North East



Melbourne North East comprises an arc of outer suburbs on the north-eastern and eastern boundary of the metropolitan area. There is little travel between the eastern and western extremities of the region, the unity of which lies in a common fringe relationship to the metropolis. Despite this lack of economic integration the region has a certain physiographic unity: it covers the upper Yarra valley. In the west of the region, nearer Melbourne, hills restrict the river to a gorge, but above Yarra Glen the valley opens out to accommodate hobby farms and cool-climate wineries. The outer part of the region comprises forested water reserves. Nearer Melbourne the region has been subdivided for commuter suburbs, many of which depend on the Eastern Freeway for access to Melbourne Central, though a commuter railway serves the hills on the north bank of the Yarra. A couple of university campuses have been built towards the western edge of the region.

Major centres:

Heidelberg, Greensborough, Doncaster, Lilydale.

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	561	562	566	571	577	585	0.2%	0.7%	0.8%	1.1%	1.2%	0.6%	1.2%
Households	180	181	182	183	184	186	0.8%	0.6%	0.6%	0.7%	0.8%	0.7%	0.8%
NIEIR Workforce	293	295	302	303	308	317	0.7%	2.4%	0.2%	1.7%	3.0%	1.1%	2.3%
NIEIR Employment	271	273	281	283	288	298	0.9%	3.0%	0.4%	2.1%	3.1%	1.4%	2.6%
NIEIR Unemployment	22.0	21.6	20.6	20.0	19.1	19.3	-1.7%	-4.7%	-2.8%	-4.4%	0.7%	-3.1%	-1.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	7.5%	7.3%	6.8%	6.6%	6.2%	6.1%	-0.2	-0.5	-0.2	-0.4	-0.1	-0.3	-0.3
Headline Unemployment	5.0%	4.7%	4.4%	4.1%	3.7%	3.6%	-0.2	-0.3	-0.3	-0.4	-0.1	-0.3	-0.3
NIEIR Structural U/E	9.4%	9.4%	9.0%	8.7%	8.6%	8.3%	0.0	-0.3	-0.3	-0.1	-0.3	-0.2	-0.2

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	10,686	11,194	11,815	12,192	12,678	13,283	19,042	19,905	20,862	21,351	21,956	22,723	4.5%	4.4%
Taxes Paid	3,060	3,205	3,423	3,487	3,618	3,787	5,452	5,698	6,045	6,107	6,265	6,478	4.5%	4.2%
Benefits	1,854	2,061	2,112	2,042	2,025	1,988	3,304	3,665	3,730	3,576	3,507	3,400	3.3%	-1.3%
Business Income	1,921	2,005	2,066	2,050	1,966	2,039	3,424	3,565	3,649	3,590	3,404	3,489	2.2%	-0.3%
Interest Paid	1,271	1,536	1,743	1,909	2,176	2,713	2,265	2,731	3,077	3,343	3,769	4,641	14.5%	19.2%
Property Income	2,475	2,837	3,097	3,349	3,733	4,473	4,410	5,045	5,468	5,864	6,464	7,651	10.6%	15.6%
Disposable Income	13,546	14,307	14,987	15,313	16,208	16,911	24,138	25,440	26,463	26,817	28,067	28,928	4.2%	5.1%
Rank							21	22	20	23	20	16		
%Rank #1							60%	59%	57%	56%	56%	54%		
Business Value Added	12,608	13,199	13,881	14,242	14,644	15,323	22,466	23,470	24,511	24,942	25,360	26,212	4.1%	3.7%
Rank							15	16	17	16	16	15		
%Rank #1							65%	65%	63%	62%	62%	62%		
Business Productivity							45,705	47,527	48,566	49,735	50,367	51,045	2.9%	1.3%
Rank							20	18	22	19	22	24		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Melbourne North East

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.10%	0.11%
Disability Support (aged 21-24)	0.11%	0.12%
Disability Support (aged 25+)	2.62%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.10%	0.19%
Unemployed Long Term	1.21%	1.52%
Unemployed Short Term	0.77%	1.26%
Youth Allowance - Non Student	0.56%	0.78%
Youth Allowance Student	0.16%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	13.7%	53
2004	14.4%	53
2005	14.1%	51
2006	13.3%	50
2007	12.5%	49
2008	11.8%	51

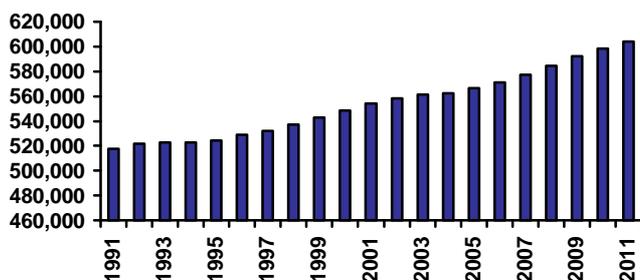
BABY BOUNCE

	Per cent	Rank
2002	1.22%	40
2003	1.20%	43
2004	1.20%	39
2005	1.19%	43
2006	1.22%	45
2007	1.24%	40
Bounce 2005-06	0.03%	48
Actual Change 2005-06 (Number)	208	25
Bounce 2006-07	0.02%	23
Actual Change 2006-07 (Number)	200	16

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	26
Aged migration	0.0	46
Population growth rate, 55+	0.0	42
Demographic stress	-0.1	35
Dominant locations	1.0	1
Family / Youth migration	-26.0	58
Fertility bounce, 1996-2005	0.0	31
Fertility, babies % pop, 2005	0.0	41
Working elderly	0.3	12
SUSTAINABILITY SCORE	76.3	10

Population Profile



POPULATION

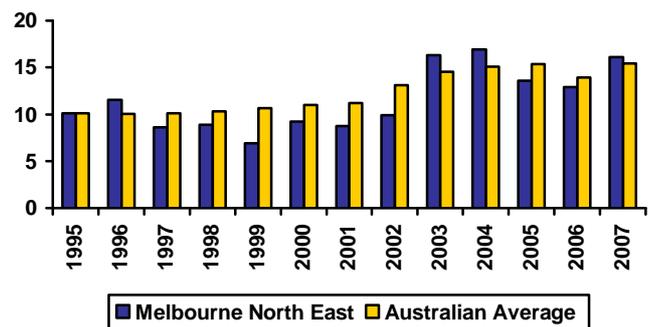
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	518	522	523	523	525	529	532	537	543	549	554	558	561	562	566	571	577	585	592	599	604

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	64.99	46.56	13
Average p.a. per capita	11.76	12.58	19
Hi Tech p.a. (1994-2007)	16.56	12.70	13
Hi Tech p.a. per capita	2.98	3.15	14
Info. Tech p.a. (1994-2007)	6.14	4.98	14
Info. Tech p.a. per capita	1.11	1.17	16
Average per capita (1994-2001)	9.22	10.80	25
Average per capita (2001-2007)	14.40	14.68	18
2001-07 avg./1994-01 avg.	1.56	1.35	9

Note: Per capita = 100,000 people

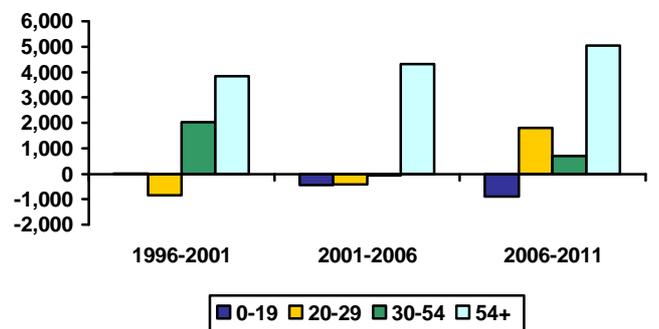
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	31.3%	29.9%	28.6%	26.3%
Age 20-29	13.7%	12.3%	11.6%	12.4%
Age 30-54	37.4%	37.6%	36.4%	35.0%
Age 55+	17.6%	20.3%	23.5%	26.3%
Population Change (average between years)				
Age 0-19		9	-445	-903
Age 20-29		-847	-423	1,805
Age 30-54		2,017	-66	697
Age 55+		3,834	4,322	5,042
Average Annual Growth		0.9%	0.6%	1.1%

Population Change by Age Group



Melbourne North East

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	498	611	14	16	40%	45%
Value of Property and Unincorporated Business	416	469	10	11	51%	59%
Value of Financial Assets	189	314	20	19	31%	42%
Value of Household Liabilities	107	172	61	56	212%	229%
Disposable Income after Debt Service Costs	67	75	21	12	60%	61%
Household Debt Service Ratio	16%	23%	51	41	227%	162%
Household Debt to Gross Income Ratio	1.20	1.55	51	41	227%	162%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	35,107	74,908	19,290	15,269	4,233	5,922
20 to 29		41,494	14,030	17,357	4,268	4,310
30 to 54		121,178	30,524	33,025	7,296	8,829
55+		106,279	9,406	9,162	1,122	8,010

Note: This data has been benchmarked to the Estimated Residential Population.

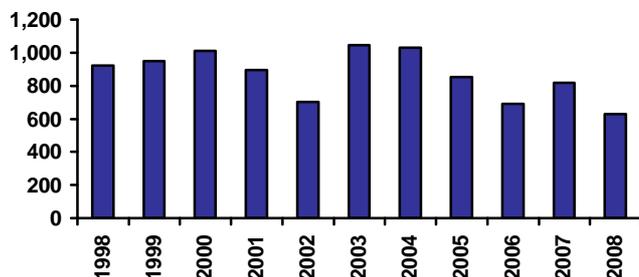
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	689	665	738	840	689	14%
Non Residential	256	316	481	551	389	50%
Total	945	980	1,219	1,391	1,077	25%
Value per capita \$2005/06						
Residential	1,252	1,176	1,278	1,436	1,163	10%
Non Residential	464	559	834	943	657	45%
Total	1,715	1,735	2,111	2,379	1,820	21%
Rank (value per capita)						
Residential	33	46	36	30	30	
Non Residential	33	46	36	26	33	
Total	44	54	39	28	30	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	922	948	1,010	896	701	1,044	1,029	852	690	817	630
Rank	27	28	11	23	23	5	10	21	25	31	36

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	16.2	17.3	18.3	18.2	19.1	19.0
Rank	61	62	61	62	61	62

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	872
Rank	10

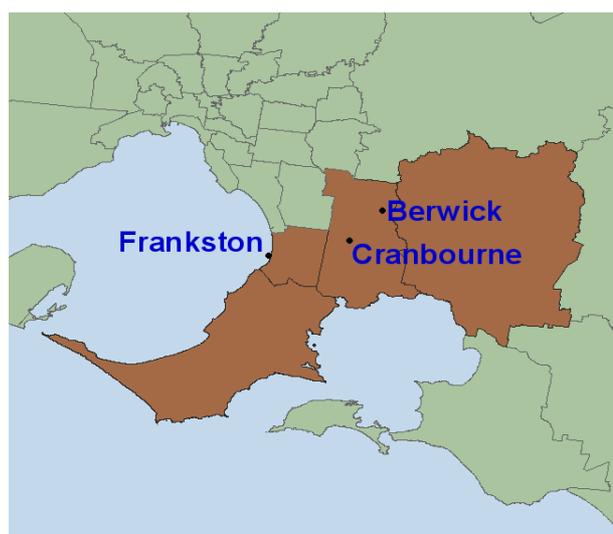
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	169	180	184
Mining	36	36	36
Manufacturing	2,008	2,180	2,236
Utilities	9	12	12
Construction	2,352	2,357	2,421
Wholesale	2,518	2,781	2,808
Retail	2,139	2,304	2,040
Hospitality	86	88	321
Transport	229	331	335
Communication	61	77	77
Finance	7,438	7,882	7,908
Property & Business	1,631	3,003	2,355
Government	28	29	27
Education	160	165	182
Health & Community	457	629	634
Cultural & Recreational	212	253	775
Personal Services	252	526	592

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Melbourne Outer South East



By an accident of local government boundary reform Melbourne Outer South East includes part of the ranges east of the Melbourne metropolitan area, but the greater part of the region is flat, comprising low hills, former sand dunes and former swamps redeemed by their proximity to Port Philip and Westernport Bays. Deep water in Westernport Bay has resulted in port and industrial development, but further growth is hindered by poor freight transport connections to the rest of Victoria. The region includes a growing urban fringe, nearly all developed within the past two decades and dependent on uncomfortably long-distance commuting. Further out there is intensive agriculture with retirement housing on the more attractive slopes.

Major centres:

Frankston, Berwick, Cranbourne

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	505	519	531	543	556	569	2.7%	2.3%	2.3%	2.3%	2.3%	2.5%	2.3%
Households	169	177	185	193	202	210	5.1%	4.5%	4.4%	4.2%	4.3%	4.6%	4.3%
NIEIR Workforce	247	254	265	273	285	279	3.1%	4.2%	3.1%	4.3%	-2.0%	3.5%	1.1%
NIEIR Employment	228	235	247	254	266	259	3.1%	5.2%	3.0%	4.8%	-2.7%	3.7%	1.0%
NIEIR Unemployment	19.1	19.6	18.2	19.1	18.7	20.2	2.8%	-7.3%	4.9%	-2.2%	8.4%	0.0%	3.0%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	7.7%	7.7%	6.9%	7.0%	6.5%	7.2%	0.0	-0.9	0.1	-0.4	0.7	-0.3	0.1
Headline Unemployment	5.1%	5.1%	4.6%	4.5%	4.2%	4.6%	-0.1	-0.5	-0.1	-0.3	0.4	-0.2	0.0
NIEIR Structural U/E	11.5%	11.3%	11.0%	10.7%	10.3%	10.5%	-0.2	-0.4	-0.3	-0.3	0.2	-0.3	-0.1

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	8,423	9,012	9,698	10,291	10,971	10,819	16,674	17,372	18,268	18,941	19,730	19,025	6.9%	2.5%
Taxes Paid	2,420	2,589	2,806	2,921	3,110	3,009	4,791	4,991	5,286	5,376	5,592	5,292	6.5%	1.5%
Benefits	1,816	2,075	2,215	2,186	2,211	2,209	3,596	4,000	4,172	4,023	3,976	3,885	6.4%	0.5%
Business Income	1,733	1,850	1,910	1,954	1,842	1,741	3,430	3,566	3,597	3,596	3,313	3,061	4.1%	-5.6%
Interest Paid	1,118	1,376	1,590	1,775	2,061	2,607	2,213	2,653	2,996	3,267	3,707	4,584	16.7%	21.2%
Property Income	1,664	1,939	2,141	2,318	2,586	3,079	3,294	3,738	4,034	4,267	4,651	5,415	11.7%	15.2%
Disposable Income	11,147	11,983	12,729	13,264	14,118	13,720	22,066	23,099	23,978	24,413	25,390	24,125	6.0%	1.7%
Rank							37	36	35	37	36	48		
%Rank #1							55%	54%	52%	51%	51%	45%		
Business Value Added	10,156	10,862	11,607	12,245	12,813	12,560	20,104	20,938	21,865	22,537	23,043	22,086	6.4%	1.3%
Rank							28	32	27	26	25	34		
%Rank #1							58%	58%	56%	56%	57%	53%		
Business Productivity							43,555	45,277	46,027	47,202	47,739	48,198	2.7%	1.0%
Rank							38	35	38	36	39	44		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Melbourne Outer South East

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.11%	0.11%
Disability Support (aged 21-24)	0.10%	0.12%
Disability Support (aged 25+)	2.78%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.17%	0.19%
Unemployed Long Term	1.80%	1.52%
Unemployed Short Term	1.00%	1.26%
Youth Allowance - Non Student	0.77%	0.78%
Youth Allowance Student	0.26%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	16.3%	40
2004	17.3%	41
2005	17.4%	36
2006	16.5%	39
2007	15.7%	42
2008	16.1%	42

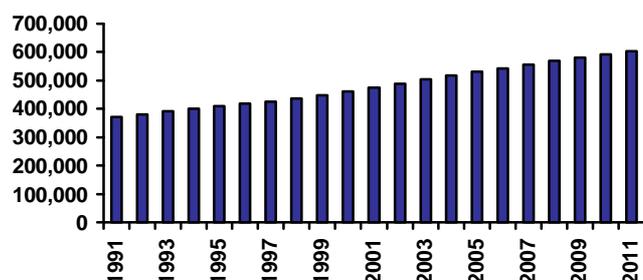
BABY BOUNCE

	Per cent	Rank
2002	1.37%	16
2003	1.35%	16
2004	1.36%	15
2005	1.36%	18
2006	1.40%	17
2007	1.40%	17
Bounce 2005-06	0.04%	34
Actual Change 2005-06 (Number)	371	9
Bounce 2006-07	0.00%	27
Actual Change 2006-07 (Number)	190	17

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	25
Aged migration	0.0	28
Population growth rate, 55+	0.1	15
Demographic stress	-0.1	44
Dominant locations	1.0	1
Family / Youth migration	78.0	6
Fertility bounce, 1996-2005	0.0	21
Fertility, babies % pop, 2005	0.0	16
Working elderly	0.3	38
SUSTAINABILITY SCORE	77.0	6

Population Profile



POPULATION

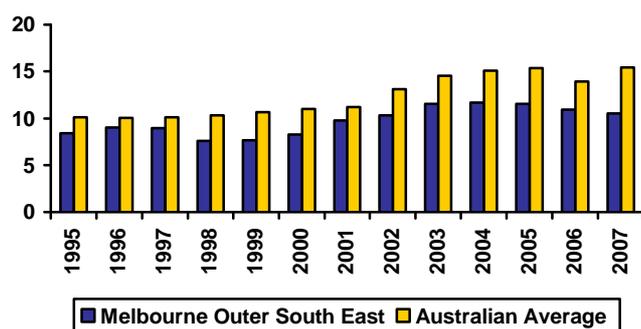
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	371	381	391	400	410	419	426	436	447	461	475	489	505	519	531	543	556	569	581	592	602

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	46.96	46.56	20
Average p.a. per capita	9.81	12.58	27
Hi Tech p.a. (1994-2007)	7.98	12.70	24
Hi Tech p.a. per capita	1.64	3.15	35
Info. Tech p.a. (1994-2007)	3.03	4.98	23
Info. Tech p.a. per capita	0.61	1.17	28
Average per capita (1994-2001)	8.73	10.80	28
Average per capita (2001-2007)	11.11	14.68	27
2001-07 avg./1994-01 avg.	1.27	1.35	46

Note: Per capita = 100,000 people

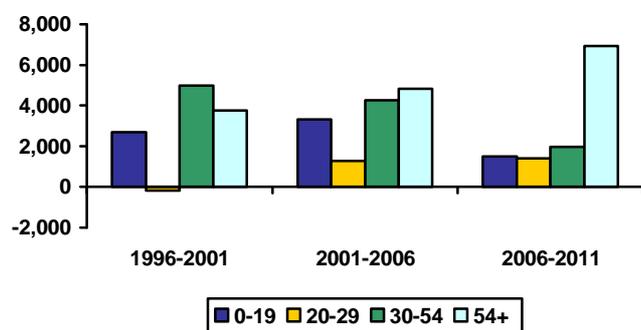
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	32.4%	31.4%	30.5%	28.8%
Age 20-29	13.0%	11.3%	11.1%	11.1%
Age 30-54	35.7%	36.8%	36.1%	34.1%
Age 55+	18.8%	20.6%	22.4%	26.0%
Population Change (average between years)				
Age 0-19		2,701	3,326	1,504
Age 20-29		-167	1,266	1,395
Age 30-54		4,979	4,264	1,949
Age 55+		3,747	4,817	6,942
Average Annual Growth		2.6%	2.7%	2.1%

Population Change by Age Group



Melbourne Outer South East

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	307	364	35	45	24%	27%
Value of Property and Unincorporated Business	266	308	26	32	33%	38%
Value of Financial Assets	142	220	34	40	23%	29%
Value of Household Liabilities	100	164	58	53	200%	218%
Disposable Income after Debt Service Costs	57	58	37	45	51%	48%
Household Debt Service Ratio	18%	28%	61	62	253%	191%
Household Debt to Gross Income Ratio	1.33	1.82	61	62	252%	191%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	37,565	61,775	24,700	21,085	4,327	8,851
20 to 29		26,178	16,392	22,761	3,641	5,445
30 to 54		96,309	33,818	40,011	7,112	11,651
55+		80,580	12,159	17,577	1,247	10,139

Note: This data has been benchmarked to the Estimated Residential Population.

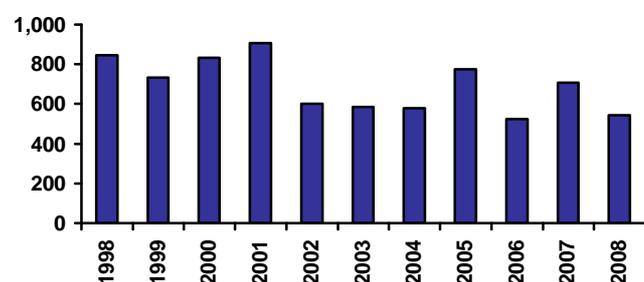
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	1,147	1,379	1,225	1,264	1,053	-14%
Non Residential	291	398	449	432	318	0%
Total	1,437	1,777	1,674	1,696	1,372	-11%
Value per capita \$2005/06						
Residential	2,443	2,636	2,204	2,223	1,814	-21%
Non Residential	621	757	808	759	548	-7%
Total	3,064	3,393	3,011	2,982	2,363	-18%
Rank (value per capita)						
Residential	6	6	10	10	6	
Non Residential	6	6	39	42	50	
Total	9	10	17	18	18	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	846	733	834	907	601	584	577	775	524	708	543
Rank	32	42	26	21	34	48	49	27	37	38	44

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	17.2	18.3	19.5	19.0	20.0	20.0
Rank	57	58	56	57	58	58

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	438
Rank	21

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	169	173	172
Mining	30	30	35
Manufacturing	1,263	1,407	1,470
Utilities	5	7	4
Construction	1,834	1,858	1,943
Wholesale	1,706	1,856	1,878
Retail	1,616	1,697	1,546
Hospitality	94	98	231
Transport	266	390	394
Communication	20	49	50
Finance	4,112	4,414	4,420
Property & Business	1,040	1,765	1,310
Government	12	12	13
Education	76	75	89
Health & Community	264	366	389
Cultural & Recreational	147	176	504
Personal Services	139	316	363

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Melbourne Mid South East



Until recently Melbourne Mid South East had little coherence as a region. The Bayside suburbs at its western end were solidly prosperous while at the other extreme Dandenong was a low-status former market town with saleyards and manufacturing. However, over the past decade or so a degree of commonality has arisen, derived partly from a common history of post-war development but more from emerging participation in the knowledge economy. The catalyst for this emergence has been Monash University but the successors to the region's failing manufacturing industries have also contributed. The region is also known for its ethnically diverse population and has several successful shopping malls, including Chadstone and Southlands.

Major centres:

Cheltenham, Oakleigh, Clayton, Dandenong

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	519	521	525	532	538	545	0.4%	0.8%	1.2%	1.1%	1.4%	0.8%	1.2%
Households	178	179	180	181	182	183	0.6%	0.6%	0.5%	0.4%	0.6%	0.6%	0.5%
NIEIR Workforce	259	260	264	266	270	277	0.6%	1.7%	0.4%	1.7%	2.7%	0.9%	2.2%
NIEIR Employment	236	238	244	246	250	257	0.6%	2.7%	0.7%	1.6%	2.9%	1.3%	2.3%
NIEIR Unemployment	22.2	22.3	20.3	19.7	20.1	20.2	0.6%	-8.9%	-3.1%	2.4%	0.0%	-3.9%	1.2%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.6%	8.6%	7.7%	7.4%	7.5%	7.3%	0.0	-0.9	-0.3	0.1	-0.2	-0.4	-0.1
Headline Unemployment	5.8%	5.8%	5.1%	4.9%	5.0%	4.8%	0.0	-0.6	-0.3	0.1	-0.2	-0.3	0.0
NIEIR Structural U/E	11.6%	11.3%	10.9%	10.6%	10.3%	9.8%	-0.3	-0.4	-0.3	-0.3	-0.5	-0.3	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	9,763	10,197	10,732	11,145	11,533	12,040	18,822	19,574	20,436	20,964	21,456	22,097	4.5%	3.9%
Taxes Paid	2,823	2,963	3,153	3,243	3,377	3,493	5,443	5,688	6,004	6,100	6,282	6,411	4.7%	3.8%
Benefits	1,888	2,051	2,086	2,024	2,012	1,978	3,640	3,938	3,972	3,807	3,742	3,630	2.3%	-1.1%
Business Income	1,683	1,807	1,847	1,916	1,895	1,949	3,244	3,468	3,517	3,604	3,525	3,577	4.4%	0.9%
Interest Paid	981	1,225	1,441	1,641	1,952	2,485	1,891	2,352	2,744	3,087	3,631	4,560	18.7%	23.0%
Property Income	2,803	3,169	3,462	3,669	4,086	5,128	5,404	6,082	6,592	6,902	7,602	9,411	9.4%	18.2%
Disposable Income	13,103	13,818	14,417	14,768	15,534	16,491	25,263	26,525	27,452	27,779	28,898	30,265	4.1%	5.7%
Rank							18	17	16	18	17	15		
%Rank #1							63%	62%	59%	59%	58%	56%		
Business Value Added	11,445	12,003	12,580	13,061	13,428	13,989	22,067	23,042	23,953	24,569	24,981	25,674	4.5%	3.5%
Rank							18	19	19	19	17	19		
%Rank #1							64%	63%	61%	61%	61%	61%		
Business Productivity							47,621	49,707	50,796	52,408	53,030	53,701	3.2%	1.2%
Rank							14	13	12	13	14	17		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Melbourne Mid South East

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.08%	0.11%
Disability Support (aged 21-24)	0.08%	0.12%
Disability Support (aged 25+)	2.75%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.04%	0.08%
Parenting Payment - Single (aged 25+)	0.09%	0.19%
Unemployed Long Term	1.07%	1.52%
Unemployed Short Term	0.98%	1.26%
Youth Allowance - Non Student	0.73%	0.78%
Youth Allowance Student	0.13%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	14.4%	49
2004	14.8%	50
2005	14.5%	49
2006	13.7%	48
2007	13.0%	48
2008	12.0%	50

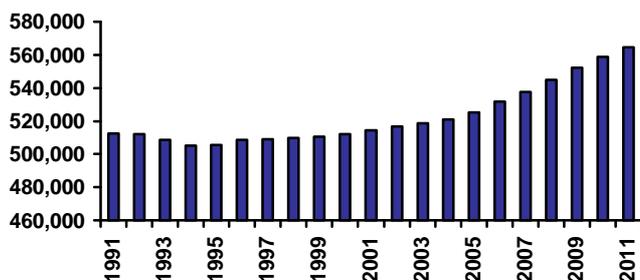
BABY BOUNCE

	Per cent	Rank
2002	1.10%	59
2003	1.10%	58
2004	1.12%	57
2005	1.12%	57
2006	1.17%	55
2007	1.22%	43
Bounce 2005-06	0.05%	23
Actual Change 2005-06 (Number)	314	14
Bounce 2006-07	0.05%	14
Actual Change 2006-07 (Number)	359	7

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	42
Aged migration	0.0	37
Population growth rate, 55+	0.0	54
Demographic stress	-0.1	39
Dominant locations	1.0	1
Family / Youth migration	29.0	21
Fertility bounce, 1996-2005	0.0	6
Fertility, babies % pop, 2005	0.0	55
Working elderly	0.3	44
SUSTAINABILITY SCORE	74.9	17

Population Profile



POPULATION

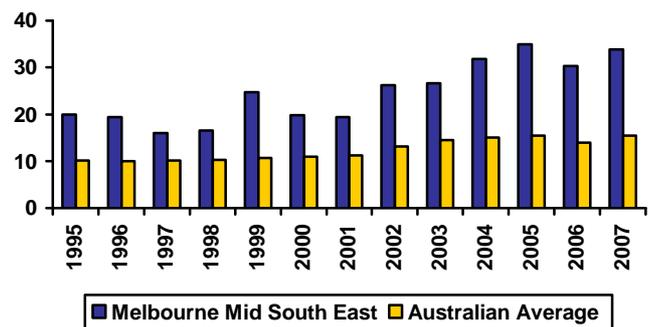
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	512	512	509	505	505	508	509	510	511	512	514	517	519	521	525	532	538	545	552	559	565

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	130.75	46.56	5
Average p.a. per capita	25.23	12.58	6
Hi Tech p.a. (1994-2007)	33.07	12.70	6
Hi Tech p.a. per capita	6.37	3.15	9
Info. Tech p.a. (1994-2007)	13.16	4.98	6
Info. Tech p.a. per capita	2.52	1.17	7
Average per capita (1994-2001)	20.24	10.80	8
Average per capita (2001-2007)	31.07	14.68	6
2001-07 avg./1994-01 avg.	1.53	1.35	11

Note: Per capita = 100,000 people

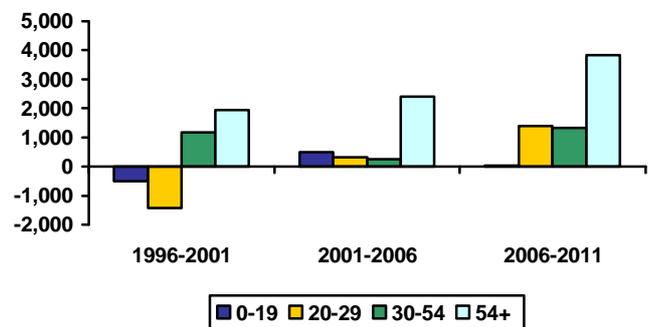
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	26.5%	25.8%	25.4%	23.9%
Age 20-29	14.3%	12.7%	12.6%	13.1%
Age 30-54	35.4%	36.1%	35.2%	34.3%
Age 55+	23.8%	25.4%	26.9%	28.7%
Population Change (average between years)				
Age 0-19		-497	489	17
Age 20-29		-1,422	316	1,400
Age 30-54		1,160	253	1,331
Age 55+		1,930	2,397	3,839
Average Annual Growth		0.2%	0.7%	1.2%

Population Change by Age Group



Melbourne Mid South East

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	549	670	12	12	44%	50%
Value of Property and Unincorporated Business	430	510	9	8	53%	64%
Value of Financial Assets	195	319	18	18	32%	42%
Value of Household Liabilities	77	160	30	51	153%	213%
Disposable Income after Debt Service Costs	67	75	19	13	60%	61%
Household Debt Service Ratio	12%	22%	16	29	170%	152%
Household Debt to Gross Income Ratio	0.89	1.45	16	29	170%	152%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	30,705	54,927	16,438	9,731	8,830	6,490
20 to 29		33,869	13,001	14,644	13,341	6,564
30 to 54		98,595	30,888	25,863	14,148	10,717
55+		110,214	11,836	8,032	1,754	11,036

Note: This data has been benchmarked to the Estimated Residential Population.

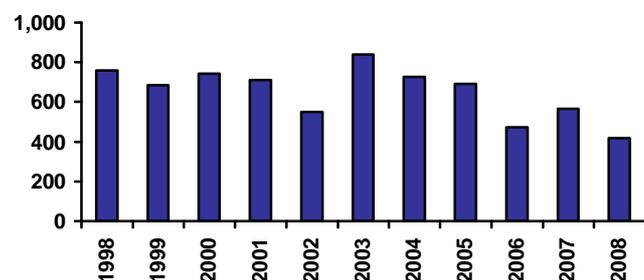
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	622	638	665	723	592	3%
Non Residential	509	610	717	680	490	3%
Total	1,132	1,249	1,382	1,403	1,082	3%
Value per capita \$2005/06						
Residential	1,212	1,218	1,237	1,326	1,072	-1%
Non Residential	992	1,163	1,334	1,249	887	-1%
Total	2,205	2,381	2,571	2,575	1,959	-1%
Rank (value per capita)						
Residential	36	45	37	36	33	
Non Residential	36	45	13	16	19	
Total	21	29	25	26	25	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	760	684	742	710	549	839	727	692	473	565	418
Rank	41	46	39	35	38	15	31	37	43	48	50

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	17.7	19.1	20.5	20.1	21.1	20.9
Rank	55	56	54	55	50	51

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	1267
Rank	7

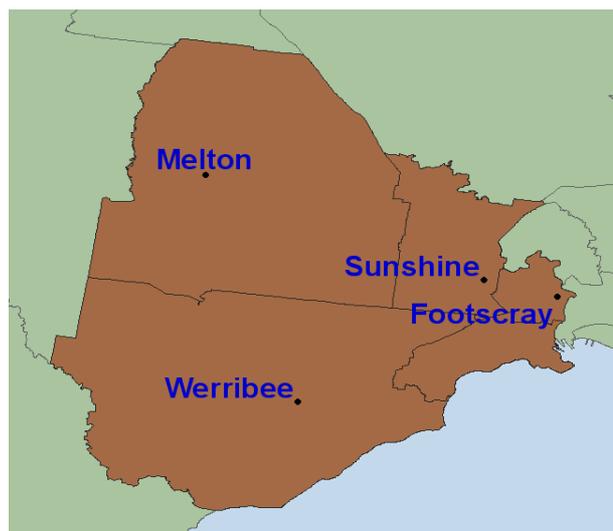
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	52	57	53
Mining	34	37	34
Manufacturing	4,377	5,037	5,184
Utilities	17	15	18
Construction	1,995	2,022	2,052
Wholesale	4,467	5,087	5,174
Retail	3,228	3,418	3,091
Hospitality	97	101	383
Transport	346	599	615
Communication	67	114	116
Finance	9,022	9,915	9,940
Property & Business	2,119	4,336	3,477
Government	38	40	31
Education	138	145	169
Health & Community	479	696	715
Cultural & Recreational	263	325	997
Personal Services	266	546	670

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Melbourne West



Melbourne West starts five kilometres from the CBD, on the other side of the port, and extends to the edge of the metropolitan area. Its economic base originally lay in manufacturing and logistics, but current development emphasises the latter. Slow growth in manufacturing coupled with rapid housing construction has resulted in increases in commuting to Melbourne Central. The extra commuters have severely stretched available transport capacity, leading to proposals for large-scale public investment in additional roads and railways. The region continues its fringe expansion, and also continues the multicultural traditions first established in the post-war period.

Major centres:

Footscray, Werribee, Sunshine

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	481	495	509	525	541	558	2.8%	2.9%	3.0%	3.0%	3.1%	2.9%	3.1%
Households	155	160	164	169	173	177	3.2%	2.9%	2.8%	2.3%	2.6%	3.0%	2.5%
NIEIR Workforce	240	248	258	266	275	285	3.2%	4.2%	3.0%	3.3%	3.8%	3.4%	3.5%
NIEIR Employment	215	222	233	242	250	261	3.0%	5.0%	4.0%	3.3%	4.3%	4.0%	3.8%
NIEIR Unemployment	24.9	26.0	25.2	23.7	24.4	24.2	4.2%	-2.8%	-5.9%	3.0%	-1.2%	-1.6%	0.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	10.4%	10.5%	9.8%	8.9%	8.9%	8.5%	0.1	-0.7	-0.9	0.0	-0.4	-0.5	-0.2
Headline Unemployment	7.9%	7.9%	7.7%	6.9%	7.0%	6.8%	0.0	-0.2	-0.8	0.1	-0.2	-0.3	-0.1
NIEIR Structural U/E	16.1%	16.1%	15.4%	14.8%	14.4%	13.7%	0.0	-0.7	-0.5	-0.4	-0.7	-0.4	-0.6

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	8,471	9,079	9,776	10,483	11,039	11,698	17,605	18,349	19,194	19,980	20,418	20,979	7.4%	5.6%
Taxes Paid	2,254	2,406	2,619	2,779	2,931	3,101	4,684	4,863	5,142	5,297	5,422	5,562	7.2%	5.6%
Benefits	1,890	2,113	2,234	2,238	2,298	2,332	3,929	4,269	4,386	4,265	4,250	4,182	5.8%	2.1%
Business Income	1,030	1,095	1,113	1,163	1,154	1,148	2,141	2,214	2,185	2,216	2,134	2,059	4.1%	-0.6%
Interest Paid	952	1,190	1,397	1,585	1,873	2,356	1,979	2,405	2,744	3,021	3,464	4,226	18.5%	21.9%
Property Income	1,145	1,239	1,419	1,625	1,817	1,915	2,380	2,505	2,786	3,097	3,360	3,434	12.4%	8.6%
Disposable Income	10,117	10,690	11,365	12,056	12,831	12,893	21,026	21,605	22,314	22,977	23,733	23,122	6.0%	3.4%
Rank							51	51	52	54	50	54		
%Rank #1							52%	50%	48%	48%	47%	43%		
Business Value Added	9,501	10,175	10,889	11,646	12,192	12,846	19,745	20,563	21,379	22,196	22,552	23,037	7.0%	5.0%
Rank							33	35	32	29	28	28		
%Rank #1							57%	57%	55%	55%	55%	55%		
Business Productivity							43,247	44,992	45,962	47,349	48,044	48,540	3.1%	1.3%
Rank							39	38	39	34	34	42		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Melbourne West

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.10%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	3.41%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.17%	0.19%
Unemployed Long Term	1.95%	1.52%
Unemployed Short Term	1.63%	1.26%
Youth Allowance - Non Student	1.01%	0.78%
Youth Allowance Student	0.31%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	18.7%	20
2004	19.8%	23
2005	19.7%	23
2006	18.6%	26
2007	17.9%	29
2008	18.1%	33

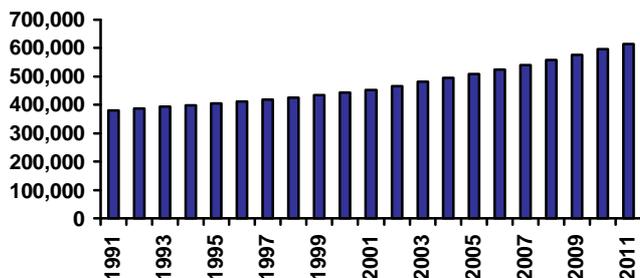
BABY BOUNCE

	Per cent	Rank
2002	1.42%	12
2003	1.42%	9
2004	1.45%	8
2005	1.46%	9
2006	1.51%	8
2007	1.58%	5
Bounce 2005-06	0.05%	18
Actual Change 2005-06 (Number)	495	4
Bounce 2006-07	0.07%	6
Actual Change 2006-07 (Number)	619	1

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	6
Aged migration	0.0	52
Population growth rate, 55+	0.0	52
Demographic stress	-0.3	62
Dominant locations	1.0	1
Family / Youth migration	136.0	1
Fertility bounce, 1996-2005	0.0	2
Fertility, babies % pop, 2005	0.0	8
Working elderly	0.2	52
SUSTAINABILITY SCORE	78.6	1

Population Profile



POPULATION

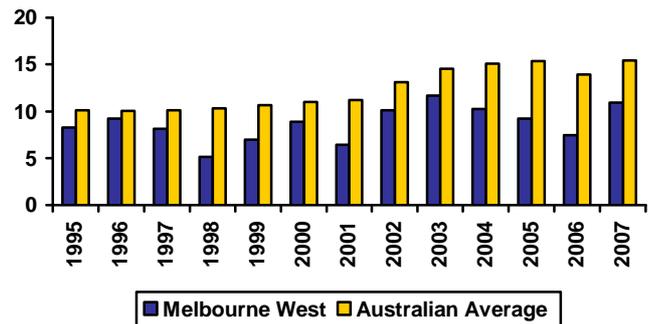
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	381	388	394	398	404	412	418	425	434	443	453	466	481	495	509	525	541	558	577	596	615

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	40.88	46.56	23
Average p.a. per capita	8.84	12.58	38
Hi Tech p.a. (1994-2007)	7.34	12.70	27
Hi Tech p.a. per capita	1.57	3.15	37
Info. Tech p.a. (1994-2007)	2.62	4.98	25
Info. Tech p.a. per capita	0.56	1.17	31
Average per capita (1994-2001)	7.89	10.80	35
Average per capita (2001-2007)	10.11	14.68	35
2001-07 avg./1994-01 avg.	1.28	1.35	42

Note: Per capita = 100,000 people

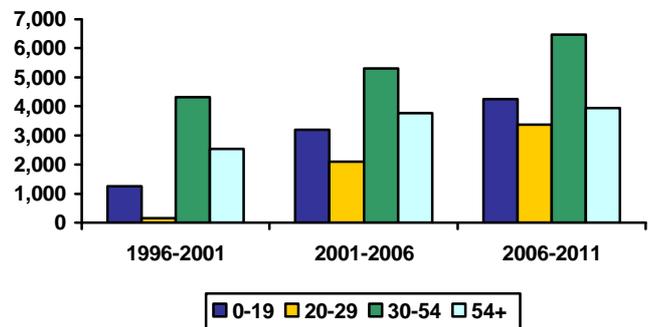
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	31.8%	30.3%	29.2%	28.3%
Age 20-29	15.2%	14.0%	14.1%	14.8%
Age 30-54	36.8%	38.2%	38.1%	37.7%
Age 55+	16.1%	17.5%	18.7%	19.1%
Population Change (average between years)				
Age 0-19		1,255	3,196	4,247
Age 20-29		164	2,099	3,370
Age 30-54		4,311	5,310	6,472
Age 55+		2,526	3,771	3,951
Average Annual Growth		1.9%	3.0%	3.2%

Population Change by Age Group



Melbourne West

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	313	335	34	49	25%	25%
Value of Property and Unincorporated Business	292	319	20	27	36%	40%
Value of Financial Assets	111	171	52	53	18%	23%
Value of Household Liabilities	90	155	55	49	179%	207%
Disposable Income after Debt Service Costs	57	58	39	46	50%	47%
Household Debt Service Ratio	16%	27%	54	58	230%	184%
Household Debt to Gross Income Ratio	1.21	1.76	54	58	230%	184%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	37,748	59,552	19,298	15,370	5,271	8,340
20 to 29		34,666	16,320	21,605	9,602	7,905
30 to 54		102,084	31,723	34,879	9,498	12,916
55+		72,560	7,880	8,514	1,170	7,791

Note: This data has been benchmarked to the Estimated Residential Population.

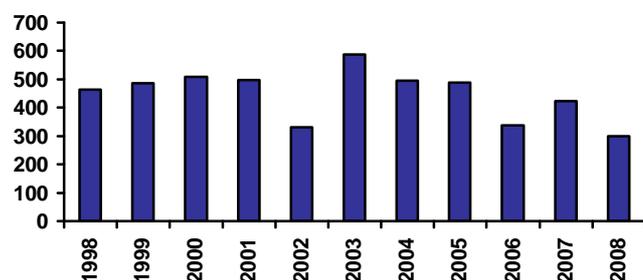
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	905	1,237	1,176	1,339	1,100	-3%
Non Residential	458	565	729	753	560	21%
Total	1,364	1,802	1,905	2,091	1,660	5%
Value per capita \$2005/06						
Residential	2,011	2,466	2,175	2,401	1,907	-12%
Non Residential	1,023	1,122	1,349	1,350	970	9%
Total	3,035	3,588	3,525	3,751	2,877	-6%
Rank (value per capita)						
Residential	10	7	11	7	5	
Non Residential	10	7	12	12	13	
Total	10	9	12	13	12	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	464	485	510	498	331	586	496	488	337	424	299
Rank	57	59	59	56	56	47	56	57	54	57	60

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	18.6	19.6	20.9	20.2	21.3	21.2
Rank	48	52	48	53	49	49

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	419
Rank	22

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	76	80	74
Mining	16	22	20
Manufacturing	1,626	1,731	1,772
Utilities	8	6	7
Construction	1,238	1,265	1,296
Wholesale	1,683	1,814	1,848
Retail	1,624	1,815	1,621
Hospitality	62	61	242
Transport	368	530	549
Communication	14	27	29
Finance	2,824	3,102	3,115
Property & Business	901	1,512	1,133
Government	15	13	15
Education	94	98	108
Health & Community	372	442	463
Cultural & Recreational	142	169	462
Personal Services	195	340	388

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

VIC Ballarat



Ballarat lies in high country very close to the watershed between the Murray basin and the southward flowing creeks. Its hinterland is similarly astride the divide. The country is hilly and has a regional identity originally forged during the gold rushes of the mid nineteenth century. Access to Melbourne is via the Western highway with Ballarat the dominant regional city, except for those parts of the region which fringe Melbourne. Ballarat has diversified its economic base, benefiting by being near Melbourne but not of it. Its tourism industry is based largely on its goldfields heritage.

Major centres:

Ballarat, Ararat, Maryborough

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	156	157	158	160	162	164	0.5%	1.0%	1.2%	1.1%	1.1%	0.9%	1.1%
Households	56	57	59	60	62	63	2.5%	2.6%	2.5%	2.3%	2.4%	2.6%	2.4%
NIEIR Workforce	74	75	76	78	79	82	0.7%	2.2%	1.7%	2.2%	3.1%	1.6%	2.6%
NIEIR Employment	66	67	68	69	70	72	1.3%	1.4%	1.8%	1.7%	3.1%	1.5%	2.4%
NIEIR Unemployment	8.4	8.1	8.9	8.9	9.4	9.7	-3.5%	9.3%	0.3%	6.1%	2.9%	1.9%	4.5%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	11.3%	10.9%	11.6%	11.5%	11.9%	11.9%	-0.5	0.7	-0.2	0.4	0.0	0.0	0.2
Headline Unemployment	8.0%	7.3%	8.2%	7.7%	8.0%	7.6%	-0.7	1.0	-0.5	0.3	-0.4	-0.1	0.0
NIEIR Structural U/E	17.2%	16.8%	16.0%	15.9%	15.6%	15.1%	-0.4	-0.8	-0.1	-0.4	-0.4	-0.4	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	2,266	2,392	2,472	2,585	2,681	2,812	14,521	15,250	15,601	16,131	16,551	17,177	4.5%	4.3%
Taxes Paid	659	716	760	774	735	779	4,223	4,566	4,798	4,832	4,535	4,760	5.5%	0.3%
Benefits	673	749	771	771	791	802	4,316	4,772	4,864	4,814	4,886	4,896	4.6%	1.9%
Business Income	521	588	573	565	466	482	3,342	3,751	3,617	3,528	2,877	2,944	2.7%	-7.7%
Interest Paid	279	335	378	411	465	576	1,791	2,137	2,383	2,563	2,871	3,518	13.7%	18.4%
Property Income	587	584	720	887	986	824	3,762	3,724	4,542	5,532	6,084	5,030	14.7%	-3.6%
Disposable Income	3,489	3,637	3,795	4,066	4,320	4,092	22,363	23,184	23,955	25,372	26,668	24,992	5.2%	0.3%
Rank							33	33	36	28	24	39		
%Rank #1							55%	54%	52%	53%	53%	47%		
Business Value Added	2,787	2,981	3,045	3,151	3,147	3,295	17,863	19,001	19,218	19,660	19,428	20,121	4.2%	2.3%
Rank							53	52	53	52	47	50		
%Rank #1							51%	52%	49%	49%	48%	48%		
Business Productivity							40,626	42,490	43,395	44,351	45,058	45,900	3.0%	1.7%
Rank							51	50	50	49	50	52		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

VIC Ballarat

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.15%	0.11%
Disability Support (aged 21-24)	0.15%	0.12%
Disability Support (aged 25+)	4.64%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.06%	0.08%
Parenting Payment - Single (aged 25+)	0.21%	0.19%
Unemployed Long Term	1.83%	1.52%
Unemployed Short Term	1.52%	1.26%
Youth Allowance - Non Student	0.76%	0.78%
Youth Allowance Student	0.46%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	19.3%	19
2004	20.6%	19
2005	20.3%	19
2006	19.0%	22
2007	18.3%	27
2008	19.6%	22

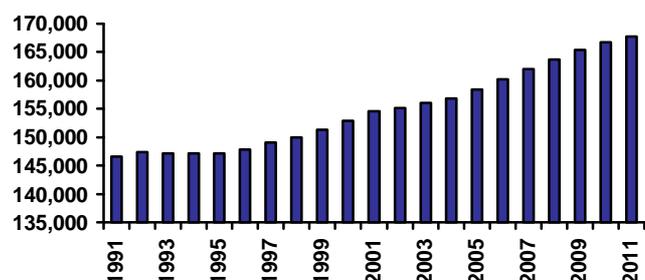
BABY BOUNCE

	Per cent	Rank
2002	1.20%	46
2003	1.19%	45
2004	1.19%	43
2005	1.18%	49
2006	1.20%	50
2007	1.23%	41
Bounce 2005-06	0.02%	50
Actual Change 2005-06 (Number)	61	55
Bounce 2006-07	0.03%	22
Actual Change 2006-07 (Number)	62	29

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.9	47
Share of population under 55	0.7	45
Aged migration	0.0	17
Population growth rate, 55+	0.0	32
Demographic stress	0.0	22
Dominant locations	0.5	37
Family / Youth migration	-9.0	49
Fertility bounce, 1996-2005	0.0	31
Fertility, babies % pop, 2005	0.0	50
Working elderly	0.3	49
SUSTAINABILITY SCORE	54.4	41

Population Profile



POPULATION

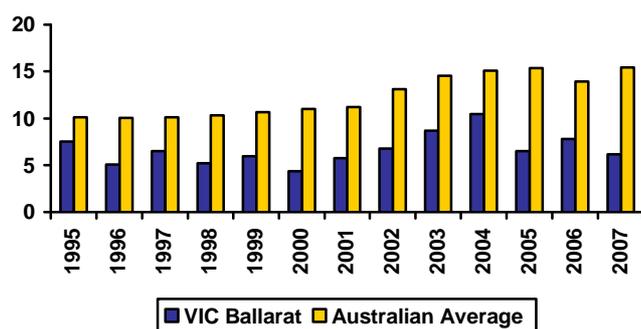
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	147	147	147	147	147	148	149	150	151	153	155	155	156	157	158	160	162	164	165	167	168

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	10.26	46.56	53
Average p.a. per capita	6.67	12.58	51
Hi Tech p.a. (1994-2007)	1.64	12.70	51
Hi Tech p.a. per capita	1.06	3.15	49
Info. Tech p.a. (1994-2007)	0.08	4.98	61
Info. Tech p.a. per capita	0.05	1.17	63
Average per capita (1994-2001)	5.89	10.80	50
Average per capita (2001-2007)	7.58	14.68	52
2001-07 avg./1994-01 avg.	1.29	1.35	39

Note: Per capita = 100,000 people

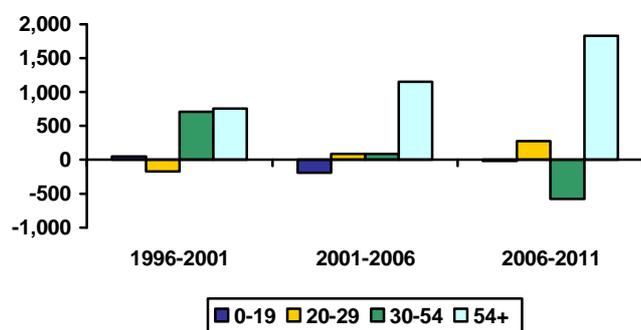
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	31.5%	30.3%	28.6%	27.3%
Age 20-29	11.7%	10.6%	10.5%	10.8%
Age 30-54	34.1%	34.9%	34.0%	30.7%
Age 55+	22.7%	24.2%	26.9%	31.2%
Population Change (average between years)				
Age 0-19		51	-191	-19
Age 20-29		-170	81	269
Age 30-54		709	86	-578
Age 55+		757	1,152	1,829
Average Annual Growth		0.9%	0.7%	0.9%

Population Change by Age Group



VIC Ballarat

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	459	540	16	19	36%	40%
Value of Property and Unincorporated Business	194	209	46	54	24%	26%
Value of Financial Assets	341	446	10	12	56%	59%
Value of Household Liabilities	77	116	32	16	154%	155%
Disposable Income after Debt Service Costs	57	58	38	42	50%	48%
Household Debt Service Ratio	15%	22%	40	28	208%	151%
Household Debt to Gross Income Ratio	1.09	1.44	40	28	207%	151%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	9,602	18,169	9,049	4,574	353	1,914
20 to 29		6,189	7,642	4,764	684	1,488
30 to 54		28,763	12,982	7,280	849	2,783
55+		31,040	5,101	3,588	137	3,306

Note: This data has been benchmarked to the Estimated Residential Population.

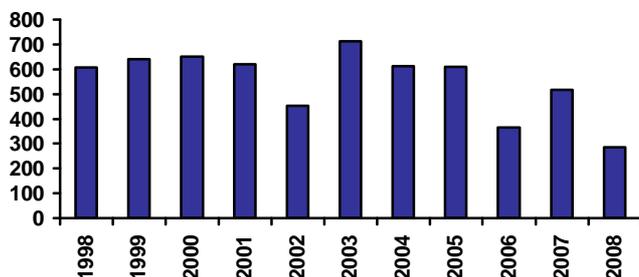
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	156	240	237	245	204	-5%
Non Residential	108	113	127	136	102	8%
Total	265	353	364	382	306	-1%
Value per capita \$2005/06						
Residential	1,019	1,522	1,465	1,499	1,231	-8%
Non Residential	706	715	785	831	616	4%
Total	1,725	2,237	2,249	2,330	1,848	-4%
Rank (value per capita)						
Residential	46	30	29	29	25	
Non Residential	46	30	43	36	37	
Total	43	37	33	31	29	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	608	640	650	620	452	713	611	610	365	518	286
Rank	51	50	49	47	48	19	47	46	51	50	62

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	15.8	17.4	18.1	18.6	20.3	20.6
Rank	63	61	62	61	57	56

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	128
Rank	48

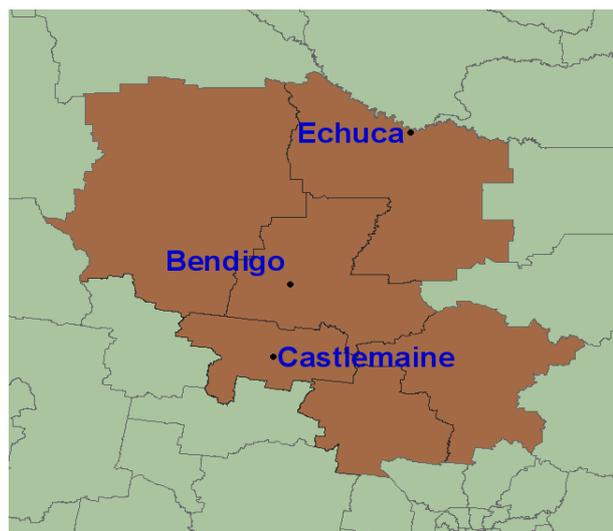
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	79	92	96
Mining	25	24	25
Manufacturing	386	404	422
Utilities	7	7	5
Construction	356	361	373
Wholesale	449	476	483
Retail	676	716	635
Hospitality	85	87	135
Transport	82	110	112
Communication	9	11	17
Finance	1,440	1,539	1,541
Property & Business	307	490	349
Government	5	4	4
Education	38	37	39
Health & Community	101	155	153
Cultural & Recreational	48	62	171
Personal Services	44	80	99

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

VIC Bendigo



Bendigo lies where the hills of Central Victoria give way to the plains of Northern Victoria. Its region is accordingly divided into relatively well-watered hill country which is well within the Melbourne hobby-farm belt and much drier farmland, some of which is irrigated. Bendigo and many of the towns of the region were founded in the nineteenth-century gold rushes, and from gold moved on to manufacturing. Recent times have not been kind to these manufacturing industries, but heritage urban centres dating from the gold rushes underpin tourism and proximity to Melbourne keeps land values up for hobby farms. Access to Melbourne is via the Calder highway. The region is one of several in Victoria where there are worries about climate change, but Bendigo has had some success in attracting knowledge-based activities.

Major centres:

Castlemaine, Bendigo, Echuca

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	223	226	229	232	235	237	1.2%	1.3%	1.3%	1.4%	1.1%	1.3%	1.2%
Households	78	80	82	84	86	88	2.7%	2.5%	2.5%	2.3%	2.1%	2.6%	2.2%
NIEIR Workforce	103	104	107	109	112	114	1.6%	2.7%	2.2%	2.2%	2.4%	2.2%	2.3%
NIEIR Employment	93	95	97	99	102	105	1.7%	1.8%	2.8%	3.1%	2.4%	2.1%	2.8%
NIEIR Unemployment	9.2	9.3	10.3	10.0	9.4	9.6	0.2%	11.3%	-3.1%	-6.3%	2.0%	2.6%	-2.2%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.0%	8.9%	9.6%	9.1%	8.4%	8.4%	-0.1	0.7	-0.5	-0.8	0.0	0.0	-0.4
Headline Unemployment	5.2%	5.0%	6.2%	5.9%	4.8%	4.5%	-0.2	1.1	-0.3	-1.1	-0.3	0.2	-0.7
NIEIR Structural U/E	15.1%	14.8%	14.2%	13.6%	13.3%	13.2%	-0.3	-0.7	-0.6	-0.4	-0.1	-0.5	-0.2

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,207	3,378	3,527	3,740	3,931	4,090	14,382	14,968	15,423	16,144	16,732	17,224	5.3%	4.6%
Taxes Paid	951	1,026	1,087	1,115	1,101	1,180	4,264	4,547	4,755	4,812	4,688	4,970	5.5%	2.9%
Benefits	895	1,004	1,042	1,045	1,079	1,103	4,013	4,451	4,556	4,511	4,594	4,646	5.3%	2.7%
Business Income	883	1,012	1,038	993	758	883	3,960	4,483	4,540	4,285	3,227	3,717	4.0%	-5.7%
Interest Paid	425	510	575	626	710	879	1,907	2,262	2,516	2,703	3,020	3,702	13.8%	18.5%
Property Income	693	751	892	1,004	1,114	1,166	3,109	3,329	3,901	4,335	4,741	4,909	13.2%	7.7%
Disposable Income	4,803	5,123	5,386	5,614	5,818	5,940	21,540	22,703	23,554	24,231	24,764	25,013	5.3%	2.9%
Rank							46	41	40	41	41	37		
%Rank #1							53%	53%	51%	51%	49%	47%		
Business Value Added	4,090	4,389	4,565	4,733	4,689	4,973	18,342	19,451	19,962	20,429	19,959	20,941	5.0%	2.5%
Rank							46	45	47	46	42	42		
%Rank #1							53%	54%	51%	50%	49%	50%		
Business Productivity							42,143	43,981	45,201	46,416	46,913	48,021	3.3%	1.7%
Rank							47	43	44	41	44	46		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

VIC Bendigo

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.15%	0.11%
Disability Support (aged 21-24)	0.15%	0.12%
Disability Support (aged 25+)	3.78%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.06%	0.08%
Parenting Payment - Single (aged 25+)	0.19%	0.19%
Unemployed Long Term	1.69%	1.52%
Unemployed Short Term	1.26%	1.26%
Youth Allowance - Non Student	0.75%	0.78%
Youth Allowance Student	0.35%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	18.6%	21
2004	19.6%	25
2005	19.3%	25
2006	18.6%	24
2007	18.6%	25
2008	18.6%	29

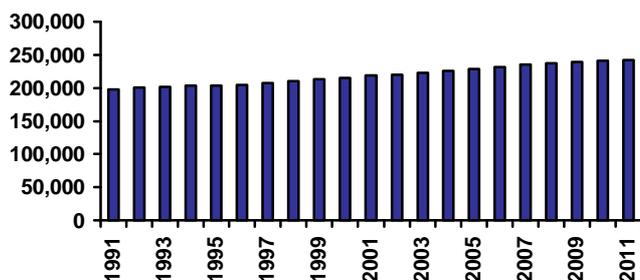
BABY BOUNCE

	Per cent	Rank
2002	1.25%	33
2003	1.22%	34
2004	1.23%	34
2005	1.21%	40
2006	1.24%	43
2007	1.22%	45
Bounce 2005-06	0.03%	44
Actual Change 2005-06 (Number)	104	46
Bounce 2006-07	-0.02%	37
Actual Change 2006-07 (Number)	-6	39

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	38
Aged migration	0.0	24
Population growth rate, 55+	0.1	24
Demographic stress	0.0	22
Dominant locations	0.4	58
Family / Youth migration	4.0	32
Fertility bounce, 1996-2005	0.0	38
Fertility, babies % pop, 2005	0.0	38
Working elderly	0.3	39
SUSTAINABILITY SCORE	48.1	58

Population Profile



POPULATION

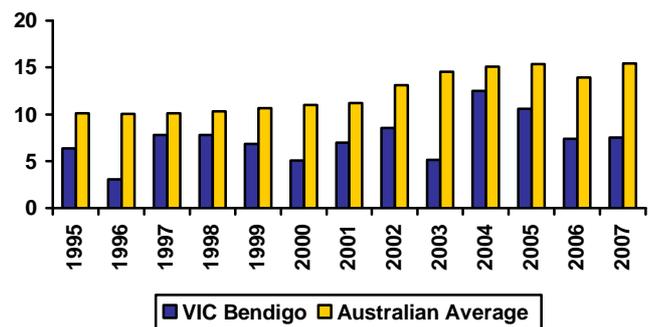
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	198	200	202	203	204	205	208	210	213	215	219	220	223	226	229	232	235	237	239	241	242

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	16.10	46.56	43
Average p.a. per capita	7.37	12.58	46
Hi Tech p.a. (1994-2007)	2.75	12.70	43
Hi Tech p.a. per capita	1.26	3.15	46
Info. Tech p.a. (1994-2007)	1.21	4.98	35
Info. Tech p.a. per capita	0.54	1.17	34
Average per capita (1994-2001)	6.54	10.80	47
Average per capita (2001-2007)	8.47	14.68	46
2001-07 avg./1994-01 avg.	1.30	1.35	38

Note: Per capita = 100,000 people

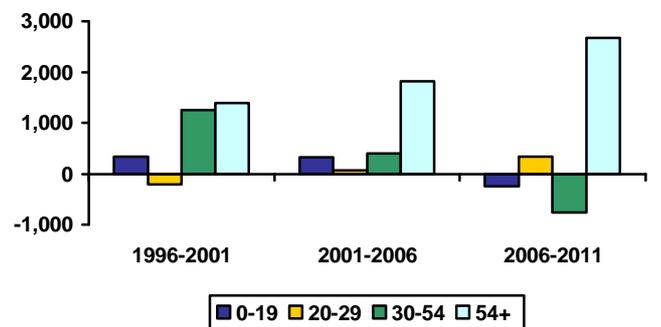
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	32.3%	31.0%	29.9%	28.2%
Age 20-29	11.0%	9.8%	9.4%	9.7%
Age 30-54	35.4%	36.0%	34.8%	31.8%
Age 55+	21.4%	23.2%	25.9%	30.3%
Population Change (average between years)				
Age 0-19		338	325	-246
Age 20-29		-203	72	332
Age 30-54		1,245	395	-760
Age 55+		1,387	1,823	2,668
Average Annual Growth		1.3%	1.2%	0.8%

Population Change by Age Group



VIC Bendigo

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	318	380	31	35	25%	28%
Value of Property and Unincorporated Business	214	232	42	49	26%	29%
Value of Financial Assets	189	275	19	23	31%	36%
Value of Household Liabilities	85	126	44	24	170%	168%
Disposable Income after Debt Service Costs	56	60	42	38	49%	49%
Household Debt Service Ratio	16%	23%	52	36	228%	157%
Household Debt to Gross Income Ratio	1.20	1.50	52	36	228%	157%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	14,796	27,430	12,545	7,964	706	2,865
20 to 29		8,570	8,999	7,298	548	1,854
30 to 54		42,400	17,486	13,297	1,066	3,963
55+		42,174	7,556	5,837	183	4,161

Note: This data has been benchmarked to the Estimated Residential Population.

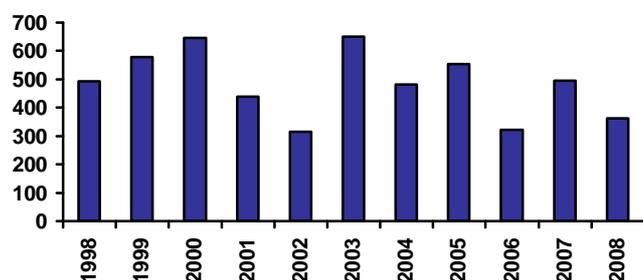
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	264	392	364	325	276	-18%
Non Residential	103	149	195	181	136	14%
Total	367	540	558	506	412	-9%
Value per capita \$2005/06						
Residential	1,218	1,724	1,549	1,370	1,153	-21%
Non Residential	475	654	829	760	566	10%
Total	1,692	2,377	2,377	2,130	1,720	-13%
Rank (value per capita)						
Residential	35	22	26	32	31	
Non Residential	35	22	37	41	47	
Total	46	30	30	39	33	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	493	578	646	440	315	650	482	553	323	495	363
Rank	55	55	50	59	59	30	57	50	56	51	55

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	18.1	20.2	20.6	21.2	21.5	21.8
Rank	52	49	51	46	46	43

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	166
Rank	37

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	160	165	172
Mining	37	44	41
Manufacturing	493	514	532
Utilities	5	4	2
Construction	534	538	548
Wholesale	684	719	723
Retail	1,017	1,067	959
Hospitality	134	136	201
Transport	158	219	217
Communication	11	17	17
Finance	1,851	1,947	1,957
Property & Business	373	664	495
Government	22	19	18
Education	65	65	71
Health & Community	107	170	176
Cultural & Recreational	50	60	195
Personal Services	54	112	128

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

VIC Geelong



The Geelong region comprises the City of Greater Geelong plus the small Borough of Queenscliff, which miraculously survived the Victorian local government reforms of the 1990s. The region is thus largely urban, though open paddocks survive on the Bellarine Peninsula and on the basalt plain which separates Geelong from the Melbourne metropolitan area. The port of Geelong remains active, largely in the export of grain and woodchips. The city developed during the twentieth century through manufacturing, but more recently this has not provided it with a robust economic base, resulting in the growth of commuter traffic to metropolitan Melbourne.

Major centres:

Geelong

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	202	204	206	209	211	214	1.0%	1.1%	1.2%	1.2%	1.3%	1.1%	1.2%
Households	74	76	78	80	82	85	3.0%	3.0%	2.7%	2.5%	2.7%	2.9%	2.6%
NIEIR Workforce	98	99	102	104	106	109	2.0%	2.8%	1.8%	2.2%	2.7%	2.2%	2.4%
NIEIR Employment	88	90	92	94	96	100	1.8%	2.2%	2.2%	2.7%	4.6%	2.0%	3.6%
NIEIR Unemployment	9.5	9.8	10.6	10.4	10.2	8.7	3.6%	8.6%	-1.9%	-1.8%	-15.3%	3.3%	-8.8%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.7%	9.9%	10.4%	10.0%	9.6%	8.0%	0.2	0.6	-0.4	-0.4	-1.7	0.1	-1.0
Headline Unemployment	6.7%	6.8%	8.0%	7.4%	6.7%	5.1%	0.1	1.2	-0.6	-0.6	-1.6	0.2	-1.1
NIEIR Structural U/E	14.9%	14.5%	14.0%	13.5%	13.2%	12.6%	-0.4	-0.5	-0.5	-0.3	-0.6	-0.5	-0.5

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,311	3,511	3,683	3,839	4,028	4,289	16,377	17,192	17,845	18,381	19,055	20,036	5.0%	5.7%
Taxes Paid	933	994	1,049	1,071	1,136	1,223	4,614	4,865	5,083	5,128	5,374	5,714	4.7%	6.9%
Benefits	845	937	975	970	988	993	4,181	4,590	4,723	4,643	4,672	4,637	4.7%	1.2%
Business Income	551	605	612	622	608	650	2,724	2,965	2,966	2,980	2,875	3,035	4.1%	2.2%
Interest Paid	358	440	509	568	659	815	1,769	2,157	2,466	2,719	3,118	3,807	16.7%	19.8%
Property Income	733	811	918	987	1,093	1,300	3,625	3,970	4,449	4,725	5,173	6,073	10.4%	14.8%
Disposable Income	4,562	4,842	5,065	5,220	5,563	5,896	22,562	23,713	24,541	24,993	26,318	27,539	4.6%	6.3%
Rank							31	30	31	32	25	19		
%Rank #1							56%	55%	53%	53%	53%	51%		
Business Value Added	3,862	4,116	4,295	4,461	4,636	4,939	19,101	20,158	20,810	21,360	21,930	23,071	4.9%	5.2%
Rank							37	37	36	32	30	27		
%Rank #1							55%	56%	53%	53%	54%	55%		
Business Productivity							43,148	45,149	46,232	47,022	47,755	48,645	2.9%	1.7%
Rank							40	36	36	38	38	40		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

VIC Geelong

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.14%	0.11%
Disability Support (aged 21-24)	0.15%	0.12%
Disability Support (aged 25+)	3.49%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.06%	0.08%
Parenting Payment - Single (aged 25+)	0.17%	0.19%
Unemployed Long Term	1.77%	1.52%
Unemployed Short Term	1.50%	1.26%
Youth Allowance - Non Student	0.86%	0.78%
Youth Allowance Student	0.36%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	18.5%	23
2004	19.4%	26
2005	19.2%	27
2006	18.6%	25
2007	17.8%	31
2008	16.8%	39

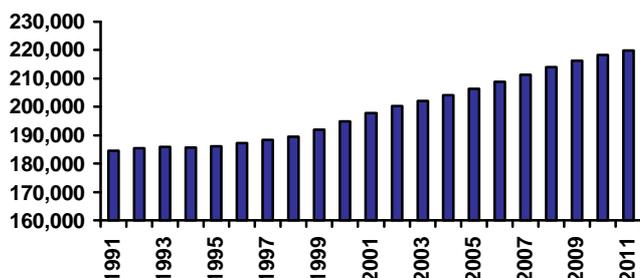
BABY BOUNCE

	Per cent	Rank
2002	1.17%	53
2003	1.15%	51
2004	1.16%	49
2005	1.16%	54
2006	1.19%	53
2007	1.17%	54
Bounce 2005-06	0.04%	32
Actual Change 2005-06 (Number)	107	44
Bounce 2006-07	-0.03%	41
Actual Change 2006-07 (Number)	-25	42

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	47
Aged migration	0.0	17
Population growth rate, 55+	0.0	30
Demographic stress	0.0	28
Dominant locations	1.0	1
Family / Youth migration	2.0	33
Fertility bounce, 1996-2005	0.0	21
Fertility, babies % pop, 2005	0.0	50
Working elderly	0.2	57
SUSTAINABILITY SCORE	74.7	18

Population Profile



POPULATION

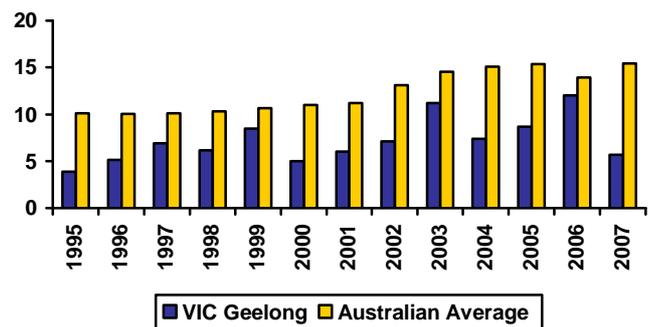
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	185	185	186	186	186	187	188	189	192	195	198	200	202	204	206	209	211	214	216	218	220

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	14.03	46.56	47
Average p.a. per capita	7.09	12.58	49
Hi Tech p.a. (1994-2007)	2.56	12.70	45
Hi Tech p.a. per capita	1.31	3.15	45
Info. Tech p.a. (1994-2007)	0.36	4.98	49
Info. Tech p.a. per capita	0.18	1.17	53
Average per capita (1994-2001)	6.09	10.80	49
Average per capita (2001-2007)	8.24	14.68	48
2001-07 avg./1994-01 avg.	1.35	1.35	30

Note: Per capita = 100,000 people

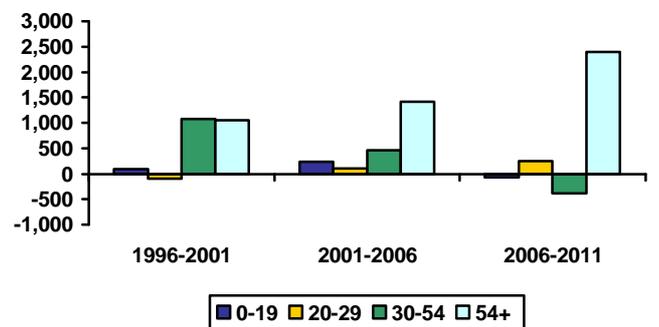
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	29.7%	28.3%	27.4%	25.9%
Age 20-29	12.6%	11.7%	11.3%	11.3%
Age 30-54	33.8%	34.7%	34.0%	31.4%
Age 55+	23.9%	25.3%	27.3%	31.4%
Population Change (average between years)				
Age 0-19		90	239	-65
Age 20-29		-100	104	245
Age 30-54		1,075	455	-385
Age 55+		1,049	1,419	2,390
Average Annual Growth		1.1%	1.1%	1.0%

Population Change by Age Group



VIC Geelong

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	303	392	38	34	24%	29%
Value of Property and Unincorporated Business	241	286	30	34	30%	36%
Value of Financial Assets	134	233	39	32	22%	31%
Value of Household Liabilities	72	127	21	26	144%	170%
Disposable Income after Debt Service Costs	55	65	45	21	49%	54%
Household Debt Service Ratio	14%	21%	30	23	198%	146%
Household Debt to Gross Income Ratio	1.04	1.40	30	23	198%	146%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	12,554	22,070	12,789	3,718	1,040	2,171
20 to 29		9,796	10,725	5,356	1,120	1,977
30 to 54		37,175	19,196	6,902	1,832	3,340
55+		41,693	7,531	3,513	275	4,063

Note: This data has been benchmarked to the Estimated Residential Population.

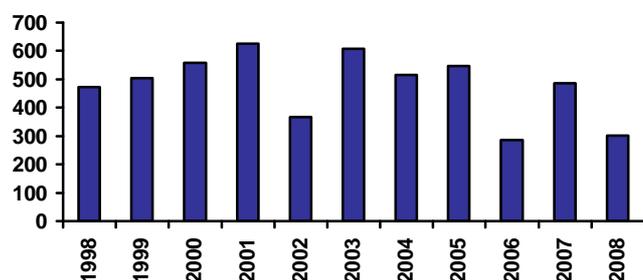
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	308	373	323	353	294	-13%
Non Residential	107	188	295	322	223	49%
Total	415	562	618	675	517	7%
Value per capita \$2005/06						
Residential	1,569	1,819	1,528	1,648	1,357	-17%
Non Residential	548	914	1,397	1,505	1,033	43%
Total	2,117	2,734	2,925	3,152	2,390	3%
Rank (value per capita)						
Residential	18	17	27	24	21	
Non Residential	18	17	11	10	12	
Total	24	17	20	17	17	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	473	503	559	627	368	608	516	548	285	486	302
Rank	56	57	56	46	54	42	53	52	58	52	59

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	18.2	19.3	20.6	20.0	20.8	20.9
Rank	50	54	50	56	55	53

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	178
Rank	35

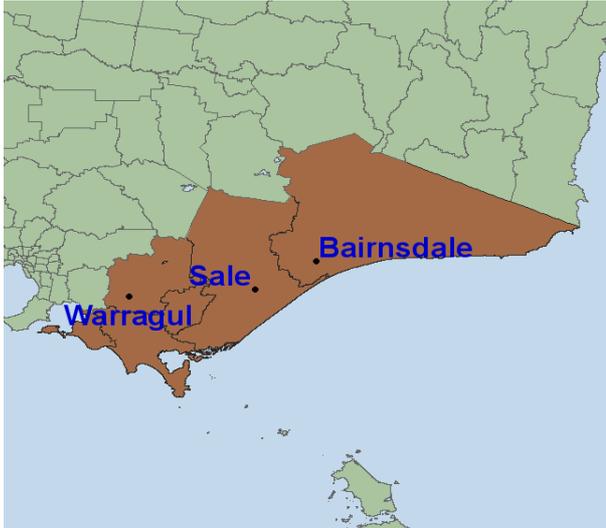
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	47	53	55
Mining	15	14	14
Manufacturing	487	514	541
Utilities	1	1	1
Construction	485	496	516
Wholesale	639	683	698
Retail	813	874	780
Hospitality	56	57	131
Transport	84	157	163
Communication	10	21	22
Finance	1,748	1,876	1,874
Property & Business	444	802	589
Government	7	7	8
Education	53	56	62
Health & Community	134	209	209
Cultural & Recreational	49	56	217
Personal Services	64	132	148

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

VIC Gippsland



Gippsland is a clearly-defined region east of Melbourne and south of the ranges. Despite its strong sense of identity, Gippsland is strikingly diverse. Bass Coast shire depends heavily on tourism and retirement as its economic base. The hills of South Gippsland stand apart from the Great Dividing Range, and are well-watered, supporting dairy farming near to Melbourne and plantation forestry further away. The East Gippsland plain has lower rainfall, and includes one of Australia's few irrigation areas outside the Murray Darling basin. The hills which bound the region to the north are forested, with continuing debate about the sustainability of the forest industry. The LaTrobe Valley is known for its brown-coal based power stations, which produce Australia's cheapest electricity at the cost of high greenhouse gas emissions. Fortunately the region is investing in research and development as it seeks a sustainable future.

Major centres:

Warragul, Traralgon, Sale, Bairnsdale

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	241	242	245	248	251	254	0.7%	1.0%	1.2%	1.3%	1.2%	1.0%	1.3%
Households	89	93	98	104	110	116	5.2%	5.4%	5.6%	5.6%	5.7%	5.4%	5.6%
NIEIR Workforce	108	111	114	114	114	118	2.0%	2.8%	0.0%	0.4%	3.3%	1.6%	1.8%
NIEIR Employment	96	97	99	100	102	104	1.6%	1.7%	0.6%	2.1%	2.2%	1.3%	2.2%
NIEIR Unemployment	12.5	13.1	14.6	14.0	12.2	13.8	5.1%	11.3%	-4.6%	-12.3%	12.4%	3.7%	-0.7%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	11.5%	11.9%	12.9%	12.3%	10.7%	11.7%	0.3	1.0	-0.6	-1.5	0.9	0.2	-0.3
Headline Unemployment	6.3%	6.6%	7.2%	6.8%	5.2%	5.6%	0.2	0.6	-0.4	-1.6	0.4	0.1	-0.6
NIEIR Structural U/E	17.7%	17.0%	16.5%	16.2%	15.9%	15.6%	-0.7	-0.5	-0.4	-0.3	-0.3	-0.5	-0.3

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,249	3,441	3,574	3,751	3,909	4,063	13,505	14,197	14,607	15,145	15,582	15,998	4.9%	4.1%
Taxes Paid	1,019	1,100	1,161	1,193	1,115	1,182	4,235	4,537	4,743	4,816	4,446	4,652	5.4%	-0.5%
Benefits	1,047	1,164	1,203	1,170	1,171	1,163	4,352	4,803	4,915	4,723	4,669	4,581	3.8%	-0.3%
Business Income	1,063	1,181	1,192	1,167	775	860	4,417	4,875	4,872	4,710	3,090	3,387	3.2%	-14.1%
Interest Paid	429	511	571	616	692	865	1,785	2,108	2,333	2,487	2,758	3,405	12.8%	18.5%
Property Income	753	791	951	1,114	1,248	1,345	3,131	3,265	3,886	4,499	4,973	5,296	13.9%	9.9%
Disposable Income	5,270	5,590	5,849	6,091	6,145	6,240	21,904	23,065	23,903	24,591	24,491	24,570	4.9%	1.2%
Rank							41	37	37	36	43	46		
%Rank #1							54%	54%	51%	52%	49%	46%		
Business Value Added	4,312	4,622	4,767	4,918	4,685	4,923	17,921	19,072	19,479	19,855	18,672	19,385	4.5%	0.1%
Rank							52	49	52	51	55	57		
%Rank #1							52%	53%	50%	49%	46%	46%		
Business Productivity							42,600	44,186	45,241	46,943	47,510	49,290	3.3%	2.5%
Rank							43	41	43	40	40	34		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

VIC Gippsland

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.11%	0.11%
Disability Support (aged 21-24)	0.11%	0.12%
Disability Support (aged 25+)	3.23%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.03%	0.08%
Parenting Payment - Single (aged 25+)	0.10%	0.19%
Unemployed Long Term	1.13%	1.52%
Unemployed Short Term	0.85%	1.26%
Youth Allowance - Non Student	0.54%	0.78%
Youth Allowance Student	0.24%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	19.9%	17
2004	20.8%	18
2005	20.6%	18
2006	19.2%	19
2007	19.1%	21
2008	18.6%	28

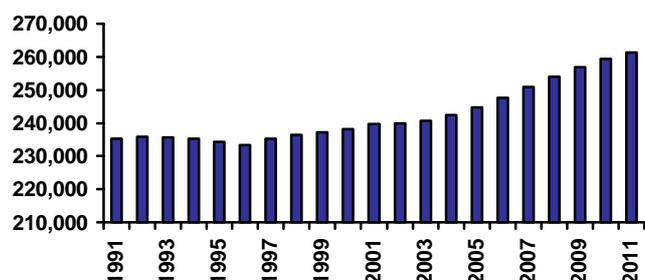
BABY BOUNCE

	Per cent	Rank
2002	1.14%	54
2003	1.13%	55
2004	1.13%	55
2005	1.12%	56
2006	1.15%	58
2007	1.10%	61
Bounce 2005-06	0.03%	45
Actual Change 2005-06 (Number)	105	45
Bounce 2006-07	-0.05%	47
Actual Change 2006-07 (Number)	-86	49

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.9	52
Share of population under 55	0.7	62
Aged migration	0.0	7
Population growth rate, 55+	0.1	7
Demographic stress	0.0	15
Dominant locations	0.3	64
Family / Youth migration	-21.0	56
Fertility bounce, 1996-2005	0.0	38
Fertility, babies % pop, 2005	0.0	59
Working elderly	0.3	50
SUSTAINABILITY SCORE	42.4	65

Population Profile



POPULATION

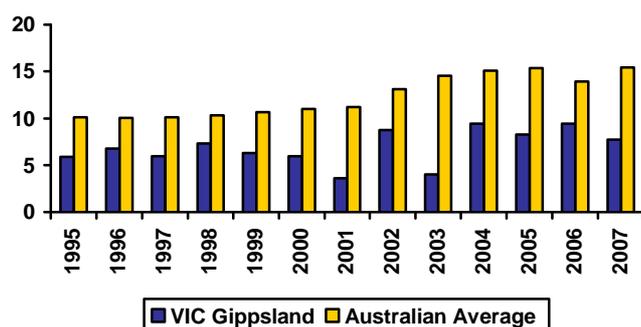
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	235	236	236	235	234	233	235	236	237	238	240	240	241	242	245	248	251	254	257	259	261

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	16.49	46.56	41
Average p.a. per capita	6.87	12.58	50
Hi Tech p.a. (1994-2007)	2.27	12.70	47
Hi Tech p.a. per capita	0.93	3.15	53
Info. Tech p.a. (1994-2007)	0.53	4.98	46
Info. Tech p.a. per capita	0.22	1.17	51
Average per capita (1994-2001)	6.31	10.80	48
Average per capita (2001-2007)	7.77	14.68	49
2001-07 avg./1994-01 avg.	1.23	1.35	50

Note: Per capita = 100,000 people

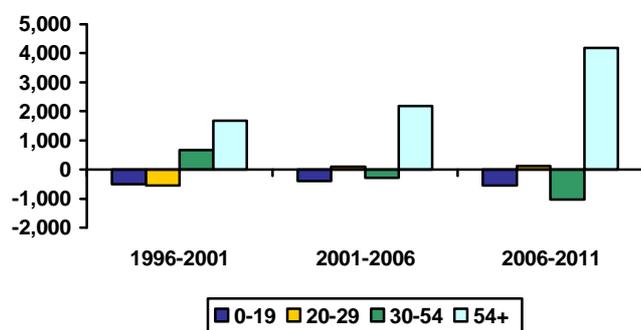
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	31.6%	29.7%	27.9%	25.4%
Age 20-29	10.6%	9.2%	9.1%	8.8%
Age 30-54	34.6%	35.1%	33.4%	29.7%
Age 55+	23.2%	26.1%	29.7%	36.1%
Population Change (average between years)				
Age 0-19		-512	-401	-537
Age 20-29		-538	82	108
Age 30-54		669	-276	-1,038
Age 55+		1,677	2,187	4,192
Average Annual Growth		0.5%	0.7%	1.1%

Population Change by Age Group



VIC Gippsland

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	277	368	45	42	22%	27%
Value of Property and Unincorporated Business	172	190	59	57	21%	24%
Value of Financial Assets	181	289	22	22	30%	38%
Value of Household Liabilities	76	111	29	14	152%	148%
Disposable Income after Debt Service Costs	53	57	49	51	47%	47%
Household Debt Service Ratio	15%	22%	48	27	219%	149%
Household Debt to Gross Income Ratio	1.15	1.43	48	27	218%	149%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	14,378	27,853	13,298	6,975	613	3,148
20 to 29		8,481	10,426	6,060	589	2,240
30 to 54		44,564	18,003	11,897	1,174	4,508
55+		51,144	9,025	8,105	238	4,976

Note: This data has been benchmarked to the Estimated Residential Population.

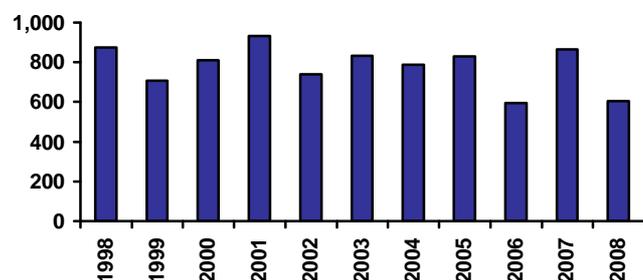
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	253	424	449	444	366	-1%
Non Residential	107	170	222	229	158	19%
Total	361	594	672	673	524	5%
Value per capita \$2005/06						
Residential	1,061	1,736	1,791	1,747	1,426	-5%
Non Residential	450	697	886	902	615	15%
Total	1,511	2,434	2,676	2,649	2,041	1%
Rank (value per capita)						
Residential	43	19	21	21	19	
Non Residential	43	19	30	28	38	
Total	48	27	23	24	22	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	874	709	811	931	738	834	787	830	595	866	605
Rank	30	44	30	18	20	16	28	23	31	27	37

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	17.4	18.6	19.4	19.0	19.5	19.6
Rank	56	57	58	58	59	59

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	149
Rank	42

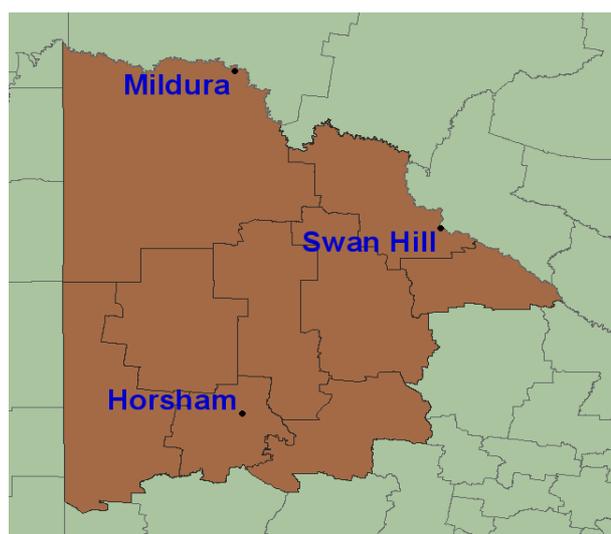
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	208	234	214
Mining	31	32	35
Manufacturing	499	499	535
Utilities	9	12	16
Construction	613	624	637
Wholesale	586	630	628
Retail	1,196	1,246	1,113
Hospitality	150	153	227
Transport	178	234	244
Communication	7	18	19
Finance	1,980	2,103	2,096
Property & Business	390	642	473
Government	14	15	16
Education	54	60	69
Health & Community	107	164	173
Cultural & Recreational	73	82	209
Personal Services	63	119	143

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

VIC Mallee Wimmera



The Mallee-Wimmera comprises the plains north of the Grampians and the Dundas hills. The region is classic wheat/sheep country. Rainfall diminishes northward, as does the reliability of the harvest. The region includes several dry-country national parks. The region's rain-fed agriculture, originally concentrating on wheat, has diversified considerably. Intensive viticulture is practised in several irrigation areas which pump water from the Murray. Horsham is the chief town in the Wimmera, and Swan Hill and Mildura serve irrigation areas along the Murray, including adjacent parts of NSW.

Major centres:

Mildura, Swan Hill, Horsham

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	141	141	141	142	143	144	-0.1%	0.3%	0.6%	0.6%	0.5%	0.2%	0.6%
Households	51	52	53	54	55	56	1.8%	1.8%	1.8%	1.8%	1.7%	1.8%	1.7%
NIEIR Workforce	60	60	62	62	63	65	1.4%	2.0%	0.3%	1.3%	3.8%	1.2%	2.5%
NIEIR Employment	54	54	55	55	56	57	1.2%	0.6%	1.0%	1.0%	2.5%	0.9%	1.7%
NIEIR Unemployment	5.9	6.2	7.1	6.7	6.9	7.9	3.7%	14.6%	-5.4%	3.7%	14.3%	4.0%	8.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	10.0%	10.2%	11.4%	10.8%	11.1%	12.2%	0.2	1.3	-0.6	0.3	1.1	0.3	0.7
Headline Unemployment	5.0%	5.4%	6.9%	6.4%	6.0%	5.9%	0.5	1.4	-0.4	-0.4	-0.1	0.5	-0.2
NIEIR Structural U/E	17.0%	16.7%	16.3%	15.8%	15.7%	16.0%	-0.4	-0.3	-0.5	-0.1	0.3	-0.4	0.1

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,570	1,643	1,711	1,793	1,849	1,931	11,150	11,684	12,132	12,634	12,946	13,456	4.5%	3.8%
Taxes Paid	593	713	718	747	581	701	4,208	5,068	5,092	5,263	4,071	4,883	8.0%	-3.1%
Benefits	585	653	667	833	1,155	1,752	4,157	4,647	4,730	5,868	8,085	12,209	12.5%	45.1%
Business Income	983	1,360	1,159	1,215	785	1,141	6,979	9,669	8,219	8,563	5,496	7,949	7.3%	-3.1%
Interest Paid	258	298	323	339	370	461	1,835	2,120	2,292	2,388	2,590	3,211	9.5%	16.6%
Property Income	570	515	683	894	1,009	554	4,046	3,665	4,839	6,301	7,068	3,858	16.2%	-21.3%
Disposable Income	3,283	3,639	3,656	4,204	4,485	4,765	23,310	25,878	25,920	29,630	31,405	33,205	8.6%	6.5%
Rank							27	20	23	15	13	10		
%Rank #1							58%	60%	56%	62%	63%	62%		
Business Value Added	2,553	3,003	2,870	3,008	2,634	3,072	18,129	21,354	20,351	21,197	18,442	21,405	5.6%	1.1%
Rank							50	27	40	35	57	38		
%Rank #1							52%	59%	52%	52%	45%	51%		
Business Productivity							42,539	43,692	44,128	45,474	46,241	48,809	2.2%	3.6%
Rank							45	45	48	46	47	38		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

VIC Mallee Wimmera

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.15%	0.11%
Disability Support (aged 21-24)	0.17%	0.12%
Disability Support (aged 25+)	4.44%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.07%	0.08%
Parenting Payment - Single (aged 25+)	0.18%	0.19%
Unemployed Long Term	1.54%	1.52%
Unemployed Short Term	1.45%	1.26%
Youth Allowance - Non Student	0.89%	0.78%
Youth Allowance Student	0.45%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	17.8%	27
2004	18.0%	37
2005	18.2%	32
2006	19.8%	18
2007	25.7%	3
2008	36.8%	1

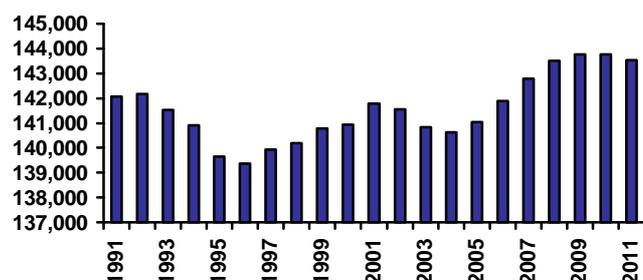
BABY BOUNCE

	Per cent	Rank
2002	1.33%	25
2003	1.27%	29
2004	1.25%	32
2005	1.21%	41
2006	1.22%	47
2007	1.18%	50
Bounce 2005-06	0.01%	60
Actual Change 2005-06 (Number)	23	60
Bounce 2006-07	-0.04%	43
Actual Change 2006-07 (Number)	-39	44

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.6	57
Share of population under 55	0.7	57
Aged migration	0.0	17
Population growth rate, 55+	0.0	37
Demographic stress	0.1	13
Dominant locations	0.4	51
Family / Youth migration	-21.0	56
Fertility bounce, 1996-2005	0.0	64
Fertility, babies % pop, 2005	0.0	50
Working elderly	0.3	37
SUSTAINABILITY SCORE	48.4	57

Population Profile



POPULATION

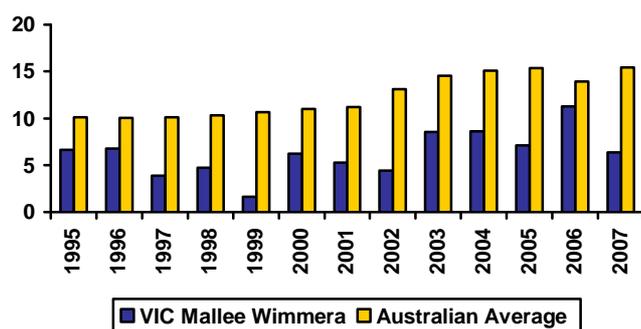
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	142	142	142	141	140	139	140	140	141	141	142	142	141	141	141	142	143	144	144	144	144

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	8.97	46.56	54
Average p.a. per capita	6.36	12.58	52
Hi Tech p.a. (1994-2007)	1.27	12.70	54
Hi Tech p.a. per capita	0.90	3.15	54
Info. Tech p.a. (1994-2007)	0.14	4.98	59
Info. Tech p.a. per capita	0.10	1.17	59
Average per capita (1994-2001)	4.94	10.80	57
Average per capita (2001-2007)	7.71	14.68	50
2001-07 avg./1994-01 avg.	1.56	1.35	10

Note: Per capita = 100,000 people

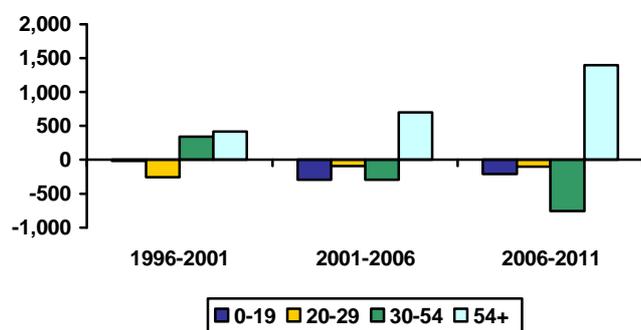
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.3%	29.8%	28.7%	27.6%
Age 20-29	10.6%	9.5%	9.2%	8.7%
Age 30-54	33.8%	34.4%	33.3%	30.3%
Age 55+	25.3%	26.3%	28.8%	33.3%
Population Change (average between years)				
Age 0-19		-17	-297	-209
Age 20-29		-258	-90	-102
Age 30-54		340	-294	-758
Age 55+		415	699	1,398
Average Annual Growth		0.3%	0.0%	0.2%

Population Change by Age Group



VIC Mallee Wimmera

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	702	837	6	5	56%	62%
Value of Property and Unincorporated Business	176	187	57	58	22%	23%
Value of Financial Assets	611	755	1	1	100%	100%
Value of Household Liabilities	84	105	41	10	168%	140%
Disposable Income after Debt Service Costs	73	80	12	9	65%	66%
Household Debt Service Ratio	13%	16%	21	2	183%	110%
Household Debt to Gross Income Ratio	0.96	1.05	21	2	183%	110%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	8,601	17,274	6,720	4,522	389	1,792
20 to 29		4,502	5,391	4,410	529	1,201
30 to 54		26,501	9,459	7,044	651	2,053
55+		29,985	4,432	3,654	89	2,684

Note: This data has been benchmarked to the Estimated Residential Population.

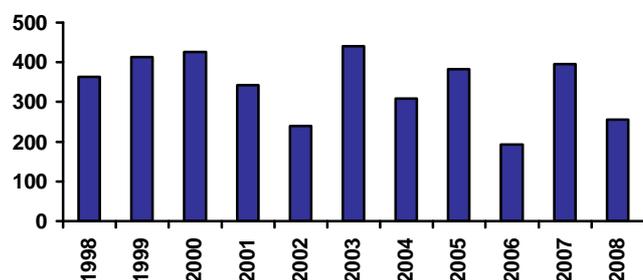
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	115	153	169	144	123	-5%
Non Residential	83	99	112	104	69	-4%
Total	198	252	281	248	192	-4%
Value per capita \$2005/06						
Residential	817	1,082	1,182	1,007	858	-6%
Non Residential	586	702	783	725	480	-6%
Total	1,403	1,784	1,965	1,731	1,337	-6%
Rank (value per capita)						
Residential	52	51	42	52	48	
Non Residential	52	51	44	47	55	
Total	53	51	46	53	52	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	363	413	426	342	239	440	309	383	194	395	255
Rank	63	63	63	63	62	55	64	62	64	61	64

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	20.6	22.6	22.9	23.4	23.5	23.9
Rank	40	40	37	33	31	26

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	77
Rank	56

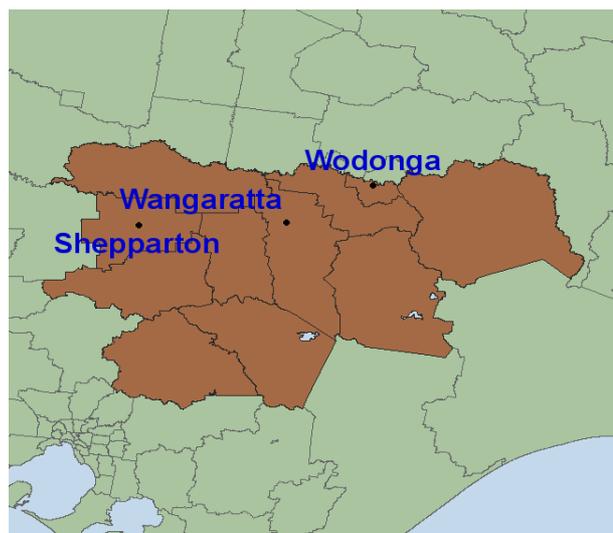
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	391	410	425
Mining	16	20	22
Manufacturing	270	290	297
Utilities	7	6	5
Construction	305	304	311
Wholesale	470	489	496
Retail	798	831	752
Hospitality	102	104	142
Transport	95	135	139
Communication	4	10	8
Finance	1,184	1,248	1,254
Property & Business	209	344	242
Government	20	19	20
Education	28	34	46
Health & Community	56	85	85
Cultural & Recreational	37	40	112
Personal Services	30	55	74

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

VIC North East



The North East of Victoria comprises the country lying between the Victorian snowfields and the Murray River. It is accessed from Melbourne via the Hume Highway, which takes advantage of the gap in the ranges near Kilmore. The division between the hill country and the plains is quite sharp, with the Hume running on the plains alongside the hills while the direct highway to Brisbane diverges across the plains. These major transport routes have encouraged the development of agricultural processing and logistics, but the region remains largely rural, with irrigation on the plains, intensive agriculture in the mountain valleys and forest plantations on the hills. The hills close to Melbourne have hobby farms and resorts, but the mountain-top ski resorts are several hours' drive out of the metropolitan area. There are worries as to the effect of climate change both on the snowfields and on agriculture.

Major centres:

Wodonga, Wangaratta, Shepparton

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	224	225	226	228	230	232	0.5%	0.6%	1.1%	0.8%	0.8%	0.7%	0.8%
Households	79	82	84	87	89	92	3.1%	3.0%	3.1%	3.0%	3.0%	3.1%	3.0%
NIEIR Workforce	105	106	109	110	112	114	0.3%	2.6%	1.4%	1.7%	2.2%	1.5%	1.9%
NIEIR Employment	96	97	99	100	103	105	1.2%	2.3%	0.9%	2.8%	2.3%	1.4%	2.5%
NIEIR Unemployment	9.6	8.8	9.4	10.0	9.1	9.2	-8.2%	6.8%	6.6%	-8.8%	0.2%	1.5%	-4.4%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.1%	8.3%	8.7%	9.1%	8.2%	8.0%	-0.8	0.3	0.4	-0.9	-0.2	0.0	-0.5
Headline Unemployment	5.2%	4.3%	4.6%	5.4%	4.3%	3.6%	-0.8	0.3	0.8	-1.1	-0.7	0.1	-0.9
NIEIR Structural U/E	14.6%	14.5%	13.8%	13.2%	12.9%	13.1%	-0.1	-0.7	-0.7	-0.3	0.2	-0.5	0.0

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,119	3,259	3,402	3,534	3,702	3,849	13,949	14,508	15,056	15,471	16,080	16,577	4.3%	4.4%
Taxes Paid	973	1,046	1,149	1,143	1,004	1,096	4,352	4,656	5,085	5,006	4,359	4,721	5.5%	-2.1%
Benefits	913	1,019	1,045	1,020	1,026	1,026	4,084	4,537	4,627	4,466	4,456	4,418	3.8%	0.3%
Business Income	1,084	1,178	1,264	1,227	722	900	4,846	5,245	5,595	5,371	3,136	3,875	4.2%	-14.4%
Interest Paid	425	504	561	602	673	834	1,900	2,242	2,481	2,637	2,925	3,591	12.3%	17.7%
Property Income	883	863	1,074	1,315	1,377	1,122	3,951	3,843	4,755	5,756	5,979	4,834	14.2%	-7.6%
Disposable Income	5,203	5,355	5,728	6,064	5,991	5,731	23,270	23,839	25,353	26,547	26,020	24,684	5.2%	-2.8%
Rank							28	29	25	25	29	44		
%Rank #1							58%	55%	55%	56%	52%	46%		
Business Value Added	4,202	4,438	4,666	4,760	4,425	4,748	18,795	19,753	20,651	20,842	19,217	20,453	4.2%	-0.1%
Rank							43	40	38	42	49	47		
%Rank #1							54%	54%	53%	51%	47%	49%		
Business Productivity							41,357	42,862	44,004	45,058	45,617	47,367	2.9%	2.5%
Rank							48	49	49	48	49	47		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

VIC North East

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.15%	0.11%
Disability Support (aged 21-24)	0.15%	0.12%
Disability Support (aged 25+)	3.85%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.06%	0.08%
Parenting Payment - Single (aged 25+)	0.21%	0.19%
Unemployed Long Term	1.63%	1.52%
Unemployed Short Term	1.26%	1.26%
Youth Allowance - Non Student	0.82%	0.78%
Youth Allowance Student	0.40%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	17.6%	32
2004	19.0%	28
2005	18.3%	31
2006	16.8%	35
2007	17.1%	36
2008	17.9%	34

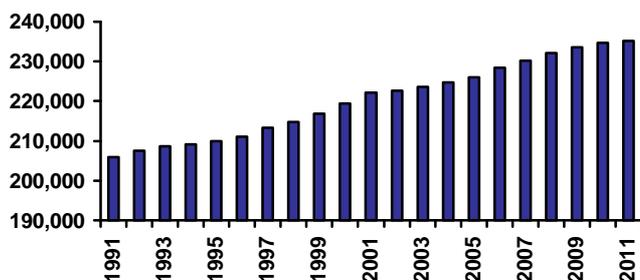
BABY BOUNCE

	Per cent	Rank
2002	1.26%	30
2003	1.24%	32
2004	1.23%	33
2005	1.22%	38
2006	1.24%	42
2007	1.21%	47
Bounce 2005-06	0.02%	54
Actual Change 2005-06 (Number)	79	52
Bounce 2006-07	-0.03%	40
Actual Change 2006-07 (Number)	-36	43

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	53
Aged migration	0.0	13
Population growth rate, 55+	0.1	24
Demographic stress	0.0	15
Dominant locations	0.3	60
Family / Youth migration	-20.0	55
Fertility bounce, 1996-2005	0.0	56
Fertility, babies % pop, 2005	0.0	45
Working elderly	0.3	29
SUSTAINABILITY SCORE	46.1	62

Population Profile



POPULATION

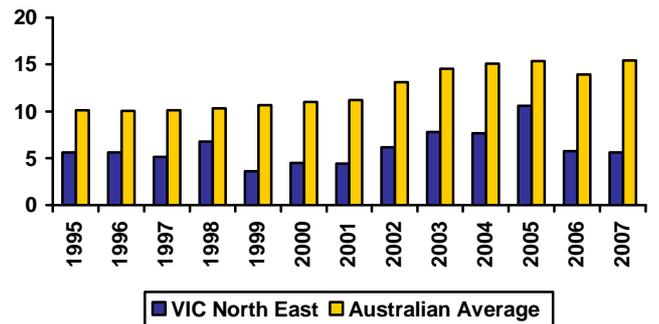
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	206	208	209	209	210	211	213	215	217	219	222	223	224	225	226	228	230	232	234	235	235

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	13.33	46.56	49
Average p.a. per capita	6.06	12.58	54
Hi Tech p.a. (1994-2007)	1.54	12.70	52
Hi Tech p.a. per capita	0.70	3.15	58
Info. Tech p.a. (1994-2007)	0.73	4.98	43
Info. Tech p.a. per capita	0.33	1.17	43
Average per capita (1994-2001)	5.22	10.80	54
Average per capita (2001-2007)	7.03	14.68	55
2001-07 avg./1994-01 avg.	1.35	1.35	31

Note: Per capita = 100,000 people

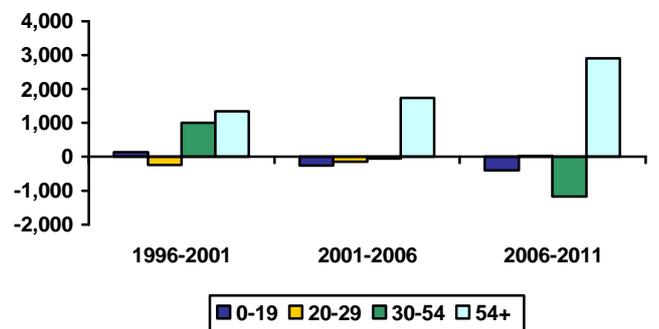
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	31.3%	30.1%	28.6%	27.0%
Age 20-29	10.9%	9.8%	9.2%	8.9%
Age 30-54	35.0%	35.5%	34.4%	30.9%
Age 55+	22.8%	24.7%	27.8%	33.2%
Population Change (average between years)				
Age 0-19		130	-270	-391
Age 20-29		-246	-152	13
Age 30-54		995	-57	-1,164
Age 55+		1,331	1,740	2,910
Average Annual Growth		1.0%	0.6%	0.6%

Population Change by Age Group



VIC North East

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	478	556	15	17	38%	41%
Value of Property and Unincorporated Business	205	213	44	53	25%	27%
Value of Financial Assets	358	463	9	10	59%	61%
Value of Household Liabilities	84	120	42	19	168%	160%
Disposable Income after Debt Service Costs	60	58	29	44	54%	48%
Household Debt Service Ratio	15%	22%	43	35	213%	155%
Household Debt to Gross Income Ratio	1.12	1.48	43	35	213%	155%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	13,964	26,031	11,637	7,375	847	2,981
20 to 29		7,516	8,674	7,232	649	1,800
30 to 54		41,583	16,765	12,717	1,283	3,881
55+		44,957	7,493	6,728	219	4,074

Note: This data has been benchmarked to the Estimated Residential Population.

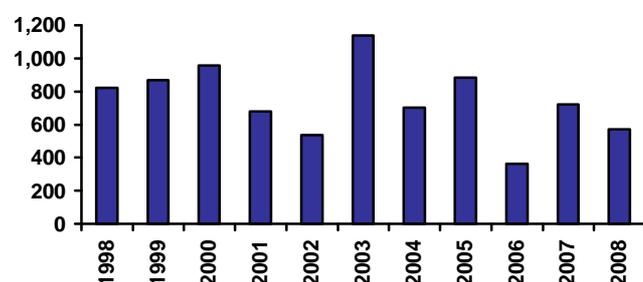
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	259	342	338	325	274	-9%
Non Residential	141	170	178	173	127	-6%
Total	400	512	516	498	402	-8%
Value per capita \$2005/06						
Residential	1,175	1,515	1,469	1,398	1,175	-11%
Non Residential	639	754	773	747	545	-9%
Total	1,814	2,269	2,242	2,145	1,720	-10%
Rank (value per capita)						
Residential	38	31	28	31	29	
Non Residential	38	31	47	44	51	
Total	39	35	34	37	32	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	820	867	958	678	536	1,138	702	884	363	722	570
Rank	37	31	15	39	42	3	33	19	52	36	42

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	17.1	19.4	19.4	20.5	20.5	20.9
Rank	58	53	57	50	56	52

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	147
Rank	43

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	289	306	293
Mining	29	29	29
Manufacturing	609	624	649
Utilities	10	11	10
Construction	655	670	686
Wholesale	757	785	791
Retail	1,231	1,297	1,170
Hospitality	219	220	290
Transport	208	285	305
Communication	12	17	16
Finance	2,233	2,365	2,374
Property & Business	489	761	517
Government	18	19	19
Education	74	78	87
Health & Community	134	181	184
Cultural & Recreational	95	99	275
Personal Services	58	138	157

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

VIC West



For most of the twentieth century the basalt plain west of Melbourne was known for its wealthy squatters, but the declining price of wool has forced a gradual diversification. Intensive agriculture is well-established in the strip from Colac to Warrnambool, while in the southern part of the region the Otway ranges are forested. The coast is graced by a series of resorts. The Surf Coast resorts at the eastern end of the region are within commuter range of Geelong and weekend resort range of Melbourne. At the western end, Portland combines a bulk port, heavy industry and tourism, while Warrnambool is a major commercial centre with some manufacturing.

Major centres:

Colac, Warrnambool, Hamilton, Portland

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	159	160	161	163	165	167	0.8%	1.0%	1.2%	1.3%	1.1%	1.0%	1.2%
Households	57	59	62	65	68	72	4.5%	4.6%	4.8%	4.8%	4.9%	4.6%	4.8%
NIEIR Workforce	72	74	75	76	78	80	2.4%	2.5%	1.1%	1.9%	3.0%	2.0%	2.5%
NIEIR Employment	65	67	68	70	71	74	2.4%	1.9%	2.1%	2.3%	3.6%	2.1%	3.0%
NIEIR Unemployment	6.4	6.5	7.1	6.6	6.4	6.2	2.6%	9.2%	-8.2%	-2.4%	-3.3%	0.9%	-2.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.9%	8.9%	9.5%	8.6%	8.2%	7.7%	0.0	0.6	-0.9	-0.4	-0.5	-0.1	-0.4
Headline Unemployment	4.9%	5.2%	6.0%	5.5%	4.9%	3.7%	0.3	0.8	-0.5	-0.6	-1.2	0.2	-0.9
NIEIR Structural U/E	13.3%	12.6%	12.1%	11.3%	11.2%	11.4%	-0.7	-0.5	-0.8	-0.2	0.2	-0.7	0.0

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	2,055	2,182	2,302	2,451	2,560	2,700	12,948	13,649	14,252	15,006	15,473	16,139	6.1%	5.0%
Taxes Paid	753	818	895	891	808	912	4,748	5,116	5,539	5,455	4,883	5,449	5.8%	1.1%
Benefits	613	678	697	689	701	705	3,861	4,240	4,315	4,218	4,234	4,214	4.0%	1.2%
Business Income	1,156	1,259	1,335	1,210	856	1,088	7,283	7,874	8,264	7,409	5,173	6,503	1.5%	-5.2%
Interest Paid	302	358	399	431	484	602	1,903	2,240	2,474	2,637	2,926	3,599	12.6%	18.2%
Property Income	594	634	764	886	997	1,040	3,746	3,967	4,732	5,423	6,028	6,216	14.2%	8.4%
Disposable Income	3,799	4,026	4,298	4,419	4,426	4,663	23,938	25,182	26,614	27,049	26,750	27,869	5.2%	2.7%
Rank							23	23	19	20	23	18		
%Rank #1							59%	58%	57%	57%	53%	52%		
Business Value Added	3,211	3,441	3,636	3,662	3,416	3,788	20,231	21,523	22,516	22,415	20,646	22,642	4.5%	1.7%
Rank							26	25	24	28	39	31		
%Rank #1							58%	59%	58%	55%	51%	54%		
Business Productivity							43,959	45,381	47,074	48,383	49,028	52,186	3.2%	3.9%
Rank							34	34	30	25	26	19		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

VIC West

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.14%	0.11%
Disability Support (aged 21-24)	0.14%	0.12%
Disability Support (aged 25+)	3.33%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.14%	0.19%
Unemployed Long Term	1.30%	1.52%
Unemployed Short Term	1.06%	1.26%
Youth Allowance - Non Student	0.66%	0.78%
Youth Allowance Student	0.28%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	16.1%	41
2004	16.8%	44
2005	16.2%	43
2006	15.6%	43
2007	15.8%	40
2008	15.1%	45

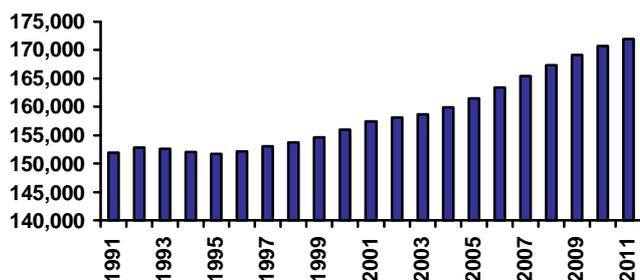
BABY BOUNCE

	Per cent	Rank
2002	1.25%	32
2003	1.22%	36
2004	1.21%	36
2005	1.18%	48
2006	1.20%	51
2007	1.19%	49
Bounce 2005-06	0.02%	53
Actual Change 2005-06 (Number)	59	56
Bounce 2006-07	-0.01%	35
Actual Change 2006-07 (Number)	9	36

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.9	47
Share of population under 55	0.7	43
Aged migration	0.0	24
Population growth rate, 55+	0.0	30
Demographic stress	0.0	25
Dominant locations	0.4	48
Family / Youth migration	-7.0	44
Fertility bounce, 1996-2005	0.0	47
Fertility, babies % pop, 2005	0.0	45
Working elderly	0.3	21
SUSTAINABILITY SCORE	50.1	51

Population Profile



POPULATION

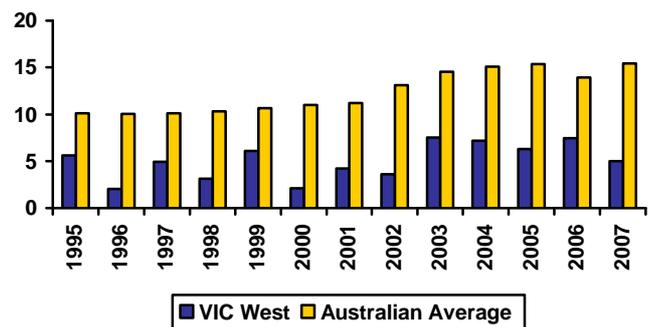
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	152	153	153	152	152	152	153	154	155	156	157	158	159	160	161	163	165	167	169	171	172

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	7.82	46.56	56
Average p.a. per capita	4.97	12.58	59
Hi Tech p.a. (1994-2007)	0.86	12.70	58
Hi Tech p.a. per capita	0.55	3.15	61
Info. Tech p.a. (1994-2007)	0.22	4.98	54
Info. Tech p.a. per capita	0.14	1.17	56
Average per capita (1994-2001)	3.98	10.80	60
Average per capita (2001-2007)	5.90	14.68	59
2001-07 avg./1994-01 avg.	1.48	1.35	17

Note: Per capita = 100,000 people

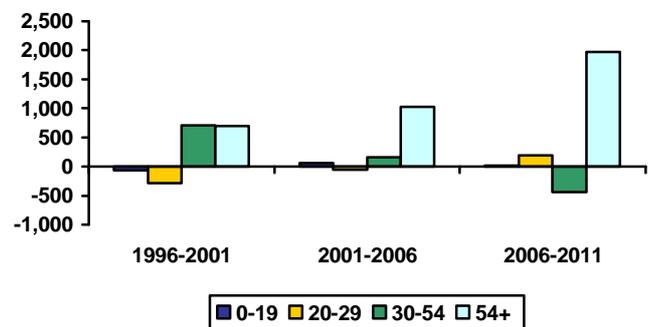
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	31.4%	30.2%	29.2%	27.8%
Age 20-29	10.7%	9.4%	8.9%	9.0%
Age 30-54	34.8%	35.8%	35.0%	32.0%
Age 55+	23.1%	24.5%	26.8%	31.2%
Population Change (average between years)				
Age 0-19		-65	57	13
Age 20-29		-283	-52	187
Age 30-54		706	155	-441
Age 55+		692	1,022	1,970
Average Annual Growth		0.7%	0.7%	1.0%

Population Change by Age Group



VIC West

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	388	521	20	21	31%	38%
Value of Property and Unincorporated Business	226	262	36	42	28%	33%
Value of Financial Assets	246	381	15	15	40%	50%
Value of Household Liabilities	85	122	43	21	169%	162%
Disposable Income after Debt Service Costs	61	68	26	20	54%	56%
Household Debt Service Ratio	15%	20%	41	17	210%	139%
Household Debt to Gross Income Ratio	1.11	1.33	41	17	210%	139%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	10,190	20,637	7,976	4,882	426	1,826
20 to 29		5,771	5,965	4,812	470	1,131
30 to 54		31,926	11,742	8,503	832	2,508
55+		32,097	4,668	3,874	162	2,960

Note: This data has been benchmarked to the Estimated Residential Population.

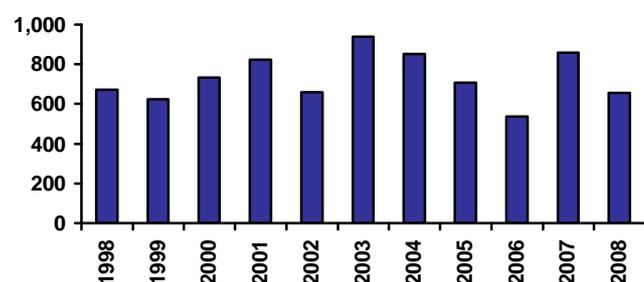
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	217	323	340	331	274	-2%
Non Residential	83	122	149	147	108	10%
Total	300	445	489	478	382	1%
Value per capita \$2005/06						
Residential	1,388	2,007	2,057	1,979	1,620	-6%
Non Residential	529	760	900	876	640	6%
Total	1,917	2,767	2,958	2,855	2,260	-3%
Rank (value per capita)						
Residential	25	13	16	17	14	
Non Residential	25	13	28	31	34	
Total	36	15	18	19	19	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	671	622	734	824	658	938	852	706	536	858	657
Rank	46	52	40	28	29	9	23	35	35	29	35

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	16.9	18.1	19.1	18.8	19.5	19.5
Rank	59	60	59	60	60	60

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	95
Rank	54

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	292	308	314
Mining	14	14	15
Manufacturing	329	330	338
Utilities	7	7	7
Construction	403	410	419
Wholesale	423	472	463
Retail	721	759	684
Hospitality	143	147	204
Transport	126	155	156
Communication	6	9	8
Finance	1,406	1,472	1,482
Property & Business	250	408	291
Government	21	19	23
Education	40	41	59
Health & Community	81	113	115
Cultural & Recreational	53	62	147
Personal Services	41	72	86

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

SEQ Brisbane City



The boundaries of the City of Brisbane were drawn not long after the First World War to encompass the then city with plenty of room for expansion. With the exception of its north-west quarter, which is a water reserve and too hilly for urban expansion, the urban area has now overflowed its boundaries. It comprises a large and heterogeneous metropolitan region, roughly equivalent to the central and middle regions in Melbourne or Sydney. The region includes the rapidly-developing Brisbane CBD, the down-river port and adjacent airport with substantial areas of flat land reserved for manufacturing and logistics, and large areas of rather hilly commuter suburbs. The knowledge economy is flourishing around Brisbane CBD, but the new manufacturing and logistics areas are vulnerable to sea level should it rise.

Major centres:

Brisbane, Garden City, Chermside

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	939	958	974	991	1,007	1,023	2.0%	1.7%	1.8%	1.6%	1.6%	1.8%	1.6%
Households	336	342	346	350	354	357	1.6%	1.3%	1.2%	1.0%	1.1%	1.4%	1.0%
NIEIR Workforce	505	517	541	563	583	595	2.4%	4.6%	4.0%	3.6%	2.2%	3.7%	2.9%
NIEIR Employment	469	483	509	534	559	572	3.0%	5.5%	4.9%	4.7%	2.4%	4.4%	3.5%
NIEIR Unemployment	36.5	34.7	32.1	28.8	23.7	23.0	-5.0%	-7.6%	-10.1%	-17.8%	-3.0%	-7.6%	-10.7%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	7.2%	6.7%	5.9%	5.1%	4.1%	3.9%	-0.5	-0.8	-0.8	-1.1	-0.2	-0.7	-0.6
Headline Unemployment	5.9%	5.5%	4.9%	4.3%	3.4%	3.3%	-0.4	-0.6	-0.6	-0.8	-0.2	-0.5	-0.5
NIEIR Structural U/E	9.8%	9.1%	8.5%	7.7%	7.2%	6.8%	-0.7	-0.7	-0.7	-0.6	-0.4	-0.7	-0.5

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	17,666	18,965	20,544	22,611	24,435	25,508	18,812	19,798	21,093	22,811	24,266	24,938	8.6%	6.2%
Taxes Paid	5,071	5,513	6,002	6,499	6,801	7,092	5,401	5,756	6,162	6,556	6,754	6,933	8.6%	4.5%
Benefits	2,910	3,152	3,251	3,131	3,162	3,144	3,099	3,291	3,338	3,158	3,140	3,074	2.5%	0.2%
Business Income	3,432	3,688	3,859	4,100	4,091	4,132	3,654	3,850	3,962	4,136	4,062	4,040	6.1%	0.4%
Interest Paid	1,607	2,118	2,562	2,960	3,564	4,424	1,711	2,211	2,631	2,986	3,539	4,325	22.6%	22.2%
Property Income	4,096	4,732	5,127	5,369	5,894	7,814	4,362	4,940	5,264	5,416	5,853	7,639	9.4%	20.6%
Disposable Income	22,936	24,463	25,967	27,693	28,759	31,010	24,425	25,538	26,662	27,937	28,560	30,318	6.5%	5.8%
Rank							20	21	18	17	18	14		
%Rank #1							61%	59%	57%	59%	57%	56%		
Business Value Added	21,098	22,652	24,402	26,712	28,526	29,640	22,467	23,648	25,055	26,947	28,328	28,978	8.2%	5.3%
Rank							14	15	14	12	11	11		
%Rank #1							65%	65%	64%	67%	69%	69%		
Business Productivity							44,352	46,307	47,402	49,503	50,471	51,216	3.7%	1.7%
Rank							30	24	26	20	20	23		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

SEQ Brisbane City

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.09%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	2.31%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.12%	0.19%
Unemployed Long Term	0.99%	1.52%
Unemployed Short Term	0.71%	1.26%
Youth Allowance - Non Student	0.56%	0.78%
Youth Allowance Student	0.17%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	12.7%	55
2004	12.9%	54
2005	12.5%	56
2006	11.3%	55
2007	11.0%	56
2008	10.1%	56

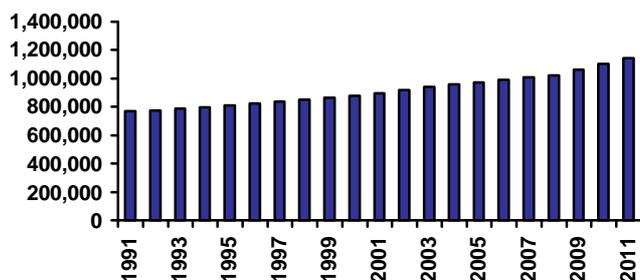
BABY BOUNCE

	Per cent	Rank
2002	1.22%	39
2003	1.20%	42
2004	1.21%	35
2005	1.25%	32
2006	1.29%	33
2007	1.29%	32
Bounce 2005-06	0.03%	43
Actual Change 2005-06 (Number)	530	3
Bounce 2006-07	0.00%	28
Actual Change 2006-07 (Number)	222	14

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	17
Aged migration	0.0	55
Population growth rate, 55+	0.0	59
Demographic stress	-0.1	44
Dominant locations	1.0	1
Family / Youth migration	128.0	2
Fertility bounce, 1996-2005	0.0	8
Fertility, babies % pop, 2005	0.0	31
Working elderly	0.3	20
SUSTAINABILITY SCORE	77.3	4

Population Profile



POPULATION

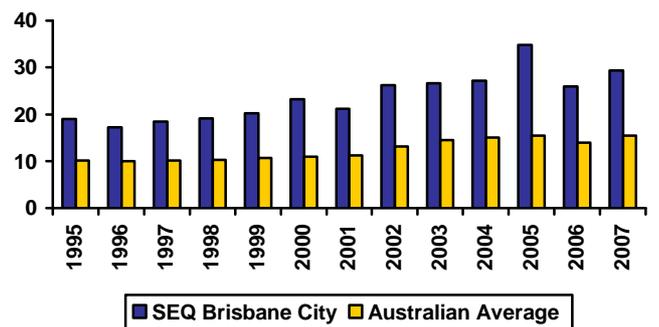
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	769	777	786	797	808	824	836	851	864	879	897	918	939	958	974	991	1007	1023	1064	1105	1145

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	218.45	46.56	3
Average p.a. per capita	24.06	12.58	8
Hi Tech p.a. (1994-2007)	61.90	12.70	3
Hi Tech p.a. per capita	6.68	3.15	7
Info. Tech p.a. (1994-2007)	20.89	4.98	3
Info. Tech p.a. per capita	2.23	1.17	12
Average per capita (1994-2001)	20.56	10.80	7
Average per capita (2001-2007)	28.38	14.68	7
2001-07 avg./1994-01 avg.	1.38	1.35	26

Note: Per capita = 100,000 people

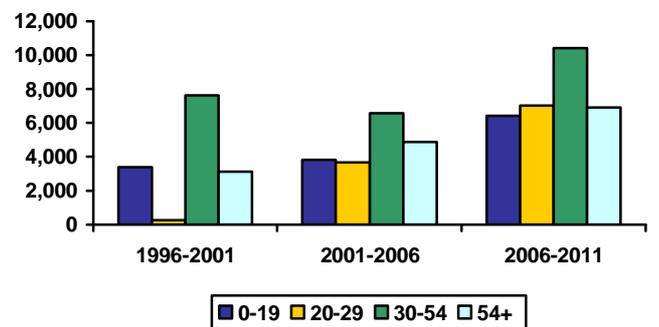
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	27.2%	26.9%	26.3%	25.6%
Age 20-29	16.8%	15.6%	16.0%	16.9%
Age 30-54	35.1%	36.6%	36.4%	36.0%
Age 55+	20.8%	20.9%	21.3%	21.5%
Population Change (average between years)				
Age 0-19		3,397	3,828	6,419
Age 20-29		273	3,668	7,026
Age 30-54		7,634	6,571	10,413
Age 55+		3,128	4,855	6,891
Average Annual Growth		1.7%	2.0%	2.9%

Population Change by Age Group



SEQ Brisbane City

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	358	523	26	20	28%	39%
Value of Property and Unincorporated Business	323	461	13	12	40%	58%
Value of Financial Assets	96	205	53	46	16%	27%
Value of Household Liabilities	62	143	11	41	123%	190%
Disposable Income after Debt Service Costs	59	71	33	16	52%	58%
Household Debt Service Ratio	11%	21%	13	24	158%	146%
Household Debt to Gross Income Ratio	0.83	1.40	13	24	158%	146%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	60,848	80,020	50,853	26,142	13,050	12,039
20 to 29		47,404	42,618	51,817	28,580	21,610
30 to 54		147,061	91,170	57,465	25,864	23,103
55+		145,833	29,301	16,650	3,136	16,554

Note: This data has been benchmarked to the Estimated Residential Population.

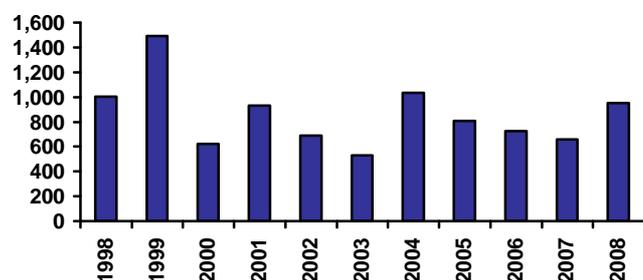
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	1,634	2,035	1,949	1,820	1,372	-16%
Non Residential	1,556	1,783	2,368	2,505	2,000	28%
Total	3,191	3,819	4,317	4,325	3,372	5%
Value per capita \$2005/06						
Residential	1,837	2,109	1,935	1,779	1,289	-21%
Non Residential	1,749	1,845	2,352	2,449	1,879	21%
Total	3,587	3,953	4,287	4,228	3,168	-1%
Rank (value per capita)						
Residential	13	10	18	20	22	
Non Residential	13	10	5	5	5	
Total	6	6	7	8	10	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,005	1,492	621	931	689	532	1,034	807	727	661	951
Rank	23	9	51	19	26	51	9	26	22	42	26

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	24.9	26.2	26.1	25.6	25.8	25.1
Rank	14	15	15	16	15	19

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	2374
Rank	3

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	183	183	173
Mining	340	457	489
Manufacturing	3,823	4,160	4,287
Utilities	53	53	59
Construction	3,172	3,221	3,363
Wholesale	7,822	8,543	8,584
Retail	5,048	5,370	4,784
Hospitality	420	420	1,036
Transport	499	1,188	1,230
Communication	126	212	219
Finance	12,882	14,117	14,231
Property & Business	4,614	9,268	7,663
Government	183	180	183
Education	432	478	519
Health & Community	1,080	1,600	1,649
Cultural & Recreational	596	717	2,037
Personal Services	752	1,260	1,474

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

SEQ Brisbane South



The suburbs between Brisbane and the Gold Coast are pleasantly hilly, with flat areas chiefly along the Logan River. The hills are eminently suited to residential development and have become commuter suburbs, but there has been some decentralisation of manufacturing, logistics and knowledge-based business. To the east, the region includes the Moreton Bay islands, which have somehow avoided conversion to tourist resorts. It also includes patches of remnant agriculture and water reserves.

Major centres:

Browns Plains, Beenleigh, Cleveland

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	371	379	386	392	399	406	2.2%	1.8%	1.7%	1.8%	1.8%	1.9%	1.8%
Households	122	124	126	128	130	132	2.2%	1.6%	1.3%	1.4%	1.6%	1.7%	1.5%
NIEIR Workforce	191	197	205	208	217	222	3.2%	3.9%	1.9%	4.1%	2.5%	3.0%	3.3%
NIEIR Employment	171	177	187	192	200	207	3.7%	5.8%	2.7%	4.1%	3.5%	4.1%	3.8%
NIEIR Unemployment	19.9	19.8	17.2	15.9	16.5	15.1	-0.6%	-13.2%	-7.2%	3.7%	-8.6%	-7.1%	-2.6%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	10.4%	10.1%	8.4%	7.7%	7.6%	6.8%	-0.4	-1.7	-0.8	0.0	-0.8	-0.9	-0.4
Headline Unemployment	7.7%	7.4%	5.8%	5.1%	5.2%	4.6%	-0.3	-1.6	-0.7	0.2	-0.6	-0.9	-0.2
NIEIR Structural U/E	13.3%	12.5%	11.8%	11.2%	10.4%	9.7%	-0.7	-0.7	-0.6	-0.8	-0.7	-0.7	-0.8

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	5,645	6,105	6,608	7,114	7,660	8,094	15,228	16,118	17,140	18,140	19,192	19,918	8.0%	6.7%
Taxes Paid	1,466	1,584	1,694	1,790	1,855	1,952	3,955	4,182	4,394	4,564	4,648	4,804	6.9%	4.4%
Benefits	1,294	1,436	1,486	1,441	1,465	1,467	3,491	3,791	3,854	3,673	3,671	3,609	3.6%	0.9%
Business Income	1,132	1,188	1,186	1,243	1,185	1,179	3,055	3,136	3,076	3,168	2,968	2,901	3.1%	-2.6%
Interest Paid	726	907	1,042	1,144	1,311	1,621	1,959	2,395	2,702	2,916	3,285	3,989	16.3%	19.0%
Property Income	928	1,050	1,124	1,175	1,279	1,653	2,505	2,773	2,914	2,996	3,205	4,069	8.2%	18.6%
Disposable Income	7,299	7,774	8,203	8,607	8,857	9,326	19,691	20,524	21,276	21,946	22,193	22,952	5.6%	4.1%
Rank							58	57	56	55	55	56		
%Rank #1							49%	48%	46%	46%	44%	43%		
Business Value Added	6,777	7,293	7,795	8,357	8,844	9,272	18,283	19,254	20,216	21,308	22,160	22,819	7.2%	5.3%
Rank							47	47	43	33	29	30		
%Rank #1							53%	53%	52%	53%	54%	54%		
Business Productivity							39,164	40,680	41,179	42,828	43,795	44,406	3.0%	1.8%
Rank							57	57	58	56	56	58		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

SEQ Brisbane South

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.11%	0.11%
Disability Support (aged 21-24)	0.11%	0.12%
Disability Support (aged 25+)	2.94%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.09%	0.08%
Parenting Payment - Single (aged 25+)	0.25%	0.19%
Unemployed Long Term	1.80%	1.52%
Unemployed Short Term	0.93%	1.26%
Youth Allowance - Non Student	0.75%	0.78%
Youth Allowance Student	0.32%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	17.7%	30
2004	18.5%	30
2005	18.1%	35
2006	16.7%	36
2007	16.5%	38
2008	15.7%	43

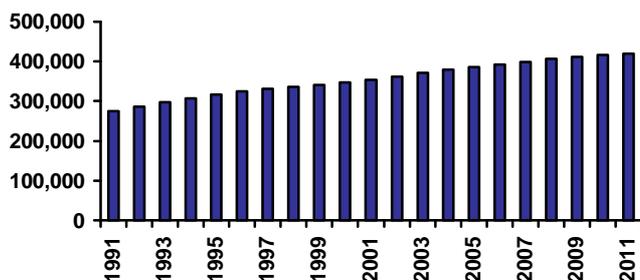
BABY BOUNCE

	Per cent	Rank
2002	1.35%	20
2003	1.32%	24
2004	1.33%	21
2005	1.36%	17
2006	1.40%	18
2007	1.40%	18
Bounce 2005-06	0.04%	37
Actual Change 2005-06 (Number)	230	19
Bounce 2006-07	0.00%	30
Actual Change 2006-07 (Number)	99	22

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	19
Aged migration	0.0	33
Population growth rate, 55+	0.1	12
Demographic stress	-0.1	43
Dominant locations	0.7	30
Family / Youth migration	52.0	10
Fertility bounce, 1996-2005	0.0	28
Fertility, babies % pop, 2005	0.0	16
Working elderly	0.3	16
SUSTAINABILITY SCORE	63.6	29

Population Profile



POPULATION

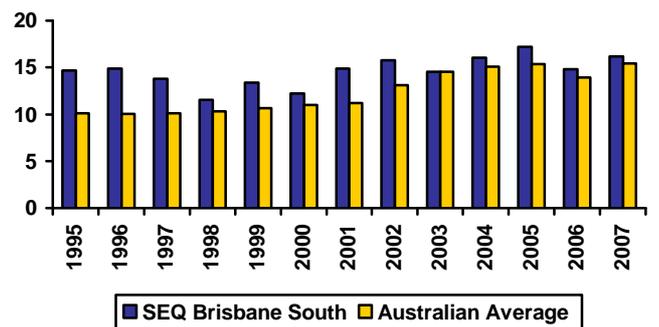
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	274	285	297	307	317	325	331	335	340	347	353	362	371	379	386	392	399	406	412	416	420

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	52.37	46.56	18
Average p.a. per capita	14.75	12.58	15
Hi Tech p.a. (1994-2007)	9.31	12.70	20
Hi Tech p.a. per capita	2.60	3.15	20
Info. Tech p.a. (1994-2007)	3.64	4.98	20
Info. Tech p.a. per capita	0.99	1.17	18
Average per capita (1994-2001)	13.89	10.80	14
Average per capita (2001-2007)	15.88	14.68	16
2001-07 avg./1994-01 avg.	1.14	1.35	55

Note: Per capita = 100,000 people

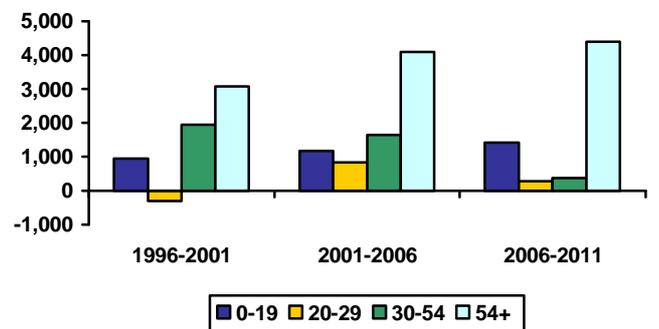
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	34.5%	33.1%	31.3%	30.6%
Age 20-29	13.5%	12.0%	11.8%	11.3%
Age 30-54	37.6%	37.4%	35.8%	33.5%
Age 55+	14.4%	17.6%	21.0%	24.6%
Population Change (average between years)				
Age 0-19		948	1,177	1,415
Age 20-29		-302	831	288
Age 30-54		1,950	1,639	371
Age 55+		3,069	4,088	4,401
Average Annual Growth		1.7%	2.1%	1.4%

Population Change by Age Group



SEQ Brisbane South

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	219	342	59	47	17%	25%
Value of Property and Unincorporated Business	252	372	27	21	31%	47%
Value of Financial Assets	54	114	63	61	9%	15%
Value of Household Liabilities	88	145	51	43	175%	193%
Disposable Income after Debt Service Costs	49	57	54	50	44%	47%
Household Debt Service Ratio	18%	25%	60	50	251%	175%
Household Debt to Gross Income Ratio	1.32	1.67	60	50	251%	175%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	27,069	37,956	23,540	16,824	4,620	7,110
20 to 29		17,711	14,894	15,977	3,578	4,984
30 to 54		61,769	30,298	27,471	6,901	8,788
55+		52,287	11,384	11,567	1,444	5,805

Note: This data has been benchmarked to the Estimated Residential Population.

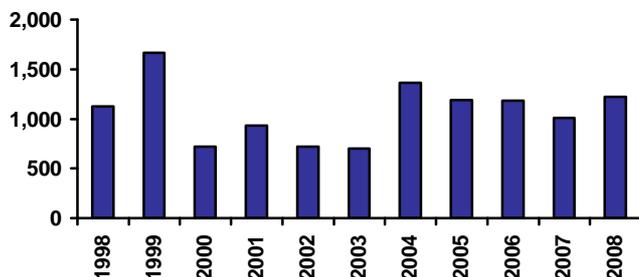
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	476	586	536	547	418	-15%
Non Residential	204	286	426	369	283	25%
Total	681	872	961	916	701	-1%
Value per capita \$2005/06						
Residential	1,359	1,538	1,342	1,346	1,015	-20%
Non Residential	585	746	1,067	909	687	19%
Total	1,944	2,284	2,409	2,255	1,702	-7%
Rank (value per capita)						
Residential	26	29	33	34	36	
Non Residential	26	29	21	27	30	
Total	34	34	29	33	35	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,128	1,664	720	935	720	698	1,365	1,187	1,186	1,007	1,220
Rank	20	8	44	17	21	22	5	6	6	22	12

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	24.6	25.9	26.0	25.4	25.7	25.5
Rank	18	16	16	17	17	14

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	316
Rank	27

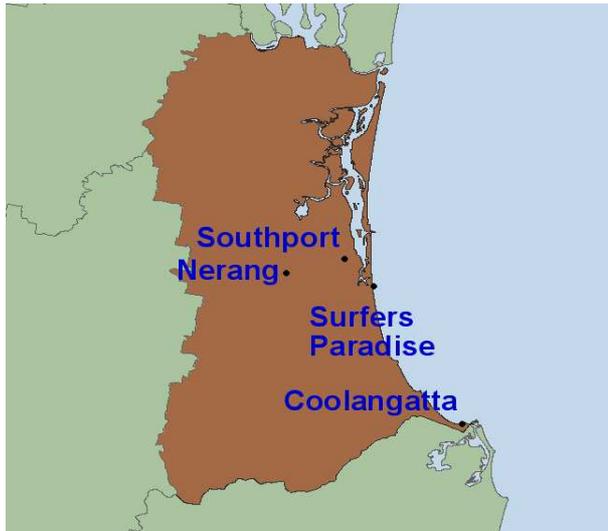
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	52	55	55
Mining	21	22	21
Manufacturing	840	916	979
Utilities	5	5	4
Construction	1,151	1,139	1,186
Wholesale	1,328	1,443	1,463
Retail	1,071	1,131	1,031
Hospitality	45	44	118
Transport	153	218	225
Communication	14	30	29
Finance	1,666	1,810	1,814
Property & Business	649	1,182	889
Government	5	5	5
Education	69	86	102
Health & Community	116	175	183
Cultural & Recreational	88	102	328
Personal Services	115	203	251

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

SEQ Gold Coast



The Gold Coast region consists of a single LGA bounded to the east by the famous beaches and to the west and south by the slopes of Mt Tambourine and the Lamington plateau. Though Brisbane is nearby, transport capacity is limited by a series of rivers requiring bridges. The Gold Coast was developed since the motor vehicle became the predominant mode of urban transport but has already been retrofitted with a trunk railway to Brisbane. The City began with tourism and retirement, but is increasingly a knowledge-economy centre in its own right. Much of it is low-lying and would be vulnerable were sea level to rise.

Major centres:

Coolangatta, Surfers Paradise, Southport, Nerang

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	422	436	451	466	482	498	3.4%	3.3%	3.5%	3.4%	3.4%	3.4%	3.4%
Households	148	154	158	163	168	173	3.6%	3.1%	2.8%	3.0%	3.0%	3.2%	3.0%
NIEIR Workforce	202	211	222	229	240	248	4.5%	5.1%	3.1%	5.1%	3.3%	4.2%	4.2%
NIEIR Employment	184	193	206	214	226	236	4.9%	6.7%	4.2%	5.6%	4.4%	5.2%	5.0%
NIEIR Unemployment	18.1	18.3	16.2	14.5	14.0	12.0	0.8%	-11.7%	-10.5%	-3.1%	-14.5%	-7.3%	-9.0%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.0%	8.7%	7.3%	6.3%	5.8%	4.8%	-0.3	-1.4	-1.0	-0.5	-1.0	-0.9	-0.7
Headline Unemployment	6.8%	6.7%	5.3%	4.5%	4.2%	3.6%	-0.1	-1.4	-0.9	-0.3	-0.6	-0.8	-0.4
NIEIR Structural U/E	14.3%	13.0%	11.8%	10.9%	9.9%	9.2%	-1.3	-1.2	-0.9	-1.0	-0.7	-1.1	-0.8

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	5,691	6,252	6,858	7,469	8,193	8,773	13,490	14,333	15,217	16,019	16,996	17,602	9.5%	8.4%
Taxes Paid	1,551	1,719	1,872	1,951	2,077	2,207	3,676	3,942	4,154	4,184	4,307	4,427	8.0%	6.3%
Benefits	1,534	1,691	1,786	1,762	1,823	1,856	3,637	3,877	3,962	3,779	3,782	3,724	4.7%	2.6%
Business Income	1,601	1,688	1,774	1,823	1,844	1,870	3,795	3,870	3,936	3,909	3,824	3,751	4.4%	1.3%
Interest Paid	655	891	1,113	1,327	1,649	2,082	1,553	2,043	2,470	2,846	3,420	4,177	26.5%	25.3%
Property Income	1,510	1,888	1,974	2,034	2,213	2,914	3,580	4,328	4,380	4,363	4,591	5,847	10.4%	19.7%
Disposable Income	8,514	9,298	9,826	10,221	10,590	11,493	20,182	21,316	21,804	21,921	21,967	23,058	6.3%	6.0%
Rank							53	53	55	56	58	55		
%Rank #1							50%	49%	47%	46%	44%	43%		
Business Value Added	7,292	7,940	8,631	9,292	10,037	10,643	17,285	18,203	19,153	19,928	20,820	21,353	8.4%	7.0%
Rank							55	55	54	50	38	39		
%Rank #1							50%	50%	49%	49%	51%	51%		
Business Productivity							39,138	40,716	41,583	43,009	43,983	44,693	3.2%	1.9%
Rank							58	55	55	55	54	55		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

SEQ Gold Coast

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.07%	0.11%
Disability Support (aged 21-24)	0.08%	0.12%
Disability Support (aged 25+)	2.54%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.06%	0.08%
Parenting Payment - Single (aged 25+)	0.16%	0.19%
Unemployed Long Term	1.60%	1.52%
Unemployed Short Term	0.88%	1.26%
Youth Allowance - Non Student	0.86%	0.78%
Youth Allowance Student	0.25%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	18.0%	26
2004	18.2%	35
2005	18.2%	34
2006	17.2%	33
2007	17.2%	35
2008	16.2%	41

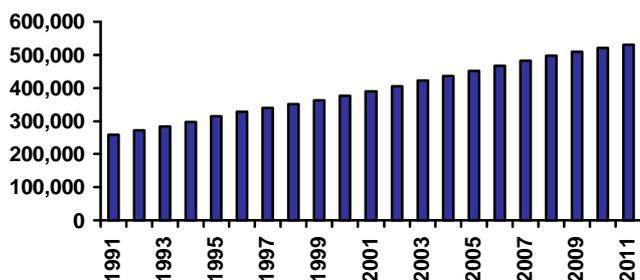
BABY BOUNCE

	Per cent	Rank
2002	1.17%	51
2003	1.15%	52
2004	1.17%	46
2005	1.22%	37
2006	1.26%	40
2007	1.18%	51
Bounce 2005-06	0.04%	38
Actual Change 2005-06 (Number)	356	10
Bounce 2006-07	-0.08%	52
Actual Change 2006-07 (Number)	-165	56

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	34
Aged migration	0.0	13
Population growth rate, 55+	0.1	10
Demographic stress	-0.1	49
Dominant locations	0.9	21
Family / Youth migration	101.0	3
Fertility bounce, 1996-2005	0.0	13
Fertility, babies % pop, 2005	0.0	40
Working elderly	0.3	43
SUSTAINABILITY SCORE	72.4	22

Population Profile



POPULATION

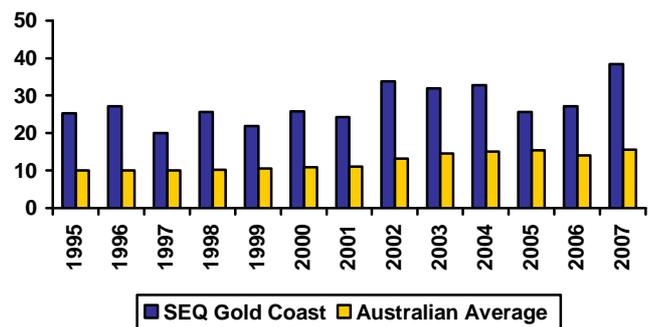
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	259	272	284	297	315	328	340	350	363	376	389	405	422	436	451	466	482	498	510	520	530

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	111.94	46.56	7
Average p.a. per capita	28.35	12.58	4
Hi Tech p.a. (1994-2007)	21.80	12.70	11
Hi Tech p.a. per capita	5.40	3.15	11
Info. Tech p.a. (1994-2007)	13.56	4.98	5
Info. Tech p.a. per capita	3.21	1.17	5
Average per capita (1994-2001)	25.44	10.80	4
Average per capita (2001-2007)	32.44	14.68	5
2001-07 avg./1994-01 avg.	1.28	1.35	43

Note: Per capita = 100,000 people

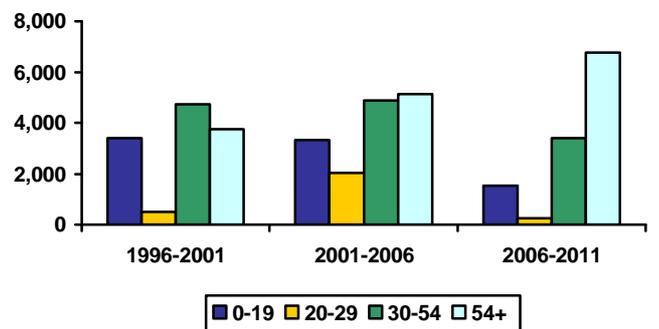
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	27.3%	27.3%	26.4%	24.8%
Age 20-29	14.5%	12.8%	12.9%	11.7%
Age 30-54	35.5%	35.9%	35.3%	34.5%
Age 55+	22.7%	23.9%	25.5%	29.0%
Population Change (average between years)				
Age 0-19		3,397	3,332	1,547
Age 20-29		501	2,043	258
Age 30-54		4,727	4,888	3,402
Age 55+		3,739	5,126	6,776
Average Annual Growth		3.5%	3.7%	2.6%

Population Change by Age Group



SEQ Gold Coast

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	301	426	39	27	24%	32%
Value of Property and Unincorporated Business	270	401	24	18	33%	50%
Value of Financial Assets	83	162	57	57	14%	21%
Value of Household Liabilities	52	137	2	37	103%	182%
Disposable Income after Debt Service Costs	46	51	58	60	41%	42%
Household Debt Service Ratio	12%	26%	14	55	168%	178%
Household Debt to Gross Income Ratio	0.89	1.70	14	55	169%	178%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	27,486	30,578	31,195	13,537	5,687	7,945
20 to 29		15,659	20,587	17,619	9,070	10,292
30 to 54		55,732	50,814	26,858	10,678	13,833
55+		64,909	25,063	13,933	2,834	11,986

Note: This data has been benchmarked to the Estimated Residential Population.

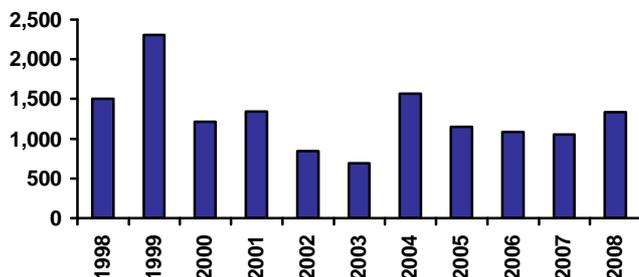
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	1,155	1,649	1,799	1,748	1,330	-1%
Non Residential	367	559	767	652	495	14%
Total	1,521	2,208	2,566	2,400	1,825	3%
Value per capita \$2005/06						
Residential	3,014	3,717	3,732	3,507	2,610	-12%
Non Residential	964	1,249	1,591	1,309	970	3%
Total	3,978	4,966	5,323	4,816	3,580	-8%
Rank (value per capita)						
Residential	1	1	2	2	2	
Non Residential	1	1	9	13	14	
Total	3	3	4	5	5	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,501	2,306	1,216	1,343	844	693	1,569	1,153	1,084	1,053	1,335
Rank	6	3	7	5	8	24	3	7	8	19	10

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	25.0	26.6	26.4	25.8	26.1	25.4
Rank	13	12	14	14	13	15

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	623
Rank	14

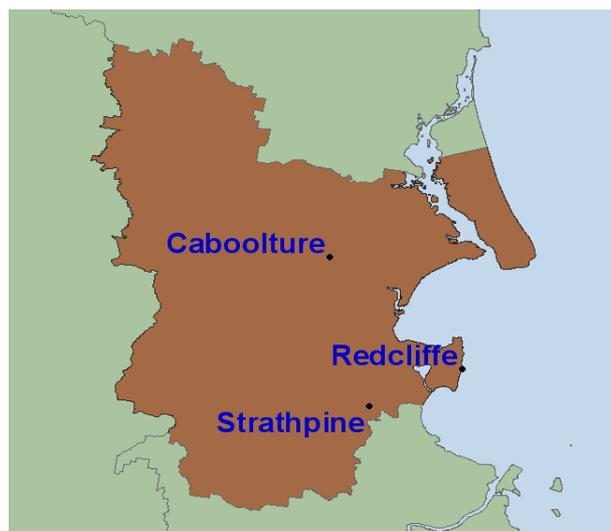
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	83	87	85
Mining	64	69	66
Manufacturing	1,546	1,687	1,788
Utilities	3	4	3
Construction	1,925	1,961	2,040
Wholesale	3,187	3,392	3,422
Retail	2,169	2,274	1,965
Hospitality	251	252	558
Transport	160	400	410
Communication	32	67	76
Finance	5,305	5,682	5,760
Property & Business	1,892	3,085	2,297
Government	10	10	9
Education	124	149	159
Health & Community	291	466	478
Cultural & Recreational	291	328	941
Personal Services	199	419	511

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

SEQ Moreton Bay



Local government reform in Queensland has combined the councils between Brisbane and the Sunshine Coast in a single regional council which has taken the name Moreton Bay – hence the name of this region which, however, covers only the northern part of the Moreton Bay foreshore. The region consists of the coastal plain below the D’Aguilar Range. The plain is divided into segments by short but wide rivers, and the cost of bridges constricts the natural traffic flow southwards into Brisbane City. The region consists largely of commuter suburbs, with some decentralisation of jobs and knowledge-economy activities.

Major centres:

Strathpine, Redcliffe, Caboolture

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	305	316	325	333	344	354	3.5%	3.0%	2.4%	3.3%	3.1%	3.0%	3.2%
Households	102	106	109	112	115	118	3.7%	3.0%	2.4%	2.6%	2.9%	3.0%	2.7%
NIEIR Workforce	153	159	166	172	179	182	4.0%	4.2%	3.5%	4.0%	2.0%	3.9%	3.0%
NIEIR Employment	139	145	154	160	167	172	4.8%	5.7%	3.8%	4.7%	2.9%	4.8%	3.8%
NIEIR Unemployment	14.5	13.9	12.3	12.3	11.7	10.5	-4.3%	-11.1%	0.2%	-5.1%	-10.4%	-5.2%	-7.8%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.4%	8.7%	7.4%	7.2%	6.6%	5.8%	-0.7	-1.3	-0.2	-0.6	-0.8	-0.8	-0.7
Headline Unemployment	6.7%	6.1%	5.1%	4.8%	4.3%	3.5%	-0.6	-1.1	-0.3	-0.4	-0.8	-0.6	-0.6
NIEIR Structural U/E	13.7%	12.8%	12.0%	11.4%	10.6%	10.1%	-0.9	-0.8	-0.7	-0.8	-0.5	-0.8	-0.6

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	4,689	5,119	5,534	6,018	6,499	6,811	15,385	16,225	17,024	18,080	18,910	19,221	8.7%	6.4%
Taxes Paid	1,188	1,311	1,389	1,487	1,541	1,611	3,898	4,156	4,271	4,467	4,485	4,546	7.8%	4.1%
Benefits	1,107	1,247	1,308	1,279	1,315	1,331	3,633	3,952	4,024	3,841	3,826	3,757	4.9%	2.0%
Business Income	813	883	873	944	873	864	2,668	2,799	2,687	2,837	2,541	2,439	5.1%	-4.3%
Interest Paid	574	733	860	963	1,124	1,391	1,883	2,324	2,645	2,893	3,270	3,927	18.8%	20.2%
Property Income	733	862	921	981	1,086	1,432	2,406	2,732	2,834	2,946	3,160	4,042	10.2%	20.9%
Disposable Income	5,957	6,445	6,791	7,205	7,432	7,827	19,544	20,427	20,890	21,647	21,626	22,087	6.5%	4.2%
Rank							60	59	58	57	60	60		
%Rank #1							48%	47%	45%	46%	43%	41%		
Business Value Added	5,502	6,002	6,407	6,962	7,372	7,675	18,052	19,024	19,711	20,917	21,451	21,661	8.2%	5.0%
Rank							51	51	50	41	32	36		
%Rank #1							52%	52%	50%	52%	53%	52%		
Business Productivity							39,305	40,935	41,469	43,198	44,059	44,624	3.2%	1.6%
Rank							56	54	56	53	53	57		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

SEQ Moreton Bay

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.11%	0.11%
Disability Support (aged 21-24)	0.11%	0.12%
Disability Support (aged 25+)	3.08%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.08%	0.08%
Parenting Payment - Single (aged 25+)	0.22%	0.19%
Unemployed Long Term	1.69%	1.52%
Unemployed Short Term	0.84%	1.26%
Youth Allowance - Non Student	0.64%	0.78%
Youth Allowance Student	0.30%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	18.6%	22
2004	19.3%	27
2005	19.3%	26
2006	17.7%	30
2007	17.7%	32
2008	17.0%	36

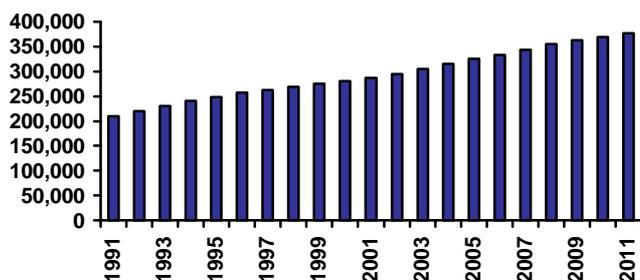
BABY BOUNCE

	Per cent	Rank
2002	1.35%	19
2003	1.32%	21
2004	1.33%	20
2005	1.36%	19
2006	1.39%	19
2007	1.37%	21
Bounce 2005-06	0.04%	36
Actual Change 2005-06 (Number)	225	21
Bounce 2006-07	-0.02%	39
Actual Change 2006-07 (Number)	74	25

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	27
Aged migration	0.0	9
Population growth rate, 55+	0.1	4
Demographic stress	-0.1	48
Dominant locations	1.0	1
Family / Youth migration	85.0	5
Fertility bounce, 1996-2005	0.0	17
Fertility, babies % pop, 2005	0.0	15
Working elderly	0.3	42
SUSTAINABILITY SCORE	76.8	9

Population Profile



POPULATION

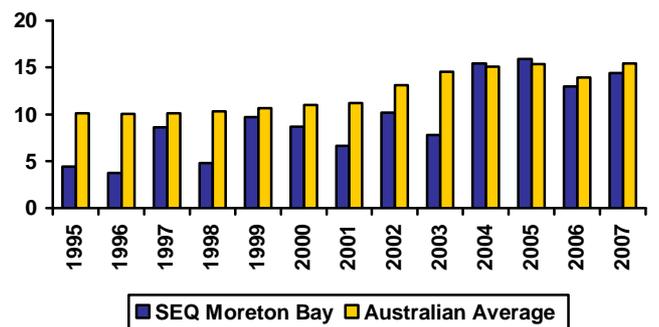
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	210	220	231	240	249	257	263	269	275	281	287	295	305	316	325	333	344	354	362	370	376

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	29.51	46.56	30
Average p.a. per capita	9.85	12.58	26
Hi Tech p.a. (1994-2007)	5.74	12.70	31
Hi Tech p.a. per capita	1.91	3.15	27
Info. Tech p.a. (1994-2007)	2.88	4.98	24
Info. Tech p.a. per capita	0.95	1.17	20
Average per capita (1994-2001)	7.09	10.80	41
Average per capita (2001-2007)	13.05	14.68	24
2001-07 avg./1994-01 avg.	1.84	1.35	2

Note: Per capita = 100,000 people

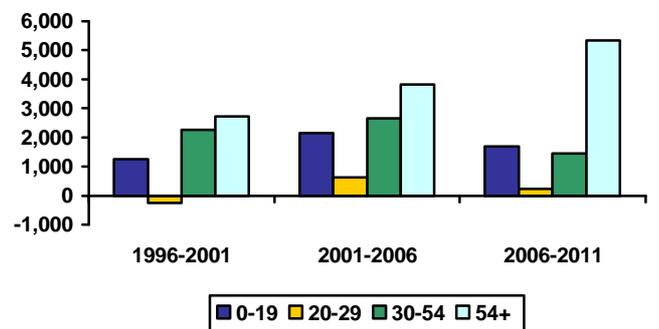
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	33.2%	31.9%	30.7%	29.4%
Age 20-29	12.7%	10.9%	10.4%	9.5%
Age 30-54	36.6%	36.8%	35.6%	33.4%
Age 55+	17.5%	20.4%	23.3%	27.7%
Population Change (average between years)				
Age 0-19		1,248	2,149	1,694
Age 20-29		-256	639	242
Age 30-54		2,265	2,651	1,443
Age 55+		2,721	3,828	5,343
Average Annual Growth		2.2%	3.0%	2.5%

Population Change by Age Group



SEQ Moreton Bay

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	229	324	55	53	18%	24%
Value of Property and Unincorporated Business	252	355	29	22	31%	44%
Value of Financial Assets	58	108	61	62	9%	14%
Value of Household Liabilities	80	139	37	38	160%	186%
Disposable Income after Debt Service Costs	49	54	55	57	44%	44%
Household Debt Service Ratio	16%	26%	55	54	233%	178%
Household Debt to Gross Income Ratio	1.23	1.70	56	54	233%	178%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	23,281	32,453	16,374	18,183	2,596	4,930
20 to 29		13,167	9,364	15,350	1,535	3,541
30 to 54		52,044	20,719	30,809	4,587	6,517
55+		47,868	8,607	14,769	1,114	5,256

Note: This data has been benchmarked to the Estimated Residential Population.

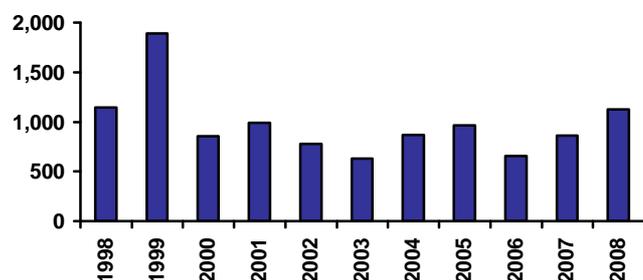
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	376	764	813	848	626	0%
Non Residential	131	176	274	317	259	61%
Total	507	940	1,088	1,165	885	11%
Value per capita \$2005/06						
Residential	1,320	2,395	2,367	2,394	1,727	-10%
Non Residential	462	546	798	895	714	47%
Total	1,782	2,941	3,164	3,289	2,442	1%
Rank (value per capita)						
Residential	27	8	6	8	9	
Non Residential	27	8	40	29	26	
Total	40	14	16	16	16	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,142	1,893	855	993	780	628	871	962	657	861	1,125
Rank	19	6	22	13	16	35	22	10	27	28	16

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	24.7	25.7	25.9	25.2	25.3	24.7
Rank	16	18	17	19	18	21

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	273
Rank	31

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	41	44	43
Mining	35	36	37
Manufacturing	709	747	788
Utilities	2	3	3
Construction	900	899	947
Wholesale	937	1,029	1,036
Retail	870	887	857
Hospitality	43	41	91
Transport	114	175	181
Communication	13	20	19
Finance	1,456	1,550	1,556
Property & Business	562	909	651
Government	7	7	9
Education	40	69	74
Health & Community	160	238	241
Cultural & Recreational	93	103	305
Personal Services	85	155	191

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

SEQ Sunshine Coast



The Sunshine Coast, for years a distinctive region, has under recent reforms become a single regional council. It lies between the coast and the Blackall Range. The older towns along the railway line which follows the foot of the range were built to serve the region's intensive agricultural developments, a function which they still perform though agriculture is gradually giving way to exurban housing. Over the past three decades, however, the major urban developments in the region have been along the coast, prompted by tourism and retirement. The region has ambitions to emulate the Gold Coast in a shift into the knowledge economy, but is still at the beginning of this transition.

Major centres:

Caloundra, Nambour, Maroochydore, Noosa Heads

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	268	278	287	295	303	312	3.8%	3.2%	3.0%	2.7%	3.0%	3.3%	2.9%
Households	95	100	105	108	112	116	5.4%	4.3%	3.4%	3.3%	3.6%	4.4%	3.5%
NIEIR Workforce	124	128	134	138	144	148	3.4%	5.1%	3.1%	4.0%	2.4%	3.9%	3.2%
NIEIR Employment	108	115	123	127	133	138	5.9%	7.1%	3.6%	4.5%	3.8%	5.5%	4.2%
NIEIR Unemployment	15.4	13.2	11.6	11.4	11.3	9.7	-14.3%	-12.1%	-1.7%	-1.6%	-13.7%	-9.5%	-7.8%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	12.5%	10.4%	8.7%	8.3%	7.8%	6.6%	-2.1	-1.7	-0.4	-0.4	-1.2	-1.4	-0.8
Headline Unemployment	9.9%	8.1%	6.4%	6.0%	5.8%	4.6%	-1.7	-1.8	-0.4	-0.2	-1.2	-1.3	-0.7
NIEIR Structural U/E	16.5%	14.8%	13.6%	12.6%	11.5%	10.9%	-1.8	-1.2	-1.0	-1.1	-0.6	-1.3	-0.8

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,119	3,451	3,795	4,108	4,464	4,757	11,654	12,421	13,241	13,923	14,732	15,236	9.6%	7.6%
Taxes Paid	820	942	1,022	1,051	1,071	1,144	3,065	3,391	3,566	3,561	3,535	3,665	8.6%	4.4%
Benefits	1,063	1,184	1,252	1,239	1,285	1,313	3,972	4,260	4,368	4,199	4,242	4,205	5.2%	2.9%
Business Income	991	1,132	1,130	1,102	1,054	1,105	3,702	4,075	3,944	3,734	3,478	3,538	3.6%	0.1%
Interest Paid	391	528	655	777	959	1,201	1,460	1,901	2,287	2,632	3,165	3,845	25.7%	24.3%
Property Income	937	1,104	1,220	1,350	1,532	1,998	3,501	3,975	4,257	4,575	5,057	6,400	12.9%	21.7%
Disposable Income	5,084	5,612	5,972	6,242	6,488	7,113	18,998	20,199	20,837	21,153	21,410	22,780	7.1%	6.7%
Rank							61	60	60	58	62	58		
%Rank #1							47%	47%	45%	45%	43%	42%		
Business Value Added	4,109	4,583	4,925	5,210	5,518	5,862	15,356	16,496	17,185	17,657	18,209	18,774	8.2%	6.1%
Rank							62	61	61	61	59	60		
%Rank #1							44%	45%	44%	44%	45%	45%		
Business Productivity							37,663	39,629	39,966	41,315	42,129	43,217	3.1%	2.3%
Rank							62	61	62	62	62	63		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

SEQ Sunshine Coast

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.09%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	2.90%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.04%	0.08%
Parenting Payment - Single (aged 25+)	0.14%	0.19%
Unemployed Long Term	1.68%	1.52%
Unemployed Short Term	1.06%	1.26%
Youth Allowance - Non Student	0.87%	0.78%
Youth Allowance Student	0.32%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	20.9%	9
2004	21.1%	17
2005	21.0%	16
2006	19.9%	17
2007	19.8%	17
2008	18.5%	30

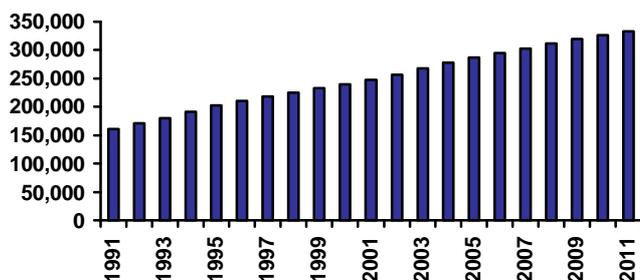
BABY BOUNCE

	Per cent	Rank
2002	1.11%	57
2003	1.08%	61
2004	1.09%	60
2005	1.12%	58
2006	1.15%	57
2007	1.07%	62
Bounce 2005-06	0.04%	35
Actual Change 2005-06 (Number)	203	26
Bounce 2006-07	-0.09%	57
Actual Change 2006-07 (Number)	-175	57

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	59
Aged migration	0.0	2
Population growth rate, 55+	0.1	2
Demographic stress	-0.1	36
Dominant locations	0.7	29
Family / Youth migration	50.0	11
Fertility bounce, 1996-2005	0.0	25
Fertility, babies % pop, 2005	0.0	58
Working elderly	0.2	54
SUSTAINABILITY SCORE	60.7	32

Population Profile



POPULATION

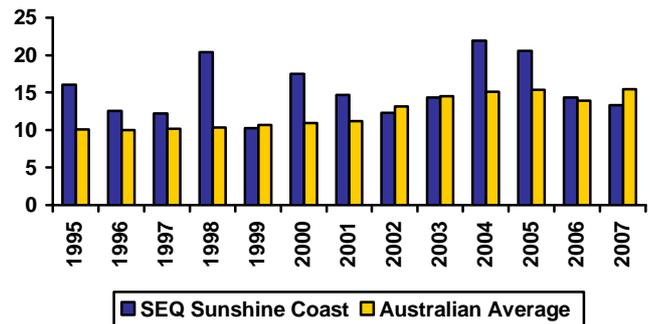
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	161	171	181	191	202	210	218	226	233	240	247	256	268	278	287	295	303	312	320	327	333

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	37.88	46.56	26
Average p.a. per capita	15.29	12.58	14
Hi Tech p.a. (1994-2007)	7.23	12.70	28
Hi Tech p.a. per capita	2.78	3.15	17
Info. Tech p.a. (1994-2007)	2.44	4.98	27
Info. Tech p.a. per capita	0.91	1.17	22
Average per capita (1994-2001)	14.47	10.80	10
Average per capita (2001-2007)	15.80	14.68	17
2001-07 avg./1994-01 avg.	1.09	1.35	58

Note: Per capita = 100,000 people

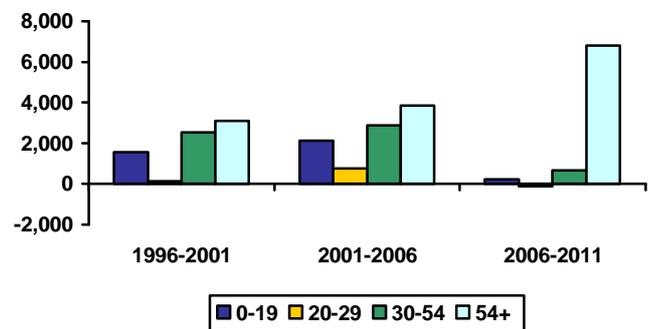
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	29.0%	27.9%	26.9%	24.2%
Age 20-29	10.7%	9.4%	9.2%	8.0%
Age 30-54	35.9%	35.7%	34.8%	31.8%
Age 55+	24.3%	27.0%	29.1%	36.0%
Population Change (average between years)				
Age 0-19		1,560	2,112	232
Age 20-29		143	756	-112
Age 30-54		2,529	2,879	684
Age 55+		3,108	3,836	6,790
Average Annual Growth		3.3%	3.6%	2.5%

Population Change by Age Group



SEQ Sunshine Coast

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	313	445	33	26	25%	33%
Value of Property and Unincorporated Business	270	353	25	23	33%	44%
Value of Financial Assets	94	215	55	41	15%	29%
Value of Household Liabilities	50	123	1	22	100%	165%
Disposable Income after Debt Service Costs	42	50	64	62	37%	41%
Household Debt Service Ratio	12%	24%	19	46	175%	169%
Household Debt to Gross Income Ratio	0.92	1.62	19	46	175%	169%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	16,913	21,680	18,749	11,554	2,693	4,565
20 to 29		7,583	10,215	10,443	2,036	3,265
30 to 54		38,182	27,591	21,812	5,320	6,574
55+		48,671	15,226	14,616	2,001	5,401

Note: This data has been benchmarked to the Estimated Residential Population.

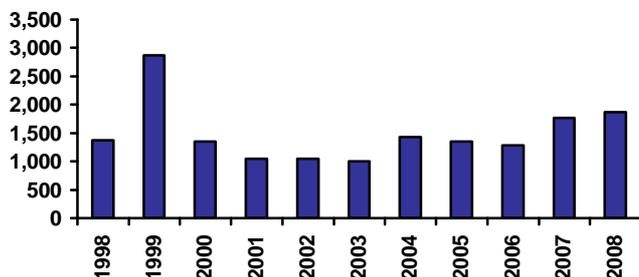
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	689	984	842	869	645	-20%
Non Residential	203	279	377	328	247	14%
Total	891	1,263	1,219	1,197	892	-13%
Value per capita \$2005/06						
Residential	2,828	3,503	2,779	2,783	2,018	-28%
Non Residential	832	985	1,244	1,050	773	4%
Total	3,660	4,488	4,023	3,834	2,790	-21%
Rank (value per capita)						
Residential	4	2	3	4	3	
Non Residential	4	2	17	23	23	
Total	5	4	10	12	13	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,371	2,865	1,348	1,048	1,046	998	1,428	1,355	1,281	1,763	1,867
Rank	12	2	5	12	4	7	4	4	5	5	2

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	24.6	25.7	25.4	25.1	25.1	24.7
Rank	17	17	19	20	19	22

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	280
Rank	28

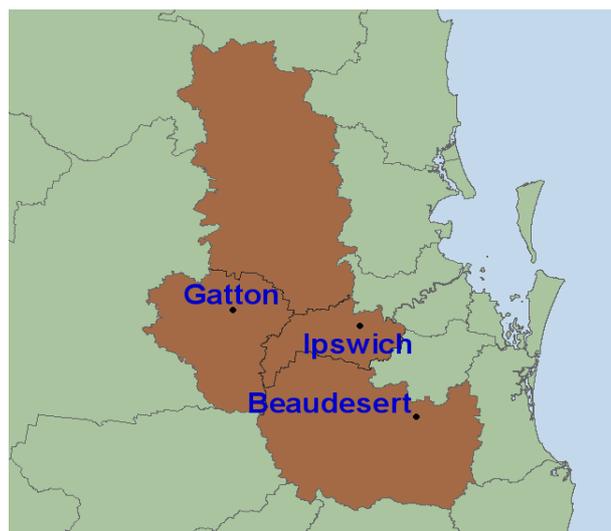
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	85	83	88
Mining	24	24	27
Manufacturing	598	635	665
Utilities	3	3	4
Construction	1,069	1,073	1,116
Wholesale	1,064	1,147	1,176
Retail	1,377	1,434	1,247
Hospitality	201	201	368
Transport	100	194	189
Communication	12	17	19
Finance	2,580	2,711	2,729
Property & Business	704	1,122	818
Government	7	7	8
Education	65	90	99
Health & Community	218	309	312
Cultural & Recreational	121	144	342
Personal Services	104	188	222

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

SEQ West Moreton



The West Moreton region centres on Ipswich, which has long regarded itself as independent of Brisbane 40 km to the east. Manufacturing industry and power production were originally based on local coal mines, and the region also attracted defence facilities. In more recent times commuting has increased, but the hills are hot in summer and have not proved attractive to hobby farmers. Intensive agriculture is practised in the several fertile valleys of tributaries of the Brisbane river, though drought has threatened their groundwater supply.

Major centres:

Ipswich

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	209	214	222	228	235	243	2.5%	3.4%	2.8%	3.1%	3.6%	2.9%	3.3%
Households	68	70	73	75	77	80	3.1%	3.3%	3.1%	2.9%	3.7%	3.2%	3.3%
NIEIR Workforce	104	107	111	113	118	120	3.1%	3.0%	2.2%	4.1%	2.0%	2.8%	3.0%
NIEIR Employment	91	95	99	102	106	109	4.1%	4.9%	2.6%	4.6%	2.8%	3.9%	3.7%
NIEIR Unemployment	13.2	12.7	11.3	11.2	11.1	10.5	-3.6%	-10.8%	-1.4%	-0.7%	-5.5%	-5.4%	-3.1%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	12.7%	11.9%	10.3%	9.9%	9.5%	8.8%	-0.8	-1.6	-0.4	-0.5	-0.7	-0.9	-0.6
Headline Unemployment	7.5%	6.6%	5.5%	5.2%	5.1%	4.3%	-0.9	-1.1	-0.2	-0.2	-0.7	-0.7	-0.5
NIEIR Structural U/E	17.4%	16.6%	16.0%	15.5%	14.6%	14.0%	-0.8	-0.7	-0.5	-0.9	-0.6	-0.6	-0.7

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	2,963	3,209	3,444	3,684	3,977	4,169	14,162	14,971	15,534	16,154	16,924	17,128	7.5%	6.4%
Taxes Paid	753	832	887	919	928	979	3,601	3,881	4,001	4,031	3,947	4,022	6.9%	3.2%
Benefits	814	908	938	920	947	962	3,892	4,236	4,230	4,033	4,029	3,951	4.1%	2.3%
Business Income	604	684	683	677	540	573	2,887	3,189	3,080	2,971	2,298	2,356	3.9%	-8.0%
Interest Paid	408	501	565	608	682	848	1,949	2,335	2,546	2,665	2,902	3,483	14.2%	18.1%
Property Income	360	397	435	458	492	596	1,723	1,851	1,963	2,008	2,094	2,448	8.3%	14.1%
Disposable Income	3,917	4,220	4,429	4,606	4,655	4,806	18,722	19,685	19,974	20,199	19,808	19,744	5.6%	2.2%
Rank							62	61	62	62	63	63		
%Rank #1							46%	46%	43%	43%	40%	37%		
Business Value Added	3,567	3,893	4,127	4,361	4,518	4,743	17,049	18,160	18,614	19,125	19,222	19,484	6.9%	4.3%
Rank							56	56	56	56	48	54		
%Rank #1							49%	50%	48%	47%	47%	46%		
Business Productivity							38,203	39,753	40,190	41,663	42,579	43,684	2.9%	2.4%
Rank							60	60	61	59	59	60		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

SEQ West Moreton

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.14%	0.11%
Disability Support (aged 21-24)	0.15%	0.12%
Disability Support (aged 25+)	4.36%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.13%	0.08%
Parenting Payment - Single (aged 25+)	0.32%	0.19%
Unemployed Long Term	1.92%	1.52%
Unemployed Short Term	0.98%	1.26%
Youth Allowance - Non Student	0.72%	0.78%
Youth Allowance Student	0.37%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	20.8%	10
2004	21.5%	15
2005	21.2%	14
2006	20.0%	16
2007	20.3%	13
2008	20.0%	19

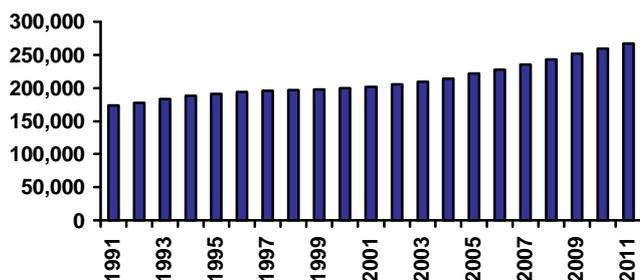
BABY BOUNCE

	Per cent	Rank
2002	1.43%	9
2003	1.41%	10
2004	1.42%	9
2005	1.47%	8
2006	1.50%	9
2007	1.48%	10
Bounce 2005-06	0.03%	40
Actual Change 2005-06 (Number)	166	29
Bounce 2006-07	-0.02%	38
Actual Change 2006-07 (Number)	59	30

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	18
Aged migration	0.0	28
Population growth rate, 55+	0.1	14
Demographic stress	-0.2	60
Dominant locations	0.3	60
Family / Youth migration	71.0	8
Fertility bounce, 1996-2005	0.0	13
Fertility, babies % pop, 2005	0.0	9
Working elderly	0.3	36
SUSTAINABILITY SCORE	49.2	53

Population Profile



POPULATION

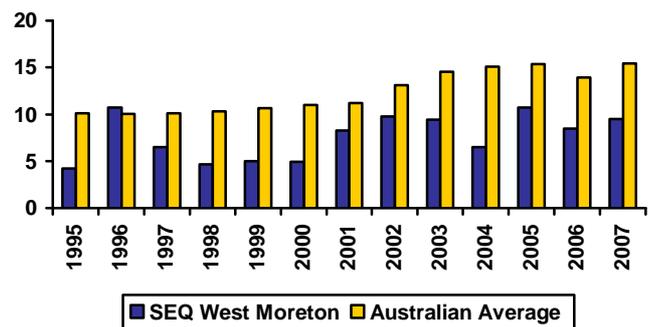
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	174	178	183	188	191	194	196	197	198	200	201	205	209	214	222	228	235	243	252	259	267

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	16.11	46.56	42
Average p.a. per capita	7.76	12.58	44
Hi Tech p.a. (1994-2007)	2.86	12.70	40
Hi Tech p.a. per capita	1.38	3.15	43
Info. Tech p.a. (1994-2007)	0.51	4.98	48
Info. Tech p.a. per capita	0.24	1.17	50
Average per capita (1994-2001)	6.75	10.80	44
Average per capita (2001-2007)	9.19	14.68	43
2001-07 avg./1994-01 avg.	1.36	1.35	29

Note: Per capita = 100,000 people

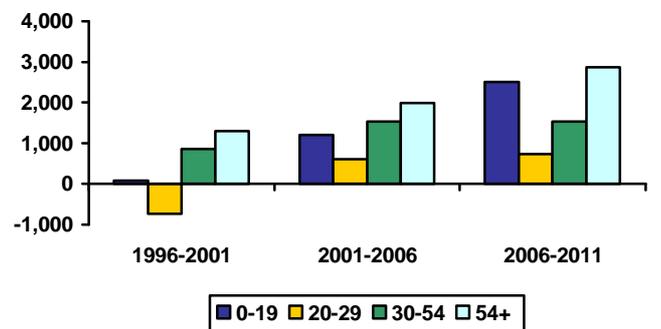
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	34.2%	33.1%	31.9%	32.1%
Age 20-29	13.6%	11.3%	11.3%	11.0%
Age 30-54	35.7%	36.4%	35.5%	33.3%
Age 55+	16.6%	19.2%	21.3%	23.6%
Population Change (average between years)				
Age 0-19		91	1,200	2,514
Age 20-29		-730	606	729
Age 30-54		850	1,526	1,528
Age 55+		1,291	1,994	2,862
Average Annual Growth		0.8%	2.5%	3.2%

Population Change by Age Group



SEQ West Moreton

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	141	200	65	65	11%	15%
Value of Property and Unincorporated Business	190	255	52	46	23%	32%
Value of Financial Assets	41	71	65	65	7%	9%
Value of Household Liabilities	89	126	53	25	178%	168%
Disposable Income after Debt Service Costs	47	49	56	63	42%	40%
Household Debt Service Ratio	19%	26%	64	56	268%	180%
Household Debt to Gross Income Ratio	1.41	1.72	64	56	268%	180%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	16,691	23,431	13,426	10,449	1,295	4,487
20 to 29		8,949	9,705	9,189	1,004	2,785
30 to 54		37,882	16,446	16,406	2,114	5,438
55+		31,934	6,184	6,727	402	3,351

Note: This data has been benchmarked to the Estimated Residential Population.

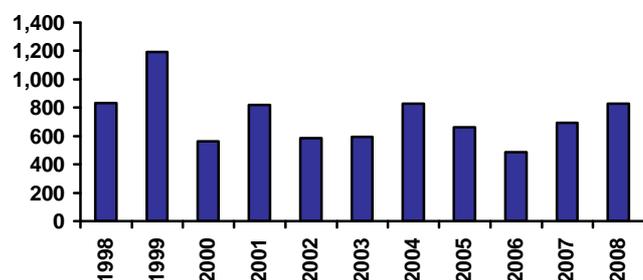
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	150	373	438	538	398	23%
Non Residential	120	155	359	405	356	141%
Total	270	528	798	943	754	58%
Value per capita \$2005/06						
Residential	744	1,700	1,865	2,211	1,582	11%
Non Residential	599	700	1,529	1,664	1,415	119%
Total	1,343	2,401	3,393	3,875	2,997	43%
Rank (value per capita)						
Residential	56	25	20	11	15	
Non Residential	56	25	10	9	8	
Total	54	28	14	11	11	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	834	1,193	563	821	584	594	830	660	484	695	828
Rank	34	18	55	29	35	46	26	42	40	39	31

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	25.7	26.8	27.0	26.6	26.3	25.2
Rank	10	11	12	12	12	18

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	136
Rank	46

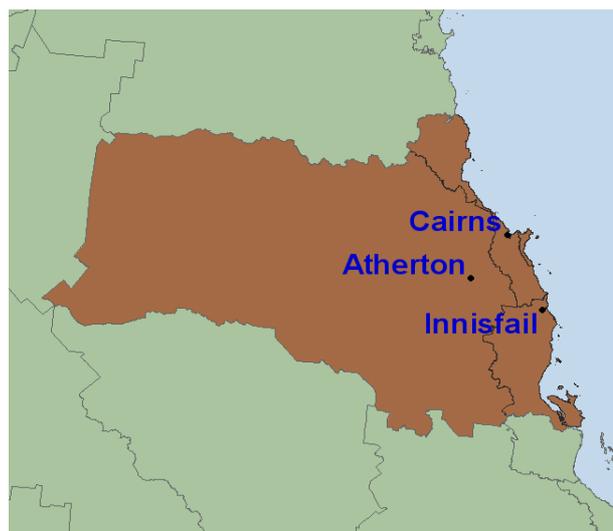
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	93	102	106
Mining	22	35	36
Manufacturing	405	424	429
Utilities	1	1	1
Construction	421	428	438
Wholesale	514	548	559
Retail	556	588	551
Hospitality	98	95	140
Transport	132	173	181
Communication	5	12	16
Finance	897	962	968
Property & Business	293	465	330
Government	15	13	13
Education	37	64	80
Health & Community	101	145	148
Cultural & Recreational	55	57	174
Personal Services	52	96	106

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

QLD Cairns



The City of Cairns lies on the coast, with the Great Barrier Reef offshore. Inland, a tropical rain forest grows on the scarp up to the Atherton and Evelyn tablelands. The reef, the forest and the beaches provide the basis of a vibrant tourist trade, though sadly all three are threatened by climate change. Both the coastal strip and the tablelands are well-watered and fertile and support intensive agriculture, particularly sugar, though many of the former canefields and several sugar mills have been sacrificed to urban expansion. The hinterland of Cairns and the Far North planning region extend into Cape Yorke Peninsula, but have not been included in the Cairns region because of their fundamentally different economic structure.

Major centres:

Cairns, Innisfail, Atherton

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	209	212	217	223	229	235	1.8%	2.4%	2.7%	2.5%	2.8%	2.3%	2.7%
Households	70	71	73	75	77	80	2.2%	2.8%	2.5%	3.1%	3.1%	2.5%	3.1%
NIEIR Workforce	103	103	107	109	112	114	-0.4%	4.3%	2.3%	2.1%	2.2%	2.1%	2.1%
NIEIR Employment	94	94	98	100	103	106	0.4%	4.9%	1.3%	3.4%	2.6%	2.2%	3.0%
NIEIR Unemployment	9.5	8.7	8.6	9.8	8.7	8.5	-7.8%	-1.8%	14.1%	-11.0%	-2.5%	1.1%	-6.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.2%	8.5%	8.0%	8.9%	7.8%	7.4%	-0.7	-0.5	0.9	-1.1	-0.4	-0.1	-0.8
Headline Unemployment	6.5%	5.6%	5.0%	6.2%	5.2%	4.5%	-0.9	-0.6	1.1	-1.0	-0.6	-0.1	-0.8
NIEIR Structural U/E	16.4%	16.1%	14.3%	12.8%	11.7%	11.3%	-0.3	-1.7	-1.6	-1.1	-0.4	-1.2	-0.7

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	2,931	3,070	3,289	3,479	3,718	3,898	14,057	14,457	15,133	15,584	16,246	16,567	5.9%	5.9%
Taxes Paid	827	923	1,026	1,055	967	1,007	3,967	4,347	4,719	4,725	4,227	4,282	8.4%	-2.3%
Benefits	765	846	849	864	933	1,005	3,667	3,985	3,906	3,870	4,075	4,271	4.1%	7.9%
Business Income	941	1,013	1,075	1,047	971	958	4,510	4,772	4,946	4,688	4,243	4,072	3.6%	-4.3%
Interest Paid	393	489	558	609	693	882	1,885	2,302	2,569	2,728	3,026	3,748	15.7%	20.3%
Property Income	792	716	879	1,071	1,182	841	3,798	3,371	4,045	4,796	5,163	3,574	10.6%	-11.4%
Disposable Income	4,645	4,639	4,993	5,341	5,606	5,161	22,273	21,850	22,973	23,923	24,497	21,932	4.8%	-1.7%
Rank							34	50	46	43	42	61		
%Rank #1							55%	51%	49%	50%	49%	41%		
Business Value Added	3,872	4,083	4,364	4,526	4,689	4,856	18,567	19,229	20,079	20,272	20,489	20,639	5.3%	3.6%
Rank							45	48	45	48	40	44		
%Rank #1							53%	53%	51%	50%	50%	49%		
Business Productivity							39,881	41,870	42,505	44,133	44,864	46,018	3.4%	2.1%
Rank							52	51	51	50	51	50		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

QLD Cairns

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.09%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	3.01%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.12%	0.08%
Parenting Payment - Single (aged 25+)	0.23%	0.19%
Unemployed Long Term	1.82%	1.52%
Unemployed Short Term	1.06%	1.26%
Youth Allowance - Non Student	0.87%	0.78%
Youth Allowance Student	0.37%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	16.5%	37
2004	18.2%	34
2005	17.0%	39
2006	16.2%	41
2007	16.6%	37
2008	19.5%	23

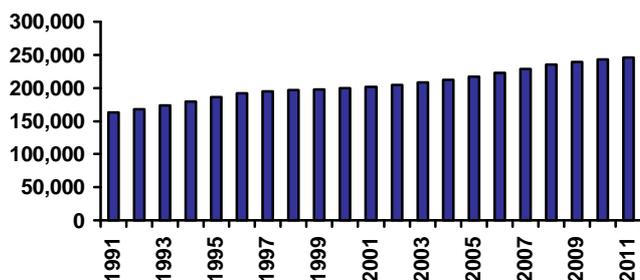
BABY BOUNCE

	Per cent	Rank
2002	1.41%	14
2003	1.37%	13
2004	1.38%	13
2005	1.41%	12
2006	1.44%	13
2007	1.36%	24
Bounce 2005-06	0.03%	42
Actual Change 2005-06 (Number)	155	32
Bounce 2006-07	-0.09%	56
Actual Change 2006-07 (Number)	-120	52

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	22
Aged migration	0.0	33
Population growth rate, 55+	0.1	20
Demographic stress	-0.2	56
Dominant locations	0.3	60
Family / Youth migration	36.0	17
Fertility bounce, 1996-2005	0.0	35
Fertility, babies % pop, 2005	0.0	13
Working elderly	0.3	11
SUSTAINABILITY SCORE	48.9	54

Population Profile



POPULATION

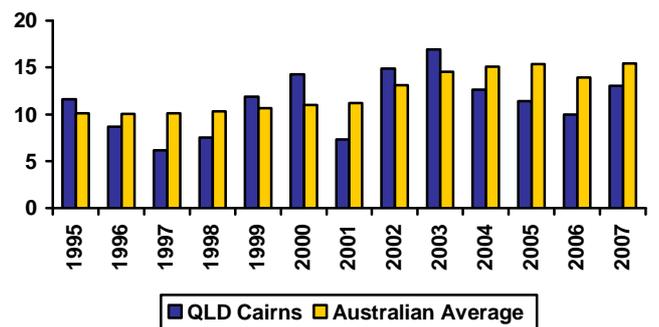
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	163	168	173	179	186	192	194	197	198	200	201	204	209	212	217	223	229	235	239	243	246

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	23.31	46.56	34
Average p.a. per capita	11.41	12.58	21
Hi Tech p.a. (1994-2007)	3.66	12.70	37
Hi Tech p.a. per capita	1.75	3.15	32
Info. Tech p.a. (1994-2007)	2.03	4.98	31
Info. Tech p.a. per capita	0.95	1.17	21
Average per capita (1994-2001)	10.28	10.80	19
Average per capita (2001-2007)	13.20	14.68	23
2001-07 avg./1994-01 avg.	1.28	1.35	40

Note: Per capita = 100,000 people

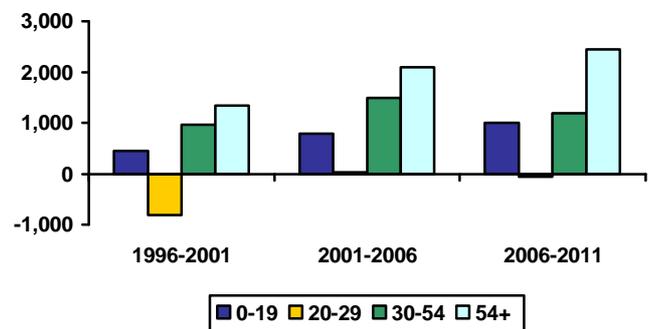
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.7%	30.3%	29.1%	28.4%
Age 20-29	15.1%	12.4%	11.2%	10.1%
Age 30-54	37.8%	38.3%	37.9%	36.8%
Age 55+	16.4%	18.9%	21.8%	24.7%
Population Change (average between years)				
Age 0-19		443	788	996
Age 20-29		-816	27	-60
Age 30-54		957	1,486	1,191
Age 55+		1,342	2,090	2,447
Average Annual Growth		1.0%	2.1%	2.0%

Population Change by Age Group



QLD Cairns

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	275	320	46	54	22%	24%
Value of Property and Unincorporated Business	226	264	37	41	28%	33%
Value of Financial Assets	126	175	44	52	21%	23%
Value of Household Liabilities	77	120	31	20	154%	160%
Disposable Income after Debt Service Costs	56	48	44	64	49%	40%
Household Debt Service Ratio	15%	25%	38	52	207%	175%
Household Debt to Gross Income Ratio	1.09	1.67	39	52	207%	175%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	15,407	19,940	12,161	8,699	1,288	5,026
20 to 29		6,959	7,586	9,457	2,109	4,458
30 to 54		33,844	19,354	17,098	3,302	7,990
55+		29,827	6,376	6,838	763	4,781

Note: This data has been benchmarked to the Estimated Residential Population.

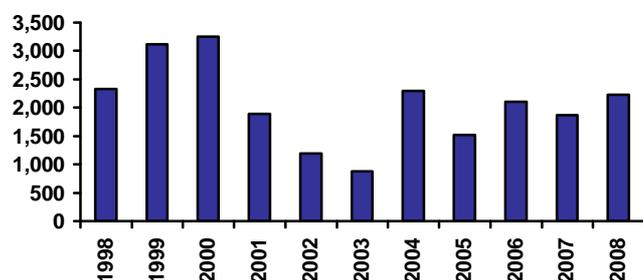
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	231	374	531	566	410	34%
Non Residential	197	209	243	265	218	16%
Total	428	584	774	831	627	28%
Value per capita \$2005/06						
Residential	1,150	1,731	2,322	2,407	1,712	24%
Non Residential	983	968	1,061	1,125	909	7%
Total	2,133	2,699	3,384	3,533	2,622	18%
Rank (value per capita)						
Residential	40	21	7	6	10	
Non Residential	40	21	23	18	18	
Total	23	18	15	14	14	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	2,326	3,115	3,251	1,891	1,191	878	2,295	1,515	2,105	1,869	2,227
Rank	2	1	1	1	3	13	1	1	1	1	1

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	28.1	27.9	28.1	27.4	27.7	27.8
Rank	8	8	8	8	8	8

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	194
Rank	33

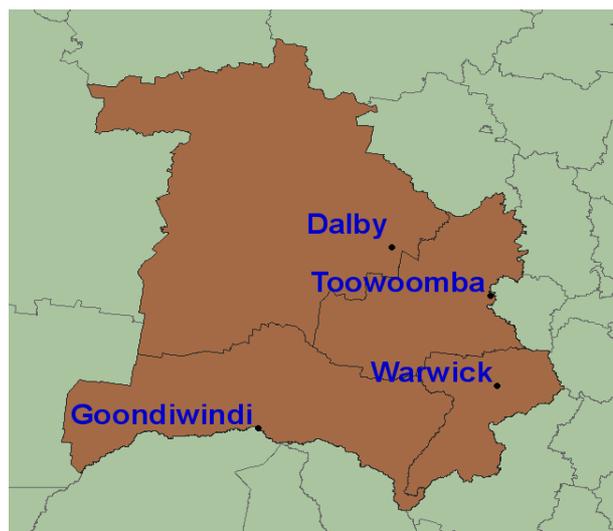
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	182	186	190
Mining	63	65	61
Manufacturing	398	416	431
Utilities	2	2	2
Construction	594	600	622
Wholesale	1,028	1,055	1,070
Retail	1,280	1,328	1,157
Hospitality	264	252	393
Transport	115	323	330
Communication	10	28	26
Finance	1,806	1,888	1,905
Property & Business	581	895	648
Government	16	16	16
Education	72	77	87
Health & Community	191	247	256
Cultural & Recreational	143	176	352
Personal Services	106	178	209

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

QLD Darling Downs



Toowoomba is only 120 km inland from Brisbane, at the top of a short steep climb. From here the creeks flow at gentle gradients westward into the Darling Basin, and some of Australia's best farming country is devoted to intensive agriculture. The roads fan out from Toowoomba, making it the chief commercial centre for the downs and a centre for agricultural processing. To the south, the region includes the northern end of the New England granite massif, well known for its orchards, while to the west the country becomes drier and harvests less guaranteed. Export coal mining has commenced, and the region boasts several new power stations, some based on local coal and others on coal seam methane.

Major centres:

Toowoomba, Warwick, Dalby

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	214	217	222	226	228	230	1.4%	2.0%	1.8%	1.0%	0.9%	1.7%	1.0%
Households	73	75	77	78	80	82	2.2%	2.3%	2.5%	2.2%	2.1%	2.3%	2.1%
NIEIR Workforce	99	103	105	105	109	112	3.9%	2.1%	0.1%	3.8%	1.9%	2.0%	2.9%
NIEIR Employment	90	94	97	98	102	104	3.6%	3.7%	0.6%	3.9%	2.2%	2.6%	3.1%
NIEIR Unemployment	8.8	9.4	8.2	7.7	7.9	7.8	7.3%	-13.3%	-6.1%	2.4%	-1.1%	-4.4%	0.6%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.8%	9.1%	7.8%	7.3%	7.2%	7.0%	0.3	-1.4	-0.5	-0.1	-0.2	-0.5	-0.2
Headline Unemployment	5.0%	5.2%	4.3%	3.9%	3.8%	3.3%	0.2	-0.9	-0.4	0.0	-0.5	-0.4	-0.3
NIEIR Structural U/E	14.3%	13.8%	13.2%	12.9%	12.2%	12.1%	-0.5	-0.6	-0.3	-0.6	-0.2	-0.5	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	2,793	2,982	3,173	3,352	3,595	3,745	13,027	13,713	14,307	14,844	15,764	16,267	6.3%	5.7%
Taxes Paid	821	980	1,065	1,050	888	937	3,827	4,509	4,804	4,649	3,892	4,071	8.6%	-5.5%
Benefits	800	888	908	936	1,025	1,129	3,731	4,085	4,096	4,143	4,496	4,903	5.4%	9.8%
Business Income	1,026	1,404	1,460	1,351	692	736	4,785	6,456	6,582	5,980	3,032	3,197	9.6%	-26.2%
Interest Paid	319	399	459	504	579	719	1,487	1,834	2,068	2,233	2,537	3,122	16.5%	19.4%
Property Income	660	705	829	972	998	1,077	3,080	3,241	3,737	4,306	4,376	4,679	13.8%	5.2%
Disposable Income	4,581	5,121	5,433	5,674	5,262	5,477	21,364	23,553	24,495	25,124	23,070	23,792	7.4%	-1.8%
Rank							49	31	32	30	54	51		
%Rank #1							53%	55%	53%	53%	46%	44%		
Business Value Added	3,819	4,385	4,633	4,703	4,287	4,481	17,811	20,169	20,890	20,824	18,796	19,464	7.2%	-2.4%
Rank							54	36	35	43	53	55		
%Rank #1							51%	56%	53%	51%	46%	46%		
Business Productivity							39,713	41,458	41,925	43,597	44,395	46,000	3.2%	2.7%
Rank							54	52	53	52	52	51		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

QLD Darling Downs

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.12%	0.11%
Disability Support (aged 21-24)	0.13%	0.12%
Disability Support (aged 25+)	3.76%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.10%	0.08%
Parenting Payment - Single (aged 25+)	0.21%	0.19%
Unemployed Long Term	1.54%	1.52%
Unemployed Short Term	0.86%	1.26%
Youth Allowance - Non Student	0.65%	0.78%
Youth Allowance Student	0.34%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	17.5%	33
2004	17.3%	40
2005	16.7%	42
2006	16.5%	37
2007	19.5%	20
2008	20.6%	14

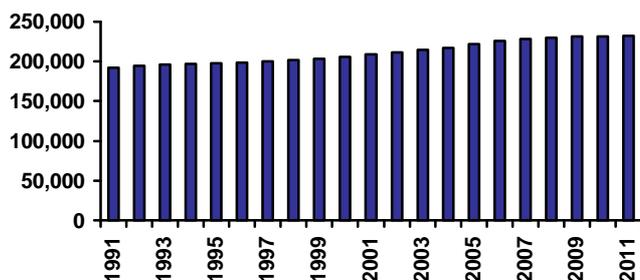
BABY BOUNCE

	Per cent	Rank
2002	1.39%	15
2003	1.37%	14
2004	1.39%	12
2005	1.43%	11
2006	1.46%	12
2007	1.33%	27
Bounce 2005-06	0.03%	41
Actual Change 2005-06 (Number)	131	36
Bounce 2006-07	-0.13%	62
Actual Change 2006-07 (Number)	-253	61

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	36
Aged migration	0.0	17
Population growth rate, 55+	0.0	32
Demographic stress	0.1	10
Dominant locations	0.4	46
Family / Youth migration	21.0	25
Fertility bounce, 1996-2005	0.0	27
Fertility, babies % pop, 2005	0.0	12
Working elderly	0.3	28
SUSTAINABILITY SCORE	51.4	49

Population Profile



POPULATION

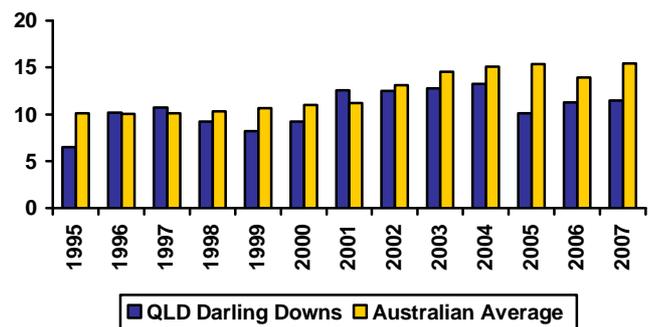
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	193	194	196	197	198	199	200	202	203	206	209	212	214	217	222	226	228	230	231	232	232

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	22.38	46.56	37
Average p.a. per capita	10.64	12.58	25
Hi Tech p.a. (1994-2007)	3.04	12.70	38
Hi Tech p.a. per capita	1.46	3.15	40
Info. Tech p.a. (1994-2007)	0.73	4.98	42
Info. Tech p.a. per capita	0.34	1.17	41
Average per capita (1994-2001)	9.87	10.80	21
Average per capita (2001-2007)	11.77	14.68	26
2001-07 avg./1994-01 avg.	1.19	1.35	52

Note: Per capita = 100,000 people

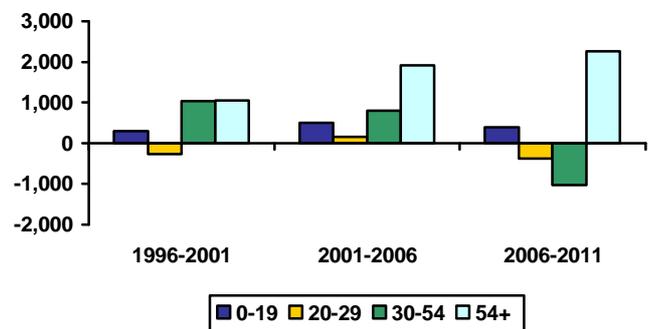
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	32.7%	31.8%	30.5%	30.5%
Age 20-29	12.8%	11.5%	11.0%	9.9%
Age 30-54	33.2%	34.0%	33.3%	30.2%
Age 55+	21.2%	22.7%	25.2%	29.4%
Population Change (average between years)				
Age 0-19		289	501	384
Age 20-29		-275	162	-380
Age 30-54		1,035	794	-1,025
Age 55+		1,051	1,912	2,267
Average Annual Growth		1.0%	1.6%	0.5%

Population Change by Age Group



QLD Darling Downs

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	305	377	36	37	24%	28%
Value of Property and Unincorporated Business	219	255	40	47	27%	32%
Value of Financial Assets	149	230	27	33	24%	30%
Value of Household Liabilities	63	109	14	13	126%	145%
Disposable Income after Debt Service Costs	58	59	34	41	52%	49%
Household Debt Service Ratio	12%	20%	15	19	169%	140%
Household Debt to Gross Income Ratio	0.89	1.34	15	19	169%	140%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	15,756	20,520	13,502	11,631	1,194	3,312
20 to 29		6,656	9,865	10,154	1,504	2,328
30 to 54		33,294	17,545	15,975	1,669	3,939
55+		37,116	7,683	7,928	358	3,882

Note: This data has been benchmarked to the Estimated Residential Population.

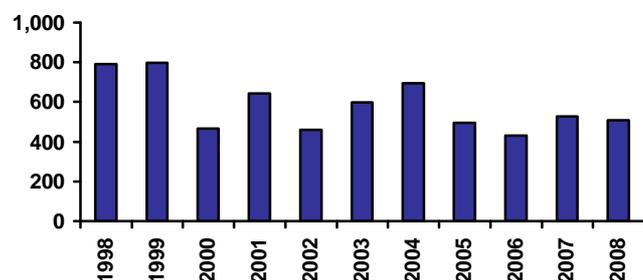
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	158	246	278	243	189	-4%
Non Residential	144	138	191	162	119	14%
Total	302	384	469	405	308	2%
Value per capita \$2005/06						
Residential	762	1,117	1,220	1,054	818	-8%
Non Residential	696	627	837	705	514	9%
Total	1,458	1,744	2,057	1,758	1,332	-2%
Rank (value per capita)						
Residential	55	48	39	49	50	
Non Residential	55	48	35	51	52	
Total	49	53	41	51	53	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	792	798	466	642	459	597	694	496	429	528	507
Rank	39	36	61	43	46	45	36	56	45	49	47

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	25.0	26.2	27.5	26.3	25.7	25.2
Rank	12	14	9	13	16	17

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	136
Rank	46

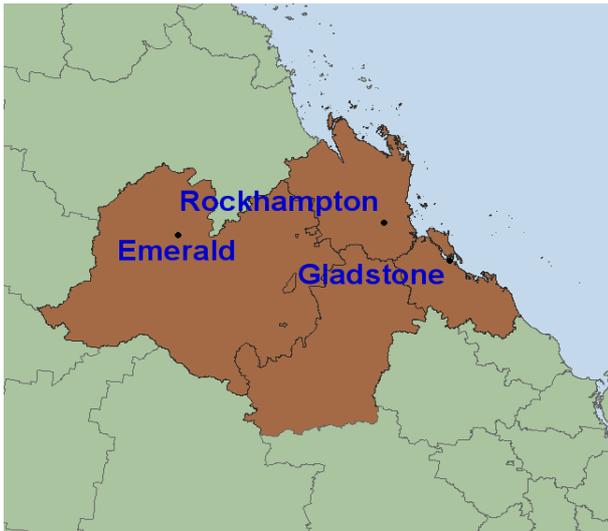
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	271	282	298
Mining	20	27	26
Manufacturing	466	479	500
Utilities	4	4	2
Construction	508	511	529
Wholesale	789	818	823
Retail	1,028	1,068	997
Hospitality	180	188	257
Transport	179	230	237
Communication	7	16	20
Finance	1,652	1,759	1,771
Property & Business	361	617	433
Government	21	22	22
Education	80	97	114
Health & Community	146	201	213
Cultural & Recreational	65	74	194
Personal Services	67	121	136

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

QLD Fitzroy



Over the past thirty years the Fitzroy region has been transformed by the growth of the coal trade. Coal is mined in the Bowen Basin, the southern part of which lies in the west of the region, and railed to the port of Gladstone for export and to fire the energy-intensive industries which have developed there. Recently coal production has been supplemented by coal seam methane, which also fuels industry in Gladstone and there are expectations that an export trade will develop. As the long-standing commercial capital of the region, Rockhampton has also benefited from these developments. Intensive agriculture is practised on the downs round Biloela and Emerald, with the rest of the region utilised for extensive cattle grazing. The coast comprises beaches, rocky headlands and rocky offshore islands, all of which combine with the Great Barrier Reef to underwrite the region's tourist trade.

Major centres:

Rockhampton, Gladstone

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	193	197	201	206	210	216	2.3%	1.9%	2.5%	2.0%	2.5%	2.2%	2.2%
Households	64	65	66	68	70	72	2.4%	2.3%	2.4%	2.9%	3.0%	2.3%	2.9%
NIEIR Workforce	92	94	97	99	101	104	1.7%	3.6%	1.6%	2.9%	2.7%	2.3%	2.8%
NIEIR Employment	83	84	88	91	95	98	1.6%	4.7%	3.2%	4.0%	2.7%	3.2%	3.3%
NIEIR Unemployment	8.8	9.1	8.5	7.2	6.4	6.6	3.2%	-6.5%	-15.5%	-10.7%	3.4%	-6.6%	-3.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.6%	9.7%	8.8%	7.3%	6.3%	6.4%	0.1	-1.0	-1.5	-1.0	0.0	-0.8	-0.5
Headline Unemployment	7.0%	6.7%	5.8%	4.6%	3.7%	3.6%	-0.3	-1.0	-1.2	-0.9	-0.1	-0.8	-0.5
NIEIR Structural U/E	13.6%	13.6%	12.7%	11.3%	10.9%	10.4%	0.0	-0.9	-1.4	-0.4	-0.5	-0.8	-0.5

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,136	3,351	3,588	3,944	4,283	4,536	16,250	16,974	17,836	19,133	20,379	21,050	7.9%	7.2%
Taxes Paid	954	1,072	1,156	1,264	1,202	1,300	4,942	5,428	5,746	6,130	5,720	6,034	9.8%	1.4%
Benefits	673	747	758	751	787	824	3,487	3,786	3,770	3,645	3,745	3,823	3.7%	4.7%
Business Income	679	788	791	848	648	767	3,520	3,989	3,932	4,115	3,084	3,561	7.7%	-4.9%
Interest Paid	345	429	490	535	609	788	1,788	2,173	2,436	2,595	2,900	3,656	15.7%	21.4%
Property Income	576	594	659	800	896	874	2,987	3,009	3,279	3,882	4,263	4,054	11.6%	4.5%
Disposable Income	4,239	4,484	4,705	5,177	5,331	5,431	21,964	22,714	23,392	25,112	25,362	25,202	6.9%	2.4%
Rank							38	40	42	31	37	36		
%Rank #1							54%	53%	50%	53%	51%	47%		
Business Value Added	3,816	4,139	4,378	4,793	4,932	5,304	19,770	20,962	21,768	23,248	23,463	24,611	7.9%	5.2%
Rank							31	31	29	23	24	23		
%Rank #1							57%	58%	56%	57%	58%	59%		
Business Productivity							44,095	46,312	47,254	50,284	51,924	54,340	4.5%	4.0%
Rank							33	23	28	17	15	14		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

QLD Fitzroy

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.10%	0.11%
Disability Support (aged 21-24)	0.10%	0.12%
Disability Support (aged 25+)	2.88%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.09%	0.08%
Parenting Payment - Single (aged 25+)	0.23%	0.19%
Unemployed Long Term	1.43%	1.52%
Unemployed Short Term	1.03%	1.26%
Youth Allowance - Non Student	0.66%	0.78%
Youth Allowance Student	0.33%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	15.9%	42
2004	16.7%	46
2005	16.1%	44
2006	14.5%	46
2007	14.8%	46
2008	15.2%	44

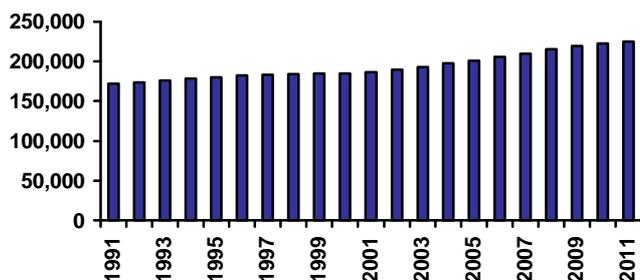
BABY BOUNCE

	Per cent	Rank
2002	1.44%	8
2003	1.41%	11
2004	1.42%	10
2005	1.45%	10
2006	1.47%	10
2007	1.40%	16
Bounce 2005-06	0.02%	51
Actual Change 2005-06 (Number)	123	42
Bounce 2006-07	-0.07%	51
Actual Change 2006-07 (Number)	-86	48

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	15
Aged migration	0.0	41
Population growth rate, 55+	0.0	34
Demographic stress	-0.2	51
Dominant locations	0.5	39
Family / Youth migration	42.0	12
Fertility bounce, 1996-2005	0.0	31
Fertility, babies % pop, 2005	0.0	11
Working elderly	0.3	26
SUSTAINABILITY SCORE	55.8	39

Population Profile



POPULATION

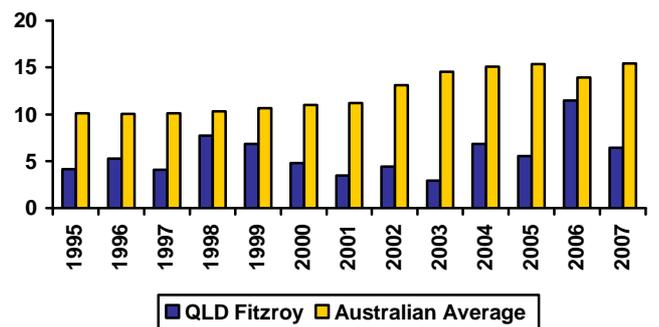
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	172	174	176	178	180	182	183	184	185	185	187	190	193	197	201	206	210	216	219	222	225

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	11.01	46.56	52
Average p.a. per capita	5.74	12.58	55
Hi Tech p.a. (1994-2007)	1.95	12.70	49
Hi Tech p.a. per capita	1.00	3.15	51
Info. Tech p.a. (1994-2007)	0.29	4.98	53
Info. Tech p.a. per capita	0.15	1.17	54
Average per capita (1994-2001)	5.10	10.80	55
Average per capita (2001-2007)	6.30	14.68	57
2001-07 avg./1994-01 avg.	1.24	1.35	49

Note: Per capita = 100,000 people

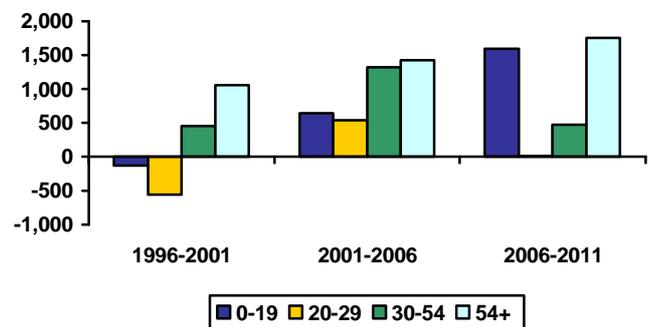
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	33.9%	32.8%	31.3%	32.1%
Age 20-29	13.5%	11.7%	11.9%	10.9%
Age 30-54	35.8%	36.2%	36.0%	33.9%
Age 55+	16.8%	19.2%	20.9%	23.0%
Population Change (average between years)				
Age 0-19		-130	642	1,595
Age 20-29		-556	539	14
Age 30-54		455	1,323	468
Age 55+		1,055	1,427	1,754
Average Annual Growth		0.4%	2.0%	1.8%

Population Change by Age Group



QLD Fitzroy

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	260	374	48	38	21%	28%
Value of Property and Unincorporated Business	186	266	54	40	23%	33%
Value of Financial Assets	152	238	25	31	25%	32%
Value of Household Liabilities	79	129	36	30	157%	173%
Disposable Income after Debt Service Costs	59	63	32	28	53%	52%
Household Debt Service Ratio	14%	22%	34	33	203%	154%
Household Debt to Gross Income Ratio	1.07	1.47	34	33	203%	154%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	14,737	18,871	11,485	12,054	743	3,863
20 to 29		6,215	9,129	10,579	980	2,993
30 to 54		31,280	15,199	17,588	1,835	5,653
55+		28,170	4,961	5,814	219	3,855

Note: This data has been benchmarked to the Estimated Residential Population.

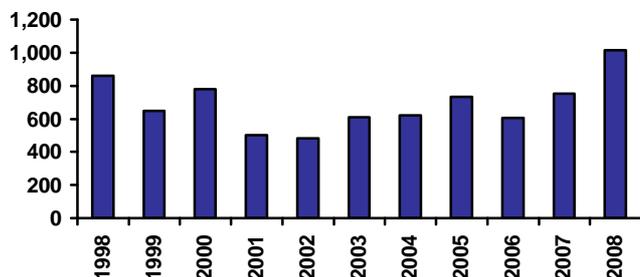
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	151	262	369	367	274	29%
Non Residential	165	117	163	182	151	41%
Total	317	379	532	549	425	33%
Value per capita \$2005/06						
Residential	812	1,310	1,756	1,705	1,250	20%
Non Residential	886	587	776	844	689	31%
Total	1,698	1,898	2,533	2,549	1,940	23%
Rank (value per capita)						
Residential	53	38	22	22	23	
Non Residential	53	38	46	33	29	
Total	45	44	26	27	26	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	862	650	779	501	483	608	623	734	606	754	1,014
Rank	31	49	33	55	45	41	41	33	30	33	22

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	28.1	29.0	29.0	28.7	28.1	27.6
Rank	7	7	7	5	7	9

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	128
Rank	48

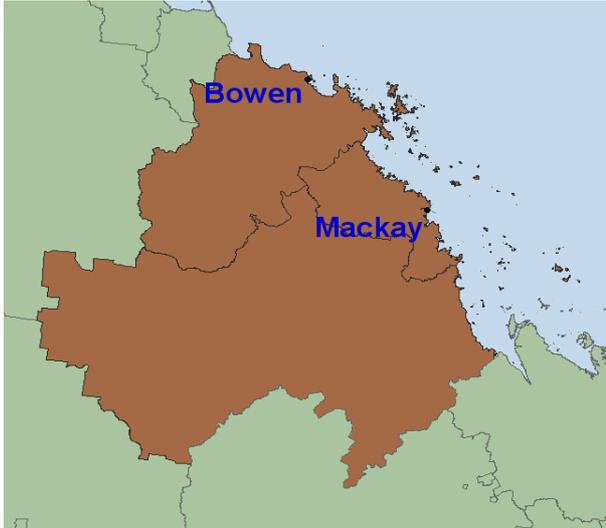
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	190	193	193
Mining	46	71	70
Manufacturing	287	291	311
Utilities	6	7	8
Construction	460	455	474
Wholesale	514	526	535
Retail	943	946	890
Hospitality	197	189	254
Transport	98	150	153
Communication	5	17	19
Finance	1,066	1,124	1,134
Property & Business	320	582	393
Government	25	25	26
Education	60	82	96
Health & Community	100	132	134
Cultural & Recreational	51	59	190
Personal Services	67	103	147

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

QLD Mackay



The Pioneer River has significant flow because it drains high-rainfall country on the windward side of the Eungella Range. The Pioneer Valley is therefore an important sugar area. The City of Mackay is located by the river about ten kilometres inland. Offshore the Whitsunday Islands and Great Barrier Reef attract tourists, while inland, over the Range, the large coal mines of the northern part of the Bowen Basin supply the world through the ports of Dalrymple Bay/Hay Point and Abbot Point – one to the north of Mackay and one to the south, and both located so that the supplying rail lines avoid the highest parts of the ranges.

Major centres:

Mackay, Bowen

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	145	149	154	160	163	167	2.6%	3.7%	3.8%	2.0%	2.4%	3.3%	2.2%
Households	46	48	49	51	52	54	2.5%	3.1%	3.3%	3.4%	3.1%	3.0%	3.2%
NIEIR Workforce	73	76	79	81	83	85	4.0%	4.3%	1.9%	2.9%	1.8%	3.4%	2.3%
NIEIR Employment	67	69	73	76	80	81	3.8%	5.2%	4.2%	4.7%	1.9%	4.4%	3.3%
NIEIR Unemployment	6.5	6.9	6.5	5.0	3.7	3.7	5.2%	-4.9%	-23.7%	-25.5%	0.1%	-8.6%	-13.6%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.9%	9.0%	8.2%	6.2%	4.5%	4.4%	0.1	-0.8	-2.1	-1.7	-0.1	-0.9	-0.9
Headline Unemployment	6.7%	6.7%	5.9%	4.4%	3.2%	3.0%	0.1	-0.9	-1.5	-1.2	-0.2	-0.8	-0.7
NIEIR Structural U/E	12.6%	11.8%	10.7%	9.1%	8.2%	7.8%	-0.8	-1.1	-1.5	-0.9	-0.4	-1.1	-0.7

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	2,544	2,791	3,082	3,406	3,746	3,962	17,573	18,794	20,013	21,311	22,975	23,722	10.2%	7.9%
Taxes Paid	750	865	983	1,080	1,121	1,179	5,179	5,825	6,383	6,758	6,876	7,060	12.9%	4.5%
Benefits	481	533	541	453	407	370	3,320	3,590	3,512	2,837	2,496	2,215	-1.9%	-9.7%
Business Income	553	658	699	774	844	848	3,819	4,433	4,538	4,843	5,177	5,077	11.9%	4.7%
Interest Paid	266	337	394	440	513	660	1,835	2,271	2,557	2,753	3,146	3,951	18.3%	22.5%
Property Income	498	540	622	726	835	939	3,439	3,637	4,036	4,543	5,122	5,623	13.4%	13.7%
Disposable Income	3,375	3,667	3,960	4,289	4,606	4,691	23,317	24,691	25,712	26,838	28,248	28,085	8.3%	4.6%
Rank							25	24	24	22	19	17		
%Rank #1							58%	57%	55%	57%	56%	52%		
Business Value Added	3,097	3,449	3,781	4,179	4,590	4,810	21,393	23,227	24,551	26,154	28,152	28,798	10.5%	7.3%
Rank							21	17	16	13	12	12		
%Rank #1							62%	64%	63%	65%	69%	69%		
Business Productivity							45,327	47,969	50,398	53,832	55,581	58,373	5.9%	4.1%
Rank							21	17	15	9	9	8		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

QLD Mackay

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.10%	0.11%
Disability Support (aged 21-24)	0.11%	0.12%
Disability Support (aged 25+)	2.34%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.07%	0.08%
Parenting Payment - Single (aged 25+)	0.15%	0.19%
Unemployed Long Term	1.09%	1.52%
Unemployed Short Term	0.70%	1.26%
Youth Allowance - Non Student	0.71%	0.78%
Youth Allowance Student	0.25%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	14.2%	50
2004	14.5%	52
2005	13.7%	52
2006	10.6%	56
2007	8.8%	58
2008	7.9%	59

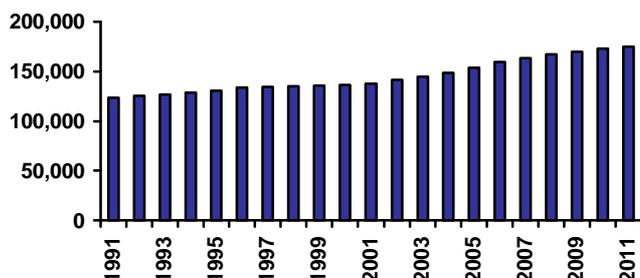
BABY BOUNCE

	Percent	Rank
2002	1.42%	13
2003	1.37%	15
2004	1.36%	16
2005	1.37%	16
2006	1.37%	23
2007	1.33%	26
Bounce 2005-06	0.00%	62
Actual Change 2005-06 (Number)	84	51
Bounce 2006-07	-0.04%	44
Actual Change 2006-07 (Number)	-18	41

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	9
Aged migration	0.0	46
Population growth rate, 55+	0.1	27
Demographic stress	-0.2	54
Dominant locations	0.4	48
Family / Youth migration	31.0	20
Fertility bounce, 1996-2005	0.0	58
Fertility, babies % pop, 2005	0.0	16
Working elderly	0.3	17
SUSTAINABILITY SCORE	53.5	43

Population Profile



POPULATION

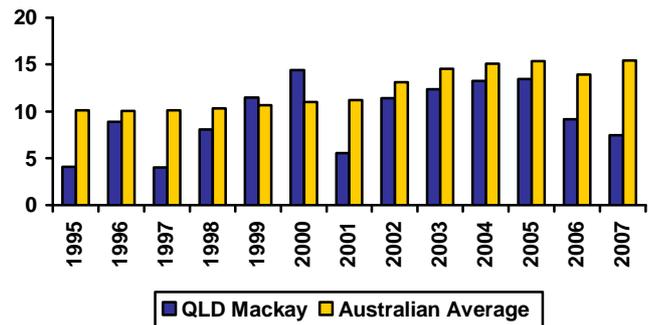
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	124	125	127	128	130	133	135	135	136	136	138	141	145	149	154	160	163	167	170	173	175

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	13.34	46.56	48
Average p.a. per capita	9.39	12.58	31
Hi Tech p.a. (1994-2007)	2.17	12.70	48
Hi Tech p.a. per capita	1.51	3.15	39
Info. Tech p.a. (1994-2007)	0.22	4.98	55
Info. Tech p.a. per capita	0.15	1.17	55
Average per capita (1994-2001)	8.48	10.80	31
Average per capita (2001-2007)	10.71	14.68	32
2001-07 avg./1994-01 avg.	1.26	1.35	47

Note: Per capita = 100,000 people

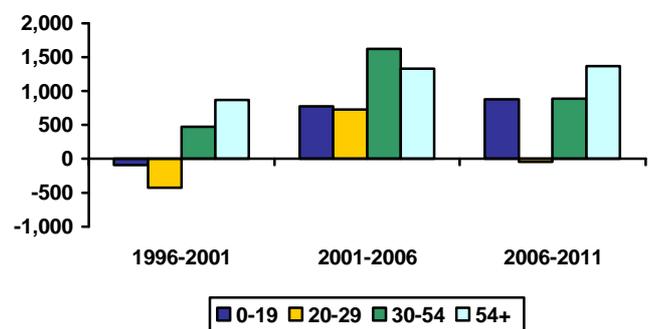
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	32.7%	31.4%	29.4%	29.4%
Age 20-29	13.9%	12.0%	12.6%	11.3%
Age 30-54	37.7%	38.3%	38.0%	37.2%
Age 55+	15.7%	18.3%	20.0%	22.1%
Population Change (average between years)				
Age 0-19		-97	772	879
Age 20-29		-420	723	-50
Age 30-54		468	1,622	884
Age 55+		867	1,331	1,365
Average Annual Growth		0.6%	3.0%	1.9%

Population Change by Age Group



QLD Mackay

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	297	486	42	22	24%	36%
Value of Property and Unincorporated Business	252	375	28	20	31%	47%
Value of Financial Assets	123	247	47	28	20%	33%
Value of Household Liabilities	78	136	34	35	156%	181%
Disposable Income after Debt Service Costs	60	68	30	18	53%	56%
Household Debt Service Ratio	14%	21%	29	25	197%	147%
Household Debt to Gross Income Ratio	1.04	1.41	29	25	197%	147%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	11,081	14,482	7,193	8,249	781	3,242
20 to 29		5,165	6,102	9,081	933	3,079
30 to 54		24,932	11,027	14,762	1,789	6,014
55+		19,913	4,063	4,522	232	3,172

Note: This data has been benchmarked to the Estimated Residential Population.

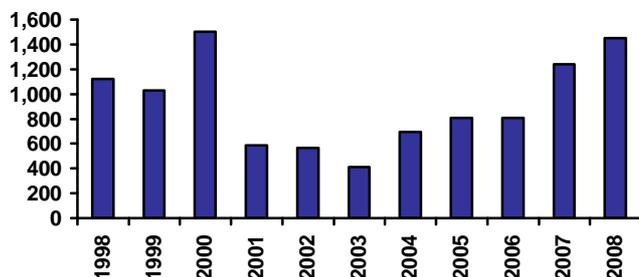
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	177	257	363	346	258	26%
Non Residential	109	124	196	218	176	59%
Total	286	380	559	564	434	36%
Value per capita \$2005/06						
Residential	1,286	1,679	2,225	2,072	1,516	15%
Non Residential	794	811	1,200	1,304	1,034	45%
Total	2,080	2,490	3,425	3,376	2,550	25%
Rank (value per capita)						
Residential	30	26	9	13	16	
Non Residential	30	26	18	14	11	
Total	28	24	13	15	15	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,123	1,029	1,503	584	565	409	696	810	808	1,240	1,448
Rank	21	26	4	49	36	57	34	25	16	12	9

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	29.0	29.3	29.3	28.5	28.1	28.2
Rank	6	6	6	6	6	7

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	113
Rank	52

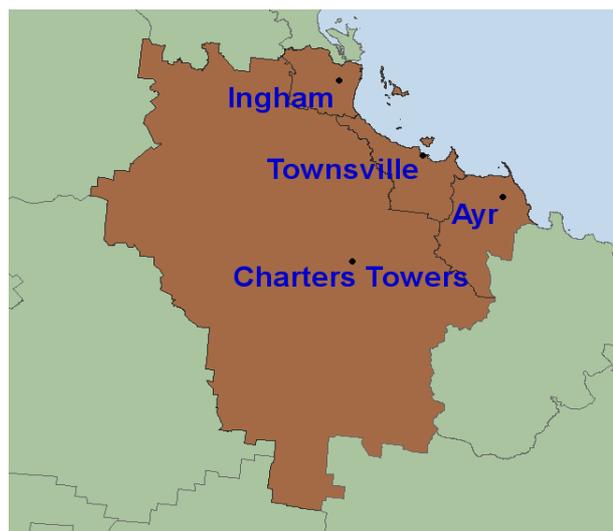
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	129	131	137
Mining	31	49	49
Manufacturing	241	241	268
Utilities	5	4	5
Construction	373	389	408
Wholesale	431	452	451
Retail	672	683	648
Hospitality	133	131	168
Transport	86	158	158
Communication	8	18	17
Finance	1,173	1,224	1,231
Property & Business	231	459	323
Government	11	13	13
Education	32	45	50
Health & Community	66	106	108
Cultural & Recreational	54	58	154
Personal Services	30	53	75

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

QLD North



North Queensland is centred on Townsville, a major city and port with an economic base emphasising defence and minerals processing. The region includes two intensive agricultural areas roughly equidistant north and south of Townsville and both originally developed for sugar: the Burdekin Delta and the Herbert River Valley. At a similar distance inland, Charters Towers was originally founded in a gold rush and survives as a commercial and educational centre. Despite nearby Magnetic Island and the Barrier Reef, the region is less involved in tourism than the other Queensland east coast regions.

Major centres:

Townsville, Ingham, Ayr, Charters Towers

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	197	200	205	210	215	221	1.7%	2.4%	2.5%	2.2%	2.8%	2.2%	2.5%
Households	65	66	68	70	71	73	2.3%	2.4%	2.5%	2.4%	3.0%	2.4%	2.7%
NIEIR Workforce	101	102	106	108	112	113	0.9%	3.7%	2.2%	3.4%	1.1%	2.3%	2.3%
NIEIR Employment	92	93	98	100	104	106	1.1%	5.0%	2.3%	4.1%	2.1%	2.8%	3.1%
NIEIR Unemployment	8.9	8.8	7.9	8.0	7.7	6.7	-1.3%	-10.0%	0.7%	-4.1%	-12.1%	-3.7%	-8.2%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.8%	8.6%	7.5%	7.4%	6.8%	5.9%	-0.2	-1.1	-0.1	-0.5	-0.9	-0.5	-0.7
Headline Unemployment	7.2%	6.8%	5.4%	5.2%	4.8%	4.0%	-0.4	-1.3	-0.3	-0.4	-0.8	-0.7	-0.6
NIEIR Structural U/E	12.0%	11.7%	11.2%	10.6%	9.7%	9.4%	-0.3	-0.6	-0.6	-0.9	-0.3	-0.5	-0.6

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,278	3,461	3,744	4,015	4,335	4,537	16,657	17,297	18,278	19,127	20,199	20,564	7.0%	6.3%
Taxes Paid	886	980	1,099	1,131	1,176	1,252	4,503	4,897	5,364	5,388	5,477	5,676	8.5%	5.2%
Benefits	664	734	754	686	664	642	3,372	3,668	3,684	3,268	3,095	2,911	1.1%	-3.2%
Business Income	676	784	919	848	936	1,052	3,432	3,916	4,487	4,040	4,360	4,767	7.9%	11.4%
Interest Paid	326	414	482	537	624	797	1,659	2,068	2,354	2,558	2,906	3,614	18.0%	21.9%
Property Income	575	627	672	745	838	983	2,920	3,134	3,280	3,549	3,902	4,457	9.0%	14.9%
Disposable Income	4,419	4,674	5,041	5,188	5,473	5,699	22,452	23,360	24,611	24,718	25,502	25,833	5.5%	4.8%
Rank							32	32	30	34	33	31		
%Rank #1							56%	54%	53%	52%	51%	48%		
Business Value Added	3,954	4,244	4,663	4,863	5,271	5,588	20,089	21,213	22,764	23,168	24,559	25,331	7.1%	7.2%
Rank							29	28	23	24	19	20		
%Rank #1							58%	58%	58%	57%	60%	60%		
Business Productivity							41,171	43,351	44,758	46,980	48,130	49,485	4.5%	2.6%
Rank							49	48	46	39	32	32		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

QLD North

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.09%	0.11%
Disability Support (aged 21-24)	0.10%	0.12%
Disability Support (aged 25+)	2.64%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.09%	0.08%
Parenting Payment - Single (aged 25+)	0.26%	0.19%
Unemployed Long Term	1.55%	1.52%
Unemployed Short Term	0.98%	1.26%
Youth Allowance - Non Student	0.78%	0.78%
Youth Allowance Student	0.33%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	15.0%	47
2004	15.7%	49
2005	15.0%	47
2006	13.2%	51
2007	12.1%	51
2008	11.3%	53

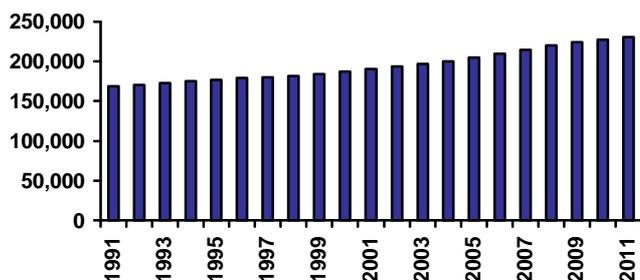
BABY BOUNCE

	Per cent	Rank
2002	1.42%	11
2003	1.38%	12
2004	1.38%	14
2005	1.41%	13
2006	1.42%	14
2007	1.36%	23
Bounce 2005-06	0.01%	59
Actual Change 2005-06 (Number)	100	48
Bounce 2006-07	-0.07%	50
Actual Change 2006-07 (Number)	-73	47

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	12
Aged migration	0.0	46
Population growth rate, 55+	0.0	37
Demographic stress	-0.2	56
Dominant locations	0.5	39
Family / Youth migration	41.0	13
Fertility bounce, 1996-2005	0.0	47
Fertility, babies % pop, 2005	0.0	13
Working elderly	0.3	22
SUSTAINABILITY SCORE	56.1	38

Population Profile



POPULATION

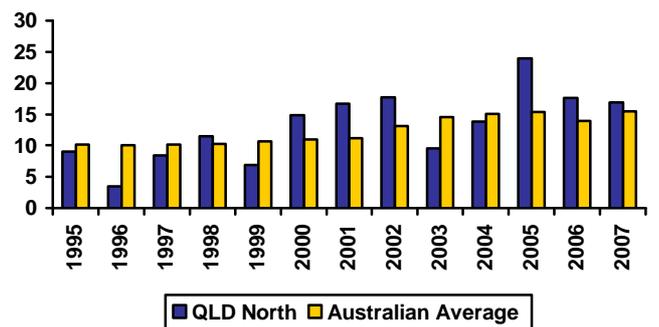
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	169	170	173	175	177	179	180	182	184	187	190	194	197	200	205	210	215	221	224	228	231

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	26.19	46.56	32
Average p.a. per capita	13.47	12.58	17
Hi Tech p.a. (1994-2007)	5.84	12.70	30
Hi Tech p.a. per capita	2.98	3.15	15
Info. Tech p.a. (1994-2007)	2.53	4.98	26
Info. Tech p.a. per capita	1.27	1.17	14
Average per capita (1994-2001)	11.05	10.80	17
Average per capita (2001-2007)	16.83	14.68	14
2001-07 avg./1994-01 avg.	1.52	1.35	13

Note: Per capita = 100,000 people

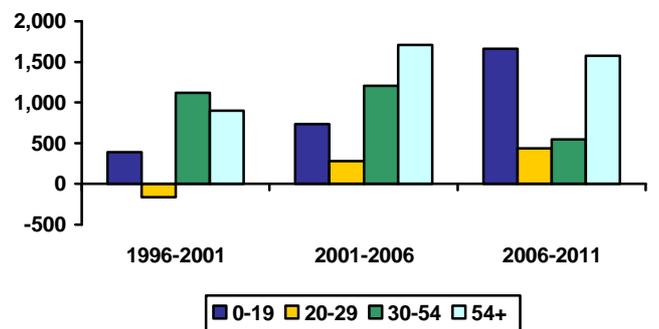
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	33.0%	32.1%	30.8%	31.6%
Age 20-29	15.6%	14.2%	13.6%	13.3%
Age 30-54	34.8%	35.7%	35.2%	33.2%
Age 55+	16.6%	18.0%	20.4%	21.9%
Population Change (average between years)				
Age 0-19		391	735	1,666
Age 20-29		-163	279	435
Age 30-54		1,119	1,206	549
Age 55+		900	1,706	1,573
Average Annual Growth		1.2%	2.0%	1.9%

Population Change by Age Group



QLD North

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	256	369	49	40	20%	27%
Value of Property and Unincorporated Business	231	311	34	31	28%	39%
Value of Financial Assets	96	186	54	50	16%	25%
Value of Household Liabilities	70	128	20	28	140%	171%
Disposable Income after Debt Service Costs	58	65	35	22	52%	53%
Household Debt Service Ratio	13%	21%	23	26	185%	148%
Household Debt to Gross Income Ratio	0.97	1.41	23	26	185%	148%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	14,468	19,302	12,407	10,478	980	3,627
20 to 29		7,815	9,786	12,204	1,455	3,626
30 to 54		31,226	17,971	14,580	2,091	5,143
55+		27,937	6,090	5,047	347	3,332

Note: This data has been benchmarked to the Estimated Residential Population.

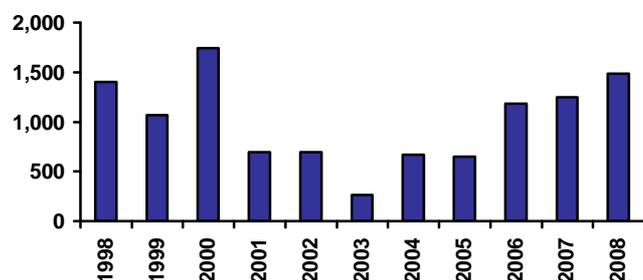
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	233	367	447	507	400	23%
Non Residential	259	233	354	387	315	51%
Total	492	600	802	894	716	34%
Value per capita \$2005/06						
Residential	1,236	1,803	2,085	2,296	1,783	14%
Non Residential	1,372	1,148	1,650	1,756	1,404	40%
Total	2,607	2,952	3,735	4,052	3,187	24%
Rank (value per capita)						
Residential	34	18	15	9	8	
Non Residential	34	18	8	8	9	
Total	14	12	11	9	9	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,402	1,067	1,742	694	693	266	666	648	1,185	1,247	1,483
Rank	9	23	3	38	25	64	38	43	7	11	8

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	29.5	29.5	29.9	28.2	28.3	28.4
Rank	5	5	5	7	5	5

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	198
Rank	32

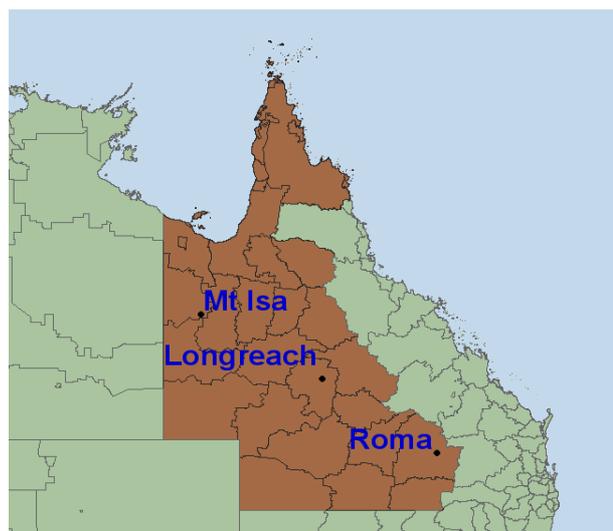
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	125	131	137
Mining	70	72	72
Manufacturing	383	395	411
Utilities	6	6	6
Construction	614	614	644
Wholesale	653	695	703
Retail	1,023	1,050	948
Hospitality	175	167	247
Transport	95	161	165
Communication	14	21	22
Finance	1,489	1,572	1,578
Property & Business	448	706	501
Government	14	15	15
Education	58	73	75
Health & Community	159	219	223
Cultural & Recreational	94	115	285
Personal Services	89	140	155

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

QLD Resource region



Inland Queensland and the Gulf Country comprise a vast expanse of sparsely-populated country, most of which is devoted to extensive pastoral production. However, a high proportion of total production by value comes from minerals: natural gas from the sedimentary basins of the south, base metals from the rocky country round Mt Isa, and bauxite from the red cliffs overlooking the Gulf. There is some mineral processing, particularly at Mt Isa, but the urban imprint of the mining industry is light – many of its labour needs are served fly-in fly-out. In the winter months the region attracts outback tourism, though transport costs discourage travel to the more distant destinations. The Aboriginal proportion of the population increases as one travels north, and at the northern extremity of the region lies the homeland of the Torres Strait Islanders.

Major centres:

Roma, Longreach, Mt Isa

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	97	96	96	96	96	96	-0.6%	0.1%	0.0%	0.2%	0.0%	-0.1%	0.1%
Households	29	29	30	30	31	31	1.4%	1.6%	1.6%	1.6%	1.6%	1.5%	1.6%
NIEIR Workforce	41	41	42	42	43	44	-0.9%	1.8%	0.0%	2.8%	1.5%	0.3%	2.2%
NIEIR Employment	38	38	39	39	40	40	-0.8%	3.3%	0.4%	3.0%	0.6%	1.0%	1.8%
NIEIR Unemployment	3.6	3.5	3.0	2.8	2.9	3.3	-2.0%	-13.8%	-5.5%	0.2%	14.5%	-7.2%	7.1%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.6%	8.5%	7.2%	6.8%	6.6%	7.5%	-0.1	-1.3	-0.4	-0.2	0.8	-0.6	0.3
Headline Unemployment	5.0%	4.9%	4.2%	4.1%	3.9%	3.7%	-0.1	-0.8	0.0	-0.2	-0.2	-0.3	-0.2
NIEIR Structural U/E	14.6%	15.0%	13.9%	11.5%	11.2%	11.3%	0.4	-1.2	-2.4	-0.2	0.1	-1.0	-0.1

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,299	1,332	1,421	1,494	1,607	1,670	13,447	13,872	14,776	15,532	16,672	17,331	4.8%	5.7%
Taxes Paid	470	579	716	721	509	527	4,867	6,033	7,448	7,501	5,278	5,474	15.3%	-14.5%
Benefits	383	449	403	418	465	517	3,970	4,674	4,187	4,351	4,824	5,369	2.9%	11.2%
Business Income	667	803	997	884	728	667	6,904	8,360	10,373	9,192	7,556	6,920	9.9%	-13.2%
Interest Paid	154	180	195	201	216	270	1,593	1,880	2,025	2,086	2,239	2,798	9.2%	15.9%
Property Income	542	420	800	1,192	1,311	299	5,612	4,372	8,326	12,396	13,604	3,108	30.0%	-49.9%
Disposable Income	2,612	2,565	3,171	3,617	3,916	2,631	27,041	26,722	32,988	37,617	40,634	27,307	11.5%	-14.7%
Rank							12	16	8	6	6	21		
%Rank #1							67%	62%	71%	79%	81%	51%		
Business Value Added	1,965	2,134	2,418	2,378	2,335	2,336	20,351	22,231	25,149	24,724	24,228	24,250	6.6%	-0.9%
Rank							25	22	13	18	21	24		
%Rank #1							59%	61%	64%	61%	59%	58%		
Business Productivity							46,654	48,674	49,939	51,856	53,516	56,843	3.6%	4.7%
Rank							17	15	16	14	12	11		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

QLD Resource region

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.13%	0.11%
Disability Support (aged 21-24)	0.14%	0.12%
Disability Support (aged 25+)	2.70%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.13%	0.08%
Parenting Payment - Single (aged 25+)	0.27%	0.19%
Unemployed Long Term	1.60%	1.52%
Unemployed Short Term	1.16%	1.26%
Youth Allowance - Non Student	0.85%	0.78%
Youth Allowance Student	0.59%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	14.7%	48
2004	17.5%	38
2005	12.7%	54
2006	11.6%	54
2007	11.9%	52
2008	19.7%	21

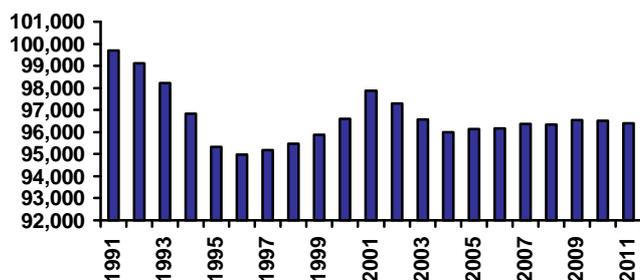
BABY BOUNCE

	Per cent	Rank
2002	1.81%	3
2003	1.71%	4
2004	1.71%	3
2005	1.71%	3
2006	1.69%	4
2007	1.76%	3
Bounce 2005-06	-0.02%	65
Actual Change 2005-06 (Number)	-23	65
Bounce 2006-07	0.07%	5
Actual Change 2006-07 (Number)	72	27

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.6	57
Share of population under 55	0.8	5
Aged migration	0.0	59
Population growth rate, 55+	0.1	7
Demographic stress	0.0	28
Dominant locations	0.4	57
Family / Youth migration	-3.0	38
Fertility bounce, 1996-2005	0.0	61
Fertility, babies % pop, 2005	0.0	2
Working elderly	0.4	3
SUSTAINABILITY SCORE	52.0	47

Population Profile



POPULATION

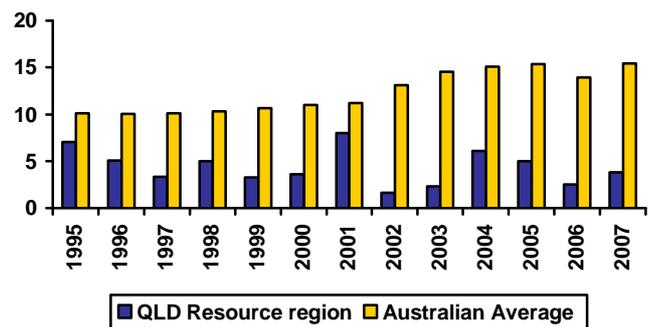
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	100	99	98	97	95	95	95	95	96	97	98	97	97	96	96	96	96	96	97	97	96

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	4.18	46.56	63
Average p.a. per capita	4.35	12.58	63
Hi Tech p.a. (1994-2007)	0.77	12.70	59
Hi Tech p.a. per capita	0.80	3.15	57
Info. Tech p.a. (1994-2007)	0.31	4.98	52
Info. Tech p.a. per capita	0.32	1.17	44
Average per capita (1994-2001)	4.61	10.80	58
Average per capita (2001-2007)	3.66	14.68	64
2001-07 avg./1994-01 avg.	0.79	1.35	65

Note: Per capita = 100,000 people

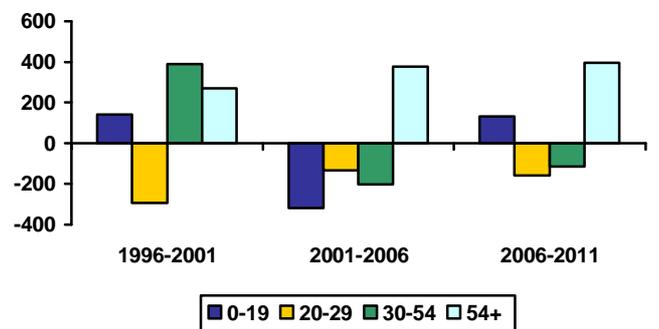
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	34.4%	34.2%	33.1%	33.3%
Age 20-29	16.6%	14.7%	14.2%	13.2%
Age 30-54	34.7%	35.8%	35.2%	34.2%
Age 55+	14.3%	15.3%	17.5%	19.3%
Population Change (average between years)				
Age 0-19		141	-319	132
Age 20-29		-292	-132	-158
Age 30-54		391	-203	-115
Age 55+		270	376	397
Average Annual Growth		0.6%	-0.4%	0.1%

Population Change by Age Group



QLD Resource region

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	316	328	32	51	25%	24%
Value of Property and Unincorporated Business	220	226	39	50	27%	28%
Value of Financial Assets	180	197	23	47	29%	26%
Value of Household Liabilities	84	96	40	6	167%	128%
Disposable Income after Debt Service Costs	112	69	1	17	100%	57%
Household Debt Service Ratio	11%	16%	12	3	155%	114%
Household Debt to Gross Income Ratio	0.82	1.09	12	3	155%	114%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	8,751	11,217	3,095	4,956	265	2,456
20 to 29		4,944	2,756	6,121	366	1,643
30 to 54		16,817	4,218	8,199	614	2,813
55+		11,670	1,353	2,245	111	1,490

Note: This data has been benchmarked to the Estimated Residential Population.

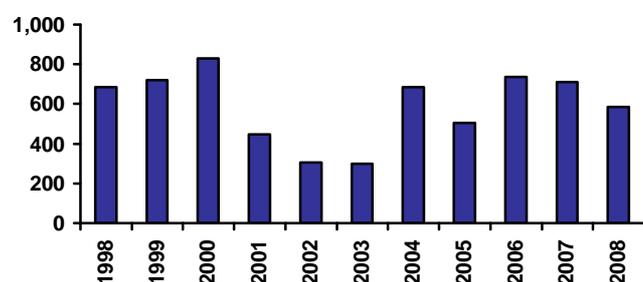
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	42	28	34	42	32	27%
Non Residential	77	43	55	73	61	46%
Total	119	72	90	115	93	39%
Value per capita \$2005/06						
Residential	434	294	353	434	333	27%
Non Residential	793	449	575	757	632	46%
Total	1,226	744	929	1,191	965	38%
Rank (value per capita)						
Residential	64	65	65	64	64	
Non Residential	64	65	60	43	35	
Total	57	65	64	63	63	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	686	720	831	447	305	298	686	505	736	710	584
Rank	45	43	27	57	60	61	37	54	21	37	40

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	31.6	31.4	32.2	31.4	31.2	31.3
Rank	4	4	4	4	4	4

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	46
Rank	63

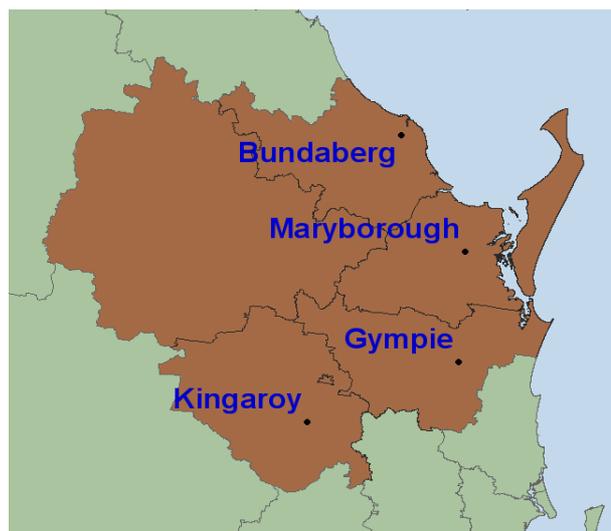
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	257	260	264
Mining	43	46	50
Manufacturing	127	125	133
Utilities	1	1	2
Construction	258	259	267
Wholesale	304	317	313
Retail	703	722	646
Hospitality	213	196	279
Transport	105	154	158
Communication	6	6	5
Finance	601	624	631
Property & Business	158	254	176
Government	43	42	45
Education	58	69	79
Health & Community	50	60	63
Cultural & Recreational	46	53	109
Personal Services	38	59	76

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

QLD Wide Bay Burnett



The coast of Wide Bay is sandy, lending itself to sweeping beaches and including the great forested sand dune of Fraser Island – all of which support tourism, with retirement settlement on the mainland. Inland much of the region comprises dry rocky hills, but intensive agriculture is practised on the downs round Kingaroy and made possible by irrigation from the Burnett on the plains round Bundaberg, as well as in several other pockets along the river. Kingaroy is known for peanuts and Bundaberg for sugar and its derivative rum. The chief rival to Bundaberg as a regional centre is Maryborough, which started out as a port for the Gympie gold rush but keeps going as a centre for engineering and commerce.

Major centres:

Kingaroy, Gympie, Maryborough, Bundaberg

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	242	249	256	264	270	277	2.8%	3.0%	3.1%	2.4%	2.6%	3.0%	2.5%
Households	85	88	91	95	99	102	3.6%	3.8%	3.9%	3.7%	3.7%	3.8%	3.7%
NIEIR Workforce	105	109	112	114	119	121	3.6%	3.2%	1.9%	4.5%	1.8%	2.9%	3.1%
NIEIR Employment	86	90	95	98	104	107	5.1%	5.3%	3.4%	6.3%	2.5%	4.6%	4.4%
NIEIR Unemployment	19.2	18.6	17.3	16.2	15.2	14.7	-3.5%	-6.8%	-6.2%	-6.3%	-3.1%	-5.5%	-4.7%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	18.3%	17.1%	15.4%	14.2%	12.7%	12.1%	-1.2	-1.7	-1.2	-1.5	-0.6	-1.4	-1.0
Headline Unemployment	12.7%	11.3%	9.0%	7.4%	6.6%	5.5%	-1.5	-2.2	-1.6	-0.8	-1.1	-1.8	-0.9
NIEIR Structural U/E	25.0%	23.6%	22.5%	21.9%	20.6%	19.9%	-1.4	-1.1	-0.7	-1.2	-0.7	-1.0	-1.0

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	2,456	2,702	2,913	3,151	3,467	3,635	10,157	10,872	11,376	11,934	12,825	13,108	8.7%	7.4%
Taxes Paid	682	773	814	873	821	871	2,821	3,111	3,180	3,306	3,038	3,141	8.6%	-0.1%
Benefits	1,106	1,255	1,288	1,274	1,321	1,351	4,575	5,048	5,030	4,823	4,886	4,873	4.8%	3.0%
Business Income	930	999	959	1,011	674	744	3,847	4,018	3,744	3,827	2,494	2,684	2.8%	-14.2%
Interest Paid	355	447	516	571	659	836	1,468	1,797	2,016	2,161	2,436	3,016	17.1%	21.0%
Property Income	510	566	633	701	766	931	2,107	2,279	2,471	2,654	2,832	3,356	11.2%	15.2%
Disposable Income	4,276	4,636	4,825	5,091	5,026	5,262	17,681	18,652	18,842	19,278	18,589	18,976	6.0%	1.7%
Rank							65	64	64	64	64	64		
%Rank #1							44%	43%	41%	41%	37%	35%		
Business Value Added	3,387	3,701	3,872	4,162	4,142	4,379	14,004	14,890	15,120	15,760	15,319	15,792	7.1%	2.6%
Rank							64	62	63	62	63	63		
%Rank #1							40%	41%	39%	39%	38%	38%		
Business Productivity							36,948	39,101	39,441	40,604	41,322	43,017	3.2%	2.9%
Rank							63	63	64	64	64	65		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

QLD Wide Bay Burnett

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.13%	0.11%
Disability Support (aged 21-24)	0.13%	0.12%
Disability Support (aged 25+)	5.58%	3.41%
Parenting Payment - Single (aged 16-20)	0.01%	0.00%
Parenting Payment - Single (aged 21-24)	0.09%	0.08%
Parenting Payment - Single (aged 25+)	0.26%	0.19%
Unemployed Long Term	1.92%	1.52%
Unemployed Short Term	1.68%	1.26%
Youth Allowance - Non Student	1.09%	0.78%
Youth Allowance Student	0.54%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	25.9%	3
2004	27.1%	3
2005	26.7%	3
2006	25.0%	3
2007	26.3%	2
2008	25.7%	3

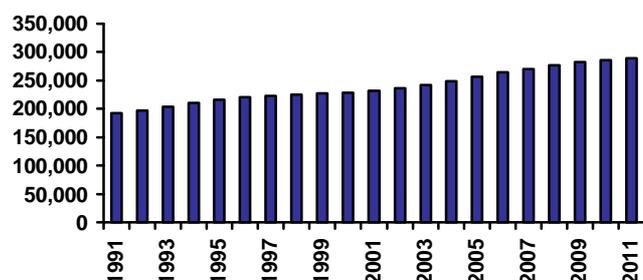
BABY BOUNCE

	Per cent	Rank
2002	1.17%	52
2003	1.14%	54
2004	1.14%	54
2005	1.16%	53
2006	1.17%	54
2007	1.14%	57
Bounce 2005-06	0.01%	58
Actual Change 2005-06 (Number)	129	38
Bounce 2006-07	-0.03%	42
Actual Change 2006-07 (Number)	-8	40

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	64
Aged migration	0.0	1
Population growth rate, 55+	0.1	1
Demographic stress	0.0	20
Dominant locations	0.4	54
Family / Youth migration	41.0	13
Fertility bounce, 1996-2005	0.0	38
Fertility, babies % pop, 2005	0.0	53
Working elderly	0.2	61
SUSTAINABILITY SCORE	46.6	61

Population Profile



POPULATION

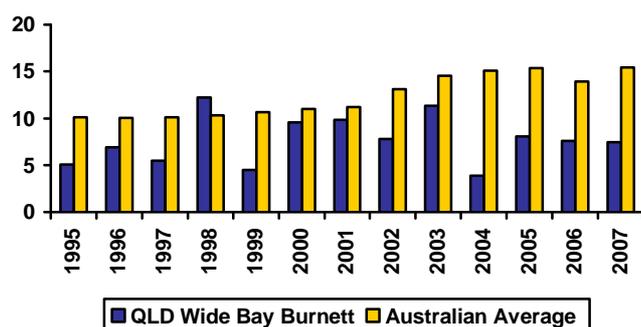
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	193	197	204	211	216	220	223	225	227	229	232	236	242	249	256	264	270	277	282	286	290

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	18.06	46.56	40
Average p.a. per capita	7.65	12.58	45
Hi Tech p.a. (1994-2007)	2.37	12.70	46
Hi Tech p.a. per capita	0.99	3.15	52
Info. Tech p.a. (1994-2007)	1.14	4.98	36
Info. Tech p.a. per capita	0.46	1.17	37
Average per capita (1994-2001)	7.65	10.80	38
Average per capita (2001-2007)	7.67	14.68	51
2001-07 avg./1994-01 avg.	1.00	1.35	62

Note: Per capita = 100,000 people

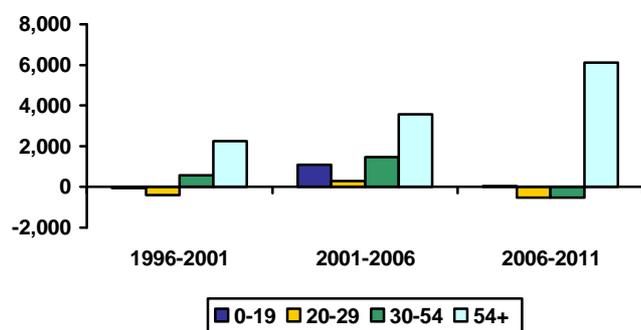
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.9%	29.2%	27.8%	25.4%
Age 20-29	10.4%	9.0%	8.5%	6.8%
Age 30-54	34.4%	33.9%	32.5%	28.8%
Age 55+	24.3%	27.9%	31.2%	39.0%
Population Change (average between years)				
Age 0-19		-58	1,089	58
Age 20-29		-406	305	-521
Age 30-54		565	1,462	-531
Age 55+		2,243	3,554	6,109
Average Annual Growth		1.0%	2.6%	1.9%

Population Change by Age Group



QLD Wide Bay Burnett

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	185	243	61	64	15%	18%
Value of Property and Unincorporated Business	177	221	56	51	22%	28%
Value of Financial Assets	68	120	59	60	11%	16%
Value of Household Liabilities	60	98	9	8	120%	131%
Disposable Income after Debt Service Costs	41	43	65	65	36%	35%
Household Debt Service Ratio	15%	24%	44	43	216%	165%
Household Debt to Gross Income Ratio	1.14	1.57	44	43	216%	165%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	15,908	22,391	13,617	13,734	814	4,282
20 to 29		6,565	9,077	8,866	696	2,318
30 to 54		36,872	17,756	21,859	1,662	5,207
55+		48,119	10,875	17,263	688	5,525

Note: This data has been benchmarked to the Estimated Residential Population.

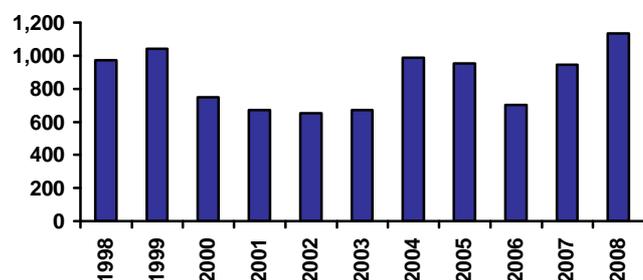
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	207	440	565	565	426	18%
Non Residential	125	149	198	181	137	15%
Total	332	590	762	746	563	17%
Value per capita \$2005/06						
Residential	894	1,735	2,088	2,038	1,509	8%
Non Residential	543	587	731	653	488	6%
Total	1,437	2,322	2,819	2,691	1,997	8%
Rank (value per capita)						
Residential	49	20	14	14	17	
Non Residential	49	20	50	56	54	
Total	51	32	21	22	24	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	973	1,043	747	672	651	672	990	954	703	945	1,136
Rank	24	24	37	40	31	29	14	12	24	24	15

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	26.6	27.5	27.5	27.3	26.9	26.5
Rank	9	9	10	9	10	11

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	109
Rank	53

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	190	197	207
Mining	25	28	29
Manufacturing	394	396	415
Utilities	1	1	2
Construction	476	484	504
Wholesale	632	659	666
Retail	1,016	1,046	977
Hospitality	186	192	258
Transport	112	178	184
Communication	3	12	13
Finance	1,247	1,323	1,330
Property & Business	332	510	336
Government	21	20	24
Education	82	104	111
Health & Community	113	169	182
Cultural & Recreational	76	85	196
Personal Services	46	84	111

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Adelaide Inner



The Adelaide CBD reflects the vision of Colonel Light, who placed it half-way between the port and the Mt Lofty scarp. Adelaide has always cherished its gardens, and these are particularly well looked after in the suburbs between the CBD and the scarp – suburbs which are also responsible for a high proportion of South Australia's research and development activity. Adelaide airport lies within the region, close to the CBD at the price of a rather restricted site. The gracious beach-side suburbs of Holdfast Bay are nearby. The CBD provides the economic base of the region, with much of the rest comprising commuter suburbs.

Major centres:

Adelaide, Glenelg

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	366	369	372	376	379	383	0.7%	0.8%	1.1%	0.9%	0.9%	0.9%	0.9%
Households	146	147	148	149	149	150	0.8%	0.6%	0.6%	0.6%	0.5%	0.6%	0.5%
NIEIR Workforce	187	191	194	196	199	203	2.4%	1.6%	1.2%	1.4%	1.9%	1.7%	1.6%
NIEIR Employment	172	177	181	184	188	191	2.8%	1.9%	1.7%	2.2%	2.0%	2.1%	2.1%
NIEIR Unemployment	14.1	13.7	13.5	12.8	11.5	11.6	-2.8%	-1.4%	-5.8%	-10.0%	1.0%	-3.4%	-4.7%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	7.6%	7.2%	7.0%	6.5%	5.8%	5.7%	-0.4	-0.2	-0.5	-0.7	-0.1	-0.4	-0.4
Headline Unemployment	5.0%	4.9%	4.8%	4.4%	3.9%	3.8%	-0.1	-0.1	-0.4	-0.5	-0.1	-0.2	-0.3
NIEIR Structural U/E	12.0%	11.2%	10.8%	10.3%	9.8%	9.5%	-0.8	-0.4	-0.5	-0.5	-0.3	-0.6	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	6,764	6,929	7,332	7,587	7,941	8,226	18,467	18,779	19,725	20,184	20,929	21,490	3.9%	4.1%
Taxes Paid	1,937	2,110	2,274	2,353	2,562	2,635	5,288	5,718	6,118	6,261	6,751	6,883	6.7%	5.8%
Benefits	1,416	1,532	1,572	1,492	1,503	1,492	3,865	4,152	4,229	3,969	3,961	3,897	1.8%	0.0%
Business Income	1,501	1,621	1,726	1,797	1,842	1,889	4,097	4,394	4,642	4,781	4,855	4,935	6.2%	2.5%
Interest Paid	575	749	903	1,037	1,247	1,624	1,570	2,030	2,428	2,759	3,286	4,242	21.7%	25.1%
Property Income	2,250	2,623	2,791	2,949	3,306	4,348	6,144	7,110	7,509	7,844	8,712	11,360	9.4%	21.4%
Disposable Income	10,044	10,483	10,964	11,177	12,103	13,230	27,420	28,413	29,494	29,734	31,899	34,564	3.6%	8.8%
Rank							10	11	12	14	10	9		
%Rank #1							68%	66%	63%	63%	64%	64%		
Business Value Added	8,265	8,550	9,058	9,384	9,783	10,115	22,564	23,173	24,367	24,965	25,784	26,424	4.3%	3.8%
Rank							13	18	18	15	14	14		
%Rank #1							65%	64%	62%	62%	63%	63%		
Business Productivity							47,158	47,476	49,426	50,357	51,375	52,099	2.2%	1.7%
Rank							15	19	17	16	17	21		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Adelaide Inner

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.12%	0.11%
Disability Support (aged 21-24)	0.13%	0.12%
Disability Support (aged 25+)	3.15%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.09%	0.19%
Unemployed Long Term	0.87%	1.52%
Unemployed Short Term	0.96%	1.26%
Youth Allowance - Non Student	0.65%	0.78%
Youth Allowance Student	0.18%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	14.1%	52
2004	14.6%	51
2005	14.3%	50
2006	13.3%	49
2007	12.4%	50
2008	11.3%	52

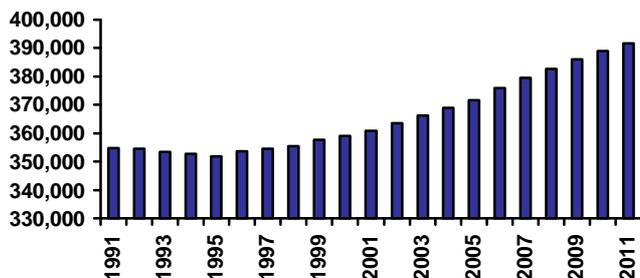
BABY BOUNCE

	Per cent	Rank
2002	0.96%	65
2003	0.94%	65
2004	0.94%	65
2005	0.95%	65
2006	0.97%	65
2007	1.01%	64
Bounce 2005-06	0.01%	57
Actual Change 2005-06 (Number)	95	50
Bounce 2006-07	0.05%	17
Actual Change 2006-07 (Number)	213	15

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.9	47
Share of population under 55	0.7	56
Aged migration	0.0	17
Population growth rate, 55+	0.0	43
Demographic stress	0.0	25
Dominant locations	1.0	1
Family / Youth migration	-2.0	37
Fertility bounce, 1996-2005	0.0	11
Fertility, babies % pop, 2005	0.0	65
Working elderly	0.3	45
SUSTAINABILITY SCORE	73.9	19

Population Profile



POPULATION

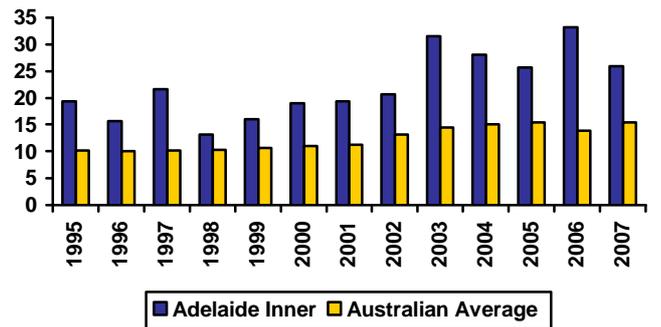
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	355	355	353	353	352	354	355	356	358	359	361	364	366	369	372	376	379	383	386	389	392

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	81.43	46.56	10
Average p.a. per capita	22.38	12.58	9
Hi Tech p.a. (1994-2007)	28.54	12.70	8
Hi Tech p.a. per capita	7.82	3.15	5
Info. Tech p.a. (1994-2007)	9.11	4.98	10
Info. Tech p.a. per capita	2.50	1.17	8
Average per capita (1994-2001)	18.10	10.80	9
Average per capita (2001-2007)	27.03	14.68	9
2001-07 avg./1994-01 avg.	1.49	1.35	15

Note: Per capita = 100,000 people

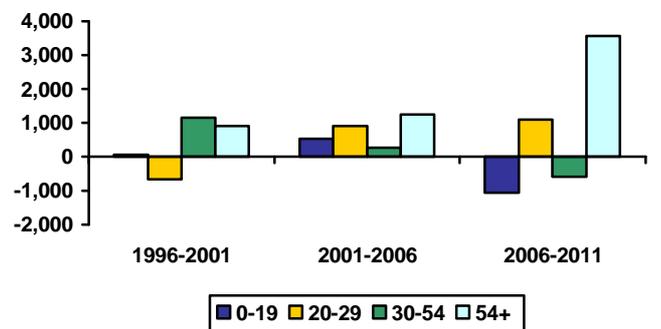
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	23.6%	23.2%	23.0%	20.8%
Age 20-29	13.9%	12.7%	13.4%	14.3%
Age 30-54	34.6%	35.5%	34.5%	32.4%
Age 55+	27.9%	28.5%	29.1%	32.5%
Population Change (average between years)				
Age 0-19		48	530	-1,059
Age 20-29		-668	912	1,098
Age 30-54		1,152	264	-580
Age 55+		897	1,251	3,571
Average Annual Growth		0.4%	0.8%	0.8%

Population Change by Age Group



Adelaide Inner

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	451	617	17	15	36%	46%
Value of Property and Unincorporated Business	317	426	14	14	39%	53%
Value of Financial Assets	188	320	21	17	31%	42%
Value of Household Liabilities	53	129	4	29	106%	173%
Disposable Income after Debt Service Costs	62	76	25	10	56%	63%
Household Debt Service Ratio	9%	18%	4	11	131%	128%
Household Debt to Gross Income Ratio	0.69	1.22	4	11	131%	128%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	17,964	33,786	11,677	8,662	4,620	3,403
20 to 29		18,344	12,385	16,845	9,279	5,251
30 to 54		65,313	25,175	19,818	7,822	6,388
55+		79,335	13,983	8,282	832	6,739

Note: This data has been benchmarked to the Estimated Residential Population.

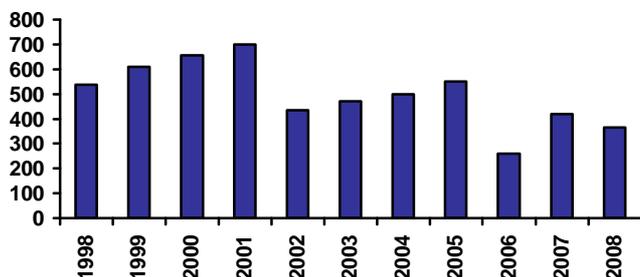
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	378	453	449	482	385	-3%
Non Residential	359	535	490	519	434	-10%
Total	737	987	939	1,001	820	-7%
Value per capita \$2005/06						
Residential	1,051	1,221	1,182	1,259	998	-6%
Non Residential	995	1,442	1,292	1,357	1,125	-13%
Total	2,046	2,662	2,474	2,616	2,122	-10%
Rank (value per capita)						
Residential	45	43	41	38	39	
Non Residential	45	43	15	11	10	
Total	31	19	28	25	20	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	538	611	656	699	435	470	500	550	260	419	365
Rank	53	54	47	37	51	53	55	51	61	59	54

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	20.5	22.1	22.5	22.7	23.3	23.5
Rank	42	42	40	40	33	28

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	927
Rank	8

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	149	141	146
Mining	155	174	189
Manufacturing	1,602	1,799	1,864
Utilities	35	34	39
Construction	1,413	1,416	1,445
Wholesale	3,157	3,455	3,478
Retail	3,097	3,309	2,743
Hospitality	294	295	821
Transport	151	406	413
Communication	65	95	101
Finance	9,049	9,934	9,970
Property & Business	2,402	4,561	3,737
Government	234	221	226
Education	204	207	248
Health & Community	624	918	936
Cultural & Recreational	290	350	953
Personal Services	379	649	738

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Adelaide North



The northern suburbs of Adelaide are mainly flat, but rise into the hills at Tea Tree Gully. The Port is as old as the state, and the town of Gawler at the northern edge of the region similarly, but much of the region comprises post-war planned suburbs in which public housing was provided to house workers in new manufacturing industries. These have since declined, and despite a number of high-profile research locations the region has had difficulty in converting to knowledge-based industry. The suburbs close to Adelaide Inner have experienced some gentrification, but not yet much decentralisation of inner-city activities.

Major centres:

Port Adelaide, Salisbury, Elizabeth

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	480	483	487	492	499	507	0.6%	0.8%	1.2%	1.4%	1.6%	0.9%	1.5%
Households	178	180	181	182	184	185	0.7%	0.8%	0.7%	0.7%	1.0%	0.7%	0.9%
NIEIR Workforce	230	238	240	243	248	253	3.7%	0.7%	1.1%	2.1%	2.1%	1.8%	2.1%
NIEIR Employment	202	208	211	216	221	225	3.1%	1.5%	2.2%	2.3%	2.2%	2.2%	2.2%
NIEIR Unemployment	28.0	30.3	28.9	26.9	27.1	27.5	8.0%	-4.6%	-6.7%	0.7%	1.2%	-1.3%	1.0%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	12.2%	12.7%	12.0%	11.1%	11.0%	10.9%	0.5	-0.7	-0.9	-0.2	-0.1	-0.4	-0.1
Headline Unemployment	7.9%	8.8%	8.1%	7.0%	7.0%	6.9%	0.9	-0.7	-1.1	0.0	-0.1	-0.3	0.0
NIEIR Structural U/E	20.6%	19.3%	18.9%	18.5%	17.9%	17.3%	-1.4	-0.4	-0.4	-0.6	-0.6	-0.7	-0.6

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	7,195	7,449	7,824	8,099	8,531	8,907	14,993	15,427	16,072	16,445	17,079	17,557	4.0%	4.9%
Taxes Paid	1,689	1,831	1,932	1,989	2,194	2,291	3,520	3,792	3,968	4,039	4,393	4,515	5.6%	7.3%
Benefits	2,257	2,470	2,542	2,462	2,531	2,565	4,703	5,116	5,222	4,999	5,068	5,056	2.9%	2.1%
Business Income	893	955	950	992	948	954	1,862	1,979	1,951	2,014	1,897	1,880	3.5%	-1.9%
Interest Paid	755	937	1,077	1,179	1,349	1,716	1,573	1,941	2,212	2,393	2,702	3,383	16.0%	20.7%
Property Income	1,050	1,215	1,259	1,347	1,529	1,989	2,188	2,516	2,587	2,734	3,060	3,921	8.6%	21.5%
Disposable Income	9,574	9,897	10,156	10,324	11,074	11,585	19,951	20,497	20,861	20,962	22,171	22,834	2.5%	5.9%
Rank							56	58	59	60	56	57		
%Rank #1							49%	48%	45%	44%	44%	43%		
Business Value Added	8,088	8,404	8,774	9,091	9,478	9,861	16,855	17,406	18,023	18,459	18,977	19,436	4.0%	4.2%
Rank							57	57	59	59	52	56		
%Rank #1							49%	48%	46%	46%	47%	46%		
Business Productivity							39,520	39,901	41,071	41,454	42,535	43,316	1.6%	2.2%
Rank							55	59	60	60	60	62		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Adelaide North

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.13%	0.11%
Disability Support (aged 21-24)	0.14%	0.12%
Disability Support (aged 25+)	5.10%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.09%	0.08%
Parenting Payment - Single (aged 25+)	0.29%	0.19%
Unemployed Long Term	2.00%	1.52%
Unemployed Short Term	1.74%	1.26%
Youth Allowance - Non Student	1.04%	0.78%
Youth Allowance Student	0.48%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	23.6%	5
2004	25.0%	5
2005	25.0%	4
2006	23.8%	4
2007	22.9%	6
2008	22.1%	8

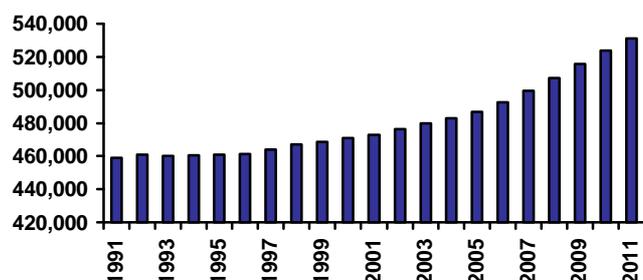
BABY BOUNCE

	Per cent	Rank
2002	1.21%	43
2003	1.20%	40
2004	1.21%	38
2005	1.22%	36
2006	1.24%	41
2007	1.29%	31
Bounce 2005-06	0.02%	55
Actual Change 2005-06 (Number)	166	30
Bounce 2006-07	0.05%	15
Actual Change 2006-07 (Number)	344	8

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	32
Aged migration	0.0	33
Population growth rate, 55+	0.0	49
Demographic stress	-0.1	36
Dominant locations	1.0	1
Family / Youth migration	19.0	26
Fertility bounce, 1996-2005	0.0	21
Fertility, babies % pop, 2005	0.0	41
Working elderly	0.2	59
SUSTAINABILITY SCORE	75.6	15

Population Profile



POPULATION

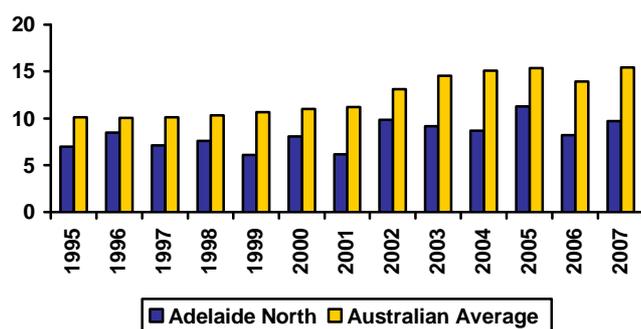
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	459	461	460	460	461	461	464	467	469	471	473	476	480	483	487	492	499	507	516	524	531

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	39.98	46.56	24
Average p.a. per capita	8.40	12.58	39
Hi Tech p.a. (1994-2007)	9.05	12.70	22
Hi Tech p.a. per capita	1.89	3.15	30
Info. Tech p.a. (1994-2007)	3.88	4.98	19
Info. Tech p.a. per capita	0.81	1.17	24
Average per capita (1994-2001)	7.53	10.80	39
Average per capita (2001-2007)	9.60	14.68	38
2001-07 avg./1994-01 avg.	1.27	1.35	45

Note: Per capita = 100,000 people

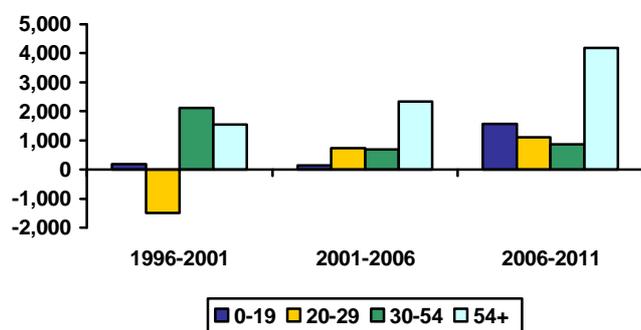
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	28.1%	27.6%	26.7%	26.2%
Age 20-29	14.3%	12.4%	12.7%	12.8%
Age 30-54	34.6%	36.0%	35.3%	33.5%
Age 55+	22.9%	24.0%	25.4%	27.5%
Population Change (average between years)				
Age 0-19		171	142	1,562
Age 20-29		-1,504	736	1,113
Age 30-54		2,114	677	852
Age 55+		1,543	2,335	4,196
Average Annual Growth		0.5%	0.8%	1.5%

Population Change by Age Group



Adelaide North

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	181	249	64	63	14%	18%
Value of Property and Unincorporated Business	191	258	50	43	24%	32%
Value of Financial Assets	53	99	64	63	9%	13%
Value of Household Liabilities	63	109	13	12	126%	145%
Disposable Income after Debt Service Costs	46	52	57	59	41%	42%
Household Debt Service Ratio	14%	22%	33	31	202%	153%
Household Debt to Gross Income Ratio	1.06	1.46	33	31	202%	153%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	29,567	51,798	20,341	11,832	3,685	6,986
20 to 29		27,677	19,110	17,505	5,438	6,380
30 to 54		95,335	32,992	23,142	5,678	10,028
55+		93,589	13,599	8,422	698	8,686

Note: This data has been benchmarked to the Estimated Residential Population.

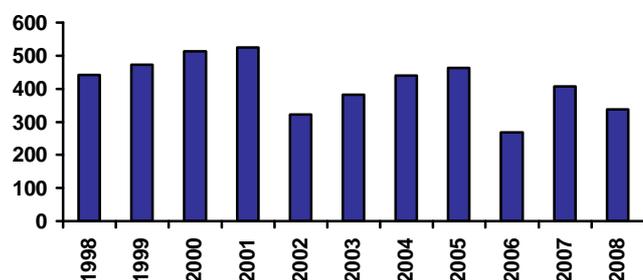
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	341	524	612	782	631	29%
Non Residential	212	378	390	364	302	-7%
Total	553	902	1,002	1,147	934	14%
Value per capita \$2005/06						
Residential	723	1,078	1,225	1,542	1,224	23%
Non Residential	449	778	782	718	586	-11%
Total	1,171	1,857	2,007	2,260	1,810	9%
Rank (value per capita)						
Residential	57	52	38	28	26	
Non Residential	57	52	45	49	42	
Total	59	47	44	32	31	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	441	473	514	524	323	382	441	463	268	407	338
Rank	61	60	57	53	57	58	58	59	60	60	56

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	21.1	22.8	22.9	23.3	23.7	24.2
Rank	35	37	36	34	28	25

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	321
Rank	26

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	93	95	102
Mining	33	35	39
Manufacturing	1,727	1,902	1,976
Utilities	9	8	10
Construction	1,235	1,242	1,277
Wholesale	1,715	1,854	1,904
Retail	1,796	1,898	1,742
Hospitality	143	145	331
Transport	360	492	505
Communication	16	27	27
Finance	2,195	2,460	2,478
Property & Business	724	1,284	959
Government	30	24	26
Education	106	142	157
Health & Community	195	275	287
Cultural & Recreational	106	126	388
Personal Services	156	231	295

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Adelaide South



The Mt Lofty ranges are bounded by scarps on both their eastern and western sides. The Western scarp reaches the shore of St Vincent's Gulf at Brighton, and south of here the shoreline is marked by cliffs. Similarly the southern shore of the region is picturesque and provides the site for a row of retirement resorts. The hills near the summit of Mt Lofty have relatively high rainfall, beautiful gardens and mansions, while in the other parts of the region close to Adelaide viticulture is being pushed aside by commuter suburban developments.

Major centres:

Noarlunga Centre, Victor Harbor, Mt Barker

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	352	354	356	359	363	366	0.6%	0.7%	0.9%	0.9%	1.0%	0.7%	0.9%
Households	124	127	129	131	134	136	1.8%	1.8%	1.8%	1.8%	2.0%	1.8%	1.9%
NIEIR Workforce	181	184	187	189	191	195	1.7%	1.4%	1.2%	1.2%	2.2%	1.4%	1.7%
NIEIR Employment	166	168	171	174	176	180	1.6%	1.4%	1.7%	1.3%	2.2%	1.6%	1.7%
NIEIR Unemployment	15.5	15.8	15.9	15.3	15.4	15.7	2.1%	1.0%	-3.9%	0.2%	2.1%	-0.3%	1.2%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.5%	8.6%	8.5%	8.1%	8.0%	8.0%	0.0	0.0	-0.4	-0.1	0.0	-0.1	0.0
Headline Unemployment	4.9%	5.0%	5.0%	4.6%	4.4%	4.3%	0.2	-0.1	-0.4	-0.1	-0.2	-0.1	-0.2
NIEIR Structural U/E	12.7%	12.2%	11.9%	11.6%	11.4%	11.0%	-0.5	-0.3	-0.3	-0.2	-0.4	-0.4	-0.3

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	5,901	5,962	6,243	6,436	6,672	6,930	16,781	16,860	17,531	17,911	18,400	18,929	2.9%	3.8%
Taxes Paid	1,491	1,573	1,656	1,693	1,817	1,910	4,241	4,447	4,650	4,711	5,011	5,217	4.3%	6.2%
Benefits	1,376	1,543	1,596	1,592	1,686	1,759	3,914	4,365	4,481	4,430	4,648	4,804	5.0%	5.1%
Business Income	1,045	1,088	1,099	1,113	1,005	1,078	2,971	3,078	3,085	3,097	2,771	2,946	2.1%	-1.6%
Interest Paid	675	815	912	972	1,083	1,366	1,918	2,306	2,561	2,705	2,987	3,731	12.9%	18.5%
Property Income	953	1,062	1,157	1,216	1,356	1,688	2,711	3,004	3,249	3,384	3,739	4,609	8.5%	17.8%
Disposable Income	7,719	7,833	8,143	8,331	8,841	9,291	21,952	22,152	22,866	23,185	24,381	25,379	2.6%	5.6%
Rank							39	49	49	48	44	34		
%Rank #1							54%	51%	49%	49%	49%	47%		
Business Value Added	6,946	7,050	7,342	7,549	7,677	8,009	19,752	19,938	20,616	21,009	21,171	21,875	2.8%	3.0%
Rank							32	38	39	38	35	35		
%Rank #1							57%	55%	53%	52%	52%	52%		
Business Productivity							41,155	41,172	42,489	43,066	43,956	44,652	1.5%	1.8%
Rank							50	53	52	54	55	56		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Adelaide South

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.13%	0.11%
Disability Support (aged 21-24)	0.14%	0.12%
Disability Support (aged 25+)	3.54%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.15%	0.19%
Unemployed Long Term	1.57%	1.52%
Unemployed Short Term	1.10%	1.26%
Youth Allowance - Non Student	0.73%	0.78%
Youth Allowance Student	0.31%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	17.8%	28
2004	19.7%	24
2005	19.6%	24
2006	19.1%	21
2007	19.1%	22
2008	18.9%	26

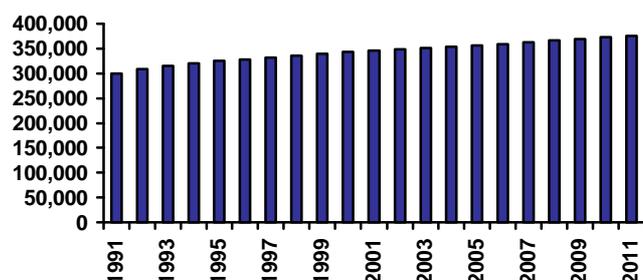
BABY BOUNCE

	Per cent	Rank
2002	1.19%	48
2003	1.17%	50
2004	1.16%	50
2005	1.15%	55
2006	1.16%	56
2007	1.15%	55
Bounce 2005-06	0.01%	61
Actual Change 2005-06 (Number)	65	54
Bounce 2006-07	-0.01%	33
Actual Change 2006-07 (Number)	12	34

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	39
Aged migration	0.0	17
Population growth rate, 55+	0.1	17
Demographic stress	0.0	15
Dominant locations	0.7	30
Family / Youth migration	-29.0	62
Fertility bounce, 1996-2005	0.0	53
Fertility, babies % pop, 2005	0.0	56
Working elderly	0.3	31
SUSTAINABILITY SCORE	61.2	30

Population Profile



POPULATION

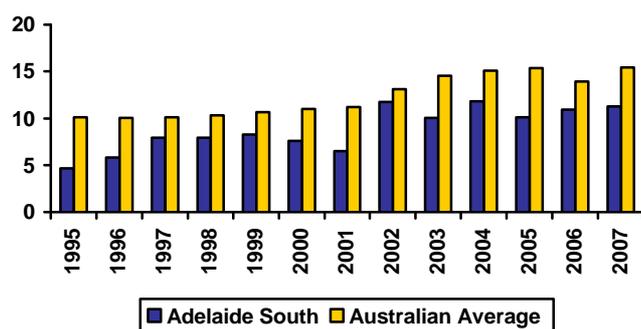
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	300	308	315	320	325	328	332	336	340	343	346	349	352	354	356	359	363	366	370	373	375

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	31.18	46.56	27
Average p.a. per capita	9.01	12.58	36
Hi Tech p.a. (1994-2007)	7.76	12.70	26
Hi Tech p.a. per capita	2.24	3.15	21
Info. Tech p.a. (1994-2007)	1.03	4.98	38
Info. Tech p.a. per capita	0.29	1.17	46
Average per capita (1994-2001)	7.53	10.80	40
Average per capita (2001-2007)	11.08	14.68	28
2001-07 avg./1994-01 avg.	1.47	1.35	18

Note: Per capita = 100,000 people

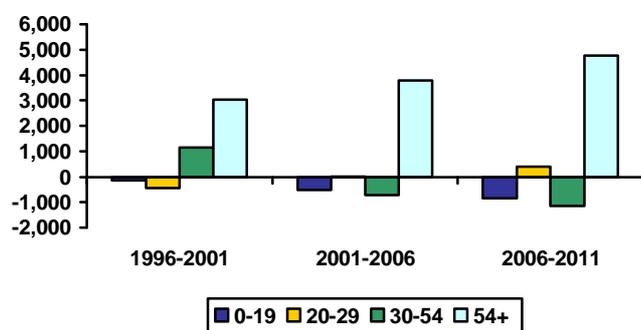
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	31.7%	29.8%	28.0%	25.7%
Age 20-29	12.1%	10.8%	10.5%	10.5%
Age 30-54	38.6%	38.2%	35.9%	32.8%
Age 55+	17.7%	21.1%	25.6%	30.9%
Population Change (average between years)				
Age 0-19		-137	-515	-835
Age 20-29		-433	24	382
Age 30-54		1,138	-715	-1,153
Age 55+		3,026	3,783	4,776
Average Annual Growth		1.1%	0.7%	0.9%

Population Change by Age Group



Adelaide South

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	221	292	58	58	18%	22%
Value of Property and Unincorporated Business	230	276	35	38	28%	35%
Value of Financial Assets	79	141	58	58	13%	19%
Value of Household Liabilities	87	125	47	23	173%	167%
Disposable Income after Debt Service Costs	53	60	48	37	48%	49%
Household Debt Service Ratio	17%	22%	57	32	235%	153%
Household Debt to Gross Income Ratio	1.23	1.46	57	32	235%	153%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	21,105	41,826	17,351	9,330	2,165	3,993
20 to 29		19,465	13,409	10,125	1,187	2,583
30 to 54		73,357	25,536	16,997	3,573	5,195
55+		67,161	11,444	8,020	637	4,859

Note: This data has been benchmarked to the Estimated Residential Population.

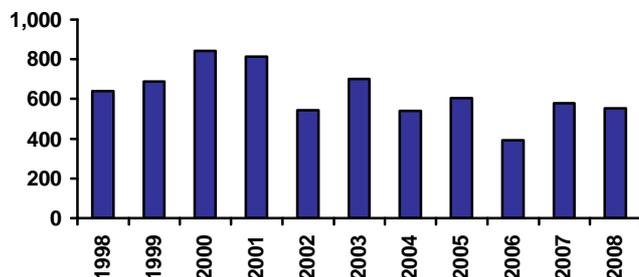
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	370	396	396	495	382	7%
Non Residential	91	133	178	164	123	16%
Total	461	529	574	659	505	9%
Value per capita \$2005/06						
Residential	1,073	1,115	1,092	1,352	1,034	4%
Non Residential	264	375	492	447	334	13%
Total	1,337	1,490	1,584	1,799	1,368	6%
Rank (value per capita)						
Residential	41	50	47	33	35	
Non Residential	41	50	62	64	63	
Total	55	57	56	48	50	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	641	687	842	813	543	700	542	606	391	580	553
Rank	50	45	25	30	41	21	51	47	49	46	43

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	18.2	20.0	20.5	20.3	21.1	21.2
Rank	51	50	53	51	51	48

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	184
Rank	34

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	259	262	269
Mining	36	39	39
Manufacturing	716	769	794
Utilities	7	6	6
Construction	973	963	1,009
Wholesale	776	841	854
Retail	1,107	1,145	1,030
Hospitality	125	123	251
Transport	185	237	243
Communication	7	16	22
Finance	1,682	1,792	1,807
Property & Business	512	856	631
Government	8	7	7
Education	39	47	55
Health & Community	128	188	198
Cultural & Recreational	76	86	243
Personal Services	84	145	181

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

SA Mallee South East



Though flat, the South East of South Australia is limestone country with the remnants of volcanic activity. Further north, the sand ridges and swamps give way to the sand dunes of the SA mallee. The plantation forestry and grazing in the south of the region gives way to wheat and barley as one travels north. Mt Gambier is a centre for timber processing, while the Coonawarra limestone belt is known for its fine wines. At the other end of the region, Murray Bridge is the gateway from Adelaide into the region. The region also includes Kangaroo Island, a tourist-oriented island too small to form a region by itself.

Major centres:

Mt Gambier, Naracoorte, Murray Bridge

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	94	95	96	97	97	98	0.6%	1.2%	0.6%	0.6%	0.4%	0.8%	0.5%
Households	35	36	37	38	39	41	3.3%	3.4%	3.4%	3.2%	3.3%	3.4%	3.3%
NIEIR Workforce	45	45	46	46	46	47	0.5%	0.5%	1.3%	0.7%	2.1%	0.8%	1.4%
NIEIR Employment	41	42	42	43	43	43	1.5%	0.6%	1.7%	-0.2%	1.7%	1.3%	0.7%
NIEIR Unemployment	4.0	3.6	3.6	3.4	3.9	4.1	-10.0%	-0.6%	-4.1%	12.7%	6.8%	-5.0%	9.7%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.9%	8.0%	7.9%	7.5%	8.3%	8.7%	-0.9	-0.1	-0.4	0.9	0.4	-0.5	0.6
Headline Unemployment	4.8%	4.0%	4.0%	3.8%	4.4%	4.1%	-0.8	0.0	-0.2	0.6	-0.2	-0.3	0.2
NIEIR Structural U/E	14.4%	13.8%	13.9%	13.7%	13.9%	13.7%	-0.5	0.1	-0.2	0.2	-0.1	-0.2	0.0

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,297	1,320	1,366	1,412	1,447	1,499	13,733	13,897	14,207	14,601	14,879	15,353	2.9%	3.0%
Taxes Paid	467	513	521	498	442	466	4,946	5,395	5,416	5,153	4,549	4,777	2.2%	-3.2%
Benefits	388	428	441	442	473	503	4,105	4,500	4,593	4,570	4,866	5,155	4.5%	6.7%
Business Income	801	847	779	678	403	424	8,476	8,919	8,104	7,008	4,140	4,340	-5.4%	-20.9%
Interest Paid	152	181	199	209	229	290	1,609	1,903	2,071	2,160	2,358	2,971	11.2%	17.9%
Property Income	322	323	402	462	492	469	3,408	3,401	4,185	4,778	5,058	4,801	12.8%	0.7%
Disposable Income	2,515	2,548	2,601	2,625	2,548	2,539	26,625	26,822	27,055	27,149	26,205	25,999	1.4%	-1.7%
Rank							15	15	17	19	27	29		
%Rank #1							66%	62%	58%	57%	52%	48%		
Business Value Added	2,098	2,168	2,145	2,089	1,849	1,923	22,210	22,816	22,311	21,609	19,019	19,693	-0.1%	-4.1%
Rank							17	20	26	31	51	53		
%Rank #1							64%	63%	57%	53%	47%	47%		
Business Productivity							43,687	43,372	44,504	44,061	45,667	47,249	0.3%	3.6%
Rank							35	47	47	51	48	49		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

SA Mallee South East

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.15%	0.11%
Disability Support (aged 21-24)	0.15%	0.12%
Disability Support (aged 25+)	3.87%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.10%	0.08%
Parenting Payment - Single (aged 25+)	0.21%	0.19%
Unemployed Long Term	1.57%	1.52%
Unemployed Short Term	1.52%	1.26%
Youth Allowance - Non Student	0.78%	0.78%
Youth Allowance Student	0.42%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	15.4%	45
2004	16.8%	45
2005	17.0%	40
2006	16.8%	34
2007	18.6%	24
2008	19.8%	20

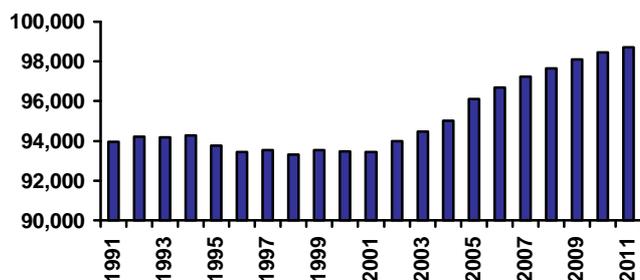
BABY BOUNCE

	Per cent	Rank
2002	1.32%	26
2003	1.29%	25
2004	1.28%	27
2005	1.27%	30
2006	1.28%	34
2007	1.27%	38
Bounce 2005-06	0.02%	56
Actual Change 2005-06 (Number)	23	61
Bounce 2006-07	-0.01%	36
Actual Change 2006-07 (Number)	-4	38

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.6	57
Share of population under 55	0.7	41
Aged migration	0.0	28
Population growth rate, 55+	0.0	37
Demographic stress	0.1	8
Dominant locations	0.5	41
Family / Youth migration	-5.0	41
Fertility bounce, 1996-2005	0.0	58
Fertility, babies % pop, 2005	0.0	34
Working elderly	0.3	14
SUSTAINABILITY SCORE	52.8	45

Population Profile



POPULATION

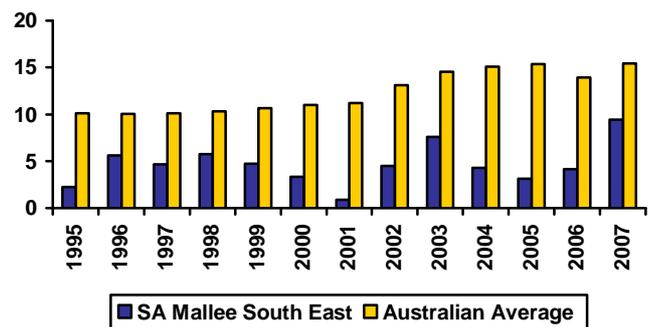
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	94	94	94	94	94	93	94	93	94	93	93	94	94	95	96	97	97	98	98	98	99

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	4.63	46.56	62
Average p.a. per capita	4.89	12.58	60
Hi Tech p.a. (1994-2007)	0.43	12.70	63
Hi Tech p.a. per capita	0.45	3.15	62
Info. Tech p.a. (1994-2007)	0.07	4.98	62
Info. Tech p.a. per capita	0.08	1.17	60
Average per capita (1994-2001)	3.96	10.80	61
Average per capita (2001-2007)	5.90	14.68	60
2001-07 avg./1994-01 avg.	1.49	1.35	16

Note: Per capita = 100,000 people

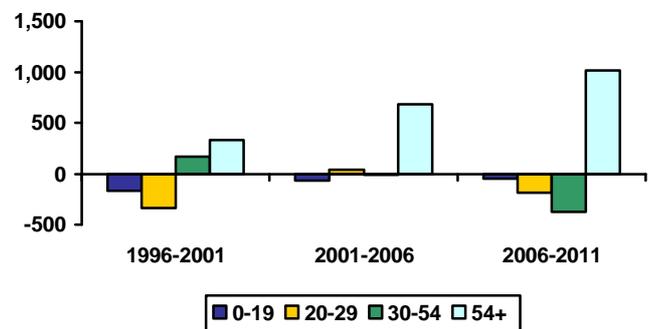
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.6%	29.7%	28.4%	27.6%
Age 20-29	12.1%	10.3%	10.2%	9.0%
Age 30-54	35.8%	36.7%	35.5%	32.8%
Age 55+	21.5%	23.2%	26.0%	30.6%
Population Change (average between years)				
Age 0-19		-167	-68	-49
Age 20-29		-335	40	-187
Age 30-54		169	-7	-374
Age 55+		329	683	1,015
Average Annual Growth		0.0%	0.7%	0.4%

Population Change by Age Group



SA Mallee South East

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	331	380	29	36	26%	28%
Value of Property and Unincorporated Business	167	169	61	63	21%	21%
Value of Financial Assets	236	307	16	20	39%	41%
Value of Household Liabilities	73	96	22	7	145%	128%
Disposable Income after Debt Service Costs	68	61	18	33	60%	50%
Household Debt Service Ratio	12%	18%	17	9	171%	126%
Household Debt to Gross Income Ratio	0.90	1.21	17	9	171%	126%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	6,136	10,869	4,925	2,984	285	1,183
20 to 29		3,288	4,458	2,996	312	961
30 to 54		18,716	6,995	4,935	648	1,854
55+		18,062	3,057	2,388	86	1,549

Note: This data has been benchmarked to the Estimated Residential Population.

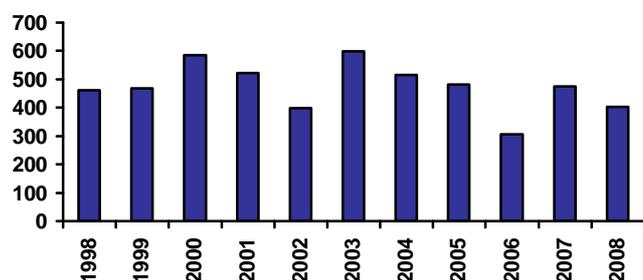
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	72	107	104	120	97	0%
Non Residential	44	67	61	53	38	-25%
Total	116	174	165	173	134	-9%
Value per capita \$2005/06						
Residential	772	1,116	1,070	1,234	986	-2%
Non Residential	471	703	631	542	385	-26%
Total	1,243	1,819	1,701	1,775	1,371	-11%
Rank (value per capita)						
Residential	54	49	48	40	40	
Non Residential	54	49	55	62	61	
Total	56	49	54	50	49	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	461	469	584	522	398	599	515	481	307	476	403
Rank	59	61	53	54	53	44	54	58	57	53	51

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	19.0	20.5	21.2	21.0	21.7	21.8
Rank	47	47	46	48	45	42

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	42
Rank	64

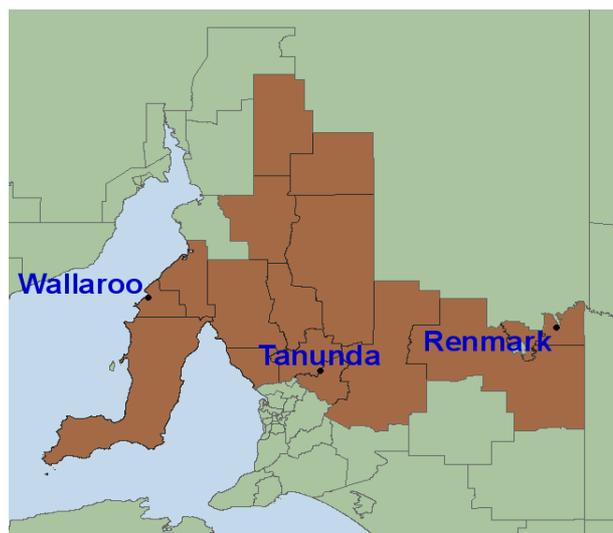
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	427	436	424
Mining	6	6	6
Manufacturing	202	196	213
Utilities	3	3	2
Construction	318	314	319
Wholesale	374	387	392
Retail	735	778	672
Hospitality	132	132	208
Transport	130	164	172
Communication	5	7	7
Finance	939	990	993
Property & Business	162	236	162
Government	20	20	19
Education	18	23	26
Health & Community	44	63	65
Cultural & Recreational	48	52	97
Personal Services	38	53	66

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

SA Mid North Riverland



The belt from Yorke Peninsula to the Victorian border is basically dry farming country. The western part, north of Adelaide, is gently hilly. Some of the hills attract enough rain to support vine growing, and the Barossa and Clare valleys are both major wine regions. Grapes are also cultivated under irrigation along the Murray in the Riverland, and several of the towns here are developing a name in wine as well as in fruit juice. It is now many years since the mining industry was fundamental to the region's economy, but it has left a heritage of old towns which are much visited by tourists.

Major centres:

Wallaroo, Tanunda, Renmark

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	133	135	136	137	139	140	0.8%	1.2%	0.9%	1.0%	0.7%	0.9%	0.9%
Households	49	51	54	56	59	62	4.4%	4.8%	5.0%	4.9%	5.1%	4.7%	5.0%
NIEIR Workforce	58	57	58	59	60	62	-1.6%	0.9%	1.6%	1.4%	3.3%	0.3%	2.4%
NIEIR Employment	53	52	53	54	55	56	-1.0%	1.5%	2.8%	0.9%	1.9%	1.1%	1.4%
NIEIR Unemployment	5.8	5.4	5.1	4.6	4.9	5.9	-6.9%	-4.8%	-10.8%	8.1%	19.0%	-7.5%	13.4%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	9.9%	9.4%	8.8%	7.8%	8.3%	9.5%	-0.5	-0.5	-1.1	0.5	1.3	-0.7	0.9
Headline Unemployment	5.0%	4.7%	4.2%	3.5%	3.9%	3.9%	-0.3	-0.5	-0.7	0.4	0.0	-0.5	0.2
NIEIR Structural U/E	17.8%	16.7%	16.5%	16.0%	15.8%	16.0%	-1.1	-0.2	-0.5	-0.2	0.2	-0.6	0.0

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,630	1,632	1,713	1,800	1,874	1,955	12,215	12,129	12,585	13,112	13,516	13,995	3.4%	4.2%
Taxes Paid	620	682	697	684	592	626	4,646	5,073	5,124	4,980	4,269	4,480	3.3%	-4.3%
Benefits	574	635	655	644	674	697	4,299	4,717	4,809	4,688	4,860	4,988	3.9%	4.0%
Business Income	1,140	1,258	1,146	1,028	645	672	8,541	9,350	8,421	7,486	4,653	4,808	-3.4%	-19.2%
Interest Paid	200	243	273	292	327	417	1,500	1,805	2,004	2,127	2,360	2,988	13.4%	19.5%
Property Income	511	469	610	711	792	643	3,827	3,483	4,483	5,179	5,710	4,602	11.7%	-4.9%
Disposable Income	3,470	3,494	3,600	3,675	3,645	3,446	26,003	25,973	26,452	26,769	26,290	24,677	1.9%	-3.2%
Rank							17	19	22	24	26	45		
%Rank #1							64%	60%	57%	56%	52%	46%		
Business Value Added	2,770	2,890	2,859	2,828	2,519	2,626	20,756	21,479	21,006	20,598	18,169	18,804	0.7%	-3.6%
Rank							24	26	34	45	60	59		
%Rank #1							60%	59%	54%	51%	45%	45%		
Business Productivity							44,421	44,074	45,397	45,243	46,793	48,726	0.6%	3.8%
Rank							28	42	41	47	46	39		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

SA Mid North Riverland

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.14%	0.11%
Disability Support (aged 21-24)	0.15%	0.12%
Disability Support (aged 25+)	4.74%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.09%	0.19%
Unemployed Long Term	1.27%	1.52%
Unemployed Short Term	1.24%	1.26%
Youth Allowance - Non Student	0.76%	0.78%
Youth Allowance Student	0.40%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	16.5%	36
2004	18.2%	36
2005	18.2%	33
2006	17.5%	32
2007	18.5%	26
2008	20.2%	17

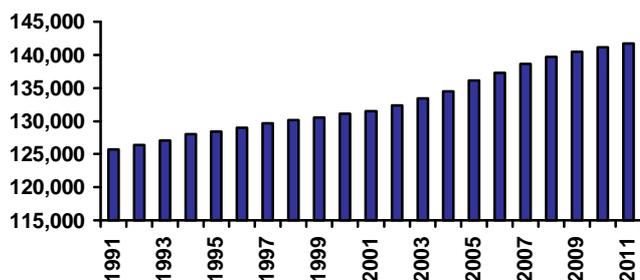
BABY BOUNCE

	Per cent	Rank
2002	1.13%	55
2003	1.10%	57
2004	1.10%	58
2005	1.10%	60
2006	1.09%	63
2007	1.15%	56
Bounce 2005-06	-0.01%	64
Actual Change 2005-06 (Number)	6	64
Bounce 2006-07	0.06%	10
Actual Change 2006-07 (Number)	97	23

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	61
Aged migration	0.0	8
Population growth rate, 55+	0.1	19
Demographic stress	0.1	6
Dominant locations	0.4	54
Family / Youth migration	-4.0	39
Fertility bounce, 1996-2005	0.0	45
Fertility, babies % pop, 2005	0.0	60
Working elderly	0.3	41
SUSTAINABILITY SCORE	46.8	60

Population Profile



POPULATION

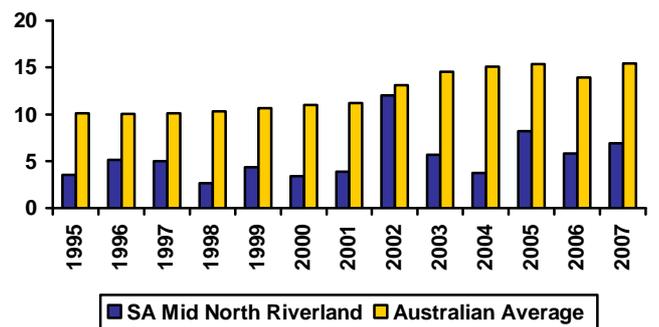
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	126	126	127	128	128	129	130	130	130	131	131	132	133	135	136	137	139	140	141	141	142

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	7.37	46.56	58
Average p.a. per capita	5.55	12.58	57
Hi Tech p.a. (1994-2007)	0.54	12.70	62
Hi Tech p.a. per capita	0.41	3.15	63
Info. Tech p.a. (1994-2007)	0.15	4.98	58
Info. Tech p.a. per capita	0.11	1.17	58
Average per capita (1994-2001)	5.00	10.80	56
Average per capita (2001-2007)	7.10	14.68	54
2001-07 avg./1994-01 avg.	1.42	1.35	21

Note: Per capita = 100,000 people

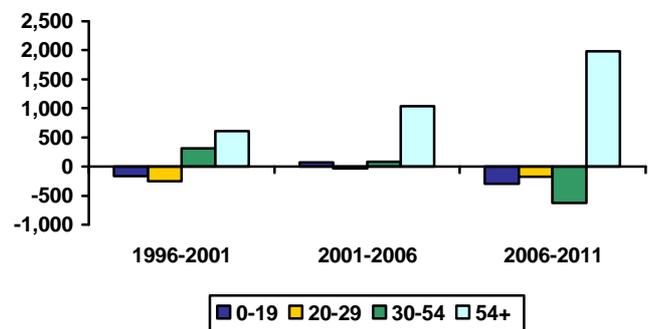
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	29.2%	28.1%	27.1%	25.2%
Age 20-29	9.8%	8.7%	8.2%	7.3%
Age 30-54	35.7%	36.2%	35.0%	31.7%
Age 55+	25.2%	27.1%	29.7%	35.8%
Population Change (average between years)				
Age 0-19		-165	71	-297
Age 20-29		-250	-29	-175
Age 30-54		306	80	-622
Age 55+		610	1,041	1,978
Average Annual Growth		0.4%	0.9%	0.6%

Population Change by Age Group



SA Mid North Riverland

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	433	475	19	24	34%	35%
Value of Property and Unincorporated Business	173	175	58	62	21%	22%
Value of Financial Assets	325	395	11	14	53%	52%
Value of Household Liabilities	65	96	15	5	129%	128%
Disposable Income after Debt Service Costs	71	57	14	48	63%	47%
Household Debt Service Ratio	10%	19%	10	13	149%	133%
Household Debt to Gross Income Ratio	0.78	1.27	10	13	148%	133%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	7,974	15,628	6,201	4,226	315	1,612
20 to 29		4,628	4,761	3,391	264	861
30 to 54		27,160	9,188	7,472	564	2,248
55+		28,644	4,977	4,650	120	2,392

Note: This data has been benchmarked to the Estimated Residential Population.

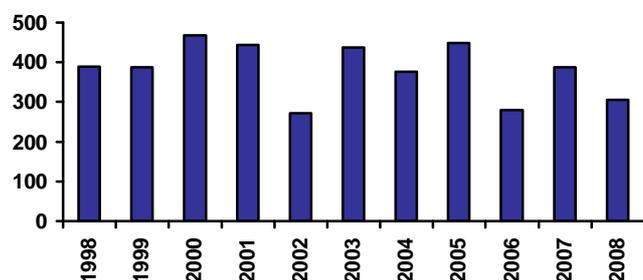
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	121	178	190	221	173	9%
Non Residential	66	86	85	79	55	-15%
Total	187	264	275	299	228	1%
Value per capita \$2005/06						
Residential	921	1,313	1,373	1,580	1,232	6%
Non Residential	503	636	613	564	390	-18%
Total	1,424	1,950	1,987	2,144	1,623	-2%
Rank (value per capita)						
Residential	48	37	32	27	24	
Non Residential	48	37	57	60	60	
Total	52	43	45	38	38	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	389	387	468	444	271	437	376	449	279	387	305
Rank	62	64	60	58	61	56	61	60	59	62	58

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	20.6	22.4	22.7	22.7	23.2	23.4
Rank	41	41	38	39	35	30

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	63
Rank	59

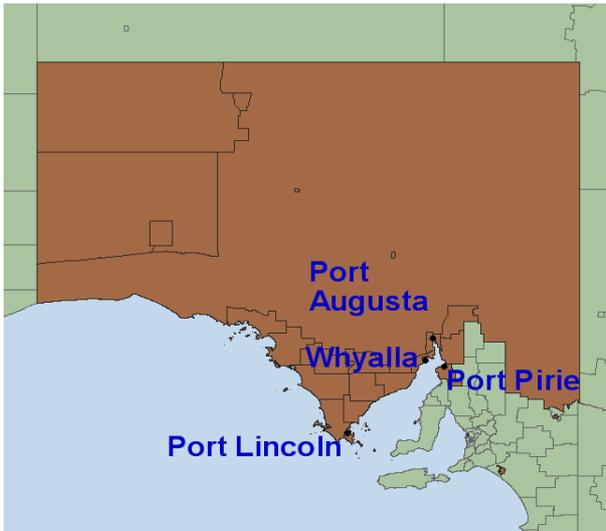
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	503	506	513
Mining	24	24	25
Manufacturing	348	361	367
Utilities	4	4	5
Construction	343	342	353
Wholesale	407	420	428
Retail	858	889	801
Hospitality	165	165	227
Transport	200	232	234
Communication	3	5	5
Finance	1,028	1,082	1,085
Property & Business	198	304	197
Government	22	18	19
Education	15	25	30
Health & Community	70	96	104
Cultural & Recreational	33	39	111
Personal Services	38	59	81

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

SA Spencer Gulf



The three industrial towns of Port Pirie, Port Augusta and Whyalla form the Iron Triangle at the head of Spencer Gulf. The winter tourist playground of the Flinders Ranges lies to the north-east, while the wheat country of Eyre Peninsula lies to the south-west. Iron ore is mined back of Whyalla, and an export trade is developing as well as supply to the domestic steel industry. However, the really big mine in the region is that at Olympic Dam. The northern two-thirds of the region comprises a vast dry outback, much of which is Aboriginal land.

Major centres:

Port Pirie, Port Augusta, Whyalla, Port Lincoln

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	106	105	106	106	107	107	0.0%	0.1%	0.6%	0.5%	0.7%	0.2%	0.6%
Households	38	39	40	41	42	43	2.1%	2.3%	2.6%	2.7%	2.8%	2.3%	2.7%
NIEIR Workforce	47	47	47	47	47	50	-0.6%	-0.3%	0.4%	1.1%	4.8%	-0.2%	3.0%
NIEIR Employment	41	40	40	42	42	44	-1.8%	1.4%	3.1%	0.8%	3.8%	0.9%	2.3%
NIEIR Unemployment	6.5	7.0	6.3	5.3	5.4	6.1	7.2%	-10.0%	-16.7%	3.2%	12.7%	-7.0%	7.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	13.9%	15.0%	13.5%	11.2%	11.5%	12.3%	1.1	-1.5	-2.3	0.2	0.9	-0.9	0.5
Headline Unemployment	8.6%	8.9%	7.1%	5.2%	5.1%	5.2%	0.3	-1.8	-1.9	-0.1	0.1	-1.2	0.0
NIEIR Structural U/E	22.2%	22.3%	22.3%	20.8%	20.2%	19.2%	0.1	-0.1	-1.4	-0.6	-1.0	-0.5	-0.8

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,478	1,462	1,535	1,615	1,678	1,783	14,006	13,863	14,539	15,206	15,715	16,590	3.0%	5.1%
Taxes Paid	470	521	550	552	493	557	4,454	4,939	5,207	5,197	4,617	5,183	5.5%	0.4%
Benefits	465	521	520	509	531	548	4,402	4,937	4,930	4,792	4,970	5,104	3.1%	3.8%
Business Income	510	578	451	452	322	421	4,831	5,476	4,275	4,252	3,015	3,915	-4.0%	-3.5%
Interest Paid	143	173	194	208	235	302	1,356	1,639	1,839	1,962	2,199	2,806	13.3%	20.3%
Property Income	462	388	528	694	688	330	4,374	3,675	4,998	6,535	6,440	3,067	14.6%	-31.1%
Disposable Income	2,609	2,537	2,586	2,866	2,962	2,589	24,720	24,045	24,493	26,983	27,739	24,090	3.2%	-5.0%
Rank							19	27	33	21	21	49		
%Rank #1							61%	56%	53%	57%	55%	45%		
Business Value Added	1,988	2,040	1,986	2,067	2,000	2,204	18,836	19,339	18,813	19,458	18,731	20,505	1.3%	3.3%
Rank							41	46	55	54	54	46		
%Rank #1							54%	53%	48%	48%	46%	49%		
Business Productivity							44,134	43,851	45,325	45,718	47,205	48,388	1.2%	2.9%
Rank							32	44	42	44	42	43		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

SA Spencer Gulf

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.17%	0.11%
Disability Support (aged 21-24)	0.18%	0.12%
Disability Support (aged 25+)	5.10%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.14%	0.08%
Parenting Payment - Single (aged 25+)	0.32%	0.19%
Unemployed Long Term	1.84%	1.52%
Unemployed Short Term	2.18%	1.26%
Youth Allowance - Non Student	0.92%	0.78%
Youth Allowance Student	0.70%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	17.8%	29
2004	20.5%	20
2005	20.1%	20
2006	17.8%	29
2007	17.9%	28
2008	21.2%	12

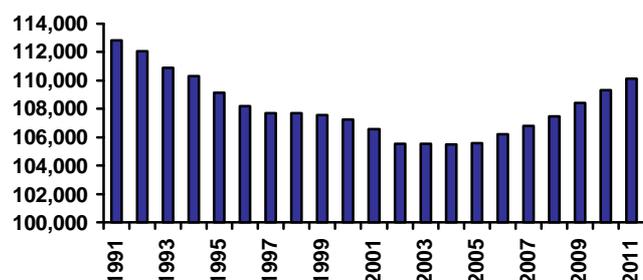
BABY BOUNCE

	Per cent	Rank
2002	1.36%	17
2003	1.32%	23
2004	1.30%	26
2005	1.27%	29
2006	1.27%	36
2007	1.33%	30
Bounce 2005-06	0.00%	63
Actual Change 2005-06 (Number)	9	63
Bounce 2006-07	0.06%	13
Actual Change 2006-07 (Number)	67	28

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.3	64
Share of population under 55	0.8	33
Aged migration	0.0	37
Population growth rate, 55+	0.0	43
Demographic stress	0.1	13
Dominant locations	0.5	38
Family / Youth migration	-7.0	44
Fertility bounce, 1996-2005	0.0	45
Fertility, babies % pop, 2005	0.0	25
Working elderly	0.3	47
SUSTAINABILITY SCORE	54.6	40

Population Profile



POPULATION

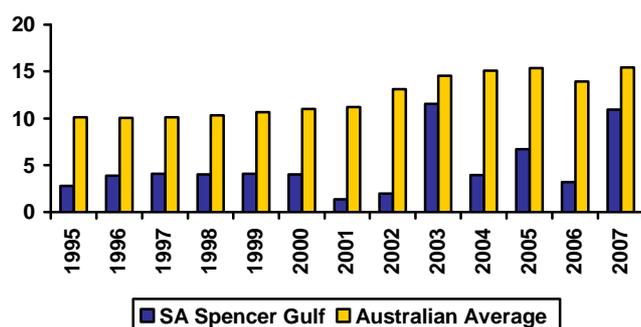
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	113	112	111	110	109	108	108	108	108	107	107	106	106	105	106	106	107	107	108	109	110

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	5.68	46.56	59
Average p.a. per capita	5.32	12.58	58
Hi Tech p.a. (1994-2007)	1.09	12.70	56
Hi Tech p.a. per capita	1.02	3.15	50
Info. Tech p.a. (1994-2007)	0.35	4.98	51
Info. Tech p.a. per capita	0.33	1.17	42
Average per capita (1994-2001)	3.28	10.80	63
Average per capita (2001-2007)	7.17	14.68	53
2001-07 avg./1994-01 avg.	2.19	1.35	1

Note: Per capita = 100,000 people

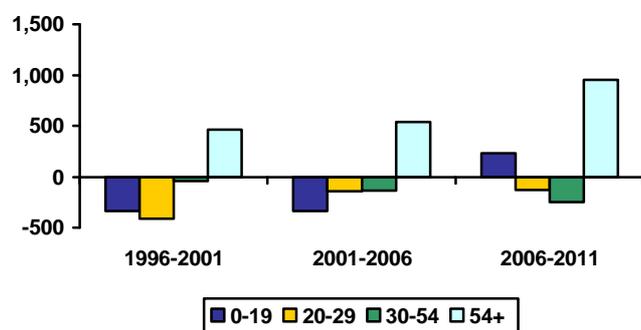
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	31.6%	30.5%	29.0%	29.0%
Age 20-29	12.9%	11.2%	10.6%	9.6%
Age 30-54	35.6%	35.9%	35.4%	33.0%
Age 55+	19.9%	22.4%	25.0%	28.4%
Population Change (average between years)				
Age 0-19		-334	-337	227
Age 20-29		-411	-142	-127
Age 30-54		-41	-133	-249
Age 55+		464	539	950
Average Annual Growth		-0.3%	-0.1%	0.7%

Population Change by Age Group



SA Spencer Gulf

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	624	721	8	9	50%	53%
Value of Property and Unincorporated Business	159	185	63	59	20%	23%
Value of Financial Assets	524	624	2	6	86%	83%
Value of Household Liabilities	59	88	8	2	117%	118%
Disposable Income after Debt Service Costs	67	55	20	56	60%	45%
Household Debt Service Ratio	10%	18%	7	10	143%	127%
Household Debt to Gross Income Ratio	0.75	1.22	7	10	142%	127%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	7,132	12,162	4,513	3,840	248	1,749
20 to 29		4,033	4,047	4,006	245	1,416
30 to 54		20,460	6,357	6,307	593	2,569
55+		19,254	2,689	2,558	70	1,968

Note: This data has been benchmarked to the Estimated Residential Population.

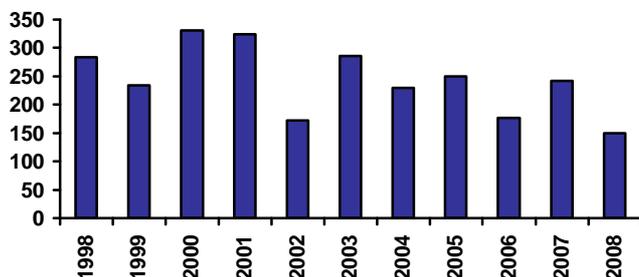
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	69	75	100	132	104	49%
Non Residential	43	56	100	85	63	48%
Total	112	131	200	217	166	49%
Value per capita \$2005/06						
Residential	645	710	936	1,228	956	47%
Non Residential	403	527	938	788	579	46%
Total	1,048	1,236	1,874	2,016	1,535	46%
Rank (value per capita)						
Residential	58	62	54	41	41	
Non Residential	58	62	26	38	44	
Total	61	61	48	42	42	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	284	234	331	324	172	286	229	250	176	242	150
Rank	65	65	65	64	65	63	65	65	65	65	65

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	24.2	25.4	25.8	25.7	25.9	26.1
Rank	20	19	18	15	14	12

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	50
Rank	61

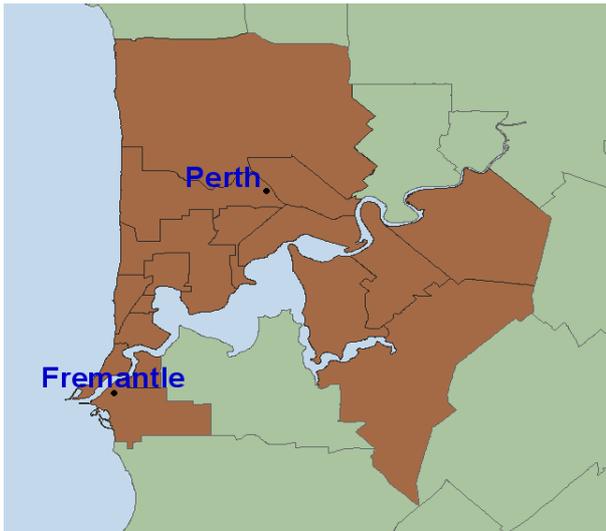
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	325	340	333
Mining	31	30	30
Manufacturing	143	142	151
Utilities	7	5	5
Construction	284	279	285
Wholesale	294	304	314
Retail	779	812	731
Hospitality	137	135	191
Transport	110	144	144
Communication	5	3	3
Finance	667	702	709
Property & Business	147	235	165
Government	27	26	26
Education	13	16	26
Health & Community	59	77	80
Cultural & Recreational	43	48	100
Personal Services	43	62	77

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Perth Central



For its first century, what is now metropolitan Perth included several distinct population centres – Fremantle, Perth and others up-river to Guildford. All this was filled in after the second world war, and our region of Perth Central includes all the old centres and all that is between. It thus includes the container port, the established eastern and inner southern suburbs, and long-established manufacturing areas. Though the region is diverse, the city centre dominates its economic base. The city centre shares educational, cultural and tourism functions with Fremantle.

Major centres:

Perth, Fremantle

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	516	522	529	536	546	557	1.2%	1.2%	1.5%	1.8%	1.9%	1.3%	1.9%
Households	197	200	202	205	208	211	1.4%	1.2%	1.4%	1.5%	1.4%	1.4%	1.5%
NIEIR Workforce	281	284	293	304	306	315	1.1%	3.1%	3.7%	0.7%	3.1%	2.6%	1.9%
NIEIR Employment	259	263	275	288	294	304	1.6%	4.4%	4.9%	1.8%	3.5%	3.6%	2.7%
NIEIR Unemployment	21.8	20.9	18.0	15.6	12.3	11.5	-4.4%	-14.0%	-13.4%	-20.9%	-6.2%	-10.7%	-13.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	7.8%	7.3%	6.1%	5.1%	4.0%	3.7%	-0.4	-1.2	-1.0	-1.1	-0.4	-0.9	-0.7
Headline Unemployment	6.7%	6.3%	5.5%	4.5%	3.6%	3.2%	-0.3	-0.8	-1.0	-1.0	-0.3	-0.7	-0.6
NIEIR Structural U/E	11.4%	10.8%	10.1%	9.1%	8.3%	7.8%	-0.6	-0.7	-1.0	-0.7	-0.6	-0.8	-0.6

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	10,126	10,665	11,339	12,142	13,008	14,382	19,629	20,425	21,452	22,641	23,819	25,835	6.2%	8.8%
Taxes Paid	3,195	3,329	3,555	3,740	3,894	4,102	6,194	6,375	6,726	6,974	7,130	7,368	5.4%	4.7%
Benefits	1,753	1,909	1,976	1,964	1,973	1,968	3,397	3,655	3,739	3,663	3,612	3,536	3.9%	0.1%
Business Income	2,935	3,223	3,294	3,387	3,416	3,631	5,689	6,173	6,233	6,315	6,255	6,521	4.9%	3.5%
Interest Paid	1,057	1,359	1,639	1,953	2,390	2,958	2,049	2,602	3,100	3,642	4,375	5,313	22.7%	23.1%
Property Income	2,729	3,205	3,409	3,675	4,108	5,594	5,290	6,138	6,449	6,853	7,522	10,048	10.4%	23.4%
Disposable Income	14,365	15,391	16,050	16,803	17,656	19,322	27,845	29,477	30,365	31,333	32,330	34,707	5.4%	7.2%
Rank							8	9	11	11	9	8		
%Rank #1							69%	68%	65%	66%	65%	65%		
Business Value Added	13,061	13,888	14,633	15,529	16,424	18,013	25,318	26,598	27,685	28,956	30,073	32,356	5.9%	7.7%
Rank							10	9	9	8	8	8		
%Rank #1							73%	73%	71%	71%	74%	77%		
Business Productivity							49,469	51,828	52,318	52,985	55,015	58,316	2.3%	4.9%
Rank							10	9	10	11	10	9		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Perth Central

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.09%	0.11%
Disability Support (aged 21-24)	0.10%	0.12%
Disability Support (aged 25+)	2.59%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.06%	0.08%
Parenting Payment - Single (aged 25+)	0.14%	0.19%
Unemployed Long Term	1.00%	1.52%
Unemployed Short Term	0.73%	1.26%
Youth Allowance - Non Student	0.52%	0.78%
Youth Allowance Student	0.13%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	12.2%	56
2004	12.4%	57
2005	12.3%	57
2006	11.7%	53
2007	11.2%	55
2008	10.2%	55

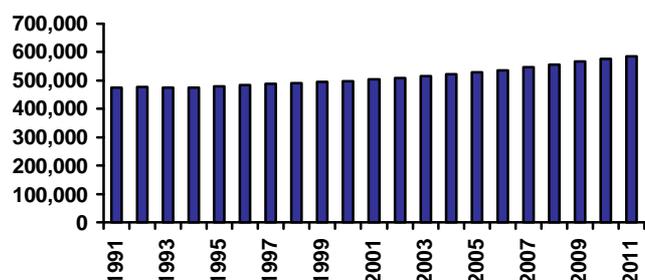
BABY BOUNCE

	Per cent	Rank
2002	1.08%	62
2003	1.06%	64
2004	1.06%	62
2005	1.08%	62
2006	1.13%	60
2007	1.22%	42
Bounce 2005-06	0.05%	22
Actual Change 2005-06 (Number)	331	11
Bounce 2006-07	0.09%	2
Actual Change 2006-07 (Number)	617	2

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	28
Aged migration	0.0	41
Population growth rate, 55+	0.0	53
Demographic stress	-0.2	51
Dominant locations	0.8	24
Family / Youth migration	36.0	17
Fertility bounce, 1996-2005	0.0	13
Fertility, babies % pop, 2005	0.0	61
Working elderly	0.3	33
SUSTAINABILITY SCORE	69.2	26

Population Profile



POPULATION

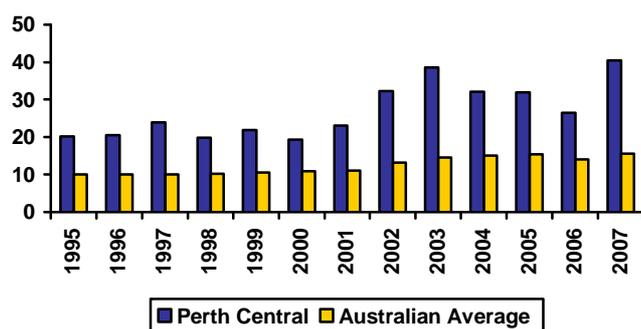
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	476	477	475	475	479	485	488	491	495	498	503	510	516	522	529	536	546	557	567	577	585

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	141.96	46.56	4
Average p.a. per capita	27.83	12.58	5
Hi Tech p.a. (1994-2007)	43.91	12.70	5
Hi Tech p.a. per capita	8.55	3.15	4
Info. Tech p.a. (1994-2007)	11.68	4.98	8
Info. Tech p.a. per capita	2.28	1.17	11
Average per capita (1994-2001)	22.57	10.80	5
Average per capita (2001-2007)	34.48	14.68	4
2001-07 avg./1994-01 avg.	1.53	1.35	12

Note: Per capita = 100,000 people

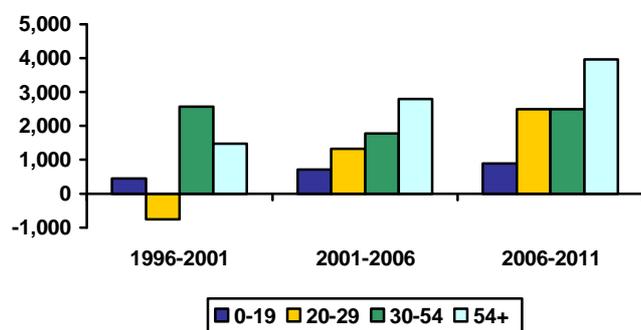
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	25.6%	25.1%	24.2%	22.9%
Age 20-29	16.4%	15.0%	15.3%	16.2%
Age 30-54	35.2%	36.5%	35.9%	35.0%
Age 55+	22.8%	23.4%	24.6%	25.9%
Population Change (average between years)				
Age 0-19		453	711	894
Age 20-29		-752	1,321	2,497
Age 30-54		2,562	1,779	2,486
Age 55+		1,481	2,795	3,958
Average Annual Growth		0.8%	1.3%	1.8%

Population Change by Age Group



Perth Central

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	382	713	21	10	30%	53%
Value of Property and Unincorporated Business	301	578	16	4	37%	72%
Value of Financial Assets	150	300	26	21	25%	40%
Value of Household Liabilities	68	165	18	54	137%	221%
Disposable Income after Debt Service Costs	59	76	31	11	53%	62%
Household Debt Service Ratio	12%	23%	18	38	174%	158%
Household Debt to Gross Income Ratio	0.91	1.51	18	38	174%	158%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	28,474	41,090	20,355	13,589	8,878	7,925
20 to 29		24,230	18,729	27,729	16,639	12,358
30 to 54		77,415	42,879	32,092	16,566	15,378
55+		90,485	16,601	11,249	2,062	11,556

Note: This data has been benchmarked to the Estimated Residential Population.

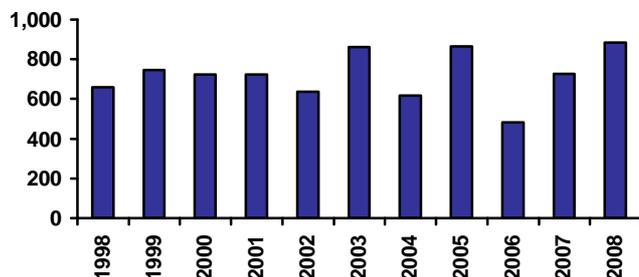
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	1,135	1,162	1,371	1,393	1,029	9%
Non Residential	609	804	901	1,160	976	26%
Total	1,743	1,965	2,272	2,553	2,005	16%
Value per capita \$2005/06						
Residential	2,263	2,210	2,510	2,503	1,814	3%
Non Residential	1,213	1,529	1,651	2,083	1,721	19%
Total	3,475	3,739	4,161	4,586	3,535	9%
Rank (value per capita)						
Residential	8	9	4	5	7	
Non Residential	8	9	7	6	6	
Total	7	7	9	7	6	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	658	747	724	723	635	862	617	864	484	726	884
Rank	47	41	43	34	32	14	44	20	41	35	29

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	21.9	24.2	23.1	24.4	24.0	25.2
Rank	28	27	35	21	23	16

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	1709
Rank	4

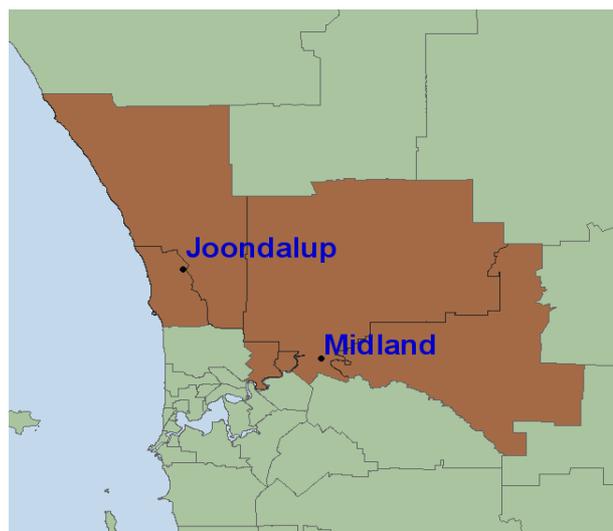
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	298	311	303
Mining	1,553	1,686	1,805
Manufacturing	7,399	7,601	7,700
Utilities	102	104	106
Construction	7,360	7,344	7,458
Wholesale	6,625	7,077	7,102
Retail	11,511	11,145	8,445
Hospitality	628	623	3,073
Transport	1,622	2,192	2,221
Communication	251	339	341
Finance	14,038	15,578	15,651
Property & Business	6,959	10,605	7,949
Government	396	380	393
Education	883	884	930
Health & Community	1,476	1,773	1,828
Cultural & Recreational	1,436	1,508	2,952
Personal Services	1,761	2,070	2,231

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Perth Outer North



The Outer North of Perth comprises a coastal strip of commuter suburbs developed over the last few decades, plus, inland, the older-established Shires of Swan and Mundaring. The area is largely a commuter zone, but manufacturing industries and high-intensity rural production are found in the eastern part of the region. Above the scarp of the Darling Ranges is an important water catchment. There are grave concerns that this catchment is drying out as a result of climate change.

Major centres:

Joondalup, Midland

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	448	458	467	481	494	509	2.1%	2.0%	2.9%	2.8%	3.0%	2.3%	2.9%
Households	148	151	154	158	162	165	2.2%	2.1%	2.3%	2.5%	2.2%	2.2%	2.3%
NIEIR Workforce	236	239	248	260	267	275	1.2%	3.9%	4.8%	2.4%	3.3%	3.3%	2.9%
NIEIR Employment	220	224	234	247	255	265	1.7%	4.5%	5.5%	3.3%	4.0%	3.9%	3.6%
NIEIR Unemployment	16.5	15.5	14.7	13.6	11.9	10.6	-5.9%	-5.3%	-7.1%	-12.8%	-10.7%	-6.1%	-11.7%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	7.0%	6.5%	5.9%	5.2%	4.5%	3.9%	-0.5	-0.6	-0.7	-0.8	-0.6	-0.6	-0.7
Headline Unemployment	5.8%	5.3%	4.6%	4.0%	3.4%	2.9%	-0.5	-0.7	-0.5	-0.7	-0.5	-0.6	-0.6
NIEIR Structural U/E	10.2%	9.9%	9.3%	8.3%	7.6%	7.0%	-0.3	-0.6	-1.0	-0.7	-0.6	-0.7	-0.6

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	7,832	8,251	8,778	9,457	10,211	11,276	17,465	18,015	18,790	19,680	20,670	22,167	6.5%	9.2%
Taxes Paid	2,110	2,152	2,317	2,442	2,569	2,663	4,705	4,699	4,959	5,081	5,200	5,235	5.0%	4.4%
Benefits	1,478	1,647	1,737	1,714	1,708	1,691	3,296	3,595	3,719	3,567	3,457	3,325	5.1%	-0.7%
Business Income	1,710	1,849	1,926	1,979	1,971	1,980	3,814	4,038	4,122	4,119	3,990	3,892	5.0%	0.0%
Interest Paid	1,067	1,322	1,537	1,765	2,079	2,546	2,379	2,887	3,289	3,673	4,208	5,005	18.3%	20.1%
Property Income	1,104	1,230	1,410	1,412	1,488	1,882	2,462	2,686	3,018	2,939	3,012	3,699	8.5%	15.4%
Disposable Income	9,769	10,252	10,847	11,225	11,584	11,929	21,786	22,386	23,219	23,359	23,449	23,451	4.7%	3.1%
Rank							43	45	43	46	53	52		
%Rank #1							54%	52%	50%	49%	47%	44%		
Business Value Added	9,542	10,100	10,704	11,436	12,182	13,256	21,279	22,053	22,912	23,799	24,659	26,059	6.2%	7.7%
Rank							22	23	22	22	18	16		
%Rank #1							61%	61%	59%	59%	60%	62%		
Business Productivity							42,546	44,332	44,996	45,596	47,183	49,379	2.3%	4.1%
Rank							44	40	45	45	43	33		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Perth Outer North

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.08%	0.11%
Disability Support (aged 21-24)	0.08%	0.12%
Disability Support (aged 25+)	2.14%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.06%	0.08%
Parenting Payment - Single (aged 25+)	0.16%	0.19%
Unemployed Long Term	1.33%	1.52%
Unemployed Short Term	0.54%	1.26%
Youth Allowance - Non Student	0.44%	0.78%
Youth Allowance Student	0.13%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	15.1%	46
2004	16.1%	47
2005	16.0%	45
2006	15.3%	44
2007	14.7%	47
2008	14.2%	49

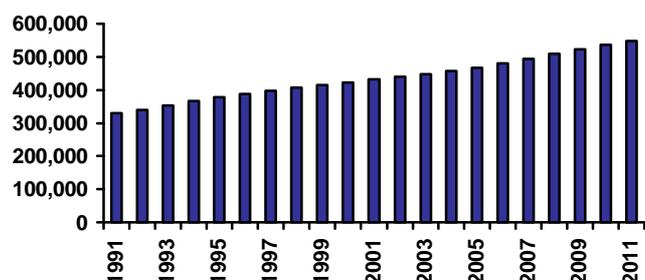
BABY BOUNCE

	Per cent	Rank
2002	1.29%	28
2003	1.26%	30
2004	1.27%	29
2005	1.30%	27
2006	1.34%	28
2007	1.37%	20
Bounce 2005-06	0.04%	24
Actual Change 2005-06 (Number)	387	8
Bounce 2006-07	0.03%	19
Actual Change 2006-07 (Number)	340	9

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	12
Aged migration	0.0	41
Population growth rate, 55+	0.1	17
Demographic stress	-0.2	55
Dominant locations	1.0	1
Family / Youth migration	96.0	4
Fertility bounce, 1996-2005	0.0	21
Fertility, babies % pop, 2005	0.0	26
Working elderly	0.3	9
SUSTAINABILITY SCORE	78.1	2

Population Profile



POPULATION

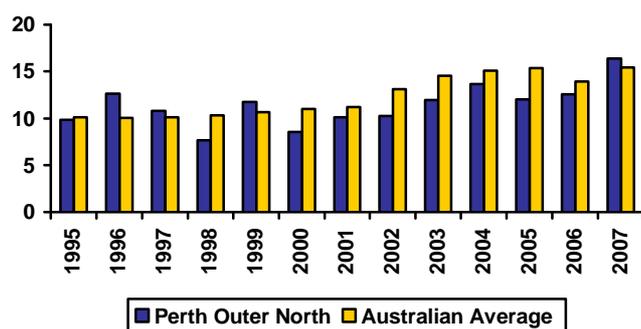
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	330	340	352	366	378	387	397	407	416	423	431	439	448	458	467	481	494	509	523	536	548

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	50.78	46.56	19
Average p.a. per capita	11.72	12.58	20
Hi Tech p.a. (1994-2007)	9.35	12.70	19
Hi Tech p.a. per capita	2.14	3.15	23
Info. Tech p.a. (1994-2007)	3.07	4.98	22
Info. Tech p.a. per capita	0.69	1.17	26
Average per capita (1994-2001)	10.20	10.80	20
Average per capita (2001-2007)	13.24	14.68	22
2001-07 avg./1994-01 avg.	1.30	1.35	37

Note: Per capita = 100,000 people

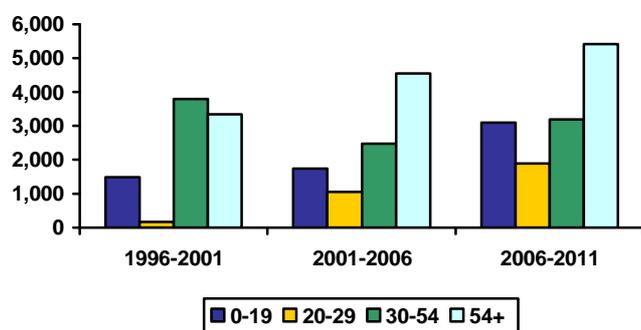
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	33.6%	31.9%	30.4%	29.5%
Age 20-29	13.0%	11.8%	11.7%	12.0%
Age 30-54	38.6%	39.0%	37.6%	35.9%
Age 55+	14.9%	17.2%	20.2%	22.6%
Population Change (average between years)				
Age 0-19		1,486	1,732	3,100
Age 20-29		174	1,051	1,894
Age 30-54		3,790	2,475	3,180
Age 55+		3,347	4,556	5,410
Average Annual Growth		2.2%	2.2%	2.7%

Population Change by Age Group



Perth Outer North

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	185	412	63	32	15%	30%
Value of Property and Unincorporated Business	231	495	33	9	29%	62%
Value of Financial Assets	57	98	62	64	9%	13%
Value of Household Liabilities	103	181	60	58	206%	241%
Disposable Income after Debt Service Costs	52	56	52	54	46%	46%
Household Debt Service Ratio	20%	30%	65	65	277%	209%
Household Debt to Gross Income Ratio	1.46	2.00	65	65	277%	209%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	31,808	51,095	18,806	21,705	8,003	7,712
20 to 29		23,448	12,441	23,415	4,564	6,111
30 to 54		83,579	26,936	39,504	13,068	11,270
55+		65,798	8,273	14,166	2,156	6,672

Note: This data has been benchmarked to the Estimated Residential Population.

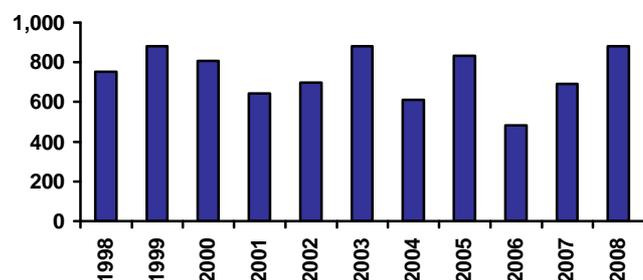
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	821	867	1,037	993	736	6%
Non Residential	245	311	409	359	250	9%
Total	1,066	1,177	1,446	1,353	986	7%
Value per capita \$2005/06						
Residential	1,922	1,869	2,099	1,953	1,409	-3%
Non Residential	574	669	828	706	478	0%
Total	2,497	2,538	2,927	2,659	1,887	-2%
Rank (value per capita)						
Residential	11	14	13	18	20	
Non Residential	11	14	38	50	56	
Total	16	23	19	23	28	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	753	880	806	642	699	882	612	831	481	692	880
Rank	42	29	31	44	24	12	46	22	42	40	30

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	23.0	25.2	24.1	25.4	24.9	25.9
Rank	22	20	26	18	20	13

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	448
Rank	20

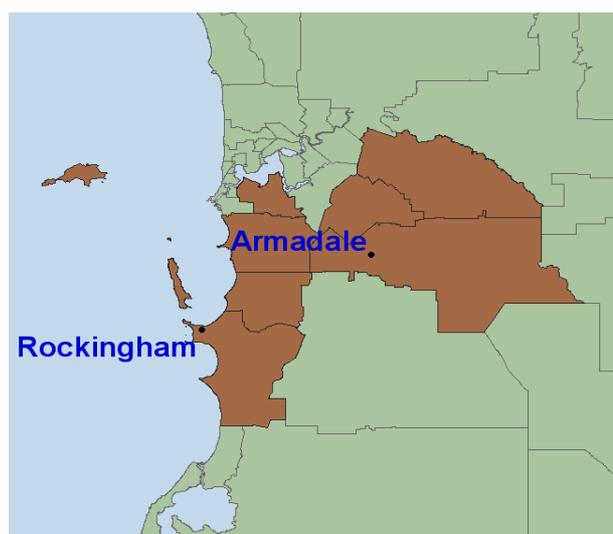
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	106	103	109
Mining	211	226	224
Manufacturing	3,750	3,792	3,885
Utilities	28	30	32
Construction	6,895	6,832	6,960
Wholesale	2,188	2,307	2,335
Retail	5,170	4,802	3,852
Hospitality	133	133	932
Transport	1,145	1,215	1,242
Communication	72	85	84
Finance	2,568	2,792	2,822
Property & Business	2,488	3,193	2,300
Government	65	64	64
Education	321	326	367
Health & Community	449	495	512
Cultural & Recreational	516	541	1,117
Personal Services	709	833	883

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

Perth Outer South



Though Rockingham, at the far end of the Outer South of Perth, is a seaside suburb which bears comparison with the Outer North, the waterfront along Cockburn Sound is industrial, with bulk port facilities. There are also industrial and transport-oriented areas in the inland part of the region, as well as extensive commuter residential areas and several higher educational facilities. In overall socio-economic status, the region is probably lower than the other two Perth regions, and it is less dependent on central city commuting for its economic base, though this may change with completion of the new fast rail connection.

Major centres:

Armadale, Rockingham

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	459	468	477	489	500	511	1.8%	2.0%	2.4%	2.3%	2.3%	2.1%	2.3%
Households	154	157	161	165	168	171	2.1%	2.3%	2.2%	2.2%	1.8%	2.2%	2.0%
NIEIR Workforce	231	234	241	249	253	263	1.4%	3.1%	3.4%	1.5%	3.9%	2.6%	2.7%
NIEIR Employment	213	216	225	235	242	252	1.6%	4.5%	4.4%	2.8%	3.9%	3.5%	3.4%
NIEIR Unemployment	18.2	18.1	15.6	13.9	11.2	11.6	-0.6%	-13.5%	-11.0%	-19.4%	3.7%	-8.5%	-8.6%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	7.9%	7.7%	6.5%	5.6%	4.4%	4.4%	-0.2	-1.2	-0.9	-1.1	0.0	-0.8	-0.6
Headline Unemployment	6.2%	6.0%	5.0%	4.3%	3.3%	3.4%	-0.2	-1.0	-0.7	-1.0	0.1	-0.6	-0.5
NIEIR Structural U/E	11.6%	11.2%	10.5%	9.6%	8.9%	8.2%	-0.5	-0.6	-1.0	-0.7	-0.7	-0.7	-0.7

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	7,748	8,224	8,735	9,304	10,032	11,116	16,867	17,585	18,309	19,043	20,070	21,746	6.3%	9.3%
Taxes Paid	2,076	2,156	2,300	2,412	2,539	2,670	4,519	4,609	4,821	4,937	5,080	5,223	5.1%	5.2%
Benefits	1,607	1,772	1,861	1,859	1,871	1,869	3,497	3,788	3,900	3,804	3,744	3,656	5.0%	0.3%
Business Income	1,495	1,624	1,681	1,705	1,698	1,747	3,255	3,472	3,523	3,489	3,397	3,418	4.5%	1.2%
Interest Paid	1,021	1,261	1,459	1,668	1,954	2,349	2,224	2,696	3,059	3,413	3,908	4,595	17.8%	18.7%
Property Income	1,173	1,390	1,495	1,616	1,802	2,418	2,555	2,972	3,133	3,307	3,605	4,730	11.3%	22.3%
Disposable Income	9,761	10,398	10,911	11,352	11,925	12,701	21,250	22,232	22,869	23,235	23,858	24,847	5.2%	5.8%
Rank							50	46	48	47	49	42		
%Rank #1							53%	52%	49%	49%	48%	46%		
Business Value Added	9,243	9,848	10,415	11,009	11,730	12,862	20,122	21,057	21,831	22,532	23,467	25,164	6.0%	8.1%
Rank							27	29	28	27	23	21		
%Rank #1							58%	58%	56%	56%	58%	60%		
Business Productivity							42,669	44,831	45,436	46,013	47,823	50,434	2.5%	4.7%
Rank							42	39	40	43	35	25		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

Perth Outer South

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.08%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	2.46%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.08%	0.08%
Parenting Payment - Single (aged 25+)	0.21%	0.19%
Unemployed Long Term	1.43%	1.52%
Unemployed Short Term	0.59%	1.26%
Youth Allowance - Non Student	0.50%	0.78%
Youth Allowance Student	0.18%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	16.5%	38
2004	17.0%	42
2005	17.1%	38
2006	16.4%	40
2007	15.7%	41
2008	14.7%	48

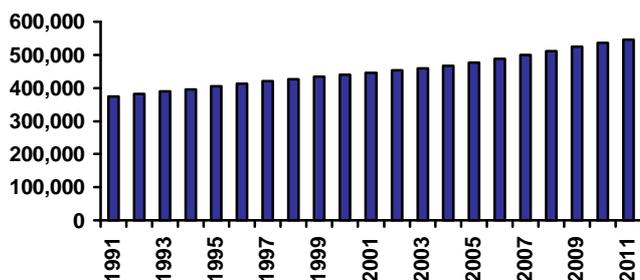
BABY BOUNCE

	Per cent	Rank
2002	1.27%	29
2003	1.25%	31
2004	1.26%	31
2005	1.29%	28
2006	1.34%	27
2007	1.43%	14
Bounce 2005-06	0.05%	17
Actual Change 2005-06 (Number)	413	5
Bounce 2006-07	0.08%	3
Actual Change 2006-07 (Number)	568	4

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	23
Aged migration	0.0	37
Population growth rate, 55+	0.1	27
Demographic stress	-0.1	47
Dominant locations	1.0	1
Family / Youth migration	71.0	8
Fertility bounce, 1996-2005	0.0	20
Fertility, babies % pop, 2005	0.0	29
Working elderly	0.3	27
SUSTAINABILITY SCORE	77.0	6

Population Profile



POPULATION

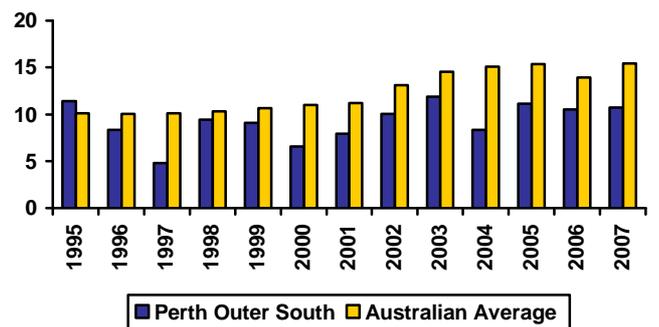
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	374	382	390	396	405	413	420	426	433	440	447	453	459	468	477	489	500	511	524	536	547

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	41.54	46.56	22
Average p.a. per capita	9.29	12.58	32
Hi Tech p.a. (1994-2007)	8.48	12.70	23
Hi Tech p.a. per capita	1.88	3.15	31
Info. Tech p.a. (1994-2007)	2.37	4.98	28
Info. Tech p.a. per capita	0.52	1.17	36
Average per capita (1994-2001)	8.43	10.80	32
Average per capita (2001-2007)	10.38	14.68	34
2001-07 avg./1994-01 avg.	1.23	1.35	51

Note: Per capita = 100,000 people

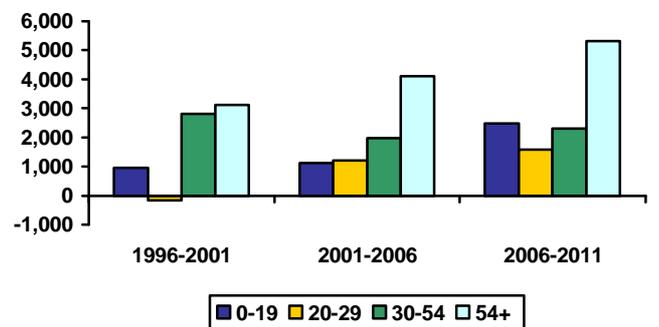
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	32.7%	31.3%	29.8%	28.9%
Age 20-29	13.3%	12.1%	12.3%	12.4%
Age 30-54	36.3%	36.7%	35.6%	33.9%
Age 55+	17.7%	19.9%	22.3%	24.8%
Population Change (average between years)				
Age 0-19		954	1,123	2,474
Age 20-29		-153	1,208	1,570
Age 30-54		2,812	1,970	2,296
Age 55+		3,122	4,099	5,308
Average Annual Growth		1.6%	1.8%	2.3%

Population Change by Age Group



Perth Outer South

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	185	396	62	33	15%	29%
Value of Property and Unincorporated Business	213	417	43	16	26%	52%
Value of Financial Assets	66	141	60	59	11%	19%
Value of Household Liabilities	94	162	56	52	188%	216%
Disposable Income after Debt Service Costs	50	59	53	39	45%	49%
Household Debt Service Ratio	19%	27%	63	60	265%	188%
Household Debt to Gross Income Ratio	1.39	1.80	63	60	265%	188%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	31,632	48,897	25,096	17,577	5,976	8,712
20 to 29		23,497	19,110	19,842	4,685	6,799
30 to 54		79,668	35,093	31,363	9,498	11,977
55+		74,680	12,970	12,045	1,741	7,723

Note: This data has been benchmarked to the Estimated Residential Population.

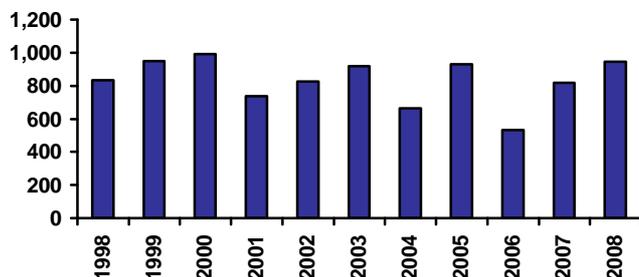
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	752	953	1,011	1,020	752	-3%
Non Residential	238	269	394	410	303	37%
Total	989	1,222	1,406	1,431	1,055	6%
Value per capita \$2005/06						
Residential	1,697	2,012	2,023	1,996	1,436	-10%
Non Residential	538	568	789	803	578	27%
Total	2,235	2,579	2,812	2,799	2,014	-1%
Rank (value per capita)						
Residential	17	12	17	16	18	
Non Residential	17	12	42	37	45	
Total	20	22	22	20	23	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	833	948	993	735	825	919	664	929	531	817	945
Rank	35	27	12	33	13	10	39	15	36	32	27

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	21.3	23.5	22.6	23.8	23.3	24.3
Rank	34	30	39	31	34	24

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	456
Rank	19

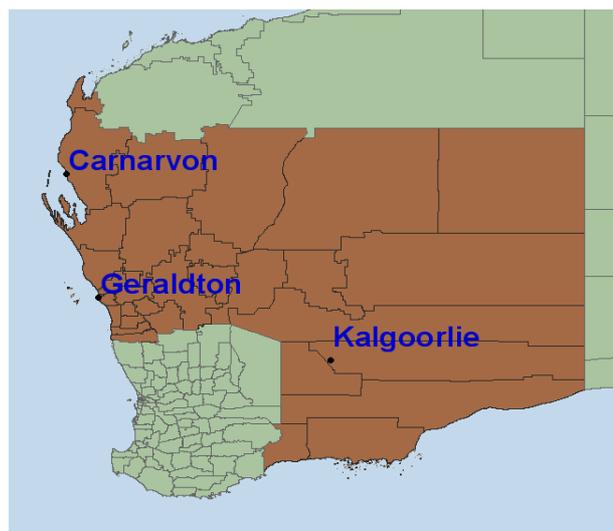
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	141	156	149
Mining	271	288	285
Manufacturing	3,888	3,956	4,038
Utilities	26	26	28
Construction	6,231	6,184	6,263
Wholesale	2,175	2,287	2,305
Retail	4,737	4,396	3,656
Hospitality	101	101	744
Transport	1,424	1,562	1,581
Communication	58	66	68
Finance	3,472	3,727	3,746
Property & Business	2,381	3,196	2,299
Government	67	65	69
Education	322	334	369
Health & Community	442	477	500
Cultural & Recreational	590	609	1,125
Personal Services	775	871	926

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

WA Gascoyne Goldfields



The Gascoyne/Goldfields region comprises the three low-population WA planning regions centred on Carnarvon, Geraldton and Kalgoorlie. With the exception of the wheat country back of Geraldton and in the immediate vicinity of Esperance, rural production is confined to extensive pastoralism, which peters out inland. The region includes two major mineral provinces, the Eastern Goldfields centred on Kalgoorlie and the Murchison region. Though Kalgoorlie is a major supply and mineral processing centre, many of the mines are worked by fly-in fly-out workforces based in Perth.

Major centres:

Carnarvon, Geraldton, Kalgoorlie

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	116	115	116	117	119	121	-0.8%	0.5%	0.7%	1.6%	1.7%	0.1%	1.6%
Households	36	37	37	38	39	40	1.7%	1.7%	2.2%	2.5%	2.6%	1.9%	2.5%
NIEIR Workforce	54	53	55	56	56	58	-2.7%	2.9%	3.4%	0.1%	2.7%	1.2%	1.4%
NIEIR Employment	50	49	50	53	53	54	-2.4%	2.8%	4.6%	0.7%	2.1%	1.6%	1.4%
NIEIR Unemployment	4.4	4.1	4.3	3.9	3.6	4.0	-6.3%	4.5%	-10.6%	-7.4%	10.8%	-4.3%	1.3%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.1%	7.8%	7.9%	6.8%	6.3%	6.8%	-0.3	0.1	-1.1	-0.5	0.5	-0.4	0.0
Headline Unemployment	5.3%	4.9%	4.7%	4.1%	3.6%	3.6%	-0.3	-0.3	-0.6	-0.5	0.0	-0.4	-0.2
NIEIR Structural U/E	14.0%	13.9%	13.3%	11.8%	11.4%	11.1%	-0.2	-0.5	-1.5	-0.4	-0.3	-0.7	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,932	1,921	2,012	2,147	2,263	2,458	16,622	16,666	17,371	18,395	19,079	20,392	3.6%	7.0%
Taxes Paid	629	676	710	732	633	671	5,413	5,865	6,126	6,271	5,334	5,566	5.2%	-4.2%
Benefits	429	488	469	491	534	594	3,688	4,234	4,046	4,205	4,505	4,926	4.6%	10.0%
Business Income	659	852	750	751	569	649	5,673	7,394	6,476	6,439	4,802	5,382	4.5%	-7.1%
Interest Paid	255	297	324	349	386	461	2,196	2,573	2,794	2,991	3,258	3,823	11.0%	14.9%
Property Income	538	464	595	772	796	432	4,627	4,023	5,133	6,619	6,712	3,585	12.8%	-25.2%
Disposable Income	3,041	3,105	3,183	3,552	3,608	3,237	26,164	26,941	27,475	30,442	30,426	26,852	5.3%	-4.5%
Rank							16	14	15	12	15	23		
%Rank #1							65%	62%	59%	64%	61%	50%		
Business Value Added	2,592	2,773	2,762	2,898	2,832	3,107	22,295	24,060	23,848	24,834	23,881	25,774	3.8%	3.5%
Rank							16	13	20	17	22	17		
%Rank #1							64%	66%	61%	61%	59%	61%		
Business Productivity							46,705	48,223	48,602	49,436	51,297	54,501	1.9%	5.0%
Rank							16	16	21	21	18	13		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

WA Gascoyne Goldfields

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.13%	0.11%
Disability Support (aged 21-24)	0.14%	0.12%
Disability Support (aged 25+)	2.86%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.12%	0.08%
Parenting Payment - Single (aged 25+)	0.26%	0.19%
Unemployed Long Term	1.60%	1.52%
Unemployed Short Term	1.13%	1.26%
Youth Allowance - Non Student	0.76%	0.78%
Youth Allowance Student	0.50%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	14.1%	51
2004	15.7%	48
2005	14.7%	48
2006	13.8%	47
2007	14.8%	45
2008	18.3%	31

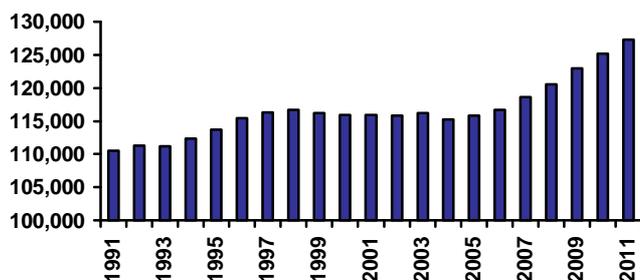
BABY BOUNCE

	Per cent	Rank
2002	1.55%	5
2003	1.51%	7
2004	1.51%	5
2005	1.52%	5
2006	1.56%	7
2007	1.57%	6
Bounce 2005-06	0.04%	30
Actual Change 2005-06 (Number)	59	57
Bounce 2006-07	0.01%	26
Actual Change 2006-07 (Number)	38	33

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.6	57
Share of population under 55	0.8	8
Aged migration	0.0	46
Population growth rate, 55+	0.1	16
Demographic stress	-0.1	36
Dominant locations	0.4	46
Family / Youth migration	1.0	34
Fertility bounce, 1996-2005	0.0	63
Fertility, babies % pop, 2005	0.0	7
Working elderly	0.4	7
SUSTAINABILITY SCORE	54.3	42

Population Profile



POPULATION

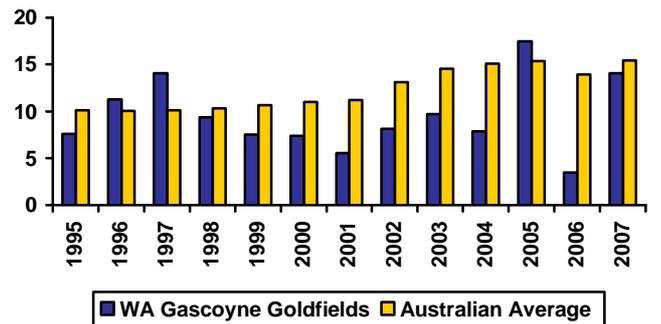
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	110	111	111	112	114	115	116	117	116	116	116	116	116	115	116	117	119	121	123	125	127

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	11.25	46.56	51
Average p.a. per capita	9.71	12.58	28
Hi Tech p.a. (1994-2007)	0.95	12.70	57
Hi Tech p.a. per capita	0.82	3.15	55
Info. Tech p.a. (1994-2007)	0.15	4.98	57
Info. Tech p.a. per capita	0.13	1.17	57
Average per capita (1994-2001)	8.84	10.80	27
Average per capita (2001-2007)	10.48	14.68	33
2001-07 avg./1994-01 avg.	1.18	1.35	53

Note: Per capita = 100,000 people

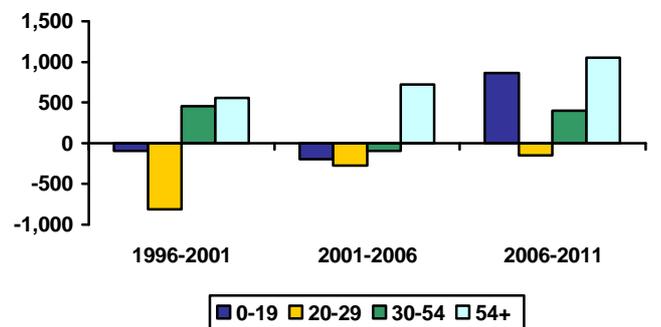
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	32.9%	32.4%	31.3%	32.0%
Age 20-29	16.9%	13.4%	12.1%	10.5%
Age 30-54	36.4%	38.2%	37.5%	35.9%
Age 55+	13.8%	16.1%	19.1%	21.6%
Population Change (average between years)				
Age 0-19		-95	-198	860
Age 20-29		-807	-277	-149
Age 30-54		453	-99	403
Age 55+		555	722	1,053
Average Annual Growth		0.1%	0.1%	1.8%

Population Change by Age Group



WA Gascoyne Goldfields

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	550	630	11	14	44%	47%
Value of Property and Unincorporated Business	194	279	48	37	24%	35%
Value of Financial Assets	465	479	5	9	76%	63%
Value of Household Liabilities	108	128	62	27	215%	170%
Disposable Income after Debt Service Costs	71	64	15	25	63%	52%
Household Debt Service Ratio	16%	22%	53	34	229%	154%
Household Debt to Gross Income Ratio	1.21	1.47	53	34	229%	154%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	8,837	10,469	5,733	6,126	761	3,200
20 to 29		3,560	4,319	6,348	741	2,243
30 to 54		17,641	8,177	10,250	1,598	4,423
55+		14,153	2,524	3,241	226	2,128

Note: This data has been benchmarked to the Estimated Residential Population.

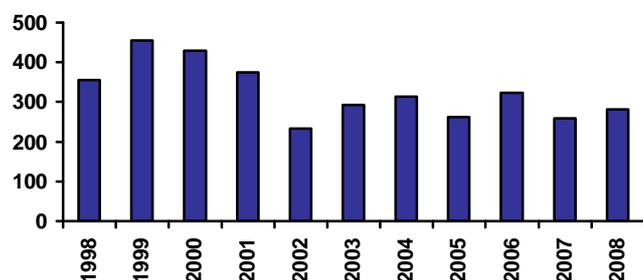
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	147	121	189	205	147	50%
Non Residential	97	98	125	130	106	23%
Total	244	218	314	334	253	38%
Value per capita \$2005/06						
Residential	1,265	1,038	1,593	1,698	1,195	44%
Non Residential	835	842	1,057	1,077	862	19%
Total	2,100	1,880	2,650	2,775	2,057	33%
Rank (value per capita)						
Residential	32	55	25	23	27	
Non Residential	32	55	24	20	20	
Total	26	45	24	21	21	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	356	454	429	375	234	293	313	262	323	259	281
Rank	64	62	62	62	63	62	62	64	55	64	63

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	25.6	26.9	27.2	27.2	27.6	28.4
Rank	11	10	11	10	9	6

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	68
Rank	58

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	331	317	306
Mining	372	552	555
Manufacturing	793	785	791
Utilities	11	11	11
Construction	1,733	1,722	1,754
Wholesale	715	725	724
Retail	1,943	1,846	1,414
Hospitality	278	273	639
Transport	375	432	442
Communication	28	28	29
Finance	1,263	1,336	1,340
Property & Business	650	798	510
Government	41	41	43
Education	46	47	59
Health & Community	73	89	97
Cultural & Recreational	275	280	496
Personal Services	290	314	337

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

WA Peel South West



The Peel/South West region comprises the two WA planning regions on the coast south of Perth. The first is centred on the resort town of Mandurah, and is increasingly being incorporated into the Perth metropolitan area particularly since the completion of a fast rail connection. The second is centred on Bunbury, which is a bulk freight port. The region is noted for its resource-based industries: bauxite and alumina, coal and power, and forestry and timber products. The coastal strip is intensively farmed, by WA standards, and Margaret River is known for its viticulture. In addition, much of the coastline, especially Mandurah and Busselton, is a resort and retirement area which bears comparison with the NSW coast. In the timber country there is conflict between the timber industry and conservation with its allies in tourism.

Major centres:

Mandurah, Bunbury

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	213	219	226	233	241	248	2.9%	3.4%	3.1%	3.1%	3.3%	3.1%	3.2%
Households	73	77	82	87	92	98	5.6%	6.1%	6.0%	6.2%	6.0%	5.9%	6.1%
NIEIR Workforce	99	102	105	109	112	116	3.0%	2.6%	4.1%	2.8%	3.8%	3.2%	3.3%
NIEIR Employment	90	93	97	102	106	110	3.2%	4.0%	5.7%	3.8%	3.8%	4.3%	3.8%
NIEIR Unemployment	8.8	8.8	7.7	6.5	5.6	5.9	0.1%	-12.1%	-16.1%	-13.2%	4.2%	-9.6%	-4.9%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	8.9%	8.7%	7.4%	6.0%	5.0%	5.1%	-0.2	-1.2	-1.4	-0.9	0.0	-1.0	-0.5
Headline Unemployment	6.7%	6.4%	5.7%	4.6%	3.6%	3.5%	-0.3	-0.7	-1.1	-1.0	-0.1	-0.7	-0.6
NIEIR Structural U/E	14.4%	13.6%	12.8%	11.4%	10.9%	10.4%	-0.8	-0.7	-1.4	-0.6	-0.4	-1.0	-0.5

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,106	3,320	3,536	3,821	4,171	4,619	14,586	15,158	15,614	16,375	17,338	18,594	7.1%	9.9%
Taxes Paid	900	957	1,030	1,091	1,100	1,171	4,225	4,368	4,546	4,677	4,574	4,715	6.6%	3.6%
Benefits	811	910	979	996	1,025	1,048	3,808	4,155	4,322	4,270	4,259	4,220	7.1%	2.6%
Business Income	930	1,033	1,036	1,069	950	1,056	4,368	4,714	4,575	4,579	3,951	4,251	4.7%	-0.6%
Interest Paid	385	487	578	678	817	1,002	1,809	2,224	2,553	2,907	3,394	4,033	20.8%	21.5%
Property Income	613	692	793	934	1,068	1,306	2,877	3,158	3,500	4,004	4,439	5,257	15.1%	18.2%
Disposable Income	4,612	4,945	5,214	5,590	5,860	6,201	21,659	22,576	23,025	23,955	24,358	24,959	6.6%	5.3%
Rank							45	42	45	42	45	41		
%Rank #1							54%	52%	50%	50%	49%	46%		
Business Value Added	4,036	4,353	4,572	4,890	5,122	5,675	18,954	19,872	20,189	20,954	21,289	22,845	6.6%	7.7%
Rank							40	39	44	39	34	29		
%Rank #1							55%	55%	52%	52%	52%	54%		
Business Productivity							43,595	45,668	46,452	47,236	48,996	52,103	2.7%	5.0%
Rank							37	29	34	35	27	20		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

WA Peel South West

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.10%	0.11%
Disability Support (aged 21-24)	0.10%	0.12%
Disability Support (aged 25+)	3.00%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.07%	0.08%
Parenting Payment - Single (aged 25+)	0.17%	0.19%
Unemployed Long Term	1.54%	1.52%
Unemployed Short Term	0.73%	1.26%
Youth Allowance - Non Student	0.57%	0.78%
Youth Allowance Student	0.20%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	17.6%	31
2004	18.4%	32
2005	18.8%	28
2006	17.8%	28
2007	17.5%	34
2008	16.9%	37

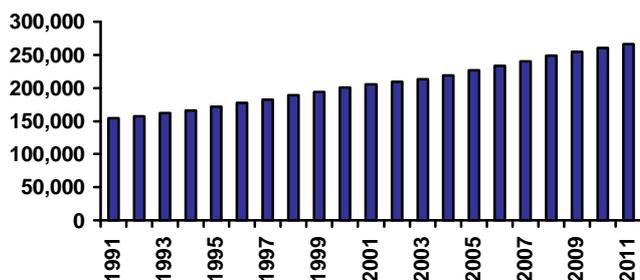
BABY BOUNCE

	Per cent	Rank
2002	1.22%	42
2003	1.18%	47
2004	1.17%	47
2005	1.18%	47
2006	1.21%	48
2007	1.28%	36
Bounce 2005-06	0.03%	46
Actual Change 2005-06 (Number)	145	34
Bounce 2006-07	0.07%	7
Actual Change 2006-07 (Number)	254	11

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.7	47
Aged migration	0.0	4
Population growth rate, 55+	0.1	2
Demographic stress	-0.1	44
Dominant locations	0.7	30
Family / Youth migration	40.0	15
Fertility bounce, 1996-2005	0.0	47
Fertility, babies % pop, 2005	0.0	45
Working elderly	0.3	46
SUSTAINABILITY SCORE	61.2	30

Population Profile



POPULATION

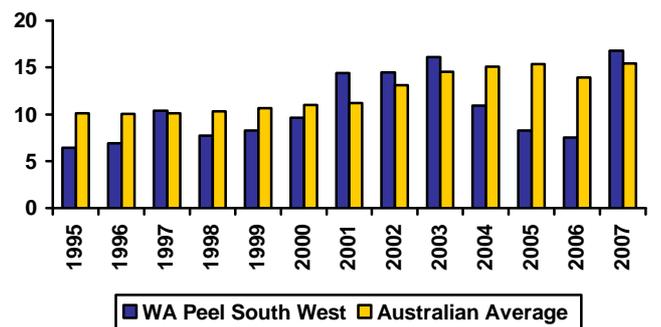
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	154	158	162	166	172	178	183	189	194	200	206	209	213	219	226	233	241	248	255	261	266

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	22.67	46.56	36
Average p.a. per capita	10.98	12.58	23
Hi Tech p.a. (1994-2007)	4.68	12.70	33
Hi Tech p.a. per capita	2.24	3.15	22
Info. Tech p.a. (1994-2007)	0.58	4.98	45
Info. Tech p.a. per capita	0.28	1.17	48
Average per capita (1994-2001)	9.77	10.80	22
Average per capita (2001-2007)	12.85	14.68	25
2001-07 avg./1994-01 avg.	1.31	1.35	35

Note: Per capita = 100,000 people

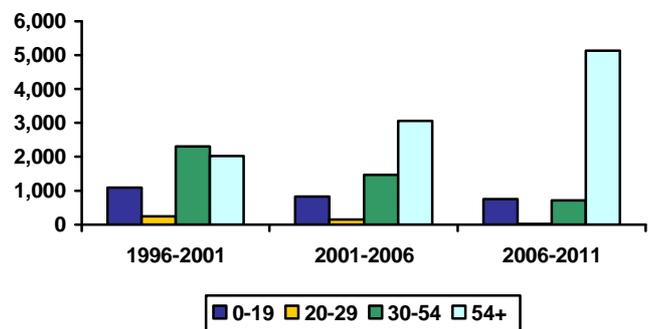
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	32.4%	30.6%	28.8%	26.6%
Age 20-29	10.9%	10.0%	9.1%	8.0%
Age 30-54	35.7%	36.4%	35.3%	32.2%
Age 55+	21.0%	23.0%	26.8%	33.2%
Population Change (average between years)				
Age 0-19		1,099	835	750
Age 20-29		242	143	19
Age 30-54		2,309	1,474	715
Age 55+		2,019	3,051	5,141
Average Annual Growth		3.0%	2.5%	2.7%

Population Change by Age Group



WA Peel South West

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	243	453	53	25	19%	33%
Value of Property and Unincorporated Business	190	352	51	24	24%	44%
Value of Financial Assets	126	241	45	29	21%	32%
Value of Household Liabilities	73	140	23	40	146%	187%
Disposable Income after Debt Service Costs	52	60	51	36	47%	49%
Household Debt Service Ratio	15%	24%	42	47	210%	169%
Household Debt to Gross Income Ratio	1.11	1.62	42	47	211%	169%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	14,249	20,770	14,149	9,943	1,439	4,082
20 to 29		6,434	9,140	7,282	982	2,524
30 to 54		34,503	19,789	16,921	2,739	5,765
55+		36,600	9,665	10,886	800	4,699

Note: This data has been benchmarked to the Estimated Residential Population.

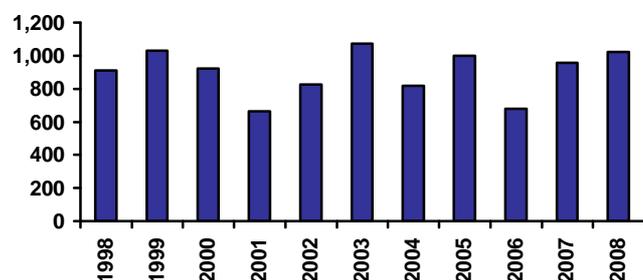
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	539	736	931	903	668	13%
Non Residential	162	185	253	265	203	30%
Total	701	921	1,185	1,168	871	17%
Value per capita \$2005/06						
Residential	2,667	3,293	3,871	3,634	2,622	3%
Non Residential	805	828	1,053	1,066	798	17%
Total	3,472	4,121	4,923	4,700	3,420	6%
Rank (value per capita)						
Residential	5	3	1	1	1	
Non Residential	5	3	25	21	22	
Total	8	5	5	6	7	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	912	1,031	923	663	827	1,073	820	998	678	956	1,022
Rank	28	25	16	41	12	4	27	9	26	23	20

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	20.0	22.0	21.1	22.3	21.8	22.8
Rank	43	43	47	43	43	36

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	121
Rank	51

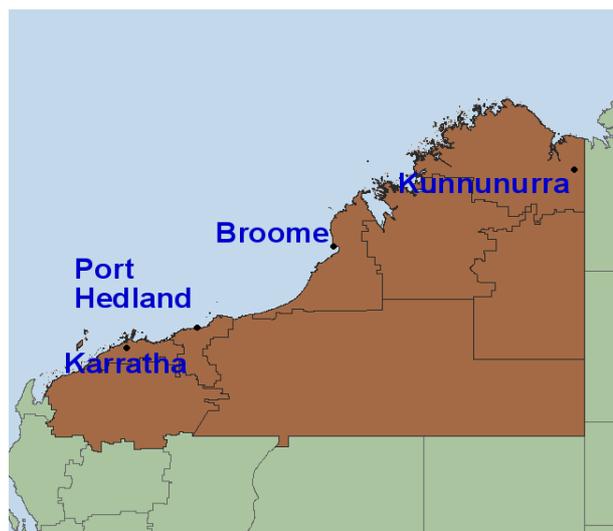
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	229	232	233
Mining	51	81	81
Manufacturing	1,356	1,353	1,402
Utilities	15	14	16
Construction	2,082	2,064	2,124
Wholesale	704	729	732
Retail	1,998	1,906	1,503
Hospitality	283	277	663
Transport	345	375	389
Communication	20	23	25
Finance	1,240	1,313	1,316
Property & Business	780	980	662
Government	44	45	45
Education	95	100	114
Health & Community	136	158	160
Cultural & Recreational	297	302	461
Personal Services	253	273	297

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

WA Pilbara Kimberley



The Pilbara and Kimberley are two WA planning regions, here brought together. Their output is dominated by minerals: offshore oil and gas, and onshore iron ore. The extensive pastoral stations first settled in the nineteenth century are still there, and so is a significant Aboriginal population. The region has a dry-season tourist trade. Towns in the Pilbara accommodate workers in the mining and petroleum industries, while those in the Kimberley are more involved with tourism, administration and in the case of Kununurra, agriculture. However, an increasing proportion of the workforce flies in and out from Perth. N.B Unemployment figures in remote regions can display excess variation.

Major centres:

Karratha, Port Hedland, Broome, Kununurra

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	73	74	75	76	78	81	1.1%	0.9%	1.9%	2.9%	3.4%	1.3%	3.1%
Households	18	18	18	19	19	20	1.1%	1.2%	1.7%	2.1%	2.6%	1.3%	2.4%
NIEIR Workforce	35	36	37	39	39	41	0.7%	4.3%	4.0%	1.8%	3.6%	3.0%	2.7%
NIEIR Employment	33	33	34	36	37	38	0.7%	4.4%	5.3%	1.4%	3.2%	3.4%	2.3%
NIEIR Unemployment	2.7	2.7	2.8	2.5	2.7	2.9	1.3%	4.1%	-11.8%	7.8%	8.9%	-2.4%	8.4%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	7.6%	7.7%	7.7%	6.5%	6.9%	7.2%	0.0	0.0	-1.2	0.4	0.4	-0.4	0.4
Headline Unemployment	5.7%	4.7%	4.4%	4.1%	3.8%	4.1%	-1.0	-0.3	-0.3	-0.2	0.2	-0.5	0.0
NIEIR Structural U/E	14.8%	16.4%	15.5%	11.3%	11.0%	11.0%	1.6	-0.8	-4.3	-0.2	-0.1	-1.2	-0.2

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,557	1,646	1,725	1,872	2,011	2,231	21,297	22,254	23,117	24,626	25,718	27,593	6.3%	9.2%
Taxes Paid	469	484	517	557	569	620	6,410	6,546	6,927	7,329	7,283	7,665	5.9%	5.5%
Benefits	309	383	336	345	359	371	4,223	5,181	4,507	4,544	4,592	4,588	3.8%	3.6%
Business Income	253	249	261	266	243	299	3,459	3,371	3,493	3,505	3,113	3,698	1.7%	5.9%
Interest Paid	156	188	212	236	271	321	2,138	2,537	2,836	3,109	3,468	3,968	14.8%	16.5%
Property Income	280	285	298	344	355	318	3,826	3,857	3,989	4,527	4,536	3,931	7.1%	-3.9%
Disposable Income	1,969	2,079	2,113	2,303	2,414	2,469	26,927	28,113	28,320	30,298	30,881	30,544	5.4%	3.5%
Rank							13	12	14	13	14	13		
%Rank #1							67%	65%	61%	64%	62%	57%		
Business Value Added	1,810	1,895	1,986	2,138	2,254	2,529	24,756	25,624	26,610	28,131	28,831	31,290	5.7%	8.8%
Rank							11	12	11	10	10	9		
%Rank #1							71%	71%	68%	69%	71%	74%		
Business Productivity							53,807	56,085	56,019	57,582	60,628	65,520	2.3%	6.7%
Rank							7	7	7	7	7	7		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

WA Pilbara Kimberley

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.15%	0.11%
Disability Support (aged 21-24)	0.16%	0.12%
Disability Support (aged 25+)	2.92%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.20%	0.08%
Parenting Payment - Single (aged 25+)	0.33%	0.19%
Unemployed Long Term	1.54%	1.52%
Unemployed Short Term	1.17%	1.26%
Youth Allowance - Non Student	0.83%	0.78%
Youth Allowance Student	0.86%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	15.7%	43
2004	18.4%	31
2005	15.9%	46
2006	15.0%	45
2007	14.9%	44
2008	15.0%	46

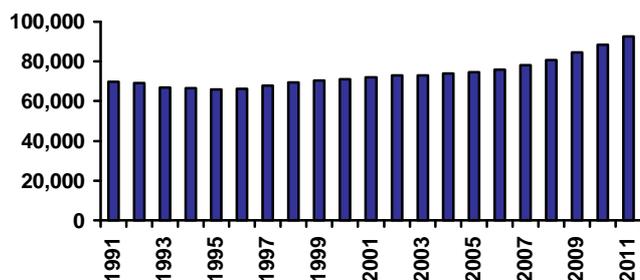
BABY BOUNCE

	Per cent	Rank
2002	1.97%	2
2003	1.92%	2
2004	1.89%	1
2005	1.91%	1
2006	1.97%	1
2007	1.82%	1
Bounce 2005-06	0.05%	16
Actual Change 2005-06 (Number)	68	53
Bounce 2006-07	-0.14%	63
Actual Change 2006-07 (Number)	-70	46

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.9	47
Share of population under 55	0.9	1
Aged migration	0.0	63
Population growth rate, 55+	0.0	47
Demographic stress	-0.4	65
Dominant locations	0.4	51
Family / Youth migration	7.0	29
Fertility bounce, 1996-2005	0.0	56
Fertility, babies % pop, 2005	0.0	1
Working elderly	0.4	1
SUSTAINABILITY SCORE	56.2	37

Population Profile



POPULATION

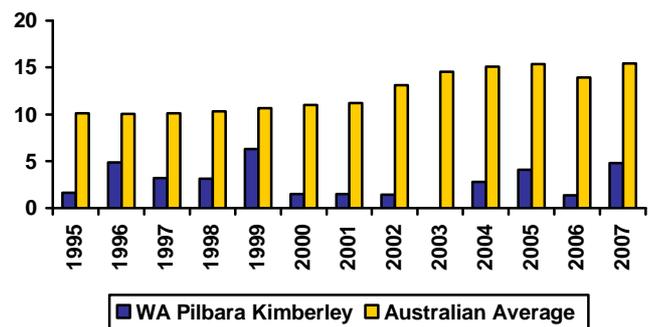
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	70	69	67	66	66	66	68	69	71	71	72	73	73	74	75	76	78	81	85	88	92

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	2.05	46.56	65
Average p.a. per capita	2.89	12.58	65
Hi Tech p.a. (1994-2007)	0.14	12.70	65
Hi Tech p.a. per capita	0.18	3.15	65
Info. Tech p.a. (1994-2007)	0.00	4.98	64
Info. Tech p.a. per capita	0.00	1.17	64
Average per capita (1994-2001)	2.95	10.80	64
Average per capita (2001-2007)	2.61	14.68	65
2001-07 avg./1994-01 avg.	0.89	1.35	64

Note: Per capita = 100,000 people

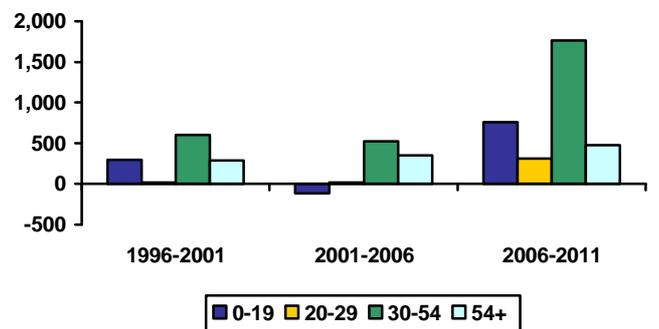
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	36.9%	35.9%	33.3%	31.4%
Age 20-29	17.5%	16.2%	15.5%	14.4%
Age 30-54	38.6%	39.5%	40.9%	43.2%
Age 55+	7.0%	8.4%	10.3%	11.0%
Population Change (average between years)				
Age 0-19		297	-112	758
Age 20-29		22	23	306
Age 30-54		599	523	1,763
Age 55+		287	349	478
Average Annual Growth		1.8%	1.1%	4.0%

Population Change by Age Group



WA Pilbara Kimberley

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	341	364	28	44	27%	27%
Value of Property and Unincorporated Business	282	306	22	33	35%	38%
Value of Financial Assets	174	190	24	49	29%	25%
Value of Household Liabilities	115	133	64	33	230%	177%
Disposable Income after Debt Service Costs	79	73	8	15	71%	60%
Household Debt Service Ratio	15%	20%	46	20	217%	142%
Household Debt to Gross Income Ratio	1.14	1.36	47	20	217%	142%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	6,877	6,846	2,554	4,521	399	3,088
20 to 29		3,117	2,058	5,791	539	2,680
30 to 54		9,220	4,061	9,774	1,235	5,430
55+		3,789	817	1,624	128	1,470

Note: This data has been benchmarked to the Estimated Residential Population.

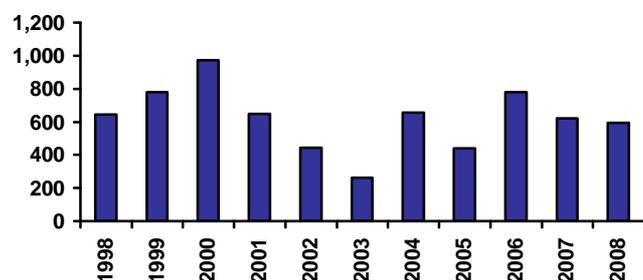
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	126	127	193	239	168	57%
Non Residential	64	92	248	291	232	179%
Total	190	220	442	530	400	108%
Value per capita \$2005/06						
Residential	1,761	1,710	2,473	2,954	1,983	44%
Non Residential	894	1,232	3,176	3,601	2,746	158%
Total	2,656	2,942	5,649	6,555	4,729	92%
Rank (value per capita)						
Residential	14	24	5	3	4	
Non Residential	14	24	3	2	3	
Total	13	13	2	2	2	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	644	779	972	648	442	264	658	439	779	623	595
Rank	49	38	14	42	49	65	40	61	18	45	39

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	33.2	33.2	34.1	32.9	33.6	34.0
Rank	2	1	1	1	1	1

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	48
Rank	62

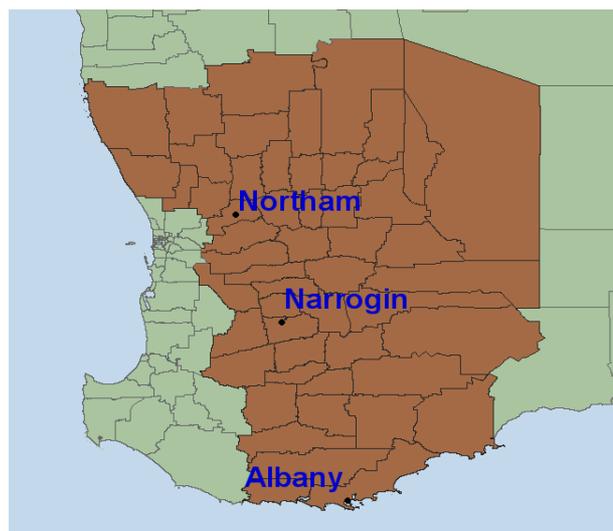
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	46	47	52
Mining	53	53	54
Manufacturing	288	286	287
Utilities	2	3	3
Construction	836	826	854
Wholesale	198	201	200
Retail	849	823	655
Hospitality	111	108	270
Transport	144	206	214
Communication	5	9	9
Finance	194	213	215
Property & Business	341	436	319
Government	23	25	22
Education	51	49	54
Health & Community	58	75	79
Cultural & Recreational	158	162	240
Personal Services	136	152	167

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

WA Wheatbelt Great Southern



The WA Wheat Belt and Great Southern are here brought together as broad-acre farming regions. Relative to the Eastern States, towns in the WA wheat belt are few and small; the largest are Northam and Narrogin. Much of the area depends directly on Perth for higher-order retail and administrative functions. By contrast, the Great Southern comprises the hinterland of Albany, a town of some size and long history. The strip close to Albany is better watered than the rest of the region and has plantation forestry, while the areas close to Perth are gaining commuters and hobby farms.

Major centres:

Albany, Narrogin, Northam

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	127	127	127	128	129	130	-0.4%	0.6%	0.4%	0.7%	0.9%	0.2%	0.8%
Households	44	46	48	50	52	55	3.9%	4.1%	4.4%	4.7%	4.7%	4.1%	4.7%
NIEIR Workforce	53	54	55	57	57	60	1.6%	2.3%	2.8%	0.1%	4.4%	2.2%	2.2%
NIEIR Employment	48	49	50	53	53	54	2.2%	2.7%	4.4%	0.9%	2.3%	3.1%	1.6%
NIEIR Unemployment	5.3	5.1	5.1	4.4	4.0	5.3	-3.8%	-1.4%	-13.4%	-9.2%	33.4%	-6.3%	10.0%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	10.0%	9.4%	9.1%	7.7%	7.0%	8.9%	-0.5	-0.3	-1.4	-0.7	1.9	-0.8	0.6
Headline Unemployment	5.0%	5.0%	4.6%	3.8%	3.1%	3.1%	0.0	-0.4	-0.8	-0.7	0.0	-0.4	-0.3
NIEIR Structural U/E	15.9%	14.9%	14.5%	13.5%	13.3%	13.1%	-0.9	-0.4	-1.0	-0.1	-0.3	-0.8	-0.2

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,374	1,460	1,538	1,631	1,729	1,887	10,814	11,539	12,077	12,751	13,424	14,527	5.9%	7.6%
Taxes Paid	623	836	820	761	557	549	4,899	6,603	6,439	5,952	4,324	4,229	6.9%	-15.1%
Benefits	478	536	540	430	461	558	3,765	4,238	4,239	3,361	3,581	4,291	-3.5%	13.9%
Business Income	1,374	2,090	1,768	1,482	995	897	10,816	16,517	13,885	11,587	7,728	6,904	2.5%	-22.2%
Interest Paid	237	274	300	325	362	430	1,862	2,168	2,353	2,538	2,811	3,312	11.1%	15.1%
Property Income	674	694	918	1,107	1,221	729	5,304	5,481	7,212	8,655	9,479	5,615	18.0%	-18.8%
Disposable Income	3,514	4,254	4,244	4,185	4,068	3,361	27,653	33,617	33,324	32,719	31,587	25,869	6.0%	-10.4%
Rank							9	7	7	8	11	30		
%Rank #1							69%	78%	72%	69%	63%	48%		
Business Value Added	2,748	3,550	3,306	3,113	2,724	2,784	21,629	28,056	25,962	24,338	21,152	21,431	4.2%	-5.4%
Rank							20	8	12	20	36	37		
%Rank #1							62%	77%	66%	60%	52%	51%		
Business Productivity							48,187	51,817	50,461	48,182	50,976	54,259	0.0%	6.1%
Rank							12	10	13	27	19	15		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

WA Wheatbelt Great Southern

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.14%	0.11%
Disability Support (aged 21-24)	0.15%	0.12%
Disability Support (aged 25+)	4.22%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.06%	0.08%
Parenting Payment - Single (aged 25+)	0.15%	0.19%
Unemployed Long Term	1.36%	1.52%
Unemployed Short Term	0.82%	1.26%
Youth Allowance - Non Student	0.61%	0.78%
Youth Allowance Student	0.30%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	13.6%	54
2004	12.6%	56
2005	12.7%	53
2006	10.3%	58
2007	11.3%	53
2008	16.6%	40

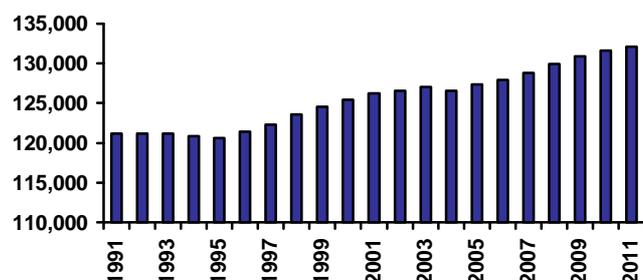
BABY BOUNCE

	Per cent	Rank
2002	1.34%	22
2003	1.28%	27
2004	1.30%	24
2005	1.32%	24
2006	1.34%	26
2007	1.34%	25
Bounce 2005-06	0.03%	47
Actual Change 2005-06 (Number)	42	59
Bounce 2006-07	-0.01%	34
Actual Change 2006-07 (Number)	0	37

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.9	52
Share of population under 55	0.7	47
Aged migration	0.0	13
Population growth rate, 55+	0.1	11
Demographic stress	0.1	4
Dominant locations	0.4	53
Family / Youth migration	-9.0	49
Fertility bounce, 1996-2005	0.0	53
Fertility, babies % pop, 2005	0.0	28
Working elderly	0.4	8
SUSTAINABILITY SCORE	48.7	56

Population Profile



POPULATION

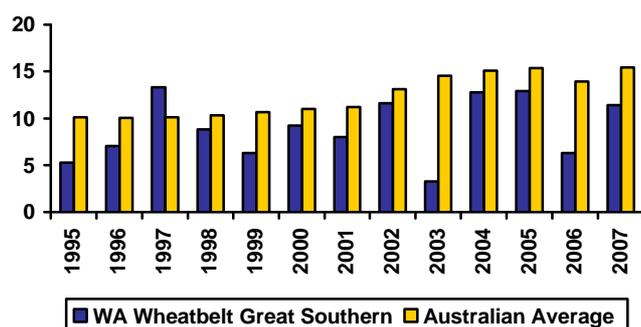
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	121	121	121	121	121	121	122	124	125	125	126	127	127	127	127	128	129	130	131	132	132

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	11.36	46.56	50
Average p.a. per capita	9.07	12.58	35
Hi Tech p.a. (1994-2007)	1.37	12.70	53
Hi Tech p.a. per capita	1.09	3.15	48
Info. Tech p.a. (1994-2007)	0.36	4.98	50
Info. Tech p.a. per capita	0.28	1.17	47
Average per capita (1994-2001)	8.69	10.80	29
Average per capita (2001-2007)	9.88	14.68	37
2001-07 avg./1994-01 avg.	1.14	1.35	56

Note: Per capita = 100,000 people

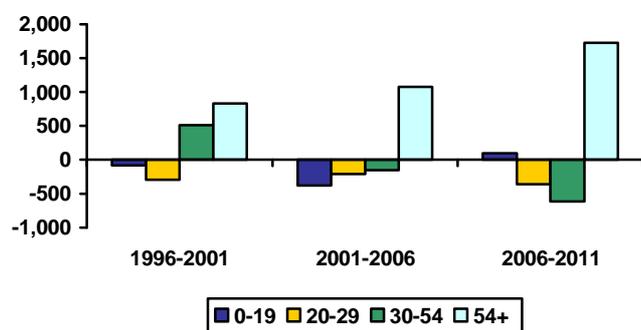
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	31.9%	30.3%	28.5%	27.9%
Age 20-29	11.4%	9.8%	8.9%	7.2%
Age 30-54	36.3%	36.9%	35.8%	32.4%
Age 55+	20.5%	23.0%	26.9%	32.5%
Population Change (average between years)				
Age 0-19		-83	-376	98
Age 20-29		-288	-204	-360
Age 30-54		506	-155	-610
Age 55+		833	1,072	1,729
Average Annual Growth		0.8%	0.3%	0.6%

Population Change by Age Group



WA Wheatbelt Great Southern

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	450	649	18	13	36%	48%
Value of Property and Unincorporated Business	164	258	62	44	20%	32%
Value of Financial Assets	373	503	8	8	61%	67%
Value of Household Liabilities	87	111	46	15	173%	149%
Disposable Income after Debt Service Costs	73	63	13	30	65%	51%
Household Debt Service Ratio	14%	20%	28	18	196%	140%
Household Debt to Gross Income Ratio	1.03	1.33	28	18	196%	140%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	8,430	12,351	5,529	6,261	488	2,143
20 to 29		3,438	3,805	4,825	583	1,287
30 to 54		22,463	7,956	9,755	1,117	3,121
55+		22,346	3,959	5,267	209	2,578

Note: This data has been benchmarked to the Estimated Residential Population.

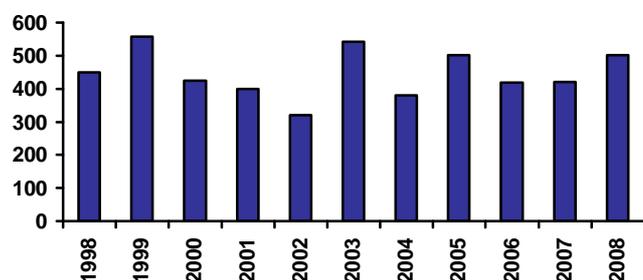
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	165	155	208	205	149	21%
Non Residential	71	82	81	77	57	-13%
Total	236	237	289	282	206	9%
Value per capita \$2005/06						
Residential	1,312	1,220	1,612	1,580	1,137	18%
Non Residential	567	645	628	591	436	-15%
Total	1,879	1,865	2,241	2,171	1,573	7%
Rank (value per capita)						
Residential	28	44	24	26	32	
Non Residential	28	44	56	59	58	
Total	37	46	35	35	41	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	449	557	424	399	320	542	381	501	418	421	502
Rank	60	56	64	61	58	50	60	55	47	58	48

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	21.9	24.6	23.4	24.2	24.1	24.9
Rank	29	23	29	27	22	20

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	72
Rank	57

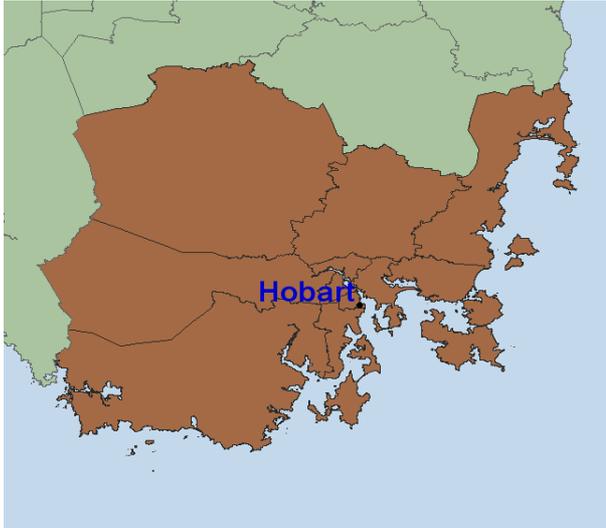
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	724	676	689
Mining	67	754	755
Manufacturing	971	971	980
Utilities	10	10	10
Construction	1,330	1,311	1,343
Wholesale	782	798	793
Retail	1,976	1,883	1,506
Hospitality	282	268	557
Transport	426	459	474
Communication	17	18	21
Finance	2,035	2,103	2,109
Property & Business	635	722	442
Government	65	62	64
Education	69	74	85
Health & Community	94	112	114
Cultural & Recreational	238	242	443
Personal Services	267	286	290

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

TAS Hobart-South



Southern Tasmania includes all of Hobart, plus its commuter zone and a fringe of purely rural areas and forests. It accordingly has a greater mix of economic base than the capital city regions of the mainland states. The regional economic base includes city centre functions, manufacturing (much of which is resource-related), agriculture, fishing, forestry and tourism, the latter based on both natural attractions and the region's urban heritage. The region extends into high country exploited for hydro-electricity.

Major centres:

Hobart

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	235	238	239	242	244	246	1.1%	0.8%	1.0%	0.9%	1.1%	0.9%	1.0%
Households	87	89	92	94	97	100	2.4%	2.7%	2.6%	2.9%	3.2%	2.6%	3.1%
NIEIR Workforce	111	115	117	120	121	124	2.9%	1.9%	3.1%	0.3%	2.8%	2.6%	1.5%
NIEIR Employment	96	101	103	107	108	112	4.4%	2.8%	3.6%	1.2%	3.3%	3.6%	2.3%
NIEIR Unemployment	15.0	14.0	13.4	13.4	12.3	12.1	-6.5%	-4.2%	-0.4%	-7.5%	-2.0%	-3.7%	-4.8%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	13.4%	12.2%	11.5%	11.1%	10.2%	9.7%	-1.2	-0.7	-0.4	-0.9	-0.5	-0.8	-0.7
Headline Unemployment	7.9%	6.8%	6.3%	6.2%	5.2%	4.5%	-1.1	-0.5	-0.1	-1.0	-0.7	-0.6	-0.8
NIEIR Structural U/E	20.2%	18.9%	18.0%	16.9%	16.5%	16.0%	-1.3	-0.9	-1.1	-0.3	-0.6	-1.1	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	3,106	3,351	3,608	3,850	3,976	4,348	13,222	14,108	15,075	15,933	16,309	17,643	7.4%	6.3%
Taxes Paid	939	996	1,080	1,119	1,195	1,272	3,997	4,192	4,514	4,633	4,900	5,160	6.0%	6.6%
Benefits	1,054	1,164	1,186	1,148	1,171	1,197	4,489	4,902	4,955	4,751	4,804	4,856	2.9%	2.1%
Business Income	668	736	754	751	858	816	2,843	3,098	3,153	3,107	3,518	3,311	4.0%	4.3%
Interest Paid	331	411	480	533	621	802	1,407	1,730	2,007	2,207	2,548	3,252	17.3%	22.6%
Property Income	809	904	1,030	1,088	1,173	1,334	3,443	3,806	4,304	4,504	4,810	5,411	10.4%	10.7%
Disposable Income	4,688	5,064	5,417	5,594	5,908	6,160	19,962	21,318	22,636	23,152	24,231	24,994	6.1%	4.9%
Rank							55	52	51	50	47	38		
%Rank #1							49%	49%	49%	49%	48%	47%		
Business Value Added	3,773	4,087	4,362	4,600	4,834	5,164	16,065	17,206	18,227	19,040	19,827	20,953	6.8%	6.0%
Rank							58	58	57	57	44	41		
%Rank #1							46%	47%	47%	47%	49%	50%		
Business Productivity							38,016	39,581	41,267	42,270	43,450	45,566	3.6%	3.8%
Rank							61	62	57	58	57	53		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

TAS Hobart-South

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.13%	0.11%
Disability Support (aged 21-24)	0.14%	0.12%
Disability Support (aged 25+)	4.77%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.10%	0.08%
Parenting Payment - Single (aged 25+)	0.25%	0.19%
Unemployed Long Term	1.73%	1.52%
Unemployed Short Term	1.86%	1.26%
Youth Allowance - Non Student	0.87%	0.78%
Youth Allowance Student	0.47%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	22.5%	7
2004	23.0%	9
2005	21.9%	8
2006	20.5%	11
2007	19.8%	16
2008	19.4%	24

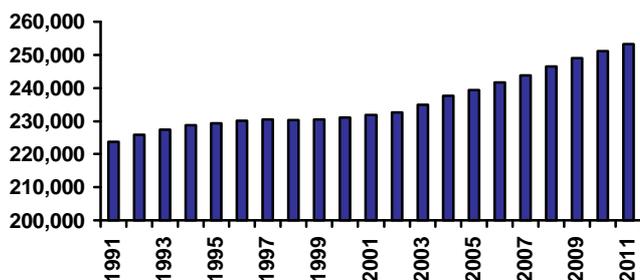
BABY BOUNCE

	Per cent	Rank
2002	1.23%	37
2003	1.20%	39
2004	1.19%	42
2005	1.24%	33
2006	1.30%	31
2007	1.36%	22
Bounce 2005-06	0.07%	8
Actual Change 2005-06 (Number)	191	27
Bounce 2006-07	0.06%	11
Actual Change 2006-07 (Number)	171	19

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.9	47
Share of population under 55	0.7	39
Aged migration	0.0	28
Population growth rate, 55+	0.0	34
Demographic stress	0.0	22
Dominant locations	0.5	41
Family / Youth migration	-1.0	36
Fertility bounce, 1996-2005	0.0	16
Fertility, babies % pop, 2005	0.0	31
Working elderly	0.3	48
SUSTAINABILITY SCORE	52.9	44

Population Profile



POPULATION

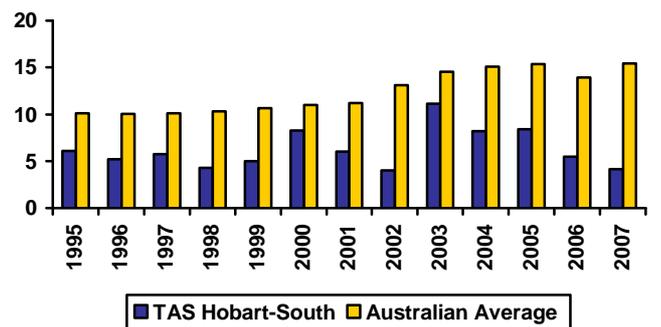
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	224	226	227	229	229	230	231	230	231	231	232	233	235	238	239	242	244	246	249	251	253

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	14.41	46.56	45
Average p.a. per capita	6.17	12.58	53
Hi Tech p.a. (1994-2007)	4.06	12.70	35
Hi Tech p.a. per capita	1.73	3.15	33
Info. Tech p.a. (1994-2007)	1.05	4.98	37
Info. Tech p.a. per capita	0.45	1.17	38
Average per capita (1994-2001)	5.57	10.80	53
Average per capita (2001-2007)	6.55	14.68	56
2001-07 avg./1994-01 avg.	1.18	1.35	54

Note: Per capita = 100,000 people

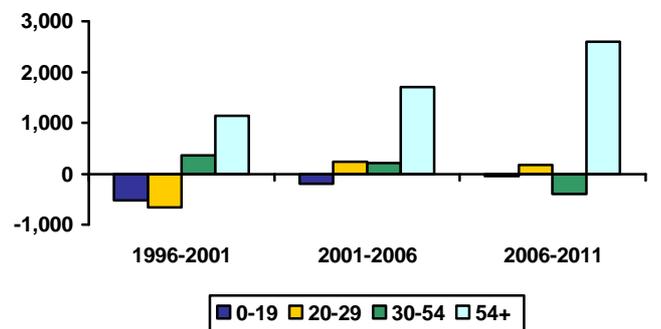
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.6%	29.3%	27.7%	26.3%
Age 20-29	12.6%	11.1%	11.2%	11.0%
Age 30-54	35.6%	36.1%	35.1%	32.7%
Age 55+	21.2%	23.5%	26.1%	30.0%
Population Change (average between years)				
Age 0-19		-518	-191	-47
Age 20-29		-655	234	164
Age 30-54		364	208	-390
Age 55+		1,143	1,699	2,595
Average Annual Growth		0.1%	0.8%	0.9%

Population Change by Age Group



TAS Hobart-South

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	329	418	30	31	26%	31%
Value of Property and Unincorporated Business	239	312	31	30	30%	39%
Value of Financial Assets	147	209	30	44	24%	28%
Value of Household Liabilities	57	104	5	9	114%	139%
Disposable Income after Debt Service Costs	45	57	60	49	40%	47%
Household Debt Service Ratio	13%	19%	25	14	186%	135%
Household Debt to Gross Income Ratio	0.98	1.29	25	14	186%	135%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	15,005	25,652	12,934	5,321	1,042	3,457
20 to 29		10,285	12,170	6,275	1,793	2,799
30 to 54		44,011	20,488	10,461	2,122	4,792
55+		44,735	8,625	4,969	396	4,281

Note: This data has been benchmarked to the Estimated Residential Population.

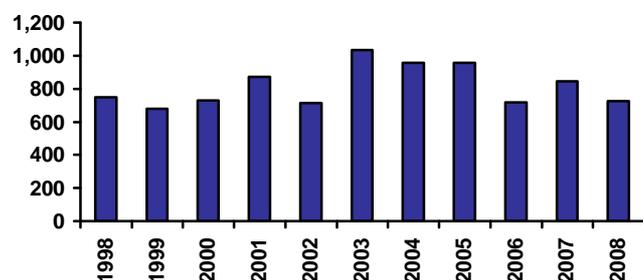
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	136	250	277	298	218	6%
Non Residential	111	148	161	189	182	20%
Total	246	397	438	487	400	11%
Value per capita \$2005/06						
Residential	585	1,047	1,135	1,208	875	2%
Non Residential	479	618	662	768	732	17%
Total	1,064	1,665	1,797	1,975	1,607	8%
Rank (value per capita)						
Residential	60	54	44	42	43	
Non Residential	60	54	53	40	25	
Total	60	56	51	43	39	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	749	679	729	872	715	1,035	956	957	717	844	726
Rank	43	47	42	26	22	6	15	11	23	30	33

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	14.3	15.0	16.0	15.3	16.2	16.6
Rank	64	65	64	65	65	64

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	280
Rank	28

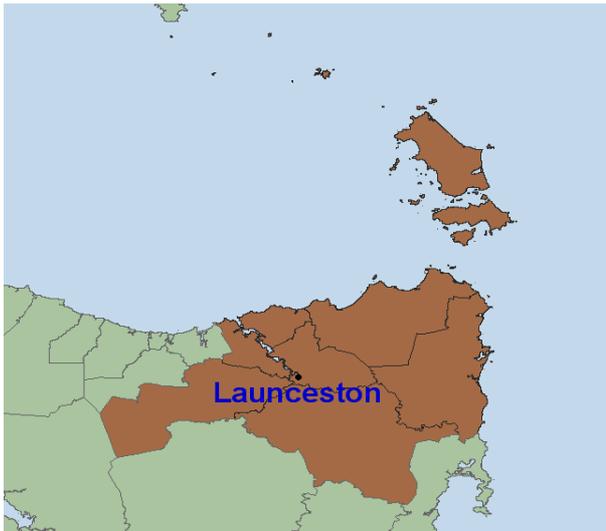
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	125	135	120
Mining	25	25	25
Manufacturing	530	544	570
Utilities	9	10	12
Construction	545	542	574
Wholesale	580	664	653
Retail	1,165	1,224	1,055
Hospitality	167	169	308
Transport	82	157	160
Communication	14	28	26
Finance	869	998	1,019
Property & Business	566	1,016	807
Government	165	160	161
Education	69	63	67
Health & Community	248	346	355
Cultural & Recreational	112	149	338
Personal Services	204	292	310

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

TAS North



Northern Tasmania comprises the north east part of the island. Its chief city, Launceston, rivals Hobart as a retail centre. The region includes areas of intensive farming with associated agricultural processing, and attracts its share of the tourist trade. The northern midlands and east coast are relatively dry, and are devoted to livestock rather than crop production. It has some manufacturing, with a nucleus of heavy industry at the port of Bell Bay.

Major centres:

Launceston

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	135	137	138	139	139	140	1.1%	0.9%	0.5%	0.6%	0.5%	0.8%	0.5%
Households	50	52	53	54	56	57	2.3%	2.5%	2.6%	2.6%	2.8%	2.5%	2.7%
NIEIR Workforce	62	65	65	66	66	67	4.1%	0.7%	1.4%	0.0%	1.6%	2.0%	0.8%
NIEIR Employment	54	56	58	59	59	60	4.6%	3.1%	2.7%	-0.2%	1.9%	3.5%	0.8%
NIEIR Unemployment	8.6	8.7	7.4	6.8	6.8	6.8	1.2%	-15.1%	-8.7%	1.2%	-0.3%	-7.8%	0.4%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	13.9%	13.5%	11.4%	10.2%	10.4%	10.2%	-0.4	-2.1	-1.1	0.1	-0.2	-1.2	0.0
Headline Unemployment	8.4%	8.2%	6.4%	5.4%	5.6%	5.3%	-0.2	-1.9	-0.9	0.2	-0.3	-1.0	-0.1
NIEIR Structural U/E	19.9%	18.7%	17.9%	17.4%	16.8%	16.3%	-1.2	-0.8	-0.5	-0.5	-0.5	-0.8	-0.5

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,637	1,772	1,919	2,022	2,057	2,214	12,105	12,958	13,899	14,576	14,748	15,792	7.3%	4.6%
Taxes Paid	514	551	597	612	606	631	3,803	4,030	4,328	4,414	4,347	4,500	6.0%	1.5%
Benefits	627	689	700	700	739	780	4,632	5,038	5,074	5,049	5,296	5,561	3.8%	5.5%
Business Income	478	520	511	521	435	402	3,531	3,799	3,702	3,756	3,117	2,867	2.9%	-12.2%
Interest Paid	188	228	262	284	324	418	1,387	1,671	1,894	2,049	2,321	2,980	14.8%	21.3%
Property Income	418	457	501	565	634	770	3,094	3,338	3,628	4,073	4,544	5,491	10.5%	16.7%
Disposable Income	2,668	2,875	3,036	3,206	3,272	3,461	19,727	21,023	21,991	23,114	23,458	24,686	6.3%	3.9%
Rank							57	55	54	52	52	43		
%Rank #1							49%	49%	47%	49%	47%	46%		
Business Value Added	2,115	2,292	2,430	2,543	2,491	2,616	15,636	16,757	17,601	18,332	17,865	18,660	6.3%	1.4%
Rank							61	60	60	60	61	61		
%Rank #1							45%	46%	45%	45%	44%	44%		
Business Productivity							36,409	37,815	39,232	40,064	41,121	43,536	3.2%	4.2%
Rank							65	65	65	65	65	61		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

TAS North

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.13%	0.11%
Disability Support (aged 21-24)	0.13%	0.12%
Disability Support (aged 25+)	4.53%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.09%	0.08%
Parenting Payment - Single (aged 25+)	0.22%	0.19%
Unemployed Long Term	1.70%	1.52%
Unemployed Short Term	1.97%	1.26%
Youth Allowance - Non Student	0.87%	0.78%
Youth Allowance Student	0.46%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	23.5%	6
2004	24.0%	6
2005	23.1%	6
2006	21.8%	6
2007	22.6%	7
2008	22.5%	6

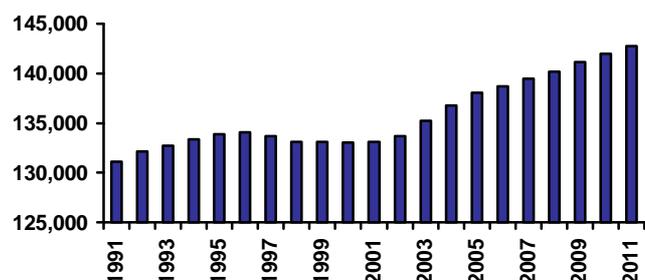
BABY BOUNCE

	Per cent	Rank
2002	1.22%	41
2003	1.19%	44
2004	1.17%	48
2005	1.21%	39
2006	1.28%	35
2007	1.28%	34
Bounce 2005-06	0.07%	9
Actual Change 2005-06 (Number)	101	47
Bounce 2006-07	0.00%	29
Actual Change 2006-07 (Number)	11	35

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.7	56
Share of population under 55	0.7	46
Aged migration	0.0	24
Population growth rate, 55+	0.0	36
Demographic stress	0.1	10
Dominant locations	0.7	33
Family / Youth migration	-4.0	39
Fertility bounce, 1996-2005	0.0	42
Fertility, babies % pop, 2005	0.0	38
Working elderly	0.3	51
SUSTAINABILITY SCORE	60.0	33

Population Profile



POPULATION

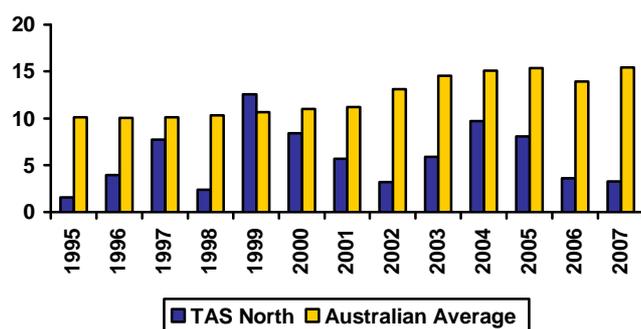
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	131	132	133	133	134	134	134	133	133	133	133	134	135	137	138	139	139	140	141	142	143

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	7.65	46.56	57
Average p.a. per capita	5.68	12.58	56
Hi Tech p.a. (1994-2007)	1.10	12.70	55
Hi Tech p.a. per capita	0.82	3.15	56
Info. Tech p.a. (1994-2007)	0.07	4.98	63
Info. Tech p.a. per capita	0.05	1.17	62
Average per capita (1994-2001)	5.68	10.80	52
Average per capita (2001-2007)	5.33	14.68	62
2001-07 avg./1994-01 avg.	0.94	1.35	63

Note: Per capita = 100,000 people

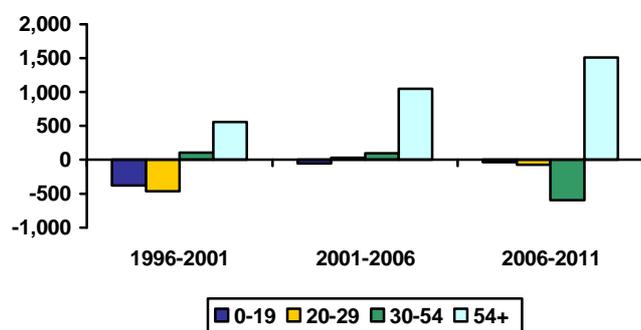
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	30.7%	29.5%	28.1%	27.2%
Age 20-29	12.5%	10.9%	10.5%	10.0%
Age 30-54	34.8%	35.5%	34.4%	31.3%
Age 55+	22.0%	24.2%	27.0%	31.6%
Population Change (average between years)				
Age 0-19		-379	-54	-38
Age 20-29		-461	25	-72
Age 30-54		102	98	-591
Age 55+		554	1,047	1,509
Average Annual Growth		-0.1%	0.8%	0.6%

Population Change by Age Group



TAS North

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	299	368	40	41	24%	27%
Value of Property and Unincorporated Business	225	257	38	45	28%	32%
Value of Financial Assets	133	206	41	45	22%	27%
Value of Household Liabilities	59	95	7	4	117%	127%
Disposable Income after Debt Service Costs	45	57	61	52	40%	47%
Household Debt Service Ratio	14%	18%	27	12	194%	128%
Household Debt to Gross Income Ratio	1.02	1.22	27	12	194%	128%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	8,429	15,255	6,359	4,651	571	1,874
20 to 29		5,211	5,812	4,986	733	1,237
30 to 54		25,461	9,393	8,034	892	2,313
55+		25,948	4,433	4,397	180	2,538

Note: This data has been benchmarked to the Estimated Residential Population.

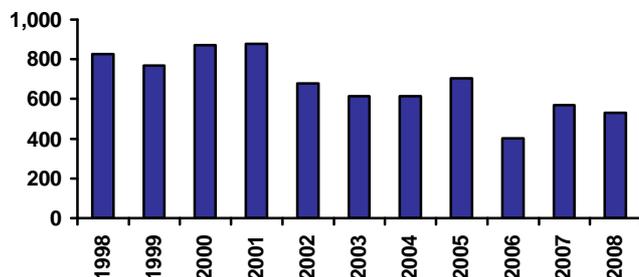
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	72	117	117	129	94	-3%
Non Residential	56	78	81	96	98	18%
Total	128	195	198	225	193	5%
Value per capita \$2005/06						
Residential	543	853	838	922	668	-5%
Non Residential	418	566	582	684	697	16%
Total	960	1,419	1,420	1,605	1,365	3%
Rank (value per capita)						
Residential	61	58	59	55	55	
Non Residential	61	58	59	53	28	
Total	63	59	61	57	51	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	827	768	872	877	679	615	613	705	403	570	529
Rank	36	40	21	25	27	39	45	36	48	47	45

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	15.8	17.0	17.6	17.2	18.0	18.3
Rank	62	63	63	63	63	63

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	144
Rank	45

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	119	138	121
Mining	13	14	14
Manufacturing	381	375	403
Utilities	3	5	3
Construction	334	335	345
Wholesale	458	502	510
Retail	770	812	735
Hospitality	128	137	209
Transport	71	112	111
Communication	6	5	6
Finance	788	846	854
Property & Business	251	475	370
Government	13	13	14
Education	24	26	30
Health & Community	107	158	171
Cultural & Recreational	47	62	150
Personal Services	91	124	132

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

TAS North West



North West Tasmania comprises the urban strip along the Cradle Coast (Devonport to Ulverstone, Burnie and Wynyard, with Stanley and Smithton beyond) plus the hinterland of this strip including the West Coast. The coastal North West is dairy farming country, while further inland plantation forestry is in conflict with the conservation of native forest and so with the tourist industry. The West Coast has a history of more than a century of mining, but tourism now overshadows mining as its economic base. Extensive tree plantations were originally started to support a paper industry, but the two industries have become disconnected and much of the product of the plantations is exported as woodchips.

Major centres:

Burnie, Devonport

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	108	108	109	110	110	111	0.9%	0.5%	0.6%	0.4%	0.7%	0.6%	0.5%
Households	40	41	42	43	44	45	2.1%	2.4%	2.3%	2.3%	2.5%	2.3%	2.4%
NIEIR Workforce	50	51	52	53	54	55	2.3%	1.0%	3.0%	1.7%	1.3%	2.1%	1.5%
NIEIR Employment	42	44	45	46	47	48	4.4%	2.8%	2.6%	1.0%	2.7%	3.2%	1.8%
NIEIR Unemployment	8.3	7.6	6.9	7.3	7.8	7.2	-8.2%	-9.4%	5.9%	6.5%	-7.2%	-4.1%	-0.6%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	16.5%	14.8%	13.3%	13.6%	14.3%	13.1%	-1.7	-1.5	0.4	0.6	-1.2	-0.9	-0.3
Headline Unemployment	9.9%	8.4%	6.9%	7.3%	8.2%	7.1%	-1.5	-1.4	0.4	1.0	-1.1	-0.9	-0.1
NIEIR Structural U/E	22.7%	21.3%	20.3%	19.4%	18.4%	17.8%	-1.4	-1.0	-0.9	-1.0	-0.6	-1.1	-0.8

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,306	1,406	1,512	1,608	1,664	1,816	12,143	12,959	13,873	14,669	15,115	16,383	7.2%	6.3%
Taxes Paid	422	452	489	522	501	545	3,927	4,168	4,486	4,757	4,555	4,919	7.3%	2.2%
Benefits	519	574	579	566	584	605	4,827	5,289	5,317	5,165	5,308	5,457	2.9%	3.3%
Business Income	394	436	457	459	362	401	3,668	4,022	4,193	4,185	3,291	3,620	5.2%	-6.5%
Interest Paid	145	175	198	213	241	319	1,346	1,610	1,818	1,945	2,188	2,878	13.8%	22.3%
Property Income	265	291	306	364	428	502	2,467	2,681	2,812	3,318	3,884	4,526	11.1%	17.4%
Disposable Income	2,113	2,289	2,419	2,538	2,603	2,769	19,654	21,099	22,200	23,149	23,643	24,988	6.3%	4.5%
Rank							59	54	53	51	51	40		
%Rank #1							49%	49%	48%	49%	47%	47%		
Business Value Added	1,700	1,842	1,968	2,067	2,026	2,217	15,810	16,981	18,065	18,853	18,406	20,003	6.7%	3.6%
Rank							60	59	58	58	58	51		
%Rank #1							46%	47%	46%	47%	45%	48%		
Business Productivity							36,935	38,201	39,909	40,921	42,256	45,272	3.5%	5.2%
Rank							64	64	63	63	61	54		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

TAS North West

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.27%	0.11%
Disability Support (aged 21-24)	0.26%	0.12%
Disability Support (aged 25+)	8.28%	3.41%
Parenting Payment - Single (aged 16-20)	0.01%	0.00%
Parenting Payment - Single (aged 21-24)	0.16%	0.08%
Parenting Payment - Single (aged 25+)	0.36%	0.19%
Unemployed Long Term	3.06%	1.52%
Unemployed Short Term	3.30%	1.26%
Youth Allowance - Non Student	1.44%	0.78%
Youth Allowance Student	0.90%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	24.6%	4
2004	25.1%	4
2005	24.0%	5
2006	22.3%	5
2007	22.5%	8
2008	21.8%	9

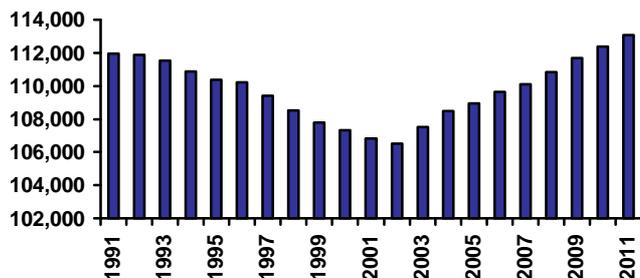
BABY BOUNCE

	Per cent	Rank
2002	1.23%	36
2003	1.21%	37
2004	1.19%	41
2005	1.24%	34
2006	1.32%	30
2007	1.38%	19
Bounce 2005-06	0.08%	2
Actual Change 2005-06 (Number)	97	49
Bounce 2006-07	0.07%	8
Actual Change 2006-07 (Number)	81	24

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	0.4	63
Share of population under 55	0.7	53
Aged migration	0.0	11
Population growth rate, 55+	0.1	23
Demographic stress	0.1	8
Dominant locations	0.6	36
Family / Youth migration	-7.0	44
Fertility bounce, 1996-2005	0.0	37
Fertility, babies % pop, 2005	0.0	34
Working elderly	0.2	55
SUSTAINABILITY SCORE	56.7	36

Population Profile



POPULATION

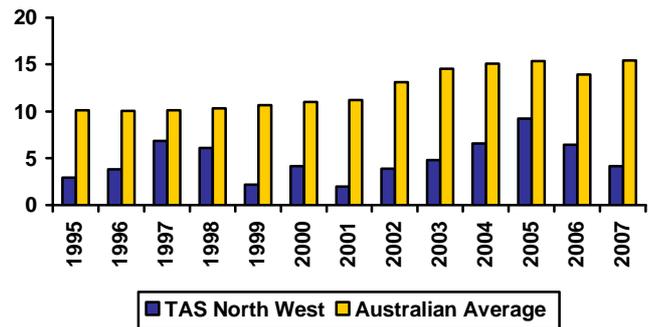
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	112	112	112	111	110	110	109	109	108	107	107	107	108	108	109	110	110	111	112	112	113

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	5.25	46.56	60
Average p.a. per capita	4.83	12.58	62
Hi Tech p.a. (1994-2007)	0.66	12.70	60
Hi Tech p.a. per capita	0.60	3.15	60
Info. Tech p.a. (1994-2007)	0.00	4.98	65
Info. Tech p.a. per capita	0.00	1.17	65
Average per capita (1994-2001)	3.98	10.80	59
Average per capita (2001-2007)	5.66	14.68	61
2001-07 avg./1994-01 avg.	1.42	1.35	19

Note: Per capita = 100,000 people

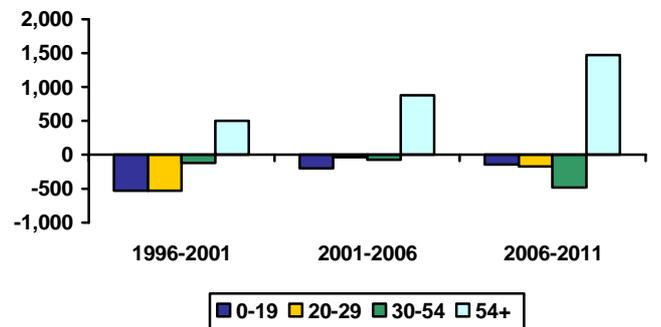
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	31.5%	30.0%	28.3%	26.8%
Age 20-29	12.0%	9.9%	9.5%	8.5%
Age 30-54	35.2%	35.7%	34.5%	31.3%
Age 55+	21.4%	24.4%	27.7%	33.4%
Population Change (average between years)				
Age 0-19		-531	-198	-138
Age 20-29		-527	-41	-165
Age 30-54		-121	-74	-479
Age 55+		502	874	1,468
Average Annual Growth		-0.6%	0.5%	0.6%

Population Change by Age Group



TAS North West

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	265	373	47	39	21%	28%
Value of Property and Unincorporated Business	196	237	45	48	24%	30%
Value of Financial Assets	127	228	43	35	21%	30%
Value of Household Liabilities	58	92	6	3	116%	123%
Disposable Income after Debt Service Costs	45	58	59	43	40%	48%
Household Debt Service Ratio	14%	18%	26	8	192%	124%
Household Debt to Gross Income Ratio	1.01	1.18	26	8	192%	124%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	6,729	12,232	6,534	2,902	237	1,227
20 to 29		3,997	5,179	2,605	177	816
30 to 54		20,716	9,039	4,771	506	1,550
55+		21,535	4,277	2,617	141	1,852

Note: This data has been benchmarked to the Estimated Residential Population.

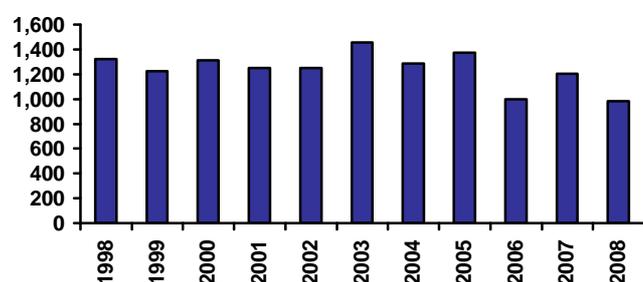
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	44	86	103	113	83	16%
Non Residential	35	54	58	66	63	17%
Total	80	140	162	180	146	16%
Value per capita \$2005/06						
Residential	415	790	939	1,024	746	14%
Non Residential	328	493	529	598	564	14%
Total	742	1,283	1,467	1,622	1,310	14%
Rank (value per capita)						
Residential	65	59	53	51	52	
Non Residential	65	59	61	57	48	
Total	65	60	60	56	54	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	1,323	1,224	1,312	1,251	1,251	1,455	1,285	1,373	996	1,206	983
Rank	13	17	6	7	1	1	8	3	9	15	23

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	14.2	15.1	15.8	15.3	16.2	16.4
Rank	65	64	65	64	64	65

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	88
Rank	55

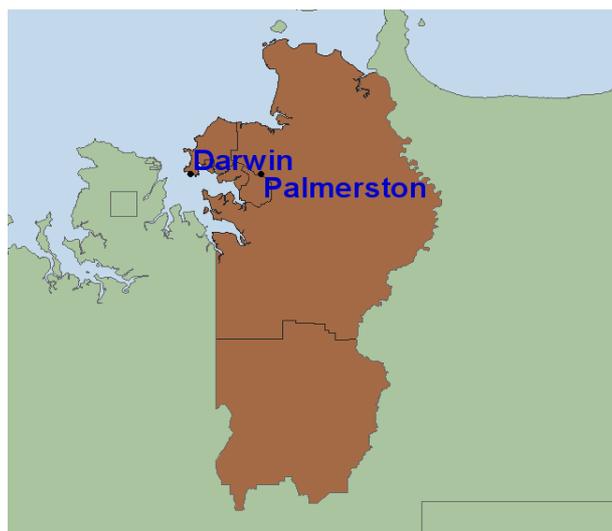
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	85	96	88
Mining	21	19	18
Manufacturing	228	226	240
Utilities	2	2	2
Construction	224	225	236
Wholesale	323	337	345
Retail	563	602	523
Hospitality	101	96	155
Transport	74	117	126
Communication	1	4	6
Finance	505	547	553
Property & Business	165	291	226
Government	8	8	8
Education	22	22	23
Health & Community	71	102	104
Cultural & Recreational	30	35	81
Personal Services	47	77	87

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NT Darwin



As the smallest of the capitals (though growing faster than the rest), Darwin comprises a single region which includes the CBD, all the suburbs and virtually all of the commuter and hobby farm belt – its precise boundary having recently been redrawn in the process of local government reform. Darwin's economic base includes the provision of urban functions for the Top End and government functions for the whole of the NT. Tourism is important, and defence very important. Darwin is also the service port for offshore oil and gas fields, and expects to gain gas-processing industries.

Major centres:

Darwin, Palmerston

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	108	109	112	115	118	122	1.1%	2.4%	2.8%	2.6%	3.0%	2.1%	2.8%
Households	33	34	34	35	35	36	1.1%	1.6%	1.7%	1.6%	1.4%	1.5%	1.5%
NIEIR Workforce	67	70	69	72	75	79	4.6%	-1.3%	3.1%	4.5%	6.3%	2.1%	5.4%
NIEIR Employment	64	67	66	69	72	77	4.6%	-1.3%	3.5%	5.5%	6.4%	2.2%	5.9%
NIEIR Unemployment	3.1	3.2	3.2	3.1	2.5	2.6	3.6%	-1.3%	-4.2%	-17.3%	2.9%	-0.7%	-7.7%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	4.6%	4.6%	4.6%	4.3%	3.4%	3.3%	0.0	0.0	-0.3	-0.9	-0.1	-0.1	-0.5
Headline Unemployment	3.5%	3.6%	3.6%	3.2%	2.4%	2.4%	0.1	0.0	-0.4	-0.8	0.0	-0.1	-0.4
NIEIR Structural U/E	11.8%	11.1%	11.1%	10.7%	9.1%	8.3%	-0.7	0.0	-0.4	-1.6	-0.7	-0.4	-1.2

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	2,371	2,642	2,833	3,004	3,227	3,545	21,927	24,168	25,303	26,092	27,322	29,150	8.2%	8.6%
Taxes Paid	544	657	709	734	744	799	5,035	6,015	6,330	6,379	6,302	6,574	10.5%	4.3%
Benefits	202	204	238	229	227	230	1,871	1,865	2,128	1,991	1,926	1,892	4.2%	0.2%
Business Income	377	441	444	458	448	479	3,488	4,037	3,966	3,982	3,791	3,942	6.7%	2.3%
Interest Paid	174	220	260	296	351	443	1,609	2,011	2,317	2,574	2,970	3,646	19.4%	22.3%
Property Income	404	508	565	617	652	775	3,736	4,648	5,042	5,359	5,517	6,371	15.2%	12.1%
Disposable Income	2,885	3,205	3,429	3,615	3,715	3,947	26,678	29,320	30,618	31,403	31,452	32,458	7.8%	4.5%
Rank							14	10	10	10	12	11		
%Rank #1							66%	68%	66%	66%	63%	60%		
Business Value Added	2,748	3,083	3,278	3,462	3,674	4,024	25,415	28,205	29,269	30,074	31,113	33,092	8.0%	7.8%
Rank							8	7	7	7	7	7		
%Rank #1							73%	78%	75%	74%	76%	79%		
Business Productivity							42,501	45,519	48,964	49,995	50,448	51,911	5.6%	1.9%
Rank							46	33	18	18	21	22		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NT Darwin

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.10%	0.11%
Disability Support (aged 21-24)	0.10%	0.12%
Disability Support (aged 25+)	2.56%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.13%	0.08%
Parenting Payment - Single (aged 25+)	0.27%	0.19%
Unemployed Long Term	1.58%	1.52%
Unemployed Short Term	1.52%	1.26%
Youth Allowance - Non Student	0.88%	0.78%
Youth Allowance Student	0.42%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	7.0%	64
2004	6.4%	65
2005	7.0%	64
2006	6.3%	64
2007	6.1%	64
2008	5.8%	63

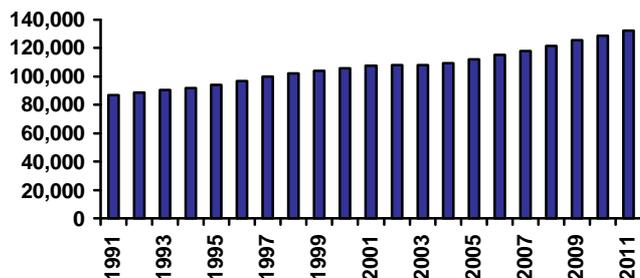
BABY BOUNCE

	Per cent	Rank
2002	1.70%	4
2003	1.75%	3
2004	1.67%	4
2005	1.63%	4
2006	1.69%	3
2007	1.60%	4
Bounce 2005-06	0.07%	7
Actual Change 2005-06 (Number)	130	37
Bounce 2006-07	-0.09%	59
Actual Change 2006-07 (Number)	-60	45

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.9	3
Aged migration	0.0	59
Population growth rate, 55+	0.0	49
Demographic stress	-0.2	61
Dominant locations	0.7	28
Family / Youth migration	22.0	24
Fertility bounce, 1996-2005	0.0	28
Fertility, babies % pop, 2005	0.0	4
Working elderly	0.4	2
SUSTAINABILITY SCORE	68.0	27

Population Profile



POPULATION

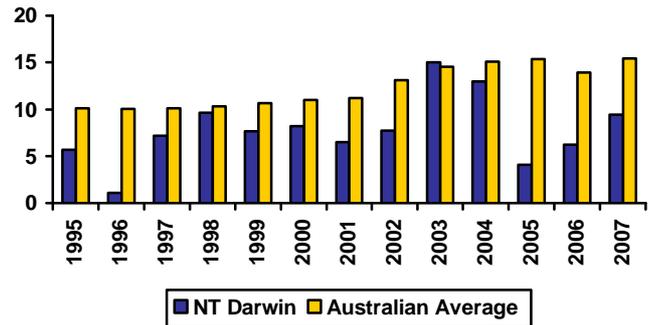
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	87	89	91	92	94	97	100	102	104	106	107	108	108	109	112	115	118	122	125	129	133

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	8.44	46.56	55
Average p.a. per capita	7.92	12.58	42
Hi Tech p.a. (1994-2007)	1.77	12.70	50
Hi Tech p.a. per capita	1.61	3.15	36
Info. Tech p.a. (1994-2007)	0.88	4.98	41
Info. Tech p.a. per capita	0.79	1.17	25
Average per capita (1994-2001)	6.69	10.80	45
Average per capita (2001-2007)	9.30	14.68	41
2001-07 avg./1994-01 avg.	1.39	1.35	25

Note: Per capita = 100,000 people

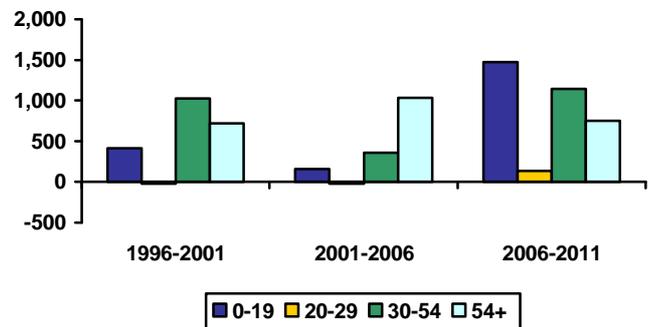
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	33.1%	31.7%	30.3%	31.9%
Age 20-29	17.7%	15.8%	14.7%	13.2%
Age 30-54	40.3%	41.1%	39.9%	39.0%
Age 55+	8.9%	11.4%	15.1%	15.9%
Population Change (average between years)				
Age 0-19		408	162	1,470
Age 20-29		-20	-24	135
Age 30-54		1,029	354	1,142
Age 55+		717	1,033	748
Average Annual Growth		2.1%	1.4%	2.9%

Population Change by Age Group



NT Darwin

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	367	543	23	18	29%	40%
Value of Property and Unincorporated Business	295	451	18	13	36%	56%
Value of Financial Assets	141	223	35	37	23%	30%
Value of Household Liabilities	69	131	19	32	137%	175%
Disposable Income after Debt Service Costs	77	85	9	8	69%	70%
Household Debt Service Ratio	10%	17%	6	5	139%	119%
Household Debt to Gross Income Ratio	0.73	1.14	6	5	139%	119%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	8,747	9,840	5,556	5,061	761	3,355
20 to 29		4,340	4,272	7,379	1,228	3,167
30 to 54		16,885	10,240	9,953	1,659	5,290
55+		10,351	2,592	2,234	258	1,948

Note: This data has been benchmarked to the Estimated Residential Population.

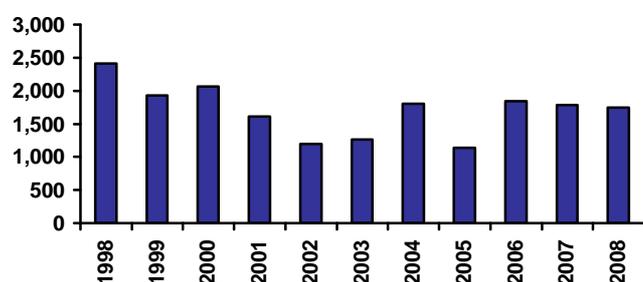
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	248	180	269	261	207	37%
Non Residential	163	165	224	226	212	34%
Total	410	344	493	487	419	35%
Value per capita \$2005/06						
Residential	2,347	1,611	2,275	2,146	1,654	26%
Non Residential	1,534	1,478	1,898	1,856	1,690	23%
Total	3,881	3,089	4,173	4,001	3,344	24%
Rank (value per capita)						
Residential	7	28	8	12	12	
Non Residential	7	28	6	7	7	
Total	4	11	8	10	8	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	2,412	1,931	2,060	1,614	1,194	1,267	1,808	1,137	1,840	1,783	1,749
Rank	1	5	2	2	2	2	2	8	2	4	5

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	34.6	33.2	34.0	32.8	33.2	33.6
Rank	1	2	2	2	2	2

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	126
Rank	50

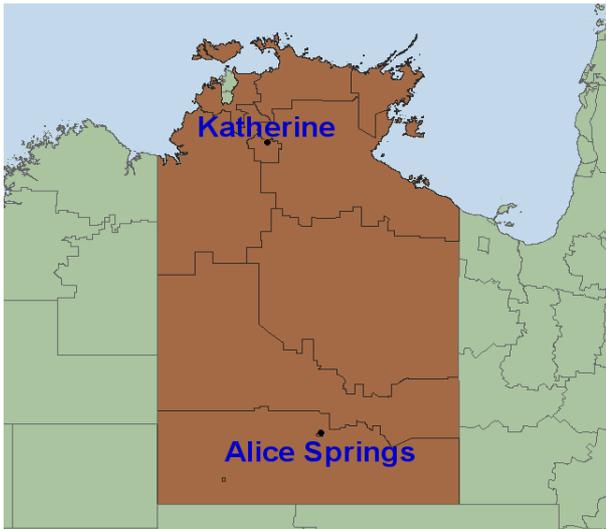
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	55	58	59
Mining	38	40	38
Manufacturing	224	233	244
Utilities	8	9	9
Construction	463	458	480
Wholesale	253	291	289
Retail	519	515	490
Hospitality	56	57	99
Transport	58	175	172
Communication	7	13	15
Finance	169	272	282
Property & Business	304	557	447
Government	112	102	104
Education	45	43	42
Health & Community	65	84	104
Cultural & Recreational	74	83	171
Personal Services	70	86	107

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

NT Lingiari



Outside Darwin, the Northern Territory comprises conservation reserves and low-productivity pastoral country. Production statistics are dominated by offshore oil and gas and onshore minerals, but these do not yield much in employment or local income. In the two main towns, Katherine and Alice Springs, defence and tourism are important parts of the economic base. Outside the towns and mining settlements, the people are predominantly Aboriginal, and mostly live in communities which, due to lack of economic base, are heavily dependent on social security – though there is some employment in mining, public works and conservation. N.B Unemployment figures in remote regions can display excess variation.

Major centres:

Alice Springs, Katherine

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	92	93	94	96	97	98	0.9%	1.8%	1.2%	1.4%	1.6%	1.3%	1.5%
Households	20	20	20	21	21	21	1.0%	1.1%	1.4%	1.5%	1.4%	1.2%	1.5%
NIEIR Workforce	37	32	31	33	33	35	-14.5%	-1.4%	4.7%	1.9%	6.9%	-4.1%	4.4%
NIEIR Employment	33	27	27	27	29	30	-16.9%	-2.3%	2.5%	4.7%	4.8%	-5.9%	4.7%
NIEIR Unemployment	4.0	4.2	4.4	5.2	4.5	5.4	4.8%	4.8%	18.0%	-13.1%	20.6%	9.0%	2.4%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	10.8%	13.2%	14.0%	15.8%	13.5%	15.2%	2.4	0.8	1.8	-2.3	1.7	1.7	-0.3
Headline Unemployment	8.6%	8.8%	9.4%	8.9%	6.8%	7.4%	0.2	0.6	-0.5	-2.1	0.6	0.1	-0.7
NIEIR Structural U/E	30.3%	37.0%	38.1%	26.0%	27.1%	25.9%	6.7	1.1	-12.1	1.1	-1.2	-1.4	-0.1

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	1,221	1,052	1,107	1,167	1,236	1,326	13,287	11,347	11,730	12,220	12,767	13,477	-1.5%	6.6%
Taxes Paid	302	281	298	308	291	299	3,288	3,029	3,154	3,228	3,001	3,035	0.7%	-1.6%
Benefits	335	380	363	361	370	387	3,643	4,094	3,847	3,775	3,822	3,932	2.5%	3.6%
Business Income	245	255	262	247	193	170	2,660	2,751	2,781	2,590	1,992	1,723	0.4%	-17.2%
Interest Paid	83	99	111	119	133	160	907	1,072	1,173	1,249	1,376	1,628	12.7%	15.9%
Property Income	216	170	200	222	249	269	2,347	1,829	2,116	2,327	2,570	2,738	1.0%	10.1%
Disposable Income	1,837	1,645	1,710	1,767	1,789	1,815	19,984	17,734	18,117	18,503	18,471	18,438	-1.3%	1.3%
Rank							54	65	65	65	65	65		
%Rank #1							50%	41%	39%	39%	37%	34%		
Business Value Added	1,466	1,308	1,370	1,415	1,429	1,496	15,947	14,098	14,511	14,810	14,759	15,200	-1.2%	2.8%
Rank							59	64	64	64	65	65		
%Rank #1							46%	39%	37%	37%	36%	36%		
Business Productivity							43,147	43,586	46,245	47,748	47,764	48,896	3.4%	1.2%
Rank							41	46	35	30	37	37		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

NT Lingiari

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.14%	0.11%
Disability Support (aged 21-24)	0.15%	0.12%
Disability Support (aged 25+)	3.18%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.26%	0.08%
Parenting Payment - Single (aged 25+)	0.43%	0.19%
Unemployed Long Term	1.75%	1.52%
Unemployed Short Term	4.55%	1.26%
Youth Allowance - Non Student	1.15%	0.78%
Youth Allowance Student	1.54%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	18.2%	25
2004	23.1%	8
2005	21.2%	13
2006	20.4%	14
2007	20.7%	12
2008	21.3%	11

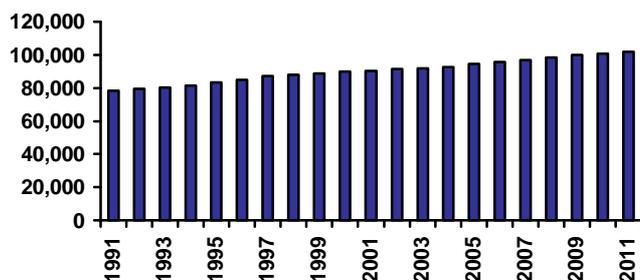
BABY BOUNCE

	Per cent	Rank
2002	1.99%	1
2003	1.97%	1
2004	1.85%	2
2005	1.76%	2
2006	1.79%	2
2007	1.82%	2
Bounce 2005-06	0.03%	39
Actual Change 2005-06 (Number)	51	58
Bounce 2006-07	0.03%	20
Actual Change 2006-07 (Number)	53	31

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.9	2
Aged migration	0.0	65
Population growth rate, 55+	0.1	12
Demographic stress	-0.2	56
Dominant locations	0.2	65
Family / Youth migration	6.0	31
Fertility bounce, 1996-2005	0.0	65
Fertility, babies % pop, 2005	0.0	3
Working elderly	0.4	4
SUSTAINABILITY SCORE	48.8	55

Population Profile



POPULATION

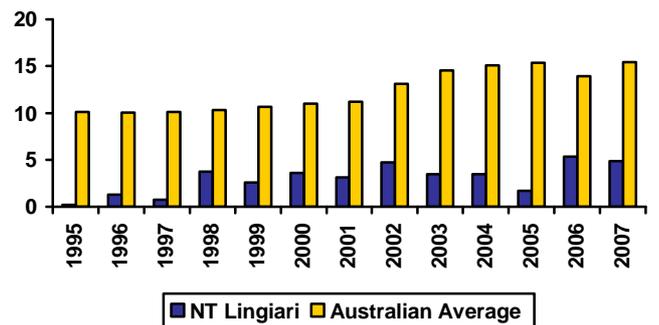
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	78	80	80	82	84	85	87	88	89	90	90	91	92	93	94	96	97	98	100	101	102

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	2.85	46.56	64
Average p.a. per capita	3.12	12.58	64
Hi Tech p.a. (1994-2007)	0.65	12.70	61
Hi Tech p.a. per capita	0.69	3.15	59
Info. Tech p.a. (1994-2007)	0.19	4.98	56
Info. Tech p.a. per capita	0.21	1.17	52
Average per capita (1994-2001)	2.51	10.80	65
Average per capita (2001-2007)	4.04	14.68	63
2001-07 avg./1994-01 avg.	1.61	1.35	6

Note: Per capita = 100,000 people

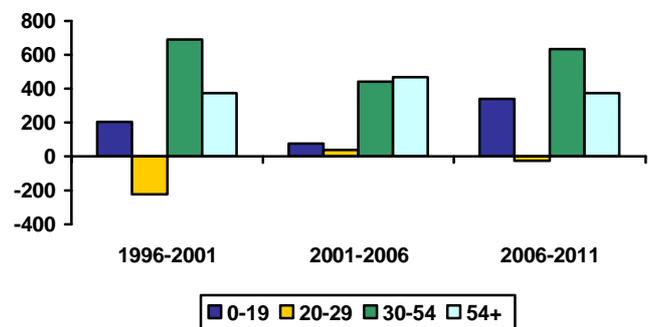
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	40.1%	38.9%	37.2%	36.4%
Age 20-29	18.3%	16.0%	15.4%	14.2%
Age 30-54	34.2%	36.0%	36.4%	37.2%
Age 55+	7.4%	9.0%	11.0%	12.1%
Population Change (average between years)				
Age 0-19		203	74	340
Age 20-29		-223	37	-27
Age 30-54		691	442	633
Age 55+		372	467	375
Average Annual Growth		1.2%	1.1%	1.3%

Population Change by Age Group



NT Lingiari

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	243	285	52	60	19%	21%
Value of Property and Unincorporated Business	156	176	64	61	19%	22%
Value of Financial Assets	149	184	28	51	24%	24%
Value of Household Liabilities	62	75	10	1	123%	100%
Disposable Income after Debt Service Costs	69	63	16	27	61%	52%
Household Debt Service Ratio	10%	14%	9	1	144%	100%
Household Debt to Gross Income Ratio	0.76	0.96	9	1	145%	100%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	8,931	15,475	2,620	3,830	407	2,475
20 to 29		8,613	1,934	4,545	588	2,448
30 to 54		16,438	3,781	7,589	1,111	4,115
55+		6,692	805	1,771	92	1,220

Note: This data has been benchmarked to the Estimated Residential Population.

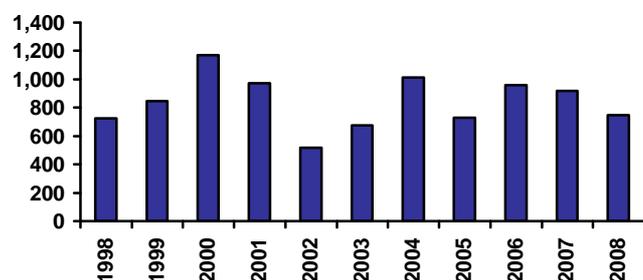
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	91	60	80	62	50	8%
Non Residential	68	75	87	100	93	24%
Total	159	135	168	162	143	17%
Value per capita \$2005/06						
Residential	1,013	636	830	630	506	3%
Non Residential	755	801	900	1,011	927	18%
Total	1,769	1,437	1,730	1,641	1,433	11%
Rank (value per capita)						
Residential	47	64	61	61	61	
Non Residential	47	64	29	24	16	
Total	42	58	53	55	47	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	726	846	1,169	974	519	677	1,013	728	957	920	748
Rank	44	32	8	14	43	25	11	34	10	25	32

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	33.1	32.6	33.4	32.1	32.5	33.1
Rank	3	3	3	3	3	3

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	35
Rank	65

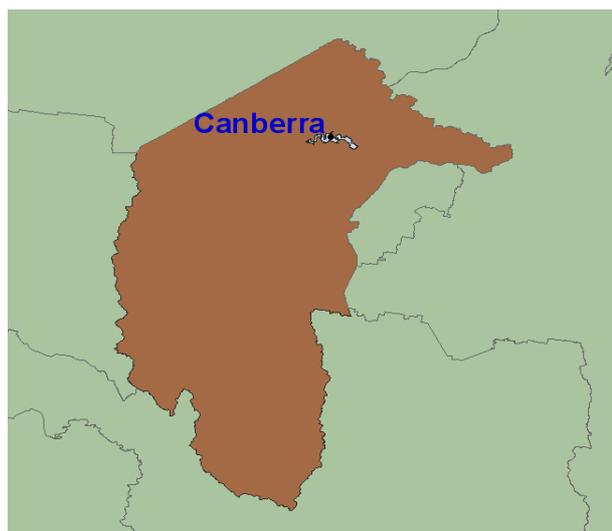
BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	69	77	78
Mining	16	16	14
Manufacturing	118	111	118
Utilities	6	6	7
Construction	301	299	306
Wholesale	108	115	121
Retail	387	382	343
Hospitality	86	83	130
Transport	53	120	128
Communication	6	6	6
Finance	101	135	143
Property & Business	136	218	168
Government	40	40	41
Education	22	22	25
Health & Community	46	66	69
Cultural & Recreational	41	52	95
Personal Services	34	39	50

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

ACT



Canberra was founded less than a century ago as Australia's federal capital. It is located among low hills at an altitude guaranteed to cause frosts in winter. The urban area extends beyond the limits of the capital territory, but it remains a government rather than a commercial city, with an inheritance of strong town planning and a monumental core known as the parliamentary triangle. Administration is still a major part of the economic base, though there has been some diversification, chiefly into knowledge industries. The urban area now extends to the foot of the forested water-catchment hills which comprise the rest of the ACT.

Major centres:

Canberra

LABOUR FORCE

	Number ('000s)						Percentage Change					% p.a. growth	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
Population	326	327	330	334	340	344	0.6%	0.8%	1.2%	1.7%	1.4%	0.9%	1.5%
Households	112	114	115	116	117	118	1.4%	1.3%	0.9%	0.7%	0.7%	1.2%	0.7%
NIEIR Workforce	180	179	182	184	190	191	-0.4%	1.3%	1.1%	3.3%	0.9%	0.7%	2.1%
NIEIR Employment	169	168	172	175	181	183	-0.3%	2.2%	1.6%	3.7%	1.0%	1.2%	2.3%
NIEIR Unemployment	11.2	10.9	9.5	8.8	8.4	8.4	-2.8%	-12.9%	-7.5%	-4.2%	-0.4%	-7.8%	-2.3%

UNEMPLOYMENT

	Percentage						Percentage Point Change					Average % Point Change pa	
	2003	2004	2005	2006	2007	2008	2003 to 2004	2004 to 2005	2005 to 2006	2006 to 2007	2007 to 2008	2003 -2006	2006 -2008
NIEIR Unemployment	6.2%	6.1%	5.2%	4.8%	4.4%	4.4%	-0.2	-0.8	-0.4	-0.3	-0.1	-0.5	-0.2
Headline Unemployment	4.3%	4.1%	3.7%	3.3%	3.0%	2.9%	-0.2	-0.4	-0.4	-0.3	-0.1	-0.3	-0.2
NIEIR Structural U/E	7.4%	7.3%	7.0%	6.7%	6.2%	6.0%	-0.1	-0.2	-0.4	-0.5	-0.2	-0.2	-0.4

INCOME FLOWS & PRODUCTIVITY

	Level 2005/06 \$m						Per Capita \$						% p.a. Growth of Level	
	2003	2004	2005	2006	2007	2008	2003	2004	2005	2006	2007	2008	2003 -2006	2006 -2008
Wages/Salaries	9,568	9,992	10,396	10,713	11,622	12,104	29,381	30,513	31,488	32,063	34,206	35,139	3.8%	6.3%
Taxes Paid	2,571	2,648	2,806	2,874	2,951	3,086	7,894	8,086	8,498	8,601	8,684	8,959	3.8%	3.6%
Benefits	1,022	1,120	1,148	1,121	1,162	1,185	3,138	3,421	3,477	3,355	3,421	3,440	3.1%	2.8%
Business Income	935	989	1,014	1,041	1,049	1,103	2,871	3,020	3,072	3,115	3,088	3,202	3.6%	2.9%
Interest Paid	703	851	954	1,020	1,147	1,508	2,158	2,600	2,889	3,053	3,375	4,378	13.2%	21.6%
Property Income	2,693	2,815	3,113	3,416	3,799	4,855	8,268	8,596	9,427	10,223	11,182	14,094	8.3%	19.2%
Disposable Income	12,023	12,601	13,197	13,726	14,022	14,545	36,920	38,479	39,971	41,080	41,269	42,226	4.5%	2.9%
Rank							3	3	3	3	5	5		
%Rank #1							92%	89%	86%	87%	82%	79%		
Business Value Added	10,503	10,981	11,411	11,754	12,671	13,207	32,252	33,533	34,560	35,179	37,294	38,341	3.8%	6.0%
Rank							4	4	4	4	4	4		
%Rank #1							93%	92%	88%	87%	91%	91%		
Business Productivity							61,293	64,222	65,404	66,352	68,966	71,196	2.7%	3.6%
Rank							5	4	5	5	3	2		

Note: (1) All years stated above are fiscal year ending.

(2) Figures for wages/salaries include superannuation supplements.

(3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.

(4) Figures for business productivity are per employee.

ACT

SOCIAL SECURITY

	% Pop	Australian Average
Disability Support (aged 16-20)	0.08%	0.11%
Disability Support (aged 21-24)	0.09%	0.12%
Disability Support (aged 25+)	1.88%	3.41%
Parenting Payment - Single (aged 16-20)	0.00%	0.00%
Parenting Payment - Single (aged 21-24)	0.05%	0.08%
Parenting Payment - Single (aged 25+)	0.12%	0.19%
Unemployed Long Term	0.90%	1.52%
Unemployed Short Term	0.59%	1.26%
Youth Allowance - Non Student	0.36%	0.78%
Youth Allowance Student	0.15%	0.37%

Cash Benefits Share of Disposable Income	Share	Rank
2003	8.5%	60
2004	8.9%	59
2005	8.7%	59
2006	8.2%	60
2007	8.3%	59
2008	8.1%	58

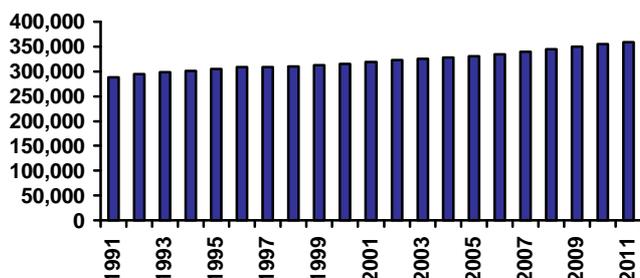
BABY BOUNCE

	Per cent	Rank
2002	1.24%	35
2003	1.23%	33
2004	1.26%	30
2005	1.26%	31
2006	1.33%	29
2007	1.33%	29
Bounce 2005-06	0.07%	10
Actual Change 2005-06 (Number)	269	17
Bounce 2006-07	0.00%	32
Actual Change 2006-07 (Number)	73	26

POPULATION SUSTAINABILITY

Sustainability measures	Value	Rank
% Years growing since 1995	1.0	1
Share of population under 55	0.8	11
Aged migration	0.0	59
Population growth rate, 55+	0.0	54
Demographic stress	-0.1	39
Dominant locations	1.0	19
Family / Youth migration	-7.0	44
Fertility bounce, 1996-2005	0.0	12
Fertility, babies % pop, 2005	0.0	30
Working elderly	0.4	6
SUSTAINABILITY SCORE	77.4	3

Population Profile



POPULATION

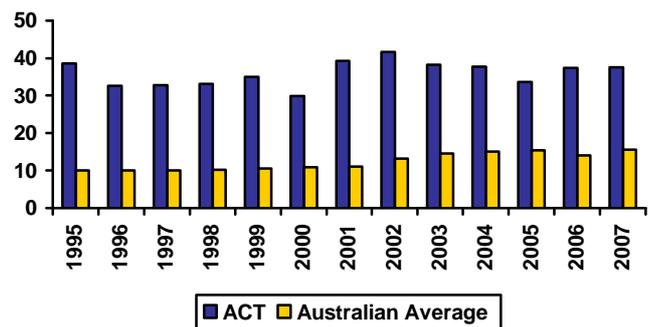
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Population	289	294	299	301	305	308	309	310	312	315	319	323	326	327	330	334	340	344	350	355	359

PATENT APPLICATIONS

	No	Aust Avg	Rank
Average p.a. (1994-2007)	113.80	46.56	6
Average p.a. per capita	35.70	12.58	3
Hi Tech p.a. (1994-2007)	52.72	12.70	4
Hi Tech p.a. per capita	16.54	3.15	3
Info. Tech p.a. (1994-2007)	15.46	4.98	4
Info. Tech p.a. per capita	4.81	1.17	3
Average per capita (1994-2001)	35.35	10.80	3
Average per capita (2001-2007)	36.96	14.68	3
2001-07 avg./1994-01 avg.	1.05	1.35	61

Note: Per capita = 100,000 people

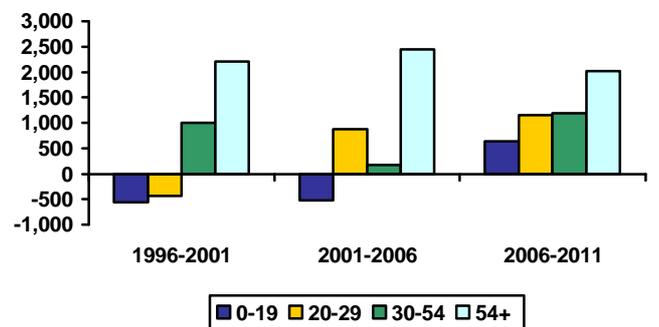
Patent Applications per 100,000 residents



POPULATION CHANGE

	1996	2001	2006	2011
Share of Population				
Age 0-19	31.9%	30.0%	27.8%	26.8%
Age 20-29	15.9%	14.7%	15.3%	15.9%
Age 30-54	38.1%	38.3%	36.9%	36.0%
Age 55+	14.1%	17.1%	20.0%	21.4%
Population Change (average between years)				
Age 0-19		-564	-528	634
Age 20-29		-438	878	1,146
Age 30-54		1,004	165	1,192
Age 55+		2,212	2,445	2,020
Average Annual Growth		0.7%	0.9%	1.5%

Population Change by Age Group



ACT

HOUSEHOLD WEALTH & DEBT

Indicator	2001	2008	2001 Rank	2008 Rank	2001 %Rank 1	2008 %Rank 1
Wealth per Household (\$000 2005/06 prices)	611	881	10	4	48%	65%
Value of Property and Unincorporated Business	287	379	21	19	35%	47%
Value of Financial Assets	412	651	7	4	67%	86%
Value of Household Liabilities	88	149	50	46	175%	199%
Disposable Income after Debt Service Costs	93	106	5	4	83%	87%
Household Debt Service Ratio	11%	16%	11	4	149%	114%
Household Debt to Gross Income Ratio	0.79	1.09	11	4	149%	114%

POPULATION MOVEMENT 2001 TO 2006

Age in 2006	Not Yet Born	Same Address	Local Move	Other Australia	Overseas	Not Stated
0 to 19	20,708	34,237	18,293	7,740	2,866	3,405
20 to 29		19,497	15,314	15,908	6,079	5,241
30 to 54		58,304	31,570	16,188	6,018	6,058
55+		50,704	7,474	3,930	854	3,732

Note: This data has been benchmarked to the Estimated Residential Population.

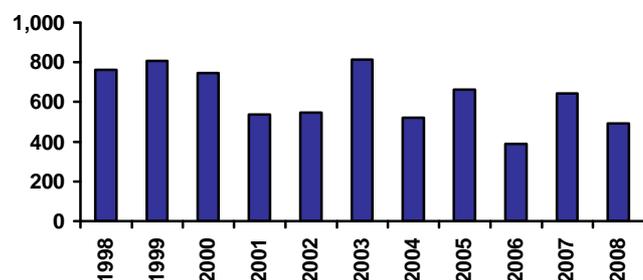
RESIDENTIAL AND NON-RESIDENTIAL BUILDING CONSTRUCTION

	1999 -2002	2003 -2006	2007	2008	2009	Percentage Change: 2007-09 to 2003-06
Value \$m2005/06 per annum						
Residential	545	668	717	664	585	-2%
Non Residential	408	524	1,132	1,019	749	84%
Total	953	1,192	1,849	1,683	1,334	36%
Value per capita \$2005/06						
Residential	1,717	2,028	2,111	1,927	1,673	-6%
Non Residential	1,286	1,586	3,332	2,958	2,141	77%
Total	3,004	3,614	5,443	4,885	3,814	30%
Rank (value per capita)						
Residential	16	11	12	19	11	
Non Residential	16	11	2	4	4	
Total	11	8	3	4	4	

RAINFALL

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Rainfall (mm)	762	807	745	539	545	813	519	662	390	642	492
Rank	40	35	38	52	40	17	52	41	50	44	49

Annual Rainfall



TEMPERATURE

	2003	2004	2005	2006	2007	2008
Temperature (Avg)	18.0	20.6	20.5	21.5	21.0	20.8
Rank	54	46	52	45	52	55

INNOVATION STARTUPS

	No.
High Tech Startups (2001-2008)	733
Rank	12

BUSINESSES BY INDUSTRY TYPE

Industry	2006	2007	2008
Agriculture	48	51	47
Mining	22	24	25
Manufacturing	695	717	718
Utilities	14	14	14
Construction	1,042	1,052	1,084
Wholesale	1,341	1,427	1,443
Retail	1,529	1,603	1,379
Hospitality	111	107	319
Transport	124	192	193
Communication	53	82	78
Finance	2,008	2,182	2,187
Property & Business	1,394	2,826	2,340
Government	341	327	329
Education	162	156	154
Health & Community	369	492	505
Cultural & Recreational	197	236	673
Personal Services	331	471	519

Note: (1) Data Sourced from Dun & Bradstreet

(2) Year to Year Comparisons can be Distorted - see Definition Appendix

APPENDIX 3

INDEX OF LOCALITIES AND REGION MEMBERSHIP

A3.1 Index of localities

Local Government Area	SOR Region
Adelaide (C)	Adelaide Inner
Adelaide Hills (DC)	Adelaide South
Albany (C)	WA Wheatbelt Great Southern
Albury (C)	NSW Riverina
Alexandrina (DC)	Adelaide South
Alice Springs (T)	NT Lingiari
Alpine (S)	VIC North East
Anangu Pitjantjatjara (AC)	SA Spencer Gulf
Ararat (RC)	VIC Ballarat
Armadale (C)	Perth Outer South
Armidale Dumaresq (A)	NSW North
Ashburton (S)	WA Pilbara Kimberley
Ashfield (A)	Sydney Old West
Auburn (A)	Sydney Parramatta-Bankstown
Augusta-Margaret River (S)	WA Peel South West
Aurukun (S)	QLD Resource region
Ballarat (C)	VIC Ballarat
Ballina (A)	NSW Richmond Tweed
Balonne (S)	QLD Resource region
Balranald (A)	NSW Far West
Banana (S)	QLD Fitzroy
Bankstown (C)	Sydney Parramatta-Bankstown
Banyule (C)	Melbourne North East
Barcaldine (R)	QLD Resource region
Barcoo (S)	QLD Resource region
Barkly (S)	NT Lingiari
Barossa (DC)	SA Mid North Riverland
Barunga West (DC)	SA Mid North Riverland
Bass Coast (S)	VIC Gippsland
Bassendean (T)	Perth Outer North
Bathurst Regional (A)	NSW Central West
Baulkham Hills (A)	Sydney Outer North
Baw Baw (S)	VIC Gippsland
Bayside (C)	Melbourne Mid South East
Bayswater (C)	Perth Outer North
Bega Valley (A)	NSW Southern Tablelands
Bellingen (A)	NSW Mid North Coast
Belmont (C)	Perth Central
Belyuen (S)	NT Lingiari
Benalla (RC)	VIC North East
Berri and Barmera (DC)	SA Mid North Riverland
Berrigan (A)	NSW Riverina
Beverley (S)	WA Wheatbelt Great Southern
Blackall Tambo (R)	QLD Resource region
Blacktown (C)	Sydney Outer West
Bland (A)	NSW Central West

Local Government Area	SOR Region
Blayney (A)	NSW Central West
Blue Mountains (C)	Sydney Outer West
Boddington (S)	WA Peel South West
Bogan (A)	NSW Far West
Bombala (A)	NSW Southern Tablelands
Boorowa (A)	NSW Southern Tablelands
Boroondara (C)	Melbourne East
Botany Bay (C)	Sydney Central
Boulia (S)	QLD Resource region
Bourke (A)	NSW Far West
Boyup Brook (S)	WA Peel South West
Break O'Day (M)	TAS North
Brewarrina (A)	NSW Far West
Bridgetown-Greenbushes (S)	WA Peel South West
Brighton (M)	TAS Hobart-South
Brimbank (C)	Melbourne West
Brisbane (C)	SEQ Brisbane City
Broken Hill (C)	NSW Far West
Brookton (S)	WA Wheatbelt Great Southern
Broome (S)	WA Pilbara Kimberley
Broomehill-Tambellup (S)	WA Wheatbelt Great Southern
Bruce Rock (S)	WA Wheatbelt Great Southern
Bulloo (S)	QLD Resource region
Buloke (S)	VIC Mallee Wimmera
Bunbury (C)	WA Peel South West
Bundaberg (R)	QLD Wide Bay Burnett
Burdekin (S)	QLD North
Burke (S)	QLD Resource region
Burnie (C)	TAS North West
Burnside (C)	Adelaide Inner
Burwood (A)	Sydney Old West
Busselton (S)	WA Peel South West
Byron (A)	NSW Richmond Tweed
Cabonne (A)	NSW Central West
Cairns (R)	QLD Cairns
Cambridge (T)	Perth Central
Camden (A)	Sydney Outer South West
Campaspe (S)	VIC Bendigo
Campbelltown (C)	Adelaide North
Campbelltown (C)	Sydney Outer South West
Canada Bay (A)	Sydney Central
Canning (C)	Perth Central
Canterbury (C)	Sydney Old West
Capel (S)	WA Peel South West
Cardinia (S)	Melbourne Outer South East
Carnamah (S)	WA Gascoyne Goldfields

Local Government Area	SOR Region
Carnarvon (S)	WA Gascoyne Goldfields
Carpentaria (S)	QLD Resource region
Carrathool (A)	NSW Far West
Casey (C)	Melbourne Outer South East
Cassowary Coast (R)	QLD Cairns
Ceduna (DC)	SA Spencer Gulf
Central Coast (M)	TAS North West
Central Darling (A)	NSW Far West
Central Desert (S)	NT Lingiari
Central Goldfields (S)	VIC Ballarat
Central Highlands (M)	TAS Hobart-South
Central Highlands (R)	QLD Fitzroy
Cessnock (C)	NSW Hunter
Chapman Valley (S)	WA Gascoyne Goldfields
Charles Sturt (C)	Adelaide North
Charters Towers (R)	QLD North
Cherbourg (S)	QLD Wide Bay Burnett
Chittering (S)	WA Wheatbelt Great Southern
Circular Head (M)	TAS North West
Clare and Gilbert Valleys (DC)	SA Mid North Riverland
Claremont (T)	Perth Central
Clarence (C)	TAS Hobart-South
Clarence Valley (A)	NSW Mid North Coast
Cleve (DC)	SA Spencer Gulf
Cloncurry (S)	QLD Resource region
Cobar (A)	NSW Far West
Cockburn (C)	Perth Outer South
Coffs Harbour (C)	NSW Mid North Coast
Colac-Otway (S)	VIC West
Collie (S)	WA Peel South West
Conargo (A)	NSW Far West
Cooper Pedy (DC)	SA Spencer Gulf
Cook (S)	QLD Resource region
Coolamon (A)	NSW Riverina
Coolgardie (S)	WA Gascoyne Goldfields
Cooma-Monaro (A)	NSW Southern Tablelands
Coomalie (S)	NT Darwin
Coonamble (A)	NSW Far West
Coorow (S)	WA Gascoyne Goldfields
Cootamundra (A)	NSW Riverina
Copper Coast (DC)	SA Mid North Riverland
Corangamite (S)	VIC West
Corowa Shire (A)	NSW Riverina
Corrigin (S)	WA Wheatbelt Great Southern
Cottesloe (T)	Perth Central
Cowra (A)	NSW Central West
Cranbrook (S)	WA Wheatbelt Great Southern
Croydon (S)	QLD Resource region
Cuballing (S)	WA Wheatbelt Great Southern

Local Government Area	SOR Region
Cue (S)	WA Gascoyne Goldfields
Cunderdin (S)	WA Wheatbelt Great Southern
Dalby (R)	QLD Darling Downs
Dalwallinu (S)	WA Wheatbelt Great Southern
Dandaragan (S)	WA Wheatbelt Great Southern
Dardanup (S)	WA Peel South West
Darebin (C)	Melbourne North
Darwin (C)	NT Darwin
Darwin Rates Area	NT Darwin
Deniliquin (A)	NSW Far West
Denmark (S)	WA Wheatbelt Great Southern
Derby-West Kimberley (S)	WA Pilbara Kimberley
Derwent Valley (M)	TAS Hobart-South
Devonport (C)	TAS North West
Diamantina (S)	QLD Resource region
Donnybrook-Balingup (S)	WA Peel South West
Doomadgee (S)	QLD Resource region
Dorset (M)	TAS North
Dowerin (S)	WA Wheatbelt Great Southern
Dubbo (C)	NSW Central West
Dumbleyung (S)	WA Wheatbelt Great Southern
Dundas (S)	WA Gascoyne Goldfields
Dungog (A)	NSW Hunter
East Arnhem (S)	NT Lingiari
East Fremantle (T)	Perth Central
East Gippsland (S)	VIC Gippsland
East Pilbara (S)	WA Pilbara Kimberley
Elliston (DC)	SA Spencer Gulf
Esperance (S)	WA Gascoyne Goldfields
Etheridge (S)	QLD Resource region
Eurobodalla (A)	NSW Southern Tablelands
Exmouth (S)	WA Gascoyne Goldfields
Fairfield (C)	Sydney Parramatta-Bankstown
Flinders (M)	TAS North
Flinders (S)	QLD Resource region
Flinders Ranges (DC)	SA Spencer Gulf
Forbes (A)	NSW Central West
Franklin Harbour (DC)	SA Spencer Gulf
Frankston (C)	Melbourne Outer South East
Fraser Coast (R)	QLD Wide Bay Burnett
Fremantle (C)	Perth Central
Gannawarra (S)	VIC Mallee Wimmera
Gawler (T)	Adelaide North
George Town (M)	TAS North
Geraldton-Greenough (C)	WA Gascoyne Goldfields
Gilgandra (A)	NSW Central West
Gingin (S)	WA Wheatbelt Great Southern
Gladstone (R)	QLD Fitzroy
Glamorgan/Spring Bay (M)	TAS Hobart-South

Local Government Area	SOR Region
Glen Eira (C)	Melbourne Central
Glen Innes Severn (A)	NSW North
Glenelg (S)	VIC West
Glenorchy (C)	TAS Hobart-South
Gloucester (A)	NSW Hunter
Gnowangerup (S)	WA Wheatbelt Great Southern
Gold Coast (C)	SEQ Gold Coast
Golden Plains (S)	VIC West
Goomalling (S)	WA Wheatbelt Great Southern
Goondiwindi (R)	QLD Darling Downs
Gosford (C)	NSW Central Coast
Gosnells (C)	Perth Outer South
Goulburn Mulwaree (A)	NSW Southern Tablelands
Goyder (DC)	SA Mid North Riverland
Grant (DC)	SA Mallee South East
Great Lakes (A)	NSW Hunter
Greater Bendigo (C)	VIC Bendigo
Greater Dandenong (C)	Melbourne Mid South East
Greater Geelong (C)	VIC Geelong
Greater Hume Shire (A)	NSW Riverina
Greater Shepparton (C)	VIC North East
Greater Taree (C)	NSW Mid North Coast
Griffith (C)	NSW Riverina
Gundagai (A)	NSW Southern Tablelands
Gunnedah (A)	NSW North
Guyra (A)	NSW North
Gwydir (A)	NSW North
Gympie (R)	QLD Wide Bay Burnett
Halls Creek (S)	WA Pilbara Kimberley
Harden (A)	NSW Southern Tablelands
Harvey (S)	WA Peel South West
Hawkesbury (C)	Sydney Outer West
Hay (A)	NSW Far West
Hepburn (S)	VIC Ballarat
Hinchinbrook (S)	QLD North
Hindmarsh (S)	VIC Mallee Wimmera
Hobart (C)	TAS Hobart-South
Hobsons Bay (C)	Melbourne West
Holdfast Bay (C)	Adelaide Inner
Holroyd (C)	Sydney Parramatta-Bankstown
Hope Vale (S)	QLD Resource region
Hornsby (A)	Sydney Outer North
Horsham (RC)	VIC Mallee Wimmera
Hume (C)	Melbourne North
Hunters Hill (A)	Sydney Central
Huon Valley (M)	TAS Hobart-South
Hurstville (C)	Sydney South
Indigo (S)	VIC North East
Inverell (A)	NSW North
Ipswich (C)	SEQ West Moreton

Local Government Area	SOR Region
Irwin (S)	WA Gascoyne Goldfields
Isaac (R)	QLD Mackay
Jerilderie (A)	NSW Far West
Jerramungup (S)	WA Wheatbelt Great Southern
Joondalup (C)	Perth Outer North
Junee (A)	NSW Riverina
Kalamunda (S)	Perth Outer South
Kalgoorlie/Boulder (C)	WA Gascoyne Goldfields
Kangaroo Island (DC)	SA Mallee South East
Karoonda East Murray (DC)	SA Mallee South East
Katanning (S)	WA Wheatbelt Great Southern
Katherine (T)	NT Lingiari
Kellerberrin (S)	WA Wheatbelt Great Southern
Kempsey (A)	NSW Mid North Coast
Kent (S)	WA Wheatbelt Great Southern
Kentish (M)	TAS North West
Kiama (A)	NSW Illawarra
Kimba (DC)	SA Spencer Gulf
King Island (M)	TAS North West
Kingborough (M)	TAS Hobart-South
Kingston (C)	Melbourne Mid South East
Kingston (DC)	SA Mallee South East
Knox (C)	Melbourne East
Kogarah (A)	Sydney South
Kojoonup (S)	WA Wheatbelt Great Southern
Kondinin (S)	WA Wheatbelt Great Southern
Koorda (S)	WA Wheatbelt Great Southern
Kowanyama (S)	QLD Resource region
Ku-ring-gai (A)	Sydney Outer North
Kulin (S)	WA Wheatbelt Great Southern
Kwinana (T)	Perth Outer South
Kyogle (A)	NSW Richmond Tweed
Lachlan (A)	NSW Far West
Lake Grace (S)	WA Wheatbelt Great Southern
Lake Macquarie (C)	NSW Hunter
Lane Cove (A)	Sydney Central
Latrobe (C)	VIC Gippsland
Latrobe (M)	TAS North West
Launceston (C)	TAS North
Laverton (S)	WA Gascoyne Goldfields
Le Hunte (DC)	SA Spencer Gulf
Leeton (A)	NSW Riverina
Leichhardt (A)	Sydney Central
Leonora (S)	WA Gascoyne Goldfields
Light (RegC)	SA Mid North Riverland
Lismore (C)	NSW Richmond Tweed
Litchfield (S)	NT Darwin
Lithgow (C)	NSW Central West
Liverpool (C)	Sydney Outer South West

Local Government Area	SOR Region
Liverpool Plains (A)	NSW North
Lockhart (A)	NSW Riverina
Lockhart River (S)	QLD Resource region
Lockyer Valley (R)	SEQ West Moreton
Loddon (S)	VIC Bendigo
Logan (C)	SEQ Brisbane South
Longreach (R)	QLD Resource region
Lower Eyre Peninsula (DC)	SA Spencer Gulf
Loxton Waikerie (DC)	SA Mid North Riverland
MacDonnell (S)	NT Lingiari
Macedon Ranges (S)	VIC Bendigo
Mackay (R)	QLD Mackay
Maitland (C)	NSW Hunter
Mallala (DC)	SA Mid North Riverland
Mandurah (C)	WA Peel South West
Manjimup (S)	WA Peel South West
Manly (A)	Sydney Northern Beaches
Manningham (C)	Melbourne North East
Mansfield (S)	VIC North East
Mapoon (S)	QLD Resource region
Maralinga Tjarutja (AC)	SA Spencer Gulf
Maribyrnong (C)	Melbourne West
Marion (C)	Adelaide Inner
Maroondah (C)	Melbourne East
Marrickville (A)	Sydney Old West
McKinlay (S)	QLD Resource region
Meander Valley (M)	TAS North
Meekatharra (S)	WA Gascoyne Goldfields
Melbourne (C)	Melbourne Central
Melton (S)	Melbourne West
Melville (C)	Perth Outer South
Menzies (S)	WA Gascoyne Goldfields
Merredin (S)	WA Wheatbelt Great Southern
Mid-Western Regional (A)	NSW Central West
Mid Murray (DC)	SA Mid North Riverland
Mildura (RC)	VIC Mallee Wimmera
Mingenew (S)	WA Gascoyne Goldfields
Mitcham (C)	Adelaide Inner
Mitchell (S)	VIC Bendigo
Moira (S)	VIC North East
Monash (C)	Melbourne Mid South East
Moonee Valley (C)	Melbourne North
Moora (S)	WA Wheatbelt Great Southern
Moorabool (S)	VIC Ballarat
Morawa (S)	WA Gascoyne Goldfields
Moree Plains (A)	NSW North
Moreland (C)	Melbourne North
Moreton Bay (R)	SEQ Moreton Bay
Mornington (S)	QLD Resource region

Local Government Area	SOR Region
Mornington Peninsula (S)	Melbourne Outer South East
Mosman (A)	Sydney Northern Beaches
Mosman Park (T)	Perth Central
Mount Alexander (S)	VIC Bendigo
Mount Barker (DC)	Adelaide South
Mount Gambier (C)	SA Mallee South East
Mount Isa (C)	QLD Resource region
Mount Magnet (S)	WA Gascoyne Goldfields
Mount Marshall (S)	WA Wheatbelt Great Southern
Mount Remarkable (DC)	SA Spencer Gulf
Moynes (S)	VIC West
Mukinbudin (S)	WA Wheatbelt Great Southern
Mullewa (S)	WA Gascoyne Goldfields
Mundaring (S)	Perth Outer North
Murchison (S)	WA Gascoyne Goldfields
Murray (A)	NSW Far West
Murray (S)	WA Peel South West
Murray Bridge (RC)	SA Mallee South East
Murrindindi (S)	VIC North East
Murrumbidgee (A)	NSW Riverina
Murweh (S)	QLD Resource region
Muswellbrook (A)	NSW Hunter
Nambucca (A)	NSW Mid North Coast
Nannup (S)	WA Peel South West
Napranum (S)	QLD Resource region
Naracoorte and Lucindale (DC)	SA Mallee South East
Narembene (S)	WA Wheatbelt Great Southern
Narrabri (A)	NSW North
Narrandera (A)	NSW Riverina
Narrogin (S)	WA Wheatbelt Great Southern
Narrogin (T)	WA Wheatbelt Great Southern
Narromine (A)	NSW Central West
Nedlands (C)	Perth Central
Newcastle (C)	NSW Hunter
Ngaanyatjarraku (S)	WA Gascoyne Goldfields
Nillumbik (S)	Melbourne North East
North Burnett (R)	QLD Wide Bay Burnett
North Sydney (A)	Sydney Central
Northam (S)	WA Wheatbelt Great Southern
Northampton (S)	WA Gascoyne Goldfields
Northern Areas (DC)	SA Mid North Riverland
Northern Grampians (S)	VIC Mallee Wimmera
Northern Midlands (M)	TAS North
Northern Peninsula Area (R)	QLD Resource region
Norwood Payneham St Peters (C)	Adelaide Inner
Nungarin (S)	WA Wheatbelt Great Southern
Oberon (A)	NSW Central West
Onkaparinga (C)	Adelaide South

Local Government Area	SOR Region
Orange (C)	NSW Central West
Orroroo/Carrieton (DC)	SA Mid North Riverland
Palerang (A)	NSW Southern Tablelands
Palm Island (S)	QLD North
Palmerston (C)	NT Darwin
Parkes (A)	NSW Central West
Paroo (S)	QLD Resource region
Parramatta (C)	Sydney Parramatta-Bankstown
Penrith (C)	Sydney Outer West
Peppermint Grove (S)	Perth Central
Perenjori (S)	WA Gascoyne Goldfields
Perth (C)	Perth Central
Peterborough (DC)	SA Mid North Riverland
Pingelly (S)	WA Wheatbelt Great Southern
Pittwater (A)	Sydney Northern Beaches
Plantagenet (S)	WA Wheatbelt Great Southern
Playford (C)	Adelaide North
Pormpuraaw (S)	QLD Resource region
Port Adelaide Enfield (C)	Adelaide North
Port Augusta (C)	SA Spencer Gulf
Port Hedland (T)	WA Pilbara Kimberley
Port Lincoln (C)	SA Spencer Gulf
Port Macquarie-Hastings (A)	NSW Mid North Coast
Port Phillip (C)	Melbourne Central
Port Pirie City and Dists (M)	SA Spencer Gulf
Port Stephens (A)	NSW Hunter
Prospect (C)	Adelaide North
Pyrenees (S)	VIC Ballarat
Quairading (S)	WA Wheatbelt Great Southern
Queanbeyan (C)	NSW Southern Tablelands
Queenscliffe (B)	VIC Geelong
Quilpie (S)	QLD Resource region
Randwick (C)	Sydney Eastern Beaches
Ravensthorpe (S)	WA Gascoyne Goldfields
Redland (C)	SEQ Brisbane South
Renmark Paringa (DC)	SA Mid North Riverland
Richmond (S)	QLD Resource region
Richmond Valley (A)	NSW Richmond Tweed
Robe (DC)	SA Mallee South East
Rockdale (C)	Sydney South
Rockhampton (R)	QLD Fitzroy
Rockingham (C)	Perth Outer South
Roebourne (S)	WA Pilbara Kimberley
Roma (R)	QLD Resource region
Roper Gulf (S)	NT Lingiari
Roxby Downs (M)	SA Spencer Gulf
Ryde (C)	Sydney Central
Salisbury (C)	Adelaide North

Local Government Area	SOR Region
Sandstone (S)	WA Gascoyne Goldfields
Scenic Rim (R)	SEQ West Moreton
Serpentine-Jarrahdale (S)	WA Peel South West
Shark Bay (S)	WA Gascoyne Goldfields
Shellharbour (C)	NSW Illawarra
Shoalhaven (C)	NSW Illawarra
Singleton (A)	NSW Hunter
Snowy River (A)	NSW Southern Tablelands
Somerset (R)	SEQ West Moreton
Sorell (M)	TAS Hobart-South
South Burnett (R)	QLD Wide Bay Burnett
South Gippsland (S)	VIC Gippsland
South Perth (C)	Perth Central
Southern Downs (R)	QLD Darling Downs
Southern Grampians (S)	VIC West
Southern Mallee (DC)	SA Mallee South East
Southern Midlands (M)	TAS Hobart-South
Stirling (C)	Perth Central
Stonnington (C)	Melbourne Central
Strathbogie (S)	VIC North East
Strathfield (A)	Sydney Old West
Streaky Bay (DC)	SA Spencer Gulf
Subiaco (C)	Perth Central
Sunshine Coast (R)	SEQ Sunshine Coast
Surf Coast (S)	VIC West
Sutherland Shire (A)	Sydney South
Swan (C)	Perth Outer North
Swan Hill (RC)	VIC Mallee Wimmera
Sydney (C)	Sydney Central
Tablelands (R)	QLD Cairns
Tammin (S)	WA Wheatbelt Great Southern
Tamworth Regional (A)	NSW North
Tasman (M)	TAS Hobart-South
Tatiara (DC)	SA Mallee South East
Tea Tree Gully (C)	Adelaide South
Temora (A)	NSW Riverina
Tenterfield (A)	NSW North
The Coorong (DC)	SA Mallee South East
Three Springs (S)	WA Gascoyne Goldfields
Tiwi Islands (S)	NT Lingiari
Toodyay (S)	WA Wheatbelt Great Southern
Toowoomba (R)	QLD Darling Downs
Torres (S)	QLD Resource region
Torres Strait Island (R)	QLD Resource region
Townsville (C)	QLD North
Towong (S)	VIC North East
Trayning (S)	WA Wheatbelt Great Southern
Tumbarumba (A)	NSW Southern Tablelands
Tumby Bay (DC)	SA Spencer Gulf
Tumut Shire (A)	NSW Southern Tablelands

Local Government Area	SOR Region
Tweed (A)	NSW Richmond Tweed
Unincorporated ACT	ACT
Unincorporated NSW	NSW Far West
Unincorporated NT	NT Lingiari
Unincorporated SA	SA Spencer Gulf
Unley (C)	Adelaide Inner
Upper Gascoyne (S)	WA Gascoyne Goldfields
Upper Hunter Shire (A)	NSW Hunter
Upper Lachlan Shire (A)	NSW Southern Tablelands
Uralla (A)	NSW North
Urana (A)	NSW Riverina
Victor Harbor (C)	Adelaide South
Victoria-Daly (S)	NT Lingiari
Victoria Park (T)	Perth Central
Victoria Plains (S)	WA Wheatbelt Great Southern
Vincent (T)	Perth Central
Wagait (S)	NT Lingiari
Wagga Wagga (C)	NSW Riverina
Wagin (S)	WA Wheatbelt Great Southern
Wakefield (DC)	SA Mid North Riverland
Wakool (A)	NSW Far West
Walcha (A)	NSW North
Walgett (A)	NSW Far West
Walkerville (M)	Adelaide Inner
Wandering (S)	WA Wheatbelt Great Southern
Wangaratta (RC)	VIC North East
Wanneroo (C)	Perth Outer North
Waratah/Wynyard (M)	TAS North West
Waroona (S)	WA Peel South West
Warren (A)	NSW Far West
Warringah (A)	Sydney Northern Beaches
Warnambool (C)	VIC West
Warrumbungle Shire (A)	NSW Central West
Wattle Range (DC)	SA Mallee South East
Waverley (A)	Sydney Eastern Beaches
Weddin (A)	NSW Central West
Weipa (T)	QLD Resource region
Wellington (A)	NSW Central West
Wellington (S)	VIC Gippsland
Wentworth (A)	NSW Far West
West Arnhem (S)	NT Lingiari
West Arthur (S)	WA Wheatbelt Great Southern
West Coast (M)	TAS North West
West Tamar (M)	TAS North
West Torrens (C)	Adelaide Inner
West Wimmera (S)	VIC Mallee Wimmera
Westonia (S)	WA Wheatbelt Great Southern
Whitehorse (C)	Melbourne East

Local Government Area	SOR Region
Whitsunday (R)	QLD Mackay
Whittlesea (C)	Melbourne North East
Whyalla (C)	SA Spencer Gulf
Wickepin (S)	WA Wheatbelt Great Southern
Williams (S)	WA Wheatbelt Great Southern
Willoughby (C)	Sydney Central
Wiluna (S)	WA Gascoyne Goldfields
Wingecarribee (A)	NSW Illawarra
Winton (S)	QLD Resource region
Wodonga (RC)	VIC North East
Wollondilly (A)	Sydney Outer South West
Wollongong (C)	NSW Illawarra
Wongan-Ballidu (S)	WA Wheatbelt Great Southern
Woodanilling (S)	WA Wheatbelt Great Southern
Woollahra (A)	Sydney Eastern Beaches
Woorabinda (S)	QLD Fitzroy
Wujal Wujal (S)	QLD Resource region
Wyalkatchem (S)	WA Wheatbelt Great Southern
Wyndham-East Kimberley (S)	WA Pilbara Kimberley
Wyndham (C)	Melbourne West
Wyong (A)	NSW Central Coast
Yalgoo (S)	WA Gascoyne Goldfields
Yankalilla (DC)	Adelaide South
Yarra (C)	Melbourne Central
Yarra Ranges (S)	Melbourne North East
Yarrabah (S)	QLD Cairns
Yarriambiack (S)	VIC Mallee Wimmera
Yass Valley (A)	NSW Southern Tablelands
Yilgarn (S)	WA Wheatbelt Great Southern
York (S)	WA Wheatbelt Great Southern
Yorke Peninsula (DC)	SA Mid North Riverland
Young (A)	NSW Southern Tablelands

A3.2 Index of region membership

Region	Local Government Area
ACT	Unincorporated ACT
Adelaide Inner	Adelaide (C)
	Burnside (C)
	Holdfast Bay (C)
	Marion (C)
	Mitcham (C)
	Norwood Payneham St Peters (C)
	Unley (C)
	Walkerville (M)
	West Torrens (C)
	Adelaide North
	Charles Sturt (C)
	Gawler (T)
	Playford (C)
	Port Adelaide Enfield (C)
	Prospect (C)
	Salisbury (C)
Adelaide South	Adelaide Hills (DC)
	Alexandrina (DC)
	Mount Barker (DC)
	Onkaparinga (C)
	Tea Tree Gully (C)
	Victor Harbor (C)
	Yankalilla (DC)
Melbourne Central	Glen Eira (C)
	Melbourne (C)
	Port Phillip (C)
	Stonnington (C)
	Yarra (C)
Melbourne East	Boroondara (C)
	Knox (C)
	Maroondah (C)
Melbourne Mid South East	Whitehorse (C)
	Bayside (C)
	Greater Dandenong (C)
	Kingston (C)
	Monash (C)
Melbourne North	Darebin (C)
	Hume (C)
	Moonee Valley (C)
	Moreland (C)
Melbourne North East	Banyule (C)
	Manningham (C)
	Nillumbik (S)
	Whittlesea (C)
	Yarra Ranges (S)

Region	Local Government Area
Melbourne Outer South East	Cardinia (S)
	Casey (C)
	Frankston (C)
	Mornington Peninsula (S)
	Melbourne West
	Hobsons Bay (C)
	Maribyrnong (C)
	Melton (S)
	Wyndham (C)
NSW Central Coast	Gosford (C)
	Wyong (A)
NSW Central West	Bathurst Regional (A)
	Bland (A)
	Blayney (A)
	Cabonne (A)
	Cowra (A)
	Dubbo (C)
	Forbes (A)
	Gilgandra (A)
	Lithgow (C)
	Mid-Western Regional (A)
	Narromine (A)
	Oberon (A)
	Orange (C)
	Parkes (A)
	Warrumbungle Shire (A)
	Weddin (A)
	Wellington (A)
NSW Far West	Balranald (A)
	Bogan (A)
	Bourke (A)
	Brewarrina (A)
	Broken Hill (C)
	Carrathool (A)
	Central Darling (A)
	Cobar (A)
	Conargo (A)
	Coonamble (A)
	Deniliquin (A)
	Hay (A)
	Jerilderie (A)
	Lachlan (A)
	Murray (A)
	Unincorporated NSW
	Wakool (A)
Walgett (A)	

Region	Local Government Area
NSW Hunter	Warren (A)
	Wentworth (A)
	Cessnock (C)
	Dungog (A)
	Gloucester (A)
	Great Lakes (A)
	Lake Macquarie (C)
	Maitland (C)
	Muswellbrook (A)
	Newcastle (C)
	Port Stephens (A)
NSW Illawarra	Singleton (A)
	Upper Hunter Shire (A)
	Kiama (A)
	Shellharbour (C)
	Shoalhaven (C)
NSW Mid North Coast	Wingecarribee (A)
	Wollongong (C)
	Bellingen (A)
	Clarence Valley (A)
	Coffs Harbour (C)
	Greater Taree (C)
	Kempsey (A)
	Nambucca (A)
NSW North	Port Macquarie-Hastings (A)
	Armidale Dumaresq (A)
	Glen Innes Severn (A)
	Gunnedah (A)
	Guyra (A)
	Gwydir (A)
	Inverell (A)
	Liverpool Plains (A)
	Moree Plains (A)
	Narrabri (A)
	Tamworth Regional (A)
	Tenterfield (A)
	Uralla (A)
	Walcha (A)
NSW Richmond Tweed	Ballina (A)
	Byron (A)
	Kyogle (A)
	Lismore (C)
	Richmond Valley (A)
NSW Riverina	Tweed (A)
	Albury (C)
	Berrigan (A)
	Coolamon (A)
	Cootamundra (A)
	Corowa Shire (A)
	Greater Hume Shire (A)

Region	Local Government Area
NSW Southern Tablelands	Griffith (C)
	Junee (A)
	Leeton (A)
	Lockhart (A)
	Murrumbidgee (A)
	Narrandera (A)
	Temora (A)
	Urana (A)
	Wagga Wagga (C)
	Bega Valley (A)
	Bombala (A)
	Boorowa (A)
	Cooma-Monaro (A)
	Eurobodalla (A)
	Goulburn Mulwaree (A)
	Gundagai (A)
	Harden (A)
	Palerang (A)
	Queanbeyan (C)
Snowy River (A)	
NT Darwin	Tumbarumba (A)
	Tumut Shire (A)
	Upper Lachlan Shire (A)
	Yass Valley (A)
	Young (A)
	Coomalie (S)
	Darwin (C)
	Darwin Rates Area
	Litchfield (S)
	Palmerston (C)
NT Lingiari	Alice Springs (T)
	Barkly (S)
	Belyuen (S)
	Central Desert (S)
	East Arnhem (S)
	Katherine (T)
	MacDonnell (S)
	Roper Gulf (S)
	Tiwi Islands (S)
	Unincorporated NT
	Victoria-Daly (S)
Perth Central	Wagait (S)
	West Arnhem (S)
	Belmont (C)
	Cambridge (T)
	Canning (C)
	Claremont (T)
	Cottesloe (T)
	East Fremantle (T)
	Fremantle (C)

Region	Local Government Area
Perth Outer North	Mosman Park (T)
	Nedlands (C)
	Peppermint Grove (S)
	Perth (C)
	South Perth (C)
	Stirling (C)
	Subiaco (C)
	Victoria Park (T)
	Vincent (T)
	Bassendean (T)
	Bayswater (C)
	Joondalup (C)
	Mundaring (S)
Perth Outer South	Swan (C)
	Wanneroo (C)
	Armadale (C)
	Cockburn (C)
	Gosnells (C)
	Kalamunda (S)
	Kwinana (T)
QLD Cairns	Melville (C)
	Rockingham (C)
	Cairns (R)
	Cassowary Coast (R)
QLD Darling Downs	Tablelands (R)
	Yarrabah (S)
	Dalby (R)
	Goondiwindi (R)
QLD Fitzroy	Southern Downs (R)
	Toowoomba (R)
	Banana (S)
	Central Highlands (R)
	Gladstone (R)
QLD Mackay	Rockhampton (R)
	Woorabinda (S)
	Isaac (R)
QLD North	Mackay (R)
	Whitsunday (R)
	Burdekin (S)
	Charters Towers (R)
	Hinchinbrook (S)
	Palm Island (S)
QLD Resource region	Townsville (C)
	Aurukun (S)
	Balonne (S)
	Barcaldine (R)
	Barcoo (S)
	Blackall Tambo (R)
	Boulia (S)

Region	Local Government Area	
QLD Wide Bay Burnett	Bulloo (S)	
	Burke (S)	
	Carpentaria (S)	
	Cloncurry (S)	
	Cook (S)	
	Croydon (S)	
	Diamantina (S)	
	Doomadgee (S)	
	Etheridge (S)	
	Flinders (S)	
	Hope Vale (S)	
	Kowanyama (S)	
	Lockhart River (S)	
	Longreach (R)	
	Mapoon (S)	
	McKinlay (S)	
	Mornington (S)	
	Mount Isa (C)	
	Murweh (S)	
	Napranum (S)	
	Northern Peninsula Area (R)	
	Paroo (S)	
	Pormpuraaw (S)	
	Quilpie (S)	
	Richmond (S)	
	Roma (R)	
	Torres (S)	
	Torres Strait Island (R)	
	Weipa (T)	
	Winton (S)	
	Wujal Wujal (S)	
	Bundaberg (R)	
	Cherbourg (S)	
	Fraser Coast (R)	
	Gympie (R)	
	North Burnett (R)	
	South Burnett (R)	
	SA Mallee South East	Grant (DC)
		Kangaroo Island (DC)
		Karoonda East Murray (DC)
		Kingston (DC)
		Mount Gambier (C)
		Murray Bridge (RC)
		Naracoorte and Lucindale (DC)
		Robe (DC)
		Southern Mallee (DC)
		Tatiara (DC)
The Coorong (DC)		
Wattle Range (DC)		

Region	Local Government Area	
SA Mid North Riverland	Barossa (DC)	
	Barunga West (DC)	
	Berri and Barmera (DC)	
	Clare and Gilbert Valleys (DC)	
	Copper Coast (DC)	
	Goyder (DC)	
	Light (RegC)	
	Loxton Waikerie (DC)	
	Mallala (DC)	
	Mid Murray (DC)	
	Northern Areas (DC)	
	Orroroo/Carrieton (DC)	
	Peterborough (DC)	
	Renmark Paringa (DC)	
	Wakefield (DC)	
	Yorke Peninsula (DC)	
	SA Spencer Gulf	Anangu Pitjantjatjara (AC)
		Ceduna (DC)
		Cleve (DC)
		Coober Pedy (DC)
Elliston (DC)		
Flinders Ranges (DC)		
Franklin Harbour (DC)		
Kimba (DC)		
Le Hunte (DC)		
Lower Eyre Peninsula (DC)		
Maralinga Tjarutja (AC)		
Mount Remarkable (DC)		
Port Augusta (C)		
Port Lincoln (C)		
Port Pirie City and Dists (M)		
Roxby Downs (M)		
Streaky Bay (DC)		
Tumby Bay (DC)		
Unincorporated SA		
Whyalla (C)		
SEQ Brisbane City	Brisbane (C)	
SEQ Brisbane South	Logan (C)	
	Redland (C)	
SEQ Gold Coast	Gold Coast (C)	
SEQ Moreton Bay	Moreton Bay (R)	
SEQ Sunshine Coast	Sunshine Coast (R)	
SEQ West Moreton	Ipswich (C)	
	Lockyer Valley (R)	
	Scenic Rim (R)	
	Somerset (R)	
Sydney Central	Botany Bay (C)	
	Canada Bay (A)	
	Hunters Hill (A)	

Region	Local Government Area
Sydney Eastern Beaches	Lane Cove (A)
	Leichhardt (A)
	North Sydney (A)
	Ryde (C)
	Sydney (C)
	Willoughby (C)
	Randwick (C)
	Waverley (A)
	Woollahra (A)
	Sydney Northern Beaches
	Mosman (A)
	Pittwater (A)
	Warringah (A)
Sydney Old West	Ashfield (A)
	Burwood (A)
	Canterbury (C)
	Marrickville (A)
Sydney Outer North	Strathfield (A)
	Baulkham Hills (A)
	Hornsby (A)
	Ku-ring-gai (A)
Sydney Outer South West	Camden (A)
	Campbelltown (C)
	Liverpool (C)
	Wollondilly (A)
Sydney Outer West	Blacktown (C)
	Blue Mountains (C)
	Hawkesbury (C)
	Penrith (C)
Sydney Parramatta-Bankstown	Auburn (A)
	Bankstown (C)
	Fairfield (C)
	Holroyd (C)
	Parramatta (C)
	Sydney South
	Kogarah (A)
	Rockdale (C)
	Sutherland (A)
TAS Hobart-South	Brighton (M)
	Central Highlands (M)
	Clarence (C)
	Derwent Valley (M)
	Glamorgan/Spring Bay (M)
	Glenorchy (C)
	Hobart (C)
	Huon Valley (M)
	Kingborough (M)
	Sorell (M)
Southern Midlands (M)	

Region	Local Government Area
TAS North	Tasman (M)
	Break O'Day (M)
	Dorset (M)
	Flinders (M)
	George Town (M)
	Launceston (C)
	Meander Valley (M)
	Northern Midlands (M)
	West Tamar (M)
	TAS North West
Central Coast (M)	
Circular Head (M)	
Devonport (C)	
Kentish (M)	
King Island (M)	
Latrobe (M)	
Waratah/Wynyard (M)	
West Coast (M)	
VIC Ballarat	
	Ballarat (C)
	Central Goldfields (S)
	Hepburn (S)
	Moorabool (S)
	Pyrenees (S)
VIC Bendigo	Campaspe (S)
	Greater Bendigo (C)
	Loddon (S)
	Macedon Ranges (S)
	Mitchell (S)
	Mount Alexander (S)
VIC Geelong	Greater Geelong (C)
	Queenscliffe (B)
VIC Gippsland	Bass Coast (S)
	Baw Baw (S)
	East Gippsland (S)
	Latrobe (C)
	South Gippsland (S)
	Wellington (S)
VIC Mallee Wimmera	Buloke (S)
	Gannawarra (S)
	Hindmarsh (S)
	Horsham (RC)
	Mildura (RC)
	Northern Grampians (S)
	Swan Hill (RC)
	West Wimmera (S)
	Yarriambiack (S)
	VIC North East
Benalla (RC)	
Greater Shepparton (C)	

Region	Local Government Area
VIC West	Indigo (S)
	Mansfield (S)
	Moira (S)
	Murrindindi (S)
	Strathbogie (S)
	Towong (S)
	Wangaratta (RC)
	Wodonga (RC)
	Colac-Otway (S)
	Corangamite (S)
	Glenelg (S)
	Golden Plains (S)
	Moyne (S)
	Southern Grampians (S)
	Surf Coast (S)
Warrnambool (C)	
WA Gascoyne Goldfields	Carnamah (S)
	Carnarvon (S)
	Chapman Valley (S)
	Coolgardie (S)
	Coorow (S)
	Cue (S)
	Dundas (S)
	Esperance (S)
	Exmouth (S)
	Geraldton-Greenough (C)
	Irwin (S)
	Kalgoorlie/Boulder (C)
	Laverton (S)
	Leonora (S)
	Meekatharra (S)
	Menzies (S)
	Mingenew (S)
	Morawa (S)
	Mount Magnet (S)
	Mullewa (S)
Murchison (S)	
Ngaanyatjarraku (S)	
Northampton (S)	
Perenjori (S)	
Ravensthorpe (S)	
Sandstone (S)	
Shark Bay (S)	
Three Springs (S)	
Upper Gascoyne (S)	
Wiluna (S)	
Yalgoo (S)	
WA Peel South West	Augusta-Margaret River (S)
	Boddington (S)
	Boyup Brook (S)

Region	Local Government Area
WA Pilbara Kimberley	Bridgetown-Greenbushes (S)
	Bunbury (C)
	Busselton (S)
	Capel (S)
	Collie (S)
	Dardanup (S)
	Donnybrook-Balingup (S)
	Harvey (S)
	Mandurah (C)
	Manjimup (S)
	Murray (S)
	Nannup (S)
	Serpentine-Jarrahdale (S)
	Waroona (S)
	Ashburton (S)
	Broome (S)
	Derby-West Kimberley (S)
	East Pilbara (S)
	Halls Creek (S)
	Port Hedland (T)
Roebourne (S)	
Wyndham-East Kimberley (S)	
WA Wheatbelt Great Southern	Albany (C)
	Beverley (S)
	Brookton (S)
	Broomehill-Tambellup (S)
	Bruce Rock (S)
	Chittering (S)
	Corrigin (S)
	Cranbrook (S)
	Cuballing (S)
	Cunderdin (S)
	Dalwallinu (S)
	Dandaragan (S)
	Denmark (S)
	Dowerin (S)
	Dumbleyung (S)
	Gingin (S)
	Gnowangerup (S)
	Goomalling (S)
	Jerramungup (S)
	Katanning (S)
Kellerberrin (S)	
Kent (S)	
Kojonup (S)	
Kondinin (S)	
Koorda (S)	

Region	Local Government Area
	Kulin (S)
	Lake Grace (S)
	Merredin (S)
	Moora (S)
	Mount Marshall (S)
	Mukinbudin (S)
	Narembeen (S)
	Narrogin (S)
	Narrogin (T)
	Northam (S)
	Nungarin (S)
	Pingelly (S)
	Plantagenet (S)
	Quairading (S)
	Tammin (S)
	Toodyay (S)
	Trayning (S)
	Victoria Plains (S)
	Wagin (S)
	Wandering (S)
	West Arthur (S)
	Westonia (S)
	Wickepin (S)
	Williams (S)
	Wongan-Ballidu (S)
	Woodanilling (S)
Wyalkatchem (S)	
Yilgarn (S)	
York (S)	

A3.3 Zone to SOR region

Zone name	SOR region
Dispersed metro	Adelaide North
	Adelaide South
	Melbourne East
	Melbourne North
	Melbourne North East
	Melbourne Outer South East
	Melbourne West
	Perth Outer North
	Perth Outer South
	SEQ Brisbane South
	SEQ Moreton Bay
	SEQ West Moreton
	Sydney Old West
	Sydney Outer North
	Sydney Outer South West
	Sydney Outer West
	Sydney South
Independent city	NSW Hunter
	NSW Illawarra
	NT Darwin
	QLD Cairns
	QLD Darling Downs
	QLD North
	TAS Hobart-South
	VIC Ballarat
	VIC Bendigo
	VIC Geelong
Knowledge-intensive regions	ACT
	Adelaide Inner
	Melbourne Central
	Melbourne Mid South East
	Perth Central
	SEQ Brisbane City
	SEQ Gold Coast
	Sydney Central
	Sydney Eastern Beaches
	Sydney Northern Beaches
	Sydney Parramatta-Bankstown

Zone name	SOR region
Lifestyle regions	NSW Central Coast
	NSW Mid North Coast
	NSW Richmond Tweed
	QLD Wide Bay Burnett
	SEQ Sunshine Coast
Resource-based	NSW Far West
	NT Lingiari
	QLD Fitzroy
	QLD Resource region
	SA Spencer Gulf
	WA Gascoyne Goldfields
	WA Pilbara Kimberley
Rural	NSW Central West
	NSW North
	NSW Riverina
	NSW Southern Tablelands
	QLD Mackay
	SA Mallee South East
	SA Mid North Riverland
	TAS North
	TAS North West
	VIC Gippsland
	VIC Mallee Wimmera
	VIC North East
	VIC West
WA Peel South West	
WA Wheatbelt Great Southern	

APPENDIX 4

INDICATOR EXPLANATIONS

Appendix 4: Indicator explanations

A4.1 Regional indicators

Population

Residential population by region for 2003 to 2007 is taken from the *ABS estimated resident population* (ERP) series. The 2008 population was derived from the household growth for 2007/2008 and constrained to 2008 state population growth. The 2008 household total was derived by increasing the 2007 household total by the number of dwelling approvals.

No Households

The number of Households per region uses the *ABS Census* for 2001 and 2006. From the 2006 benchmark, new residential building approvals data is used to grow the stock of houses in a region. This data is provided by the ABS and reported quarterly. If however, the new building approvals data is added to the stock in 2006 an over estimation will occur, due to the demolition of old houses. Therefore, National Economics uses estimated demolition rates to ensure no double counting occurs.

Workforce

Before 2005 the workforce is based on NIEIR's unemployment level plus employment based on the tax statistics. This is driven forward using a measure of the labour force adjusted for the movement of people from the workforce to Disability Support Pensions (DSP). The labour force estimates are produced by the *Department of Education, Employment and Workplace Relations* (DEEWR). The information is contained in the *Small Area Labour Markets* publication that is produced quarterly. The labour force is defined as the yearly average level for 2003 to 2008. The average DEEWR figure is added to the excess movement to disability support pensions. Excess movement is defined as any growth in excess of the rate of growth in the general population. It therefore assumes that there is a natural level of people (expressed as a per cent of the population) who need to access the DSP. The DSP data is ascertained from the Department of Social Security (Centrelink). The rationale for adding in people who move from unemployment benefits to disability support is to measure the real labour force. If a person is receiving unemployment benefits, they are counted as part of the labour force, however when people move from unemployment benefits to the DSP they are excluded. This impacts on the unemployment rate which is defined as the number of unemployed divided by the labour force.

Employment

Before 2005 this is based on the tax statistics adjusted to NIEIR definitions. This National Economics' measure of employment is the adjusted labour force as defined above, minus the estimated National Economics unemployment level. This means that since some unemployed people will be working a small number of hours, the NIEIR employment estimates exclude those employees who are on benefits while working a small number of hours.

Unemployment

This is a National Economics' measure derived from Centrelink data. It includes all people receiving Newstart allowance, Mature Age Allowance, excess growth in DSP (that is, at a level greater than population growth), youth allowance as a non-student and an estimate of students on youth allowance who are, for example, unemployed and undertaking compulsory training. This latter measure is based on demographic trends and microsimulation. This measure was discussed at length in *State of the Regions 2005-06* Chapters 10 and 11.

Headline U/E

This is the unemployment rate produced by the *Department of Education, Employment and Workplace Relations* (DEEWR). The information is contained in the *Small Area Labour Markets* publication. It contains estimates of employment, labour force participation, unemployment and the unemployment rate by Statistical Local Areas (SLAs). NIEIR does additional adjustments to the data to smooth the series. Hence, it is now designated the headline unemployment rate to denote that it is not exactly equal to the DEEWR series.

NIEIR Structural U/E

This is a measure of the level of long-term unemployed as a percentage of the population aged 21 to 65 years old. It includes all those classified as long-term unemployed, those receiving disability support pensions, 50 per cent of people from a non-English speaking background receiving Newstart allowance, 50 per cent of people receiving single parent's benefits and all people receiving the mature age allowance. This measure excludes people on Newstart allowance short-term and anyone receiving youth allowance. It therefore assumes that none of the youth are structurally unemployed.

Disposable funds and productivity

Source: ATO Taxation Statistics, National Accounts Data

In the past SOR reports NIEIR used a net flow of funds concept. This has been changed to accord directly with the net household disposable income and business value added. All state totals are reconciled to the household accounts in the Australian Bureau of Statistics' "State Accounts".

The household disposable income indicator for each LGA is household disposable income from wages and salaries (including supplements, e.g. superannuation contributions) plus benefits and business income (adjusted to gross operating surplus basis consistent with the State Accounts) and interest and dividends received (including superannuation accrued earnings) and rent income less direct taxes, interest paid and depreciation expenses. The ABS 'other income' is treated as a balancing item. All data are in real dollars, which for this year are in 2005-06 prices.

To 2006 all data are derived from the postcode tax statistics. The data is estimated for 2006-07 and 2007-08 using the following methods.

Wages/salaries

The following dot points outline the calculation of the non-farm components of wages and salaries income.

- Recent growth in income from taxation records provides the trend in income per person that can be expected in each region. This measure is required due to the very large differences in wage growth at the regional level.

- ❑ Growth in employment at the local area level is combined with growth in income per employee and the base levels of income from Taxation Statistics to produce updates of income at the regional level.
- ❑ State and national account control totals are then used to balance wages and income growth.
- ❑ As with all information collected from taxation Statistics the data is converted from postcode definitions to ABS regions using the 2001 Postcode to Statistical Local Area concordance provide by the ABS.

Again, farm income is estimated using rainfall data as a proxy for the impact of the drought on regional incomes. The change in rainfall from long-term average is used as a basis for allocating farm income on a regional basis. Farm income cannot be derived from declared taxable income from primary production due to problems of declaration and the transfer of losses between tax years. Instead, the NIEIR estimate is based on the most recent measure of gross agricultural output converted to a realised income measure consistent with national accounts. In this process differences between the relative income generating capacity of various agricultural activities are accounted for. By varying the incomes derived by our estimate of the impact of drought we obtain a reasonably accurate distribution of incomes for 2008.

Taxes paid

This total income tax paid is the net tax paid after deductions and rebates. It includes the Medicare levy as well as the additional Medicare levy for high-income taxpayers. The 2003 to 2006 figure is based on reported taxation statistics. The 2007 and 2008 figures have been adjusted by state control totals, and using estimates of income created earlier.

Benefits

This figure is an estimate of the total amount of benefits received at the local level. The mount includes all benefits and allowances received from Centrelink and an indicative assessment of the contribution of Community Development Employment Program income in remote areas. Figures for all years are based on recipient data. This measure does not include the income derived from Department of Veterans Affairs (DVA) benefits.

Business income

The business income for a region is effectively based on the value of the businesses that operate in the region and the relative performance of the economy as a whole. Unfortunately the net business income as reported in Taxation Statistics does not adequately capture the total impact of business income. National Economics utilises small area microsimulation of the value of unincorporated businesses based on realised cash flows. Using state control totals and the estimated value of business assets the destination of business income can be adequately measured. The changes in business income reflect both the evolution of business values through time as well as the macro-economic trends captured in economy wide reported values of business income.

Interest paid

The amount of interest paid by the household sector is a function of the stock of debt, the nature of the debt and interest rates applied. In order to keep abreast of the impacts that the rising level of household debt in the late 1990's National Economics developed a Household Debt Model which estimates the impact of debt at the local level. One of the measures derived from such modelling is the amount of interest that is paid by the household sector on debt. The debts incurred in running unincorporated businesses are not included, but rather used in the net business income estimates presented in the table.

The debt included covers housing, personal finance and credit card debt. These model estimates are balanced to state and national control totals automatically. The relatively large increase in the amount of interest paid across the period 2003 to 2008 reflects the continued strong growth in household debt throughout the same period.

Net property income

Net property income is derived from Taxation Statistics, and balanced to state control totals. This small measure cannot be updated at the local levels and hence National Economics relies on state trends to derive the 2007 and 2008 estimates.

Business value added

Business value added is wages and salaries plus business income. Productivity is business value added divided by employment. Business value added excludes the gross surplus of companies, since this is difficult to allocate to any small geographic area. For LGAs that are relatively isolated, business value added represents the LGA's capture of gross regional product. For LGAs in major metropolitan areas, this is not necessarily be the case because it is based on the household sector. However, for SOR aggregated LGAs the measure is a good indicator of the SOR region's capture of gross product.

Household disposable income

The household disposable income estimates are benchmarked to the ABS net (that is after depreciation) household disposable income estimates in ABS State Accounts.

This means an estimate for superannuation supplements is added to wages. Also required (other than what has been outlined above) are estimates for:

- (i) imputed owner occupier rental income; and
- (ii) depreciation.

Imputed owner occupier rental income is based on the value of owner occupied property in an LGA. Depreciation State totals are allocated to LGAs on the basis of a weighted average of the replacement value of the dwelling stock by LGA and the market value of the dwelling stock.

Financial assets, liabilities and wealth

All wealth estimates are benchmarked back to the ABS Australian National Accounts – Financial Accounts and National ABS estimates for dwelling stock and value of unincorporated business assets.

National financial assets are divided into two types, namely direct income generating financial assets and financial assets on which an imputed income is added to household income, namely superannuation assets for working households. Direct financial assets are allocated to LGAs on the basis of the Taxation Statistics' interest received data.

Imputed financial assets are allocated to LGAs using microsimulation modelling based on the ABS Household Income Survey (HES) unit and data for 2003-04 and earlier HES years.

The same procedure is adopted for allocating household total liabilities. For the benchmark years, e.g. 2006, a key Census variable in the microsimulation modelling is household mortgage debt service costs.

The value of unincorporated business assets is derived from the SOR LGA business income estimates, which in turn are based on the Taxation Statistics and ABS State Income Accounts.

The value of housing is based on property values outlined below and Census benchmarks for average rent paid by renters. The rental property is allocated back to the LGA of the owners based on rental income estimates, which in turn is derived from Tax Statistics.

The wealth indicator in the tables is equal to value of dwellings owned by residents of an LGA plus holdings of financial assets less stock of household liabilities.

The household debt service ratio equals interest paid on debt plus 0.07 of the outstanding stock of liabilities.

Household income less load repayments equals household disposable income less 0.07 times the stock of outstanding financial liabilities.

The household income measure used for the debt to income ratio is household disposable income plus depreciation plus interest paid.

Baby bounce

Source: ABS

The estimates of effective fertility are calculated using the individual year estimated resident population (ERP) at the SLA level. These amounts are aggregated to the SOR region, with the effective fertility equally the share of total population represented by those aged less than one year. It is “effective” in the sense that the actual birthplace is not collected, rather the place at which the infant lives at June 30th in their first year.

Social Security

Source: Centrelink

Summarised from postcode level values provided by Centrelink and divided by population.

Population and migration

Source: ABS Estimated Regional Population

The presentation of ageing, population and migration information is primarily based on the ABS report census migration rates, ABS Estimated Resident Population (ERP) series by age 2003 to 2007, and National Economics’ population and migration modelling program called PopInfo.

The calculation of migration patterns relies heavily on the trends established in the ABS *ERP by Age* series. Based on reported changes in population and age distribution at the LGA level and recent migration patterns, population movements are modelled to produce the population outcomes estimated in the 2007 ERP series. The extent to which such a series has incorrectly modelled the actual 2007 estimated resident population by age will create errors in the modelled net flows of migration. The other balancing items crucial to this modelling on an inter-censal basis are the state control totals of net migration from both overseas and interstate.

Population movement – where they were in 2001

With reference to the SOR region as the current place of residence the table illustrates where the current population was located in 2001 as a proportion. The data is obtained from the 2006 Census by usual residence.

The table is disaggregated into four different age cohorts. The categories include 0-19, 20-29, 30-54 and 55+. The total category refers to all age groups.

The location in 2001 has been split into six groups, they are;

1. Not yet born – includes the proportion of the population who are less than 5 years of age;
2. Same address – the proportion of the population who lived at the same address in 2001;
3. Local move (same LGA) – the proportion of the population that have either not moved out of the municipality or have moved locally. For the metropolitan region a local move is considered to be 10km or less and 50km or less for a regional area;
4. Other Australia – the proportion of the population who in 2001 either did not live at the same address, did not move within the same LGA, nor moved locally, but is known to have come from another Australian address;
5. Overseas – the proportion of the population who were living overseas in 2001;
6. Not stated – includes those people who did not write down where they lived in 2001.

Population sustainability

This suite of measures was fully described in Ch 8 of the 2006-7 *State of the Regions Report*. The individual measures are as follows.

- Percentage of years since 1995 in which the population has grown, from the *ABS Estimated Regional Populations*. This can be termed consistency of population growth.
- Share of population under 55 in 2001, from the Census.
- Aged migration: estimated in-migration of persons aged 55 and over, 2001-2006, as a percentage of population.
- Population growth rate, 55+: estimated rate of growth of population 55 and over.
- Demographic stress: a US government measure based on the total levels of out-migration and the growth rate of the 15 to 55 year age group.
- Dominant locations: the share of population of the largest urban locality within the region.
- Family/youth migration: net migration of 0-14 year olds 2001-2006, from the Census.
- Fertility bounce 1997-2006, see baby bounce above.
- Fertility, babies as a percentage of the population 2006, see baby bounce, above.
- Sustainability score: a compound of the above measures.
- Working elderly: share of persons aged 55 and over who are employed, from the 2001 Census.

Rainfall

Source: Commonwealth Bureau of Meteorology, National, Climate Centre, Australian Monthly Rainfall.

Specially requested monthly rainfall data from each available Australian weather stations is assigned into the appropriate region and then totalled and averaged to generate the average annual rainfall for each region.

Temperature

Numbers given are the average maximum daily temperature for a region.

Residential and non-residential building and construction

Source: ABS publication 8731.0 – Building Approvals Australia

Building approvals data is converted to constant price values. Forecasts are derived using National Economics construction models.

Innovation startups

Source: Dunn & Bradstreet

Innovation Start-up estimates are defined as the total number of high tech companies in 2008 which were not present in 2001. The Rank of each region was based on the gross number of high tech start-ups per capita. Average employment figures for both 2001 and 2008 were obtained by taking only hi tech businesses, which reported at least an employee. New start-up employment is calculated as the gross number of High Tech Start-ups multiplied by the average number of employees for 2006. This was then taken as a percentage of the workforce.

Businesses by industry type

Source: Dunn & Bradstreet

All businesses by industry type from Dunn & Bradstreet database, listings used as at 30 June 2006, 2007 and 2008. Businesses where an industry type could not be established have not been included.

Patent applications

Patent applications per 100,000 people

This indicator measures the number of patent applications from businesses and individuals over a ten-year period. It is an average from 1994 to 2007, expressed as the number of patents per 100,000 residents. Expressing the measure in these terms allows for regional comparisons.

The patent data is provided by the Australian patent office (IP Australia). The number of applications was chosen over patents granted, due to the long delays associated with the granting of patents. In some cases this can be up to 5 years.

This measure acts as a proxy for scientific innovation, knowledge endowment and entrepreneurial dynamism. Regions with a high value for this indicator will generally prosper, as innovation leads to greater value added and wealth creation.

Hi-Tech and IT applications per 100,000 people

The patent application data is grouped into 31 different classifications. The following classifications were identified as 'Hi-Tech':

- Electrical devices and engineering
- Information technology
- Optics
- Instrumentation
- Medical engineering
- Polymers
- Pharmaceuticals
- Biotechnology
- Environmental processes
- Nuclear engineering
- Space technology, weapons