



AUSTRALIAN LOCAL
GOVERNMENT ASSOCIATION

STATE OF THE REGIONS 2017-18

PILLARS OF REGIONAL GROWTH

(This report summarises the full State of the Regions report for 2017-18. The full report is available from the publications section of the ALGA website.)

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Regional indicators and data – more indicators and at LGA level

The full online SOR report available from the ALGA website (alga.asn.au) contains a four page indicator set for each SOR region, selected metropolitan cities, Australia and Northern Australia. A similar set of indicator data is also available at LGA level from National Economics (www.nieir.com.au). Enquiries for LGA level data should be directed to Nick Marinopoulos at National Economics. Phone 03 9488 8444 or email nickm@nieir.com.au.

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STATE OF THE REGIONS 2017-18

**PILLARS OF REGIONAL
GROWTH**



The *State of the Regions* Reports

The *State of the Regions* (SOR) reports by National Economics are published annually by the Australian Local Government Association (ALGA). The reports are launched at the Regional Cooperation and Development Forum, held in Canberra, in June of each year.

The 2017-18 SOR *Pillars of Regional Growth* is the twentieth report in the series and is available for purchase in colour from the ALGA website – www.alga.asn.au. Previous issues of the reports can be downloaded from the ALGA website or purchased in print form through ALGA. From mid-2014, early issues of the online report were made available, free of charge.

There are two versions of this year's SOR report. The full report available from the ALGA website is an online publication. A summary report is printed and made available to delegates attending the Regional Forum, the event where the report is launched which immediately precedes ALGA's annual National General Assembly of Australian Local Governments.

Previous reports are:

STATE OF THE REGIONS REPORT 2016-17: SUPPORTING A PROSPEROUS VISITOR ECONOMY

This report examines Local government's role in tourism development. Local government helps to administer many tourist attractions and assists in the presentation of tourism-related events. It also provides much of the basic infrastructure which supports the industry, especially transport infrastructure. The report seeks to better understand the importance and complexity of the visitor economy from a regional perspective - not only the opportunities for income generation, but also the associated problems of seasonal and low-wage employment. The report includes an investigation of the Commonwealth role in local government finance. It also covers regional aspects of education finance and regional differences in the pathways from early childhood to satisfying employment.

Regular features included in the report are updates on the structure of regional incomes, skills and employment, housing and wealth, telecommunications, energy and climate change. The report provides extensive data for 67 regions covering all Australia and also includes a chapter on recent economic trends in the major metropolitan areas of Sydney, Melbourne, Brisbane, Perth and Adelaide.

STATE OF THE REGIONS REPORT 2015-16: INEQUALITY BETWEEN AND WITHIN REGIONS

This report argues that reducing the inequality of income distribution within and between Australian regions will be pivotal to strengthening Australia's economy and bridging the employment fallout from the subsiding mining boom in low income regions. The report identifies a need for policies and investments to be implemented on a region-by-region basis to decrease the existing inequality across Australian regions. The success of programs such as the Regional and Local Community Infrastructure Program in 2008-10 and the current Roads to Recovery Program highlights the value and effectiveness of a direct partnership between the Federal and Local Governments in delivering major outcomes in job-creation and economic stimulation.

STATE OF THE REGIONS REPORT 2014-15: REGIONAL DEVELOPMENT IN A GLOBALISED ECONOMY

This report highlights the trend of a widening gap between regions that have benefited from the mining boom and those that have not and identifies that the national economy is now in transition, that we have entered into the post mining boom construction phase and, together with the impact of the high Australian dollar on many of Australia's manufacturing exporters, this requires growth in other areas of the economy to maintain Australian living standards. In the immediate term this is public and private investment in Infrastructure, and increased exporting activity. Development patterns of the North of Australia are discussed as are the troubling features of rising youth unemployment.

STATE OF THE REGIONS REPORT 2013-14: IT'S TIME TO INNOVATE

The report presents further policy findings that builds on the work commenced by National Economics in last year's 2012-13 Rethinking Regional Development and provides further evidence on why a new national approach to regional development is required and what alternative policy approaches should be considered. The consequences for the Australian economy and its regions post mining boom are considered as are the implications, from a social and economic perspective, of natural disasters and the role of local governments in facing up to these circumstances.

STATE OF THE REGIONS REPORT 2012-13: RETHINKING REGIONAL DEVELOPMENT

The report examines the future of regional development in light of the ongoing impacts of the patchwork economy, ever tightening fiscal budgets at both the national and jurisdictional levels, the darkening economic clouds in the United States of America and Europe. The report considers what changes need to be made to Australia's regional development policies to strengthen regional investment.

STATE OF THE REGIONS REPORT 2011-12: BEYOND THE MINING BOOM

The report critically examines the regional effects of the mining boom from 2005. The report produces a balanced analysis of both the benefits and costs associated with the mining boom and the effect the mining boom is having on other industries, as well as the regional implications as the boom ends. Lessons from Norway are included as a best practice international case study.

STATE OF THE REGIONS REPORT 2010-11: THE HOUSING SHORTAGE AND HOUSING AFFORDABILITY

The report analyses the issues surrounding housing supply. Supply issues lead to pricing pressures and these impacts are described in their regional context. Construction activity across the regions is presented.

STATE OF THE REGIONS REPORT 2008-09: SUPPLEMENTARY REPORT

This report represents a supplement to the 2008-09 Report issued in December 2009.

The supplement complements the original report by noting developments in the issues surrounding climate change and updates the regional income and labour market indicators to 2008-09. There is also an update on the impacts of the GFC.

STATE OF THE REGIONS REPORT 2008-09 AND SUPPLEMENT REPORT: CLIMATE CHANGE AND THE GLOBAL FINANCIAL CRISIS

The report and its later supplement continue to focus on the challenges of climate change, especially given the financial economic crisis engulfing the globe.

STATE OF THE REGIONS REPORT 2007-08: CLIMATE CHANGE

The report focuses on climate change and its implications and impact on Australia's diverse regions.

STATE OF THE REGIONS REPORT 2006-07: THE LANDBOOM

Australia's economic performance over the past decade has been exemplary. Incomes have increased, unemployment has decreased, and the inflation rate has remained low. In addition, nearly all home-owners have received gratifying capital gains. For many, this additional wealth has provided psychological compensation for increased working hours and reduced employment security.

STATE OF THE REGIONS REPORT 2005-06: TELECOMMUNICATIONS

The report's theme is at the very core of the issues that may well shape the economic development opportunities and competitiveness of Australia's regions. The Report explores the case for the use of telecommunications infrastructure, to assist regions improve their performance.

STATE OF THE REGIONS REPORT 2004-05: INFRASTRUCTURE

The report explores the case for the use of infrastructure development to assist regions to improve their performance.

STATE OF THE REGIONS REPORT 2003-04: AGEING, MIGRATION AND POPULATION CHANGE

The report investigates how ageing, migration and population growth impact on the economic potential of regions and the revenue raising capacity of local government.

STATE OF THE REGIONS REPORT 2002-03: REGIONAL ECONOMIC GOVERNANCE

The report discusses the role of regional economic governance and along with the traditional update of the regional performance indicators, the report focuses on governance and the linked issue of growing inequality between regions.

STATE OF THE REGIONS REPORT 2001-02: LEARNING REGIONS

The report looks at jobs and learning regions. The prime concern is how well Australian regions are positioned to capture the economic development and employment benefits from the emergence of the knowledge-based or learning economy.

STATE OF THE REGIONS REPORT 2000-01

The report released in December 2000, puts forward a vision for the future of regional Australia, and practical strategies to enable Australia's regions to attain their economic and social potential, based on a detailed analysis of their current performance and prospects. The regional framework adopted allocates the 632 LGAs into 58 regions, and examines five indicators of change based on population, gross regional product, productivity, employment growth and occupational structure.

STATE OF THE REGIONS REPORT 1999-00

This is the second report released seeking to improve the level of understanding about local economies and their regional performance and prospects. The report presents a regional typology framework based on 57 core metro, dispersed metropolitan regions, production zones, lifestyle, rural and resourced based regions. Section 4 of the report models the likely impact of the implementation of National Competition Policy and estimates the potential impact of the GST on regional Australia.

STATE OF THE REGIONS REPORT 1998-99

The report was prepared for the delegates attending the First Regional Cooperation and Development Forum – Sustaining Futures for our Regions held in Canberra on 8 November 1998. Four elements of innovative regional economic development strategies are examined, as are historic trends over the period 1986 to 1996. The key indicators used are population, employed residents, unemployment, and real incomes and skills formation.



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

The objectives of the *State of the Regions* reports (SOR – of which this is the 20th) are to:

1. present the latest statistical indicators (for this report to 2016-17) describing how Australian regions are performing;
2. analyse trends in equality and inequality between Australian regions;
3. make suggestions regarding 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 governments to understand their own region and compare performance with other regions; and
7. to provide local government with useful planning and policy tools.

The 2017-18 SOR builds on the accumulated knowledge of previous SORs to provide a coherent framework for analysing regional development. The reports also provide a base of accumulated knowledge and insights that can assist with planning and policy development. SOR reports identify each region's economic development issues as well as assessing the effectiveness of policies for removing roadblocks to regional economic development.

In order to understand the forces of divergence and convergence in economic performance, the insights of twenty years of reports can be summarised as a series of 'stylised facts'. These are the strategic findings from twenty years of research for the SOR in relation to the drivers that influence regional development. They describe the most probable effects of the identified drivers. They are tendencies and do not apply to all regions.

Effective regional development policy requires the use of all the "facts" with appropriate weights assigned to each fact/driver. The following list is derived from twenty years of reports.

Stylised 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.

This basic fact was obscured during the mining boom. Because the mining industry is both capital and resource intensive, its value added per labour hour is high. During the boom this generated rapid economic growth in regions specialising in iron ore, coal and natural gas – less so for other minerals which did not experience the same high prices.

For a few years Australia as a whole fancied that all its 23 million people could share in economic growth based on its unique and extensive mineral resource base, but the mining boom brought costs as well as benefits. A further unpalatable truth is that the spike in mineral prices is proving to be temporary. As the mining boom subsides Australia will have to return to knowledge and innovation as the foundation of its prosperity.

Stylised 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.

Judging by patent applications, Australia's most intensive knowledge-based regions are its metropolitan centres, though several of its independent cities are shaping up. Most regions are connected to the knowledge economy via a metropolitan city, either as suburbs or as hinterlands.

An important weakness of the northern Australian regions, and hence of the country as a whole, is that they have no readily-accessible metropolitan centre through which they can be linked to the world knowledge economy.

Stylised Fact Three

Successful knowledge-based regions have a high concentration of highly skilled global knowledge workers, such as scientists and engineers. These workers tend to migrate to regions with a wide variety of cultural and lifestyle choices.

The economies of agglomeration operate strongly to raise productivity and incomes in knowledge-based production located in the major metropolitan centres. The productivity benefits arise from human interaction, not only in offices and laboratories but in cafes, shops and educational and recreation venues. These interactions occur most intensively when workplaces and other venues are within walking distance of each other, and preferably also within walking distance of residential options.

This said, not every city centre worker wants, or needs, to live in a city centre high-rise; neither do those who patronise the cultural and entertainment options of city centres need to live on the spot. Commuter transport systems are therefore important but should not detract from the walkability which is the sine qua non of a knowledge-based region. Their capacity should be proportional to the size of the knowledge-hubs which they serve.

Similarly, not all jobs are suited to location in knowledge-based regions. Broad-acre and freight-intensive industries are particularly unsuitable. However, many such industries depend on knowledge inputs and contribute most to economic growth when they are connected to knowledge-based regions both by telecommunications and by convenient passenger transport.

Stylised Fact Four

There appears to be no limit to the economies of agglomeration, provided that metropolitan built form facilitates the mutual interaction of the whole metropolitan population.

Productivity and employment have been increasing in metropolitan centres more rapidly than in the suburbs, particularly fringe suburbs. Long commute times to jobs concentrated in the inner-metropolitan knowledge-based regions have limited the outward expansion of metropolitan areas; the resulting limited supply of residential land with good job access has joined with increasing demand, influenced by financial and tax factors, to increase metropolitan land prices, particularly towards the centres. This has made metropolitan housing less affordable, which in turn has hindered the exploitation of economies of agglomeration.

Stylised Fact Five

Regions with high-productivity jobs (or with commuter access to high-productivity jobs) have high household incomes and low unemployment rates.

Some regions have high productivity jobs due to a favourable industry mix – capital-intensive industries report high labour productivity almost by definition; industries characterised by refuge self-employment report low labour productivity. High productivity is also generated when resources are efficiently and innovatively used industry by industry, as is characteristic of knowledge-based regions.

In most regions the jobs available are mainly taken by people who live within the region. However, metropolitan centre regions are physically small and depend heavily on inbound commuting for labour supply – this is an established practice and is acceptable if the productivity benefits outweigh the cost and commuting times are reasonable (preferably less than half an hour each way). More contentiously, remote regions are increasingly relying on fly-in fly-out. This is acceptable for temporary job locations but has social costs when extended to workers with families.

A caveat: it should always be remembered that productivity is very difficult to measure in the absence of directly marketed output; this applies both to public services (where current conventions impute low productivity) and to the finance sector (where many services are not paid for directly but are financed from interest rate differentials and current conventions indicate high productivity).

Stylised Fact Six

Until such time as the knowledge-economy can be generalised, the young will continue to leave low-income, high-unemployment regions and migrate to high-income, low-unemployment regions.

Young people are attracted to the income-earning, educational, cultural and entertainment opportunities of the metropolitan centres and can more easily adjust to high housing costs than people with family responsibilities. The same is true of some empty-nest seniors. However, people will continue to desire greater housing space as they form families, hence the problems of appropriate investment in commuting infrastructure.

Stylised Fact Seven

Australia's difficulties in adopting the knowledge economy would be eased if knowledge-economy jobs could be decentralised.

A recent OECD study by Ahrend et al. (2014) suggests that a doubling in city size is associated with a productivity increase of between 2 and 5 per cent. National Economics has identified links between urban employment density and productivity and examined the empirical relationship between metropolitan-wide productivity and city size finding productivity gains towards the high end of expectations. In face of these economies of agglomeration it has proved very difficult to spread knowledge-economy employment away from the city centres, though there has been some decentralisation to inner metropolitan suburbs (particularly when they share the walkability of the city centre) and some to regions with attractive lifestyle options. Further decentralisation is likely to be incremental – from metropolitan centres into inner suburbs and into regional capital cities which have already established themselves as outposts of the knowledge economy. It will require infrastructure support, especially investment in telecommunications and transport to build new economic opportunities and resilient intelligent communities.

Stylised Fact Eight

Infrastructure deficiencies make it difficult for low productivity/high unemployment regions to increase productivity.

Relatively low housing costs are an advantage for regions seeking to attach themselves to the knowledge economy, as are lifestyle choices; these assist in attracting knowledge workers. However, such workers must be provided with the means to be productive, by placing themselves at the interface between the local economic base (particularly export industries) and the global economy. This requires investment in telecommunications and transport. It also requires low-key local investment so that every main street becomes an outpost of the knowledge economy.

Stylised Fact Nine

Australia could better exploit the potential of its existing knowledge-economy regions by appropriate infrastructure investments.

The affordability of metropolitan housing could be addressed directly by investment in mass transit to make additional fringe areas available for commuter housing and by investment in local transit to extend pedestrian range and so support the geographic expansion of knowledge-based regions.

It will also be important to support the diffusion of knowledge into hinterland regions, and back from the hinterland regions so that the combination of hinterland and metropolitan know-how generates innovation: telecommunications and transport are again required.

Even if all of Australia's knowledge regions are combined, they are but small compared to the mega-metropolitan regions of Asia, Europe and North America. Further economies of agglomeration could be achieved if the metropolitan areas were integrated to become a single globally-positioned knowledge economy. This will require a retreat from parochial mindsets, more interaction and more specialisation. Competition between states and regions should be re-focused on competition with the world at large. Yet again this would be facilitated by investment in improved telecommunications and transport. Commonwealth Government leadership is particularly important here.

Stylised Fact Ten

Retirees are leaving high-income, high-cost, low-unemployment regions and migrating to low-income, low-cost, high unemployment regions.

The flow of older people to retirement regions was initially encouraged by marked differentials in house prices. Though the differential is not quite as compelling as it was, retirement migration is still taking place. Retirement migration was an important source of income to recipient regions in that it supported construction activity. Such regions have to maintain inflow to keep the construction going, but this is not always possible. The question for them is whether they can turn the attributes which attracted retirees (and the retirees themselves) into greater participation in the knowledge economy.

Stylised Fact Eleven

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

In regions where productivity is low because of high retiree populations, many households depend on transfer payments, either social security payments or returns on financial investments, supplemented by government finance of health facilities. A region with a high proportion of retirees accordingly depends on other regions for much of its income. The challenge for such regions is to leverage the liveability which originally attracted retirees into the attraction of knowledge-based businesses.

Regions may also suffer low productivity because they have specialised in declining industries, usually accompanied by a failure to invest. With the current emphasis on short-period returns, downturns can be remarkably rapid. An example is the current downturn in industries adversely affected by the high exchange rate due to the mining boom. Much damage can be done, and failure to maintain capacity can result in inability to take advantage of later opportunities.

Stylised Fact Twelve

Australia's capacity to invest for fully-employed participation in the knowledge economy has been curtailed over the past three decades by its accumulation of debt and by its failure to prepare for the costs of climate change.

The accumulation of debt by households followed financial deregulation, which gave the banks free rein to lend and reduced the flow of funds to government borrowing for infrastructure finance. Households proved short-sighted and borrowed freely. For the foreseeable future a large proportion of Australian households will be forced to prioritise debt servicing, which will reduce their capacity to respond to opportunities.

The accumulation of debt by Australian households had a counterpart in the accumulation of overseas debt by the banks. The necessity to service this debt will bear down on Australian standards of living until such time as the debt is either repaid or renegotiated.

Debt accumulation had a further counterpart in the accumulation of wealth by a small minority, adding to economic inequality.

Debt servicing costs and the demands of the wealthy minority will limit Australia's capacity to rectify its infrastructure deficiencies at a time when the costs of remedial action are increasing due to climate change.

Since infrastructure by definition requires public provision (either directly or via financial arrangements) the current infrastructure backlog is basically a failure of government investment. The next three decades are likely to see continued debate about the role of the three levels of government providing infrastructure and hence on the financing of infrastructure. If user charges cannot fund appropriate provision, there is only one choice: taxes, either now or deferred through loans.

Short time horizons in the financial sector (sometimes characterised as a shortage of patient capital) not only affect infrastructure investment, they also dampen those types of business investment which require long time horizons. In particular, worthwhile investment in agricultural and manufacturing businesses requires time horizons of at least a decade. The current concentration on short-term returns calls into question the wisdom of the free-market reforms of the 1980s. It is likely that future tax debates will be accompanied by questioning of the role of the finance sector.

The need to raise domestic savings and direct them into long-term investment will raise the interest in strategic economic planning by all levels of government. This is likely to start with a realisation by the Commonwealth that its policy of leaving the governance of economic development to the market has raised the risk of economic breakdown due to excessive debt, which must be addressed by an increased emphasis on long-term investment with an emphasis on export and import competing industries. This will involve the states, due to their responsibility for infrastructure, and will be expressed in the development of regional strategies which draw on the regional knowledge of local governments and their ability to orchestrate regional development.

Stylised Fact Thirteen

Income inequality within and between regions is associated with depressed economic growth.

Economic policy over the past three decades has been founded on the proposition that economies respond to market incentives and that such incentives should accordingly be sharpened. This may be true over short periods, but over longer periods, say a decade or more, the working of the untrammelled market increases inequality of income.

International evidence summarised by the OECD and IMF shows that increases in inequality generate reductions in long-term economic growth rates.

Within Australia, the higher the per-capita disposable income of a region, the higher the growth rate it achieves. This is partly due to higher per-capita resources available for investment, but is also partly the result of the unequal rewards that result from successful response to incentives.

Once this effect is taken into account, the more unequal the household disposable incomes of a region, the lower is its growth rate. As the OECD suggests, this is likely to reflect inequality of access to educational opportunity but it is also likely to reflect inequality of access to employment opportunities within regions to which people have resorted to avail themselves of low housing costs, or which they have difficulty in leaving because they are locked in by low housing capital.

Stylised Fact Fourteen

There is increasing inequality in regional economic performance in Australian cities, with fringe urban areas being at an increasing disadvantage.

The greater the distance a sub-region is from the central LGA (e.g. the City of Melbourne or Sydney), the less is productivity compared with the city-centre peak. The historical record shows that growth in Gross Regional Product per hour worked has increased much faster in inner Sydney and Melbourne municipalities than in the fringe municipalities in those cities and the that gap has increased with increasing distance from the centre, suggesting relatively declining access to high productivity employment and, in some cases, declining access to hours of work in outer areas. It is the key reason for increasing inequality.

Stylised Fact Fifteen

Standardising pupil/teacher ratios is a necessary, but not sufficient, condition for education attainment inequalities to be reduced between regions. Another necessary condition is to reduce income inequalities between regions and that requires long term planning.

Unemployment and income inequalities between regions are an important driver of inequality of outcomes in the literacy and numeracy skills of primary school age children.

Stylised Fact Sixteen

Tourism exports are an important driver of economic activity and employment in many regions. However, on a net basis, because of Australia's high expenditure on tourism imports (Australians travelling overseas) and domestic tourism being a zero sum benefit for the national as a whole, the net benefit from tourism for the majority of regions is relatively low.

The central regions of Australia's major metropolitan cities are generally the major net beneficiaries from tourism. These are regions which are also currently performing well economically. Elsewhere local councils are in a position to improve their net benefits from tourism, both by encouraging inbound tourism and by encouraging residents to spend locally instead of in other regions or overseas. Though regions can generate export income from tourism, labour productivity in the industry is low and high incomes should not be expected. However, local investments which improve visitor experience frequently benefit local residents as well and indeed, by improving liveability, can be helpful in attracting knowledge-economy residents and businesses.

Stylised Fact Seventeen

It follows from the above that there is no market-driven tendency for inequalities in economic performance between regions to be reduced. High-technology innovation-driven development means that regions which established competitive advantages in these activities can increase their relative performance in terms of high incomes and low unemployment rates without "technical" limits. This is because scale is important and Australia's high-technology knowledge-based regions are small by world best practice.

The only practical constraint to metropolitan growth is that high dwelling costs will choke off the supply of labour, limiting the economic potential of these regions and therefore the nation. This was the experience of the Sydney metropolitan area from 2001 to 2008. A repeat experience threatens, in which metropolitan growth will slow down due to high housing and commuting costs.

Stylised Fact Eighteen

Since market mechanisms will not reduce inequality of economic performance between regions, public policy has a key role in reducing inequality of economic performance between regions and by so doing maximising overall economic growth of the nation.

The role of policy in promoting economic growth is to maximise the quantum of infrastructure capital including investments in transport, communication, health, education, etc. and organising its distribution with multiple aims, including reducing the obstacles to growth in Australia's current high-technology regions and laying the foundations for the development of new, successful knowledge-intensive regions, all in the context of promoting environmental sustainability and governing Australia's trade and capital-flow relationships with the rest of the world so that they remain financially sustainable.

Public policy also has a key role to play, either directly and or indirectly, for example by infrastructure planning to influence housing affordability and facilitate the increase in population densities necessary to sustain the growth of high-technology knowledge-based regions.

Public policy also has a key role to play in reducing the inequality within regions by appropriate tax and income transfer policies.

Empirical support for the stylised facts

The empirical support for the above stylised facts can be grouped into six general rules based on empirical observation of interregional performance. Each rule has a number of sub-rules or corollaries.

The empirical evidence for the rules, as would be expected, is particularly sharp at the LGA or even the smaller SA2 levels. Nevertheless, the SOR region data is satisfactory in showing the general empirical support for the rules.

- 1.1 Rule one:** At any point in time there is substantial inequality in economic performance between Australian regions. Given initial inequalities, there are at best only weak market-driven economic forces tending towards convergence between regions in economic performance.
- 1.2 Corollary to Rule one:** Market forces tend to perpetuate inequalities in work-derived income. If market forces generate inequality of performance between regions, over time there will be inter-regional conflict over tax and income transfers with poor people seeking greater transfers and the rich resisting. Politically a more effective mechanism would be to influence market forces by general government regional development policies to ensure greater equality in the growth of pre-tax incomes.
- 1.3 The context:** Regional development policy has not, over recent decades, been at the forefront of the national economic development policy agenda. An underlying intellectual reason for this is the major role of so-called 'general equilibrium' models in the training of national policy advisers. These models assume that market forces will ensure convergence in economic performance between regions, arguing that investment will be reallocated from regions with high unit costs to regions with low unit costs. As will be seen below this assumption is empirically empty.
- 1.4 The evidence for Rule one:** Across the 67 regions of this report, there is considerable variation in GRP per hour worked. In 2016 the range was from \$_{CVM}57 per hour worked to \$_{CVM}207, with the Pilbara-Kimberley region an outlier at \$_{CVM}356 per hour. The ratio between lowest and highest in 2016, in terms of productivity, is, therefore, over 6 to 1.
- In general, the relative position, in terms of productivity, in 2016 reflects its position in 2000. In 2016 the difference in remuneration in dollars per hour of income worked within each region ranged from \$_{CVM} 32 to \$_{CVM} 103. The lowest was for the Qld Wide Bay Burnett region. The simple rule, from regression fitted to the regional data, is that if income per hour was x in 2000, income per hour in the same region in 2016 will be 1.26 times x. The data also show zero relationship between the level of productivity in 2000 and the growth in remuneration/productivity over the next 16 years.

- 1.5 Evidence for corollary to Rule one:** If we refocus from earned incomes to household disposable incomes by subtracting income taxes and adding benefits there is evidence of reduction in relative inequality across SOR regions between 2000 and 2016. This evidence consists of a negative relationship between the year 2000 level per capita disposable income and the subsequent percentage change to 2016. However the tax and income redistribution measures were not strong enough to stop inequalities widening in terms of the level of per capita disposable income. Accordingly, the change in per capita income from 2000 to 2016 is positively related to the scale of the initial per capital income in 2000. The relationship as quantified by regression is that the change in per capita disposable income from 2000 to 2016 will be on average one third of the initial level.
- 2.1 Rule two:** In regions other than mining-based regions the proximate reasons for regional inequality, in terms of productivity and hours of work available, are:
- (i) the scale;
 - (ii) the intensity of high technology industry production;
 - (iii) the concentration of global knowledge workers; and
 - (iv) the availability of community services and lifestyle services.
- 2.2 The context:** Rule two explains why, in 2016, some regions reported GRP per hour worked, of \$_{CVM} 50 while others (ignoring the mining-based regions) reported productivity of near \$_{CVM} 90 per hour worked.
- 2.3 What are high technology industries?** High technology industries produce goods and services that require highly skilled labour input and/or a high capital intensity of production. Such industries include mineral exploration and mining services, transport and machinery production, publishing, broadcasting and Internet services, information services, finance, computer and digital technology services, tertiary education, hospital services, the arts, legal and accounting services.
- 2.4 What are global knowledge services?** Global knowledge workers are identified by their occupation. The occupations defined as global knowledge occupations include advertising, corporate services, finance, policy and ICT managers, artistic directors, producers, performers, authors, senior film personnel, writers, acoustics, senior finance personnel, technology development personnel, economists, information providers, fashion and graphic designers, engineers, chemists, geologists, medical scientists, general scientists, legal professionals, etc.
- 2.5 The evidence for Rule two:** Comparing Australian regions, there is empirical evidence that productivity rises with metropolitan size and is positively related to high-technology industry intensity and the intensity of global knowledge workers. Further, there is a positive relationship between global knowledge worker intensity and the intensity of community and lifestyle services. Liveability characteristics can accordingly be an important driver of economic development if they induce global knowledge works to settle in a region which then encourages

enterprises to invest in the region to capitalise on the available skilled labour.

Of course, the reverse causation can also apply.

- 3.1 Rule three:** The enabling condition for Rule two is the presence of adequate physical capital stock.
- 3.2 Corollary to Rule three:** Only part of the capital stock installed is driven by market forces. Investment in transport, communications, education, health and other knowledge-creation infrastructure is at the discretion of the policy authorities. Policy can have a substantial impact on the economic performance of a region by influencing the size of the national capital stock and determining where the government-administered part of the stock is installed and at what level.
- 3.3 The context:** Capital stock covers physical assets in transport and communications plus community capital stock, such as education and health facilities and commercial capital stock such as mines, factories and commercial buildings.
- 3.4 The evidence for Rule three:** In 2016 there was a close correlation between construction capital stock installed by region and headline GRP. In general, for each \$1 of capital stock installed \$1 of annual headline GRP was produced. In terms of increments, for each \$1 of additional construction capital stock secured by a region between 2000 and 2016 the increase in annual headline GRP was \$0.8. Further, the greater the construction capital stock installed per capita of the working age population, the greater the density of high technology industry activity. Empirically, for each \$100,000 per capita of capital stock installed, the share of high technology production in value added increases by 0.12 per cent.
- 3.5 General comment:** The installation of high levels of capital stock, both in absolute and per capita terms, is a necessary condition in non-mining regions for high technology industry intensity, high global knowledge worker occupation intensity and plentiful availability of lifestyle and community services.
- 4.1 Rule four:** The tendency for inequality to be sustained between regions arises because strong initial proximate drivers for inequality generate continuing strength in these drivers. This holds for all the proximate drivers of inequality of economic performance between regions, namely:
- (i) scale;
 - (ii) high technology industry intensity;
 - (iii) global knowledge worker intensity; and
 - (iv) lifestyle and community services.

- 4.2 Corollary to Rule four:** A further key factor explaining why inequality remains entrenched in the link between economic performance and educational attainment of children. This is because many studies have shown that, once teacher-pupil ratios have been standardised, the home environment is a key factor in explaining a child's educational attainment. Low household income and low educational attainment of parents are not conducive to a child's rapid achievement of basic literacy and numeracy skills.
- 4.3 The context:** The better the indicators in an initial year or base year the greater will be the improvement in the indicators, in absolute terms, at least over the period commencing with the initial year.
- 4.4 The evidence for Rule four:** It has been established that a region's scale is a positive driver of productivity. Empirically, given the productivity in the initial year, productivity will be 1.26 times higher after 16 years. This is true not only for non-mining productivity in general, it is also true for high technology industry activity, global knowledge worker share of employment and community services and entertainment hours per capita. For each of these, whatever the initial conditions, the year 16 indicator outcomes will be greater.
- 4.5 General comment:** Given the initial conditions, the expectation from the data is that market forces will, at best, lock in existing inequalities and will most likely exacerbate them. The empirical evidence indicates that policy decisions on the allocation of public capital stock have not favoured the low-income regions sufficiently to offset market forces. They have failed move towards equality of economic opportunity between regions.
- 5.1 Rule five:** The lower the unemployment rate in a region and the higher its level of productivity, the greater will be the immigration of the young, with the retirement generation tending to migrate in the opposite direction. Thanks to ageing in situ coupled with retirement migration the population increase for the older age group is highest in high-unemployment low-productivity regions.
- 5.2 The context:** Rule five adds to the explanation of why inequalities between regions have been entrenched and are likely to increase.
- 5.3 The evidence for Rule five:** Low unemployment results in high jobholding rates as measured by hours worked per capita of the working age population. Combined, the jobholding rate and productivity (measured in dollars per hour worked) yield the total income from work per capita of working age population. This can be used to represent both the unemployment and productivity indicators.
- Empirically there is a positive relationship between income and the share of population aged 20 to 29, and there is a negative relationship between per capita income from work and the share of the population aged 55 and over.

- 5.4 General comment:** The dynamic driving this relationship lies in housing costs. The higher the productivity of a region the higher its real incomes and the higher its housing costs and the capital gain if dwellings are sold. This encourages/forces low-to-medium income older age households to migrate from the region.
- The young, or at least the best qualified young, migrate to the regions with the highest paying employment opportunities and the most attractive tertiary education institutions.
- 6.1 Rule six:** For long-run positive population growth the housing stock must be expanded to accommodate the population. To do this two conditions are required:
- (i) The cost of new dwelling construction must not be significantly above the market price of established dwellings. If this is not so, those who undertake the construction of new dwellings are at risk of substantial capital loss especially in the short-term. and
 - (ii) The mortgage service costs on new dwelling construction must be affordable, in terms of the income that an average household can generate from the labour market catchment of the region.
- 6.2 The evidence for Rule six:** Empirically, where the ratio of new dwelling cost to established dwelling prices and recent housing activity is near or below one, dwelling construction activity increases substantially. At above one, dwelling construction is reduced simply to the replacement rate of approximately 2 per cent a year. In these regions population growth cannot be sustained.
- The problem for the sustainability of Australia's successful growth regions arises because established dwelling prices tend to increase rapidly when real per capita income from work increase. Once a ratio of 6 to 9 times household income is reached, mortgage costs will not be affordable in relation to terms of income from work. Once this ratio is reached, apartments become the only affordable type of dwelling. As a result, the sustainability of Australia's leading high-technology knowledge-intensive regions, in terms of housing affordability, will depend on the willingness of households to adapt to high density living. This raises the further question as to whether the apartments currently being built are of suitable design and quality to encourage this transition? On this will depend as to whether or not the current growth potential of Sydney and Melbourne is achieved.

Note: graphs of the empirical relationships which support this list of rules will be found in the equivalent section of the full version of the State of the Regions report for 2017-18.

Executive summary – Pillars of regional growth

There is much to applaud in the Productivity Commission's recent commendation of regional planning; planning which focuses on each region's relative strengths as locally perceived. This commendation is important in two ways. First, contrary to recent fashion it concedes that there is a role for regional planning; it is not wise to leave economic development simply to market forces. Second, it emphasises the importance of local knowledge in the preparation and implementation of economic development strategies.

If regional economic planning is to be authoritative and effective, it requires government auspices, not only to ensure that different voices are heard and balanced in a democratic way, but to provide the impetus to ensure implementation. In Australia authority is shared between federal, state and local government, and there is a strong case that the authority of each should be shared in the preparation and implementation of regional plans. The levels of government are able to bring complementary strengths to the process of planning.

- The Commonwealth, primarily because it has charge of Australia's overall economic strategy as a nation which trades internationally, and also because it administers the national finances (both revenue raising and the broad outlines of expenditure) and is responsible for the regulation of the finance sector. In coming to the table, the Commonwealth should also acknowledge its weaknesses, which primarily have to do with lack of local knowledge and enthusiasm for one-size-fits-all strategies.
- The states and territories, primarily because they are responsible for strategy at the mega-regional level but also because they administer the major public services and much infrastructure provision. The states and territories also have weaknesses, most commonly identified as their silo tendencies; their concentration on the efficient but uncoordinated delivery of particular services.
- Local governments, primarily because of their local knowledge and ability to see the regional scene as a whole, but also because of their local administrative capacity and planning powers. Involvement with the Commonwealth and the states can raise the sights of local governments above the parochial level, as can involvement with neighbouring councils. (Some LGAs constitute coherent wholes for strategic planning purposes, but in many parts of the country regional associations of councils are more appropriate.)

In its initial report entitled *Transitioning Regional Economies* the Productivity Commission stops short of suggesting how these strengths should be combined to offset their corresponding weaknesses, but its report implies a split between three different functions, as follows.

- Planning and strategy development.
- The allocation of funds to the implementation of plans, whether on a project or ongoing service basis.
- The actual implementation.

In this *State of the Regions* report we concentrate on the first of these duties, plan preparation, as it should be undertaken at the regional level. We assume that all three levels of government will be associated in planning for each region, perhaps through the existing Regional Development Australia structure or through some variant of it, not necessarily the same for all regions.

We begin with the observation that the sine qua non of income growth is growth in productivity and particularly in growth in output per hour worked. Chapter 1 of the report discusses recent Australian productivity growth rates in the context of policies implemented largely at the federal and state levels and makes several observations. In the quarter-century to 2016 productivity grew more rapidly than it had in the 1970s, though growth tailed off after the Global Financial Crisis. Of this growth, the portion which matters at the regional level is that captured by local people in the form of wages and the mixed wage/profit incomes of locally-owned business – growth which goes into corporate profits finds its way to head office, where it is pooled and distributed nationally and internationally.

Nationally, over the quarter century, local income per hour worked increased at 2.2 per cent a year. The finance sector was the only group of industries to beat the national average, with a growth rate in productivity so measured of 3.7 per cent a year, way above the public service where the rate of increase was below national average at 1.9 per cent a year. Trade-exposed industries, including agriculture, mining and manufacturing (all of which export and/or compete with imports) also increased productivity by 1.9 per cent a year. Productivity growth was even lower in a group of highly-competitive, labour-intensive industries centring on hospitality and retail, which, apart from sales to international tourists, do not export and are not exposed to import competition; in these industries productivity increased at 1.5 per cent a year. The remaining industries, those which are not much exposed to international competition but where there are barriers to entry, such as economies of scale or professional qualifications, recorded increases in productivity at the national average rate of 2.2 per cent a year.

These estimates raise important questions.

- Does the rapid growth of real income per hour worked in the finance sector reflect a genuine increase of productivity, or is it due to something else, such as excessive sales of debt to households? Has the sector been imprudently inveigling people into debt? Two NIEIR authors, Peter Brain and Ian Manning, address these questions in a book entitled *Credit Code Red*, which is shortly to be published by Scribe, Melbourne. Because NIEIR's views on this topic will soon be available in detail, it is not further considered in this report.
- Over the past three decades we have heard a great deal about the importance of competition as a driver of growth. Why, therefore, has the productivity growth rate been so low in the most competitive industries? For that matter, why do these industries yield such low incomes?
- Thanks to the low rate of growth of earnings per hour in the most competitive industries, which happen to be major employers, and the high rate of growth in finance (and in executive salaries), inequality of earned income has been rising. This raises serious questions for national cohesion, not to speak of the question as to whether human resources are being used to best advantage.
- Finally, and of considerable concern, the slow rate of growth of productivity in the trade-exposed industries reflects the difficulty that Australia is having in making its way in a highly-competitive world. The counterpart of low returns in the trade-exposed industries is a shortage of exports and an excess of imports, financed by heavy overseas borrowing. This borrowing has largely been the work of the finance sector, and like the increase in household debt is analysed in *Credit Code Red*. Suffice here to say that Australia is increasingly at the mercy of its creditors. Preferably sooner than later, it will be imperative to improve the relative position of the trade-exposed industries.

Behind these questions lurks a more fundamental observation, which is that the weaknesses of the Australian economy result from the experiment of relying on markets and the financial sector to guide economic growth. It was a novel experiment; as the prologue to Chapter 1 points out, up until the 1980s Australian governments were all directly involved in the government of trade. It will be necessary for them to resume this responsibility if they are to counter the weaknesses exposed over the past quarter century of reliance on finance sector decisions. In this context, Chapter 1 reviews

the Productivity Commission's initial report on *Transitioning Regional Economies*. Regional planning will certainly be part of the resumption of government responsibility for overall economic strategy.

Chapter 2 takes a traditional economist's supply/demand approach to the factors which should be taken into account in preparing regional plans. The first half of the chapter concentrates on the supply side by considering four pillars of productivity.

- In any region, economic growth depends on the regional skill base. Regional plans should cover the skills available in the region and the means by which they may be augmented, including local education, the attraction of migrants from other regions and overseas, the retention of local skilled residents who are tempted to migrate out, and (in metropolitan regions particularly) improvements to transport to enlarge the commuter catchment. Many of these areas are addressed by policies at the three levels of government, with scope for integration into regional strategies.
- Again rather obviously, in any region economic growth depends on the stock of appropriate non-dwelling physical capital. Much of this is privately-owned and industry-specific but the infrastructure which undergirds all the industries of a region is also important. Traditional economic development planning, as practised in Australia since colonial times, has yielded long experience in the provision of infrastructure services and there is every reason to adapt this experience to 21st Century technologies. Regional plans can be drawn up with an eye to implementation by direct government investment, including local government investment, and also, where appropriate, to take advantage of public-private partnerships and (more controversially, but with ample precedent) to attract or even direct private funds into investments which will benefit the region.
- Knowledge-creation capacity has risen in prominence over recent decades. It is distinct from skills and physical capital and underlies the potential for innovation. It is strongly networked, both locally and overseas, and requires a density of interaction which has so far seen it developing mainly in metropolitan areas, though there can be outliers to places where people of ideas find it congenial to live. Regional planning can at best address this pillar indirectly, for example by ensuring the supply of services which are appreciated by knowledge-industry workers such as quality education for their children.
- Finally, supply chain strength emphasises the links of trust, habit and perceptions of value that underlie trade. The more varied the links, and the more intimate, the stronger the position of the region. As with knowledge-creation capacity, governments can foster links indirectly by encouraging interpersonal contact; they can also be pro-active through such items as backup support for new exporters and support for regional marketing.

The chapter uses these factors to construct an assessment of potential productivity growth, region by region for the quarter century to 2016, and compares this potential with actual performance. Though productivity growth in a few regions was close to potential, most regions fell short. In particular, performance was significantly below potential in three types of region.

- In manufacturing-oriented commuter suburbs and independent cities, the failure to achieve potential was in line with the poor performance of trade-exposed industry. In these suburbs and cities relatively high-productivity employment in manufacturing was replaced by low-productivity employment in services, though there are recent signs of recovery in some regions. As government attention turns towards the health of trade-exposed industry there should be increasing opportunities for smart planning in these regions.
- Most of the agriculture-based regions failed to achieve potential, again as part of the general poor performance of the trade-exposed industries. Thanks to their location far from the centres of the knowledge economy, it has been difficult to realise potential in these regions, and the only effective development policies will aim to utilise the available resources and add complementary new resources to improve productivity performance. A workable strategy for

each region is likely to be highly region-specific and be based on a combination of local knowledge of resources available with broader knowledge of possible markets.

- Performance has also fallen short in lifestyle regions, due to their orientation to low-productivity service industries. The main export industry of many of these regions, tourism, is a low-productivity industry, good at generating jobs but not so good at generating income. Some lifestyle regions are beginning to parley their lifestyle advantages into knowledge-economy advantages, but this is a slow and difficult process.

A major reason for regional failure to attain potential growth in productivity has been lack of demand for the traditional exports of the region. It is arguable that insufficiency of demand is an important factor at the world scale, but the shortcomings of the world economy cannot be addressed at regional scale; regions instead face the challenge of fitting into a world economy which is beyond their control.

Despite the evidence that lack of demand is a factor limiting economic growth, the conventional wisdom over the past three decades or so has been that supply creates its own demand so that an increase in productivity not only increases the output that can be produced with a given labour force but increases sales so that employment is maintained and output increases. In this case, all concerned will be better off. The problem is that increases in productive capacity do not automatically generate increases in sales.

The second half of Chapter 2 looks at this process in more detail. An increase in productivity allows employers to produce the same outputs with less labour and hence to reduce hours worked. If hours worked are to be pumped back up to the original level, it will be necessary to expand demand, either in the industry in which productivity has increased or in other industries to which labour can be transferred. The problem is that demand expansion within the region inevitably leads to increased imports, which are almost certain to curtail the demand expansion short of the level required to ensure constant utilisation of capacity. In other words, unless productivity improvement at regional level is accompanied by increases in exports it will threaten employment. It may also lead to the transfer of workers to low-productivity jobs in industries like hospitality and retail, the sort of shift that has been observed over the past quarter century.

This process has been taking place at the national level and in similar countries overseas, with political results which are increasingly uncomfortable for the reigning elites. It can also be observed among Australia's regions. Metropolitan core regions have been gaining increases in productivity from their knowledge-based industries, including somewhat dubiously from finance, and have raised their exports of the services of these industries. Meanwhile, with the temporary exception of regions producing minerals with booming prices, regions distant from the metropolitan centres have suffered significant declines in their relative real incomes. Productivity has increased, but so has the intensity of overseas competition; exports have not risen to maintain employment and imports from the metropolitan centres have risen. As already noted, the trade-exposed manufacturing suburbs and independent cities have been unable to raise average productivity except patchily. These trends are increasing regional income differentials and raising the potential for political instability.

The only long-term solution will be to supercharge the pillars of productivity growth in regions which are currently at a disadvantage, concentrating on export incomes. To do this, resources will have to be mobilised, in the first instance by governments and then by the private sector leveraging off the initial government investments. To put it bluntly, this will require an increase in tax rates, to divert some of the income gains of the core metropolitan regions to investment in the drivers of productivity growth in the outlying regions, including the fostering of demand for their products (which will to some extent happen naturally as Commonwealth policy switches from leaving the balance of overseas trade to the market to a more traditional policy of subtle export promotion).

Chapter 3 of this report highlights the regional pattern of export earnings. From a regional point of view international and interregional exports contribute equally to prosperity, but from a national point of view Australia's current need (as a country running a balance of trade deficit) is an increase in overseas exports and/or a decrease in imports from overseas. However, the difference between international and interregional exports may be more apparent than real, in that many interregional exports are of import-competing goods and services. We argue that regional development strategies must be founded on a realistic assessment of the region's economic base in its international and interregional export industries.

Chapter 4 turns attention to other ways in which regions can garner income for their residents. By definition, in commuter suburbs (and in the source regions for FIFO employment) a significant proportion of resident income derives from work done in other regions, especially the metropolitan core regions. This raises a choice: should investment concentrate on improving connectivity with the metropolitan core, or should it concentrate on local job generation? This involves difficult questions of judgement as to the extent to which knowledge-economy work can be decentralised within metropolitan areas without losing it to other cities in Australia or overseas, versus the returns to faster commuting. The chapter also covers redistribution of income via property income and the extent to which regions rely on social security benefits.

The remaining chapters provide updates on aspects of regional development.

Employment and unemployment

Chapter 5 analyses some of the risks to future employment, particularly in the retail and manufacturing sectors, and provides an update on regional unemployment.

Debate about future employment in Australia has focussed on the impact of automation and digitisation on employment, not only in terms of skills, but also in terms of job losses, because labour productivity is increased by these processes. In this world lies both opportunity and uncertainty as well as the possibility of increasing inequality between and within regions. Amid the uncertainty, industry sectors are changing as technology redefines markets and company structures. As an example, higher levels of automation in advanced manufacturing, in farming and in the mining industry are reducing labour demand and changing the types of skills employed. The Internet is central to these changes and poor standards of connectivity will constrain productivity improvements and entrepreneurships in many industries.

Clusters of industry types are immensely important in developing a contemporary economic system because high value adding businesses require a greater intensification of knowledge. So co-location of industry types is likely to be more important than ever before. Industry clusters are likely to stimulate a greater capacity for the industry to develop higher levels of skills as employees move from one company to another and network in industry groups. These clusters provide education and training organisations the critical mass to deliver education and training for the industry.

The retail sector is important, and important to regional Australia, in that it provides local employment as well as employment for young people, often as a first job, so the retail sector assists young people in learning job ready skills. Productivity improvements in the retail sector will come about through improving professional standards through professional development strategies, innovative management practices and higher skilled and more knowledgeable employees. ICT and STEM skills generally play an important role here.

While at least some of Australia's major retailers were slow to react to the opportunities and threats from online retailing, this is changing. There has, however, been a significant penetration of online sales, clothing is just one example, into the Australian market from firms with little or no physical presence in Australia. The most successful online retail operations, and fast and effective distribution is essential, are large Australian retailers, international firms selling their products into Australia,

international firms such as Amazon and Alibaba who plan an expanding local presence, and a cohort of locally developed businesses, including entrepreneurial start-ups, often without a previous track record in the bricks and mortar retail sector. The question for local government then becomes how vulnerable does this make the smaller retailers who lack the interest to engage in the web-based economy?

The trend for the manufacturing sector in Australia is towards advanced manufacturing, which is a knowledge intensive industry, and this includes relatively low run bespoke manufacturing. The impact of the loss of the automotive manufacturing industry is not fully played-out as manufacturing closures and restructuring are likely to continue for some time, including further impacts in Melbourne. A long-term consequence from the loss of the automotive manufacturing industry will be the loss of access to these global manufacturing skills and the knowledge diffusion to other industries that has been such a strong feature of automotive manufacturing and a contribution to economic development. The consequential hollowing out of supply chains is likely to create a problem for existing industry and be a barrier to new manufacturing opportunities.

In the advanced manufacturing industry the impact of digital technologies is significant. The structure of the industry is also changing with the blending of occupations and changes to the relationships with customers and supply chain companies. These changes include the blending of traditional processes of design, engineering, planning, manufacturing with for example, marketing and distribution and ownership intellectual property rights. Research and development and intellectual property rights are an important foundation of this industry.

To be successful, the development of an advanced manufacturing industry requires strong links with universities and this research and development expertise. Innovation, collaboration and industry clusters are very important in the development of this industry.

NIEIR unemployment

By January 2016 more than 50 per cent of 15 to 24 year olds were engaged in full-time education. Meanwhile, 11 per cent of this cohort were neither participating in full-time education or employment. The disengaged young remain a major concern, as does inequality of employment outcomes between regions.

In 2017 the ten regions with the highest headline unemployment rate for 15 to 24 year olds have an average unemployment rate of 20 per cent against a national average unemployment rate for this cohort of 13.1 per cent. This compares to average unemployment rate in the most disadvantaged regions in 2016 of 17.8 per cent against a national average unemployment rate for this cohort of 12.6 per cent. The range of the ten highest unemployment regions for this group of young people in 2017 is between 17.3 per cent (Melbourne City) and 25.1 per cent (NSW South Coast). This compares to a range of between 16.4 per cent (NSW Northern Inland) and 25.9 per cent (QLD Far North Torres) in 2016. The ten best performing regions had an average unemployment rate for the 15 to 24 year-old age group of 7.4 per cent when compared to a national average of 13.1 per cent.

For the general working age population in 2017, QLD Wide Bay Burnett remains as the region with the nation's highest NIEIR unemployment rate, at 16.7 per cent, slightly down from 17.1 per cent in 2016, followed by Qld Far North Torres at 14.2 per cent, again slightly lower than last year's result of 14.8 per cent and NSW South Coast at 14.1 per cent. These regions continue to be beset by chronic problems such as low skilled, non-job ready and unqualified residents and lack of employment opportunities, or one or more of these in combination, resulting in a significant shift from unemployment benefits to disability pensions. In 2017 Melbourne City has the lowest NIEIR Unemployment rate at 3.7 per cent.

Smart cities, intelligent communities and beyond

Chapter 6 of the report expands the intelligent community narrative. The term smart cities is often aligned to the deployment of smart technology such as Internet of Things (IoT) devices such as sensors to improve efficiency, leading to improvements in overall liveability. Real-time traffic management, real-time energy consumption management, integrated public transport networks and data collecting sensors are examples of smart technology contributing to the efficiency of a modern city. These technology based networks generate large volumes of data which is analysed and leveraged in real-time decision making. We propose to expand the “intelligent community” narrative by incorporating the technology aspects of a smart city, with parallel investment in social capital and liveability factors contributing to better outcomes through a virtuous circle effect. An intelligent community leverages data for business insight leading to innovation which is business and people driven rather than technology led.

The challenge for many communities is the lack of capacity and capability to derive value from data assets for innovation to occur. Higher levels of governance can generate value for all communities through investment in common platforms for hosting open data. This would empower communities to leverage publicly accessible data assets to derive business insight needed to enable community initiated innovation.

Cyber security

Chapter 7 provides a warning about the risks and cyber-related incidents and attacks that have come to dominate news headlines, and for good reason. Digital platforms are growing exponentially from desktop through to portable devices, and software companies are also driving the storage of information to the Cloud. This proliferation of data and technology, together with the increasing sophistication of targeted cyber-attacks and the potential for human error, mean that the likelihood of a cyber-related incident affecting an organisation’s systems, data and reputation is perhaps now greater than ever.

Housing and construction

Chapter 8 discusses the updated estimates for housing and construction. The analysis of household wealth demonstrates inequality between regions. The lowest wealth regions may lack the capacity to deal with change or improve productivity as industry and skills requirements change as a result of global influences. In regions where this is not the case, other reasons for the relative decline of household wealth typically include slow land value increases relative to elsewhere and / or high mortgages relative to property values. The rise in the number of apartments in inner cities also has an impact on reducing average household wealth as a consequence of smaller dwellings and the smaller number of occupants per household that result. The value of CBD and inner city knowledge economy clusters also has an impact on the distribution of household wealth. Local Government area boundary changes in New South Wales have also had an impact on the household wealth in Sydney given in SOR regions in this report.

The SOR region with the highest average wealth per household in 2017 is Sydney Outer Northern Shores at \$1.95 million, increasing from \$1.77 million in 2016. The region with the lowest average wealth per household in 2017 is WA Gascoyne Goldfields with an average household wealth of \$304,000.

Australia's top ten regions ranked by average household wealth, and taking into account new LGA boundaries in Sydney, are in Sydney and Melbourne. Six of these high wealth regions are in Sydney. Melbourne's highest ranked region for this indicator is Melbourne Eastern Inner with an average wealth per household in 2017 of \$1.89 million, rising from \$1.74 million in 2016. In the period 2012 to 2017, the highest growth rates in household wealth among city regions were in Sydney Outer South West and Sydney Outer West, where household wealth grew at an average annual rate of 12.9 per cent and 12.7 per cent respectively. The highest growth in household wealth over the period in Melbourne occurred in Melbourne Eastern Outer and Melbourne Eastern Inner, where household wealth grew at an average annual rate of 7.7 per cent and 6.9 per cent respectively.

Melbourne City features at the lowest end of the scale with an average household wealth of \$344,000 as a result of the large student population now accommodated in Melbourne City and living in small apartments and as the general population of city apartment dwellers grows.

The debt to gross income ratio remains dangerously high in many of Australia's regions. Ratios remain the highest in urban regions with high levels of growth and increasing house prices as in the case of Sydney and Melbourne, however the trend is now a more general one and includes Western Australian and Queensland regions. The mortgage belts of the outer suburbs of Sydney, Melbourne and Perth are all areas where mortgages are very high in relation to incomes. Much of South East Queensland also fits this pattern. The highest debt to gross income ratio regions in 2017 are Perth Outer North, SEQ Logan Redland, Melbourne Eastern Inner, Sydney Outer South West, Sydney Outer West and WA Peel South West, all of which have a ratio of 2 plus. In all these regions the debt to gross income ratio had risen when compared to the previous year.

Not unexpectedly the debt service ratio is typically higher in metropolitan areas than it is in the rural regions. In 2017 the mortgage burden as measured by the ratio of average dwelling prices to average incomes is highest in Perth Outer North, Melbourne Eastern Inner, SEQ Logan Redland, Sydney Outer South West and Sydney Outer West. All these regions report debt service ratios over 20 per cent, the highest currently 23.4 per cent. Debt service ratios in the top ten highest regions have increased, most but slightly, in all of these regions. In Perth Outer North the debt service ratio increased from 21.9 per cent in 2016 to 23.4 per cent in 2017. The regions with the lowest debt service ratios continue to be NT Lingiari and the ACT. These low debt service ratios go a long way towards explaining the high levels of household disposable income in these regions. The debt service ratio in the ACT at 10.8 per cent is approximately half of that experienced in the Sydney regions. In the period 2002 to 2017 the greatest increase in the mortgage burden as measured by the ratio of average dwelling prices to average incomes has occurred in Melbourne Eastern Inner, Melbourne City, Melbourne Southern Inner, Sydney Metropolitan Core and Sydney Northern Outer Beaches. Least pressure from mortgages on households has occurred in regional areas such as NSW Murrumbidgee, NSW Orana and VIC South West.

Energy

In Chapter 9 we briefly update the state of play on climate change and on technological developments in the energy sector. The chapter concludes that local government may have an increasing role in promoting energy efficiency.

The mining sector, which has been driving the Australian economy, is changing from an investment in projects phase to a phase where production is dominant. This change is increasing the sector's demand for production energy (transport of materials and products, equipment operation and processing energy such as for LNG). Industrial energy demand is also increasing for agricultural product transport and processing as domestic and export of these products increases.

Domestically, besides export performance, population and household formation are driving growth in energy demands. Household formation is increasing at about 2 per cent per year (with regional variations) and this drives residential and, to a large extent, commercial energy demands. Each new household requires heating, cooling and appliance energy (for refrigeration, washing, etc.), plus transport and energy incorporated into clothing, food, health services and other consumption demands. These demands for energy services can sometimes be met by increases in energy efficiency but are also significant drivers of increases in demand for energy, including fuels and demand for energy capture through renewables.

Local government has a long history of involvement in the energy industries. At various times Councils have run electricity generation and distribution businesses, though these have been superseded in the Eastern States by the National Electricity Market, in WA by the South West Integrated System and other state government initiatives, and in remote areas by decentralised generation, in the NT run by the Power and Water Corporation. It is unlikely that Councils will re-enter the generation business (apart from the installation of PV and perhaps wind capacity on Council properties) but possible that Councils will again be involved in aspects of reticulation. The current position is that electricity distribution is in the hands of large, cross-regional regulated monopolies, some of them privatised, which limits the scope for the reintroduction of municipal enterprise.

This said, local government has a strong interest in the reliability of electricity supply and hence in the local layout of the grid, including modifications required to meet the changed geography of supply as it moves from central to distributed generation. Other local government interests in energy efficiency include the local promotion of cogeneration – the joint generation of electricity and useable heat, which by capturing energy which would otherwise have gone to waste has considerable potential for greenhouse gas emission abatement. Energy efficiency is considerably improved by the utilisation of otherwise waste heat, and councils will often be in a position to identify sources and users and devise means to connect the two, at a minimum by facilitating the necessary easements and possibly by itself providing the service. By and large Australia does not require the high levels of domestic heating to sustain life in winter in high-latitude countries, but there will still be opportunities. Such local institutions as hospitals and swimming pools are possible places to start.

The adaptation of cogeneration to warm-country conditions which create a demand for air-conditioning is under way in countries like Singapore and the United Arab Emirates and there will be a role for local government in facilitating the reticulation of cold air and water.

Apart from the past role of some councils in the electricity supply industry and the possibilities in cogeneration, local government has a strong influence on the implementation of energy efficiency programs, particularly:

- the enforcement of building energy efficiency standards – both residential and commercial buildings, covering not only construction standards but such matters as building orientation. Building inspectors have traditionally concentrated on safety and fire regulations and have a very poor record in the enforcement of legislated energy efficiency standards. Even if councils are not directly responsible for the achievement of energy efficiency standards, it may be possible for them to test new buildings in order to certify that standards have been met;
- town-planning measures to encourage energy conservation, particularly in transport; and
- provision of waste management services at minimum energy cost, including such areas as methane recovery.

To drive home the importance of enforcing building energy efficiency standards the 2013-2014 CSIRO study of new 5-star housing in Melbourne, Brisbane and Sydney showed that 60 per cent of houses did not comply with the 5-star code because of poor quality installation of insulation and non-compliance to leakage guidelines. A common problem with insulation was found to be in walls and in the areas surrounding downlights in roof spaces. The CSIRO's rigorous inspection of new housing for this study used thermography and blower door testing to identify leakage and other energy inefficiencies. The report recommendations included improved training and auditing of building inspectors and training and certification of independent building thermal performance auditors. The CSIRO have also developed a software tool, AccuRate, to assist designers and architects to model their housing designs in fine detail to calculate temperatures, heating and cooling requirements and energy efficiency.

Local Government Finance

Chapter 10 discusses the current circumstances of local government finance across Australia, local government taxation revenue (mainly from rates) increased by 3.8 per cent from 2014-15 to 2015-16 (ABS government finance statistics). Given that the costs of local government service provision increased by an estimated 2.7 per cent (ABS national accounts deflator), the real increase in revenue was 1.1 per cent. Given that the population increased by 1.4 per cent, the increase in rate revenue was not quite sufficient to maintain real service expenditure per capita.

In most states and territories real rate revenue kept pace with population growth, but in NSW and Queensland it fell behind. Within each state the majority of councils followed the state trend, though in WA rate collections in the metropolitan area increased more rapidly than those in the country.

Two conclusions stand out.

- With the exception of some rate-capped councils in NSW, local government continues to set an example to other levels of government in revenue effort.
- The grants program continues to address the need for horizontal equalisation, inadequately perhaps in total funding, but effectively given the funding available. As pointed out in Chapter 2, the need is increasing, and experience with the allocation of equalisation and roads grants has potential to contribute to the allocation of funds to regional economic development strategies.

1. Trade and regional development

In Australia, regions add up to states and territories, which add up to the nation. Regional economic development accordingly adds up to national development; national decisions have regional effects and regional decisions feedback to national totals. Trade lies at the heart of this, both trade to and from Australia and trade between Australian regions.

1.1 The government of Australian trade

Recognising that economic development is founded on export earnings and in the nineteenth century and most of the twentieth Australian governments paid considerable attention to trade. This is not to claim that all the policies adopted were highly successful – for example, the export-promotion policies of the 1920s, with their emphasis on soldier settlement, placed far too many inexperienced farmers on marginal lands where they were expected to make a living producing wheat or butter for depressed world markets. However, the policy of industrial diversification pursued in those decades of depressed world markets served to maintain a moderate prosperity and also, as it turned out, prepared the country for the Second World War. It also laid the foundations for the blossoming of prosperity when export markets turned favourable in the late 1940s.

Like the rest of the Western world, Australia boomed during the 1950s and 1960s. These golden years were based on exports of agricultural products, supported by government investments in research and in the application of research and in marketing. Government also took responsibility for ensuring that finance was available for rural business investments. The railway network having been completed, government transport investments concentrated on bulk handling and increasingly on roads. The state governments also invested heavily on electricity reticulation in rural areas.

Though the economic growth of the post-war period was ultimately based on prosperous export industries the government of trade extended beyond export promotion. The Commonwealth took responsibility for ensuring full employment for a rapidly growing population (these were years of high immigration) and also for keeping the balance of payments under prudential control. Neither aim could be met by the export industries alone. At the level of efficiency required to maintain export competitiveness, rural industries did not generate enough jobs to maintain full employment, nor did they generate enough foreign exchange to allow the import of all the inputs to a full-employment standard of living. The Commonwealth addressed these two shortcomings by promoting import-competing industries, which both generated jobs and saved foreign exchange.

The strategy of promoting both exports and import-replacements in the context of a constant exchange rate worked well during the post-war period but ran into trouble during the 1970s. Rather than refine their trade-centred approach, Australian governments, both Commonwealth and state, stood back from the government of trade. They abandoned their special concern for exporting and for import-competing industries in favour of ‘the market’. Changing circumstances which brought government responsibility for the progress of trade into question, particularly as expressed in the policies of the 1950s and 1960s. Particular criticism was directed against tariffs, the fixed exchange rate, financial regulation and the arbitration system governing labour relations.

These pressures demanded a response. Rather than build incrementally on the post-war system of government of trade, Australia followed the lead of the United States and the United Kingdom by adopting neo-liberal policies under which trade would be left to ungoverned markets. The politics and intellectual underpinnings of this major policy change have been covered at length in various *State of the Regions* reports and a summary account will soon be available in Peter Brain and Ian Manning: *Credit Code Red*, to be published by Scribe, Melbourne, in July 2017.

The essence of neo-liberal policy was that governments should leave economic decisions to markets. The theorists were also aware that business was tempted to anti-competitive behaviour, and for a while Australia had a National Competition Policy. However, this provided but weak discipline, pitted as it was against market power based on economies of scale, incumbent advantages and the like.

These changes did not put a complete end to government interest in trade. Negotiations continued over free-trade agreements and Austrade continued to support Australian exports, albeit on a curtailed budget. Commonwealth tax concessions such as fuel tax rebates and fringe benefits tax exemptions remained for favoured exporting industries, particularly mining. It was generally assumed that market-determined exchange rates and market-determined allocations of investment funds would guarantee growth.

Against the background of these policies, for the best part of two decades the *State of the Regions* reports have made the case for greater Commonwealth (and state) interest in regional economies, including a willingness to direct investment funds to regional development. For many years the arguments for central funding of locally-directed economic development strategies made little headway, thanks to a general complacency that free-market policies were delivering prosperity and economic growth – though it had to be admitted that the neo-liberal era got off to a shaky start when the boom of the late 1980s was followed by the 1990 recession. The subsequent years of prosperity – the land boom of the early 2000s and the mining boom which followed it – were at first hailed as the just reward of the neo-liberal reforms of the 1980s and 1990s, but gradually it has been realised that the foundations of recent prosperity are not as secure as the theoreticians assumed.

The obvious point, which has been laboured in previous *State of the Regions* reports, is that the banks' overseas borrowing have used their business freedom to borrow overseas to on-lend on mortgages, resulting in a major increase in household debt and contributing to the increases in the price of residential land. There is little in this to give comfort that the overseas borrowings have been invested so as to generate foreign exchange income to service the loans.

Recent research by the World Bank and others has documented a negative correlation, at the national level, between income inequality and economic growth. Free-market theory defends inequality as necessary to provide incentives to efficient production, but questions arise. First, at the bottom end of the income distribution, is the target rate of unemployment of 5 per cent really necessary to undergird the incentive to work and ensure that workers do not band together to earn economic rents? Unemployment has a quadruple cost: the foregone production of the unemployed people, the cost of loss of their skills, the personal costs inflicted on them and the public costs of supporting them. As the *State of the Regions* reports have documented, in Australia unemployment is unevenly distributed across regions which means that a national rate of 5 per cent requires very much higher rates in disadvantaged regions.

At the wealthy end of the spectrum, high rewards to unproductive activities can generate misdirected effort. As will be explained in *Credit Code Red*, one of the marked features of the neo-liberal era has been the generation of current account deficits on the balance of payments which in all previous times would have been regarded as excessive and dangerous.

This is not the place to belabour these risks, nor is it the place to consider their regional distribution, but rather to point out that corrective action is required and to consider its regional consequences. Corrective action will require a revival in the long-established Australian concern for the trade-exposed industries, a revival which will have strong regional consequences. In particular:

- action is required to stabilise the exchange rate;
- action is required to increase investment in the trade-exposed industries, particularly those which were overlooked during the mining boom; and

- these needs intersect with the actions required to promote regional development. In particular, action is required to develop strategies to boost the prospects of trade-exposed regions.

That these actions should still be required reflects poorly on the economic reforms of the past three decades, which were promoted as addressing the same perennial questions. The advocates of these reforms were indeed justified in asserting that incompetent government wastes resources, but the only solution is competent government – one might say ethical government; as prudent and just as is humanly possible. The experiment of leaving government to the market has instead encouraged prodigal levels of overseas borrowing and has raised the possibility of economic breakdown.

As the focus of government policy moves towards Australia’s economic relationships with the rest of the world, it will no longer be possible to maintain living standards by borrowing. Not only will this direct policy attention to the export and import-competing industries and to the regions which support these industries; it will concentrate attention on the productivity of these and other industries, not only as the source of their international competitiveness but as the basis of domestic prosperity and incomes.

1.2 Productivity

Productivity increases when a greater flow of desired outputs is extracted from a given stream of inputs. The most readily available measures of productivity relate the value of production to just one input – labour. Increasing the productivity of labour is partly a matter of accumulating skills and capital and more chiefly a matter of increasing the value generated from the national resource: the land, the people and their accumulated savings and technologies.

There have been continual attempts to improve the measurement of productivity to take non-labour inputs into account, especially capital, but they run afoul of measurement difficulties. In the *State of the Regions* reports we concentrate on labour productivity while remembering that non-labour inputs to production, particularly capital, lay claim to some of the income generated.

Trends in Australian productivity from 1978 to 2012, by industry, were discussed at length in Chapter 8 of the *State of the Regions* report for 2013-14, complete with statistical caveats. A brief update of trends over the past quarter century is provided in Table 1.1, in which industries are divided into three groups.

- Market industries, being those financed wholly or largely from sales revenue.
- Non-market industries, being those which are financed largely from taxation and operated chiefly by non-profit institutions. They include government administration, defence, education and health services, among others.
- Finance is listed separately as a quasi-market industry, since it is financed partly from revenue from the sale of services but also, substantially, from the differential between the cost of borrowed funds and the interest received on the funds it lends.

Across all economic activity, productivity (value added per hour worked) increased at over 2 per cent a year from the bottom of the 1990 recession to the middle of the urban land boom in 2004, after which its growth rate slackened off – the cause of much consternation at the time. Productivity growth in the market industries initially averaged a little over the average rate for Australia as a whole, then slipped back to the average. Growth in the non-market industries was below the national average in all periods except the most recent. The third industry group, finance, reported spectacular productivity growth in the 1990s and to this day its productivity has been growing more rapidly than national average.

	1991.3 to 1996.2	1996.2 to 2000.2	2000.2 to 2004.3	2004.4 to 2009.4	2009.4 to 2016.2
Market	2.3	2.7	2.5	1.1	1.4
Non-market	0.3	1.1	1.1	0.3	1.4
Finance	5.6	6.1	3.3	2.5	2.1
Total	2.1	2.5	2.3	1.1	1.4
Direct household income	1.5	2.1	2.5	0.4	1.9

Source: ABS, National Accounts and Labour Force Survey.

In Table 1.2 industries are ranked according to their contribution to regional income, per hour worked. The table covers a long time period – a decade – to smooth out short-period variations due in fluctuations in capacity utilisation and temporary movements in industry sale prices, as well as changes in earnings due to wage catch-ups. The table uses the ABS CVM method to index values over the decade, and cobbles together data from the National Accounts and Labour Force Survey, so may not be completely accurate. However, the general picture is clear.

- The regional income generation rate per hour worked varies considerably by industry, with finance and insurance the most munificent to its workers and accommodation and food services the least. On average, an hour worked in finance yields as much regional income as three hours worked in hospitality.
- There is a general association between the income generation and productivity more broadly defined. On average industries pay out two-thirds of their gross value added in regional income. However, the proportion paid out varies considerably by industry, being particularly low – around 30 per cent – in two capital-intensive industries, mining and electricity, gas and water, and particularly high in non-profit industries such as public administration and education, and in industries characterised by small business, such as administrative services.

Industry	local income per hour worked (\$ _{CVM})	GVA per hour worked (\$ _{CVM})	Ratio income/GVA (%)
Finance and insurance	69	159	43
Mining	64	221	29
Administrative services	54	77	100
Wholesale trade	54	68	80
Public administration	54	59	92
Electricity gas water and waste	52	170	31
Professional and scientific services	51	60	86
Rental, real estate	48	112	43
Information, media, telecommunications	45	107	42
Construction	44	67	66
Education	43	49	92
Transport, warehousing	40	71	56
Manufacturing	39	57	68
Other services	31	36	88
Agriculture, forests, fishing	31	58	54
Health services	30	49	61
Arts and recreation	30	49	61
Retail services	26	37	72
Accommodation and food	23	35	66
Total	44	66	67

Source: ABS National Accounts and Labour Force Survey.

Industry group	Av 1992-16 (\$)	r.g. 1992-16 (%)	Av 1992-09 (\$)	2000-08 (\$)	2009-16 (\$)	r.g. 92-08 (%)	r.g. 2000-16 (%)
Trade exposed	36	1.9	30	36	41	2.1	1.8
Easy entry	26	1.5	23	25	28	1.5	1.5
Other market sheltered	45	2.2	36	45	51	3.0	1.5
Non-market	43	1.9	36	42	48	2.0	1.8
Finance	57	3.7	41	57	70	4.6	2.7
Total	39	2.2	32	39	44	2.5	1.9

Notes: Trade exposed industries: agriculture, mining and manufacturing.
 Easy entry industries: retail, accommodation, food services, repairs, cleaning and waste management.
 Other market sheltered industries: all other market industries including electricity, gas supply, water supply, sewerage, construction, transport, telecommunications, information, media, real estate, professional services, arts and gambling.
 Non-market industries: public administration, defence, education, health services and residential care.
 Finance: finance and insurance.

Source: ABS National Accounts and Labour Force Survey.

Table 1.3 provides an alternative classification of industries into five major groups.

Though the trade-exposed group includes mining, which is highly paid, for the group as a whole both average income generation per hour worked and average growth in income generation per hour worked have been a little below the economy-wide average – a situation which is not healthy in a trade-exposed economy. Overseas competition has been effective in limiting income growth in these industries.

The easy-entry group of industries comprises personal services which, though there is some provision by large corporate businesses, are also relatively easily entered by small businesses with low capital. They mainly sell to the domestic market, though their operations in the tourism market are trade exposed. They generate low incomes, which have been growing at less than the economy-wide average rate. Competition in the domestic market has been effective in limiting income growth in these industries.

Other market industries sell mainly to the domestic market, though some, such as transport (particularly air transport) also sell overseas. These industries are sheltered from overseas competition for various reasons – some provide location-specific services (like construction), some lack means of transport to and from overseas (like electricity and until recently gas, at least on the East Coast) and many require personal contact between the service provider and the recipient. They differ from the easy-entry group in that barriers to entry provide at least moderate shelter from domestic competition. In some cases, such as professional services, the barriers are due to the qualifications required, and in others, such as electricity supply, they are due to capital requirements. Income generation per hour worked in these industries has been consistently above national average and conspicuously above the average for the trade-exposed industries. There is at least a prima facie case that these industries have exploited their relative freedom from competition to enhance their regional income returns.

The non-market industries are mainly tax-financed, and their rate of growth of income generated per hour worked has been similar to the trade-exposed industries. However, they require better qualifications than average, and this is reflected in their average income generation per hour worked. The relatively low rate of growth of regional incomes in these industries cannot be associated with lack of competition for sales, since they are tax-financed; instead, it reflects a different sort of competition, the competition between the tax-financed sector and the sales-financed sector for access to funds. During the neo-liberal era the balance has been firmly in favour of tax cuts and hence in favour of the sales-financed, market industries and the finance sector.

Finally, as already noted, finance has been the high flyer of the neo-liberal age. Not only does it generate income per hour worked substantially above national average; the differential has been growing and average income generation per hour worked in finance has reached 60 per cent above average.

These differentials cannot but affect regional income generation. Incomes generated in trade-exposed regions, particularly those with a heavy infusion of easy-entry services, will tend to be low; incomes generated in financial districts will be high. These connections are emphasised in the *State of the Regions* reports, but do not appear in recent work by the Productivity Commission. Even so, this work can be used to introduce discussion of the fortunes of Australia's regions.

1.3 The Productivity Commission on regional transitions

The Commonwealth's in-house economic think tank, the Productivity Commission, has long been committed to neo-liberal theory and hence to the proposition that a market-based, competitive economy generates steady economic growth, not only nationally but region by region. Accordingly the initial (i.e. pro tem) report entitled *Transitioning Regional Economies* issued by the Commission in April 2017 can be taken as an application of the tradition that markets, appropriately organised, provide the best solution to economic problems including the problems of regional development.

The occasion for the report was the end of the mining boom. The terms of reference for the inquiry, as signed by the Treasurer, are as follows: "*the Commission should identify regions which are likely, from an examination of economic and social data, to make a less successful transition from the resources boom than other parts of the country ...*" The concept of transition implies a sequence by which a region which is at first operating normally experiences a disruption followed by a transition to a new normality.

The Commission begins its search for guidelines for the provision of assistance by spotlighting change arising from a 'significant disruptive event' and poor adaptive capacity due to lack of 'adaptability' or 'resilience'. Concerning the first of these concepts, the Commission admits defeat. "*From an examination of economic growth over time, it might be possible to identify regions that have experienced a significant disruptive event...*" However, the Commission continues with the observation that "*in practice, operationalising this concept has proved challenging with the time series data available and the level of regional disaggregation possible. It has been difficult to observe events at a regional level that are out of the ordinary... The analysis of employment data suggests that regions are constantly experiencing ups and downs.*" (pp7-8)

Concerning the second concept, the Commission has constructed a 'single economic metric of relative adaptive capacity'. Ideally, the Commission would have preferred to construct this metric by identifying regions which have responded resiliently to disruptive events. However, given its inability to identify such events, the Commission resorted to listing, a priori, local population attributes which it believed would be associated with adaptive capacity. It then extracted a single value out of this potpourri using principle component analysis. In this process, the Commission used mainly Census data on residential population, with no allowance for commuting, to produce an index of adaptability which turned out to be highly correlated with the ABS SEIFA (socio-economic indexes for areas) measure. This is not at all surprising, since the Commission had essentially reasoned that nothing succeeds like success. It selected as the ingredients of its index population attributes correlated with current high incomes. Its index of adaptability is based on the argument that regions with high-status residential populations have succeeded and therefore must be adaptive.

Given that ‘significant disruptive events’ cannot be identified while ‘adaptive capacity’ is essentially low socio-economic status, the Commission does not seem to have advanced very far in its discussion of the best way to allocate funds for regional development. However, in the final chapter of its report it introduces a different set of principles. *“The Commission believes that place-based policies are likely to be more effective than subsidy-based policies, though the latter remains (sic) a significant part of government policy. Guided by this way of thinking, strategies to support regional transition and development should:*

- *take a coordinated, strategic approach led by the regional community;*
- *build on a region’s relative strengths (comparative advantage);*
- *invest in the capacity of people in regional communities and the region’s connections with other regions and markets; and*
- *promote sustainability, so that projects and programs are viable without long-term government financial support.” (p121)*

There is much to be said for these principles, whatever the socio-economic status of the residents of a region. In particular, the principle that a coordinated, strategic approach should be led by the local community provides a central role for local government and highlights the need for capable local councils and local associations of councils.

Two relevant concepts seem to be missing from the Commission’s discussion. The first missing concept is that of uncertainty. This concept is present in the report – it is inherent in the idea of a disruptive event and pervasive in the observation that regional economies are constantly being buffeted by such events – but it is not named. It is instead smoothed over in the idea of a steady equilibrium growth path and no more than tenuously present in the idea of transition between equilibrium and equilibrium. The consequences of the pervasive uncertainty of regional economic growth include the following.

- Some investment proposals will inevitably fail. Though much can be done by investment assessment and scenario planning, the failures cannot be predicted in advance.
- Capitalism deals with uncertainty by various financial devices, notably equity investment and venture capitalism. These should be matched against the level of uncertainty.
- Uncertainties can be reduced by sharing. Risks can be pooled through insurance but this is not technically possible as an approach to uncertainty.
- There is no rule against governments shouldering risks and uncertainties – indeed, when one considers such areas as defence planning, they are a fundamental fact of public life.

The second missing concept is that of the economic base. This concept is mentioned briefly where the Commission attempts to define economic resilience (p 46) but does not otherwise enter into the discussion. Yet going back to the nineteenth century and the twentieth century up to the 1980s, Australian governments had a very well-developed concept of economic base and concentrated their policies on strengthening this base. If a country, or a region, has a sound economic base, markets can be relied on to build on the economic base and provide those local services which are suited to business provision and taxes. Tax-financed services can be relied on to provide the rest, such as roads, education and health services. The question of what constitutes a region’s economic base will be addressed in Chapter 6.

This said, the Commission is on agreed ground when it recommends that regional economic development should build on each region’s relative strengths and requires investment in the capacity of people in regional communities and the region’s connections with other regions and markets. The rest of this report is devoted to the question as to what should be included in a regional economic strategy.

When describing trends at the regional level, it is useful to refer to a general classification of regions. In the remainder of this chapter we update the classification used in *State of the Regions* reports since their inception.

1.4 Classifying SOR regions

The second *State of the Regions* report, that for 1999, divided Australia into 58 regions, classified as follows.

- Core metropolitan;
- Dispersed metropolitan;
- Production zones;
- Resource-based;
- Rural-based; and
- Lifestyle.

This classification was put forward impressionistically yet in many ways has stood the test of time. However, 26 years of work allow us to firm up the classification and also to be a bit more precise in addressing the perennial problem of those who would classify LGAs or regions: while it is possible, for each type of region in the classification, to name one or more archetypical regions, there are many regions which exhibit mixed characteristics and are accordingly difficult to classify.

In subsequent reports the number of regions was increased, largely to subdivide a number of very large regions. Regional boundaries were also updated for changes in local government boundaries and to increase the internal homogeneity of regions. The difficulties of allocating regions unambiguously to one or other category led to a reduced emphasis on regional classification. Even so, it is helpful to classify regions according to their economic base. The 1999 classification was largely intuitive, but experience has shown that the intuitions were helpful; in this year's report we accordingly update and formalise the classification. The revised categories are:

- Core metropolitan;
- Commuter suburbs;
- Mining-based;
- Agriculture-based;
- Lifestyle; and
- Independent cities.

1.5 Conclusions

Australia is a trade-dependent country and all its regions are likewise trade-dependent. For most of its history Australia's governments, colonial then Commonwealth, state and territory, have made it their business to govern trade with the aim of maintaining and increasing prosperity. The instruments they have used have been based on the provision of a legal system conducive to the conduct of trade, but they have used many other instruments as well, including tax-financed education and other measures to promote equality of opportunity and in the process to ensure the best utilisation of the country's human resources. They have not been afraid to engage in public enterprise when private enterprise proved too timid or failed; they have not been afraid to direct the finance system so that investments considered essential to prosperity were made.

Over the past three decades the emphasis has been on the legal infrastructure of trade. Influenced by neo-liberal policies, including the advocacy of the Productivity Commission and its predecessors, governments have withdrawn from much of their formerly active pursuit of prosperity. In particular, they have yielded much of their authority over the distribution of resources to the finance sector, in the belief that market decisions and market incentives, conducted within a competitive framework, will maximise economic growth. In many ways the results have been satisfactory, but clear warning signals are now flashing red, particularly those associated with heavy loads of overseas and household debt. However profitable these are to the financial sector, they are not conducive to long-run growth. It is particularly worrying that Australia's trade-exposed industries are not, in general, as prosperous as its trade-sheltered industries, and there is a crying need to boost these industries – a boost which can only be given at the local and regional level.

Local government has all along played a humble but essential role in the economic system, even back in the days when some councils did not venture much beyond raising rates to finance roads and rubbish collections. These days are long past and most councils are now heavily involved in local economic development. An ideas paper issued by the Productivity Commission in April 2017 points out that there is a need for councils to shoulder an even more onerous responsibility, that of full participation with the Commonwealth and their state/territory government in the development and implementation of regional economic development strategies. Though the Commission emphasises the importance of local strategy, and has to this extent modified its view that market decisions should be paramount, it does not venture far into the question of the content of regional strategies, let alone the multi-billion-dollar question of their financing. The rest of this report concentrates on the issues to be covered in strategy plans. The Pillars of regional growth are here identified as a group of four drivers of productivity growth (skills formation, capital investment, knowledge-creation and the formation of supply chains). These pillars must be both founded and capped by policy to ensure that productive resources are fully utilised, region by region.

The reason for emphasising regional strategy is that both resources and opportunities vary markedly from region to region. In the following chapters we emphasise some of these differences. This should logically be followed by suggestions as to how the strategies should be financed, but this we leave to a later day – pointing out that several past *State of the Regions* reports have addressed this question, especially those for 2004-05 and 2012-13. As an aid to the description of regional differences, this chapter concluded with a revision of the classification of regions which has long featured in the *State of the Regions* reports.

To this end we begin with the truism that economic growth is founded on productivity increases. In the next chapter we pursue the drivers of productivity growth with a view to assisting regions to incorporate them into their development strategies.

2. Raising incomes by raising productivity

The productivity of labour is conventionally defined as value added per hour worked. The greater the value of production per hour worked, the greater the amount available for distribution to the people who contribute to that value – working people of all grades of skill, managers, financiers and those who own the capital of business enterprises. It is axiomatic that productivity growth underlies income growth.

This chapter falls into two parts. The first part is devoted to the four pillars of productivity growth – skills, capital, knowledge-creation and supply-chain connectivity; the second to the proposition that productivity growth does not yield its full benefits until the additional output is sold. Productivity growth should accordingly be matched by growth in demand, which at the regional (and indeed national) level is a far from automatic process.

2.1 The drivers of productivity growth

The factors which contribute to productivity growth at the regional level may be identified by analysing the data on recent productivity growth across Australia's regions. The period considered is 1996 to 2016, two decades which include two booms: the urban land boom of the early 2000s and the mining boom which took off as the land boom subsided due to the Global Financial Crisis of 2008.

The differences between agriculture and mining and all other industries arise mainly from their exposure to the weather and to commodity trade. Though we distinguish agriculture and mining as industries subject to the weather and to the fluctuations of commodity markets, other industries are also subject to these influences, though to lesser degree. For example, productivity in transport can be affected by adverse weather, and, more important, a wide range of industries beyond agriculture and mining are trade-exposed. These industries, including manufacturing, tourism and many other services, are like mining and agriculture in that they are affected by overseas competition and by fluctuations in exchange rates. However, their competitors' prices are a little more stable than those generated by international trade in minerals and agricultural commodities. Similarly, there are agricultural products which are relatively sheltered from international commodity markets.

Income regionally captured per hour worked in the non-agricultural, non-mining industries, averaged over the decade to 2016, was highest in the ACT followed by other core metropolitan regions. Within the metropolitan areas income captured per hour was higher in middle, high-status suburbs than in outer suburbs and was also quite high in the independent cities. Income capture was high in WA Pilbara Kimberley, the region at the centre of the mining boom, but shaded away to national average in other mining-based regions. It was generally below national average in the lifestyle and agriculture-based regions.

Growth in income capture between 1996 and 2016 was most rapid in metropolitan core regions (particularly Melbourne City and Perth Central) and in the mining-based regions producing iron ore or coal (particularly Qld Mackay and WA Pilbara Kimberley). The benefits of the mining boom were not shared by all mining-based regions; in particular the growth in income captured per hour worked was well below national average in WA Gascoyne Goldfields – the boom did not extend to gold or base metal mining. There was some spillover of productivity growth from the metropolitan core regions to the commuter suburbs but less to the independent cities, though NT Darwin reported impressive gains. Gains in the lifestyle regions were generally below average as were gains in most agriculture-based regions.

2.2 Four pillars of productivity growth

We now turn to the four main pillars of productivity growth; those drivers which are most frequently identified as areas which should be addressed by regional development policy.

2.2.1 The skill base

Almost by definition, the more skilled the workforce, the higher will be productivity per hour worked. However, this depends on the existence of complementary capital equipment and also on there being markets for the products of labour and capital. Local policy can affect skill availability both through education planning and through policy on the regional attraction of skilled migrants.

As measured, the skill base is relatively strong in the core metropolitan regions, and this strength spills into adjacent commuter regions but can become quite weak in the metropolitan outer suburbs. It is strong in Canberra and reasonably strong in the other independent cities. It appears to be very strong in WA Pilbara Kimberley, but this is probably a passing phase due to the mining boom; it is quite weak in the other mining-based regions where activity has settled down to routine operations. In the lifestyle regions it is generally a little below national average, but not much: these regions can parley their lifestyle advantages to attract skilled workers, provided there are jobs available. The only agriculture-based region where the skill base is as high as national average is WA Wheatbelt Great Southern, and this is probably a spillover from Perth. In all the other agriculture-based regions a below-average skill base is likely to hinder attempts to raise productivity.

Over the past quarter century the metropolitan core regions have mostly improved their skill advantages relative to the rest of the country, or at least avoided any major deterioration. The same is true of the commuter suburbs and independent cities. Trends in the mining-based regions have diverged, with WA Pilbara Kimberley improving its relative skill position and all the rest losing, some quite heavily. Similarly some lifestyle regions have maintained their position but others have lost some of their former skill advantages, notably Vic Gippsland. The relative skill position has deteriorated in all 14 agriculture-based regions, reflecting the difficulties of gaining an education in these regions and the lack of jobs attractive to skilled migrants or indeed to local young people trying to return after pursuing their education. The lack of skilled jobs is part of a vicious cycle – lack of jobs means lack of skilled personnel, and lack of skilled personnel contributes to low growth and hence reinforces the lack of skilled jobs.

Regional authorities drafting economic development strategies have considerable experience on which to draw – much of it sadly negative. Various recent experiences are detailed in Chapter 5.

2.2.2 Non-dwelling capital

Again almost by definition, the productivity of labour will be greater if people have appropriate capital available, including equipment, infrastructure and technologies; again provided that there is demand for their joint products.

In the quarter-century to 2016 the pattern of regional capital accumulation was strongly influenced by the mining boom, with major increases, relative to the country as a whole, in all nine mining-based regions, and also in Perth, Adelaide (less strongly) and NT Darwin. Brisbane also benefited from the mining boom, and capital accumulation proceeded at above the national average rate in SEQ Brisbane City and SEQ West Moreton but not in SEQ Moreton Bay, where workforce growth outran capital accumulation.

In the city centres and commuter suburbs of Sydney and Melbourne, and also in the ACT, the regional capital stock per capita grew at less than the national average rate. Investment in the major metropolitan areas failed to keep pace with growth in the working age population; in particular, lack of investment in transport has threatened urban cohesion including the ability of the city centre to draw employees from all over the metropolitan area. The relevant state governments appear to have realised this and all three are investing in mass transit systems, but whether this will suffice to head off a decline in productivity growth is yet to be seen. Since the capital cities are the locomotives of the knowledge economy such decline would have national effects.

Capital accumulation in the lifestyle regions proceeded at around the national average rate – some regions a little above, some a little below. The same applied in the agriculture-based regions.

As a result of these trends, in 2016 the highest levels of non-dwelling capital per resident of workforce age were found in the remote WA mining-based regions and the three Queensland mining-based regions – less so in NSW Inland Hunter and WA Peel SW. Capital per worker was well above national average in Perth but below in Adelaide and Melbourne, both for the core region and for the commuter suburbs. In Sydney and Brisbane capital availability was above average in the core metropolitan regions but lower in commuter suburbs. In the tourism-dependent lifestyle regions it was above average but in the benefit-dependent regions less so. Capital availability per worker was well below national average in some agriculture-based regions but above in others, in some cases (such as WA Wheatbelt Great Southern) due to the presence of non-agricultural industries.

Regional policy can affect the accumulation of non-dwelling capital through the allocation of public investments and public private partnerships. There is also a long tradition, recently somewhat in abeyance but quite possibly to be revived, of guiding the flow of purely private funds into investments crucial for regional development.

2.2.3 Knowledge-creation capacity

When a region pursues increases in productivity, it pays to have a concentration of knowledge-based employment within its labour catchment to support the attraction of high-productivity industries.

The location pattern of knowledge-creation capacity across the country tells a great deal about the requirements of the knowledge-based industries. Capacity is above national average (in the case of Sydney Metropolitan Core well above) in all the metropolitan core regions and in one or two of the independent cities, notably the ACT. It is also above national average in some commuter suburbs, but not in all – outer suburbs are at a distinct disadvantage. It is around or below national average in the lifestyle regions and well below national average in all nine mining-based regions. It is generally below national average in the agriculture-based regions.

Changes in the location of knowledge-creation capacity over the past quarter century have been moderate compared to changes affecting the other drivers of productivity. If anything Sydney has gained and Perth and Adelaide fallen behind.

State government policies on knowledge-creation have tended to accept present patterns and to concentrate on attracting knowledge industries into the state's capital city. Other regions considering emphasising this pillar should ensure that the particular knowledge activity targeted has viable prospects in their region, remembering that this is an area where lifestyle is an advantage but has to be complemented by accessibility, both physical transport and telecommunications.

2.2.4 Supply chain strength

When a region is pursuing productivity increases, it helps to have steady inter-business relationships both within the region and connecting the region and other regions. These assist both with the sourcing of inputs and the marketing of outputs.

Supply chain strength is measured by the intensity of inter-regional input-output relationships. In 2016 it was above national average in the core metropolitan regions of Perth (particularly), Sydney, Brisbane and Melbourne but below national average in Adelaide South. This appears to reflect connections between these city centres and the mining industry – supply chain strength was considerable in the remote WA mining-based regions but relatively weak in WA Peel SW, Qld Townsville NW and NSW Inland Hunter. It was weak in Tasmania, presumably due to the impediment of Bass Strait, and generally below average in the lifestyle and agriculture-based regions. Many of these patterns were of recent provenance and reflected the mining boom – over the 24 years to 2016 supply chains strengthened in most of the mining-based regions (the exceptions were NSW Inland Hunter and Qld Townsville NW). The most severe declines occurred in regions on the cusp of agriculture and lifestyle – Vic Gippsland and SA Fleurieu, but there were also declines in some of the commuter regions (particularly in Sydney) and in some of the agriculture-based regions.

There is less conventional wisdom concerning this pillar than the other three, which lays the field open for regions which can perceive opportunities – always remembering that untried developments are risky.

2.2.5 The four policy-related drivers together

The four pillars of regional productivity growth can be summarised by weighting them according to their average contribution to growth. The following results apply for 2016.

- In five of the six metropolitan core regions potential was above average.
- Commuter regions were generally near or below average.
- The independent cities were close to average, some above, some below.
- The mining-based regions ranged from well above (WA Pilbara Kimberley) to well below (NSW Inland Hunter – it is likely that much of the impetus for productivity growth in NSW Inland Hunter is captured by Sydney and Coastal Hunter).
- Lifestyle regions were mostly below average.
- With the exception of WA Wheatbelt Great Southern, which was above average, the agriculture-based regions were average or below.

Over the past quarter century, the main regions to gain in the drivers of potential productivity growth were mining-based, while the main relative losses were in commuter suburbs and agriculture-based regions.

2.3 The effect of changes in the pillars of productivity growth

At the all-Australia level the skill base was a relatively small source of growth, accounting for around 4 per cent of potential.

The regional non-dwelling capital stock per person of workforce age accounted for around 16 per cent of the increase in potential productivity in the decade to 2016.

The concentration of knowledge-based employment within the labour catchment was as significant a driver of potential productivity as the non-dwelling capital stock, accounting for around 15 per cent of the increase in potential productivity Australia-wide.

During the mining boom it was helpful for a region to have supply-chain relationships with the mining industry, but more generally supply chains tend to be strong in metropolitan core regions and quite strong in commuter suburbs. They have been weak in regions such as Vic Gippsland where unrelated industries share geographic space. It is in this respect that regional planning can be helpful in identifying weak links in local supply chains and either working round them or mending them, including arranging the necessary finance.

2.4 Regional growth in potential productivity

Taking the four policy-influenced drivers together with the four which are not under direct policy influence, the growth rate of potential productivity across all Australia 1992-2016 is estimated at 1.55 per cent a year, roughly equally divided between the four drivers here defined as under policy influence and the four which are not. Potential growth was distributed as follows.

- In the core metropolitan regions, it was below national average in Adelaide South, close to average in the two Sydney core metropolitan regions and above average in Perth, Melbourne and Brisbane.
- Not surprisingly, potential in the commuter suburbs tended to reflect potential in the core of their metropolitan area. In Sydney and Melbourne potential in the outer suburbs tended to be lower than in the inner suburbs, though Outer Northern Melbourne was an exception to this generalisation.
- Potential again varied between the independent cities, being well above national average in NT Darwin, around average in the ACT and below average in Coastal Hunter.
- Potential was high in the booming mining-based regions (WA Pilbara Kimberley, Qld Mackay) but lower in mining-based regions with weak supply chains (NSW Inland Hunter) or specialisation in non-booming minerals (Qld Townsville NW, SA Far North and West, WA Gascoyne Goldfields).
- Potential ranged widely in the lifestyle regions, from very low in Vic Gippsland to rather high in SEQ Sunshine Coast. The low growth rate in Vic Gippsland was due to factors beyond regional control, namely the decline in gas production and the beginnings of withdrawal from coal-based electricity generation.
- In the agriculture-based regions potential again ranged widely, from well below national average in most of NSW and the adjacent Victorian regions to quite high in WA Wheatbelt Great Southern – this latter due, perhaps, to developments in industries other than agriculture.

It is all very well to have potential, but various factors can prevent the realisation of potential. We have estimated the growth rate of potential productivity from 1992 to 2016 at 1.55 per cent a year, but Australia-wide the realised growth rate was 1.38 per cent, a shortfall of 0.17 per cent a year.

2.5 Realised productivity growth 1992-2016

In most regions, the actual gain in regional income per hour worked from 1992 to 2016 was less than potential. Australia-wide the shortfall was approximately 13 per cent, with pronounced regional differences as follows.

- Three metropolitan core regions (Adelaide South, Melbourne and Perth) performed better than their potential as assessed; Sydney Parramatta Ryde performed almost exactly to potential and Sydney Metropolitan Core and SEQ Brisbane fell below potential by around 13 per cent. Among these regions, Adelaide and Parramatta Ryde performed particularly well during the mining boom, during which performance in Perth and Melbourne tended to decline.
- Two commuter suburbs, Perth Outer North and Adelaide North, exceeded potential, raising questions as to whether their potential had been underestimated. Among commuter suburbs, the most serious shortfalls occurred in Sydney Outer West, Sydney Mid West, Sydney Outer South West and Sydney South East, which once hosted manufacturing industries which were more productive than average even if they were not equal to overseas competition. The contraction of these industries without replacement by the diversion of resources to equally-productive alternative employment resulted in disappointing productivity performance. During the mining boom there was some evidence of productivity recovery in the west of Sydney; less so in the Melbourne suburbs where manufacturing industry was more at risk from the overvaluation of the exchange rate during the mining boom.
- One independent city, Darwin, met expectations; one, the ACT, fell behind at about the national average rate, and the rest (Vic Geelong, NSW Illawarra, NSW Central Coast and NSW Coastal Hunter) fell behind seriously, again due to the contraction of manufacturing without replacement at similar levels of productivity. These trends continued through the mining boom.
- All the lifestyle regions failed to reach their potential. Of the eight regions, Vic Gippsland managed well during the early 2000s but fell short thereafter. SEQ Gold Coast also fell behind by a fairly small margin, but NSW South Coast and NSW Northern Rivers fell way short and showed no signs of recovery during the mining boom. The lifestyle regions are oriented towards low-productivity population-serving industries and the main export industry of many of them, tourism, also generates low levels of income per hour worked and accordingly has limited ability to translate local growth potential into productivity gains. Those lifestyle regions which approached potential were either, like Gippsland, assessed as having low potential, or, like Gold Coast, diversifying away from the typical lifestyle industry structure towards independent city status.
- Performance in the mining-based regions was balanced between meeting or exceeding potential (four regions) and failing to meet potential (five regions). This reflected a mixture of the performance of the particular mining industries concerned and the performance of the non-mining elements in each region's economy. Productivity performance tended to deteriorate during the mining boom. The reasons for this have frequently been canvassed, of which pressing marginal mines into service during the boom and increased expenditure on mine maintenance and development, unrelated to production, are the most commonly mentioned.
- All the agricultural regions fell behind potential, though the fall in Qld Darling Downs SW was relatively small, perhaps due to the region's nascent mining industry. Otherwise the agriculture-based regions have failed to achieve productivity growth other than that which arises due to improvements in agricultural techniques and other technical changes incorporated into new equipment as it replaces old. Though these regions are assessed as having potential for growth from capital investment, improved skills and the like, it has been

difficult to realise this potential and so far success has been limited. For these regions the only effective regional development policies would aim to utilise the resources available while providing complementary new resources to improve productivity performance. The strategy for each region would be highly specific and be based on a combination of local knowledge of resources available with broader knowledge of available markets. In these regions, the broad-brush approach wastes resources. Without a consistent plan, simply increasing the quantum of resources which generally drive regional productivity, as expressed in the calculation of regional potential, would simply be offset by increases in local area inefficiencies.

Skills, non-dwelling capital stock, knowledge-creativity and supply chain connectivity should all be addressed in any regional strategy and constitute four pillars of regional economic development. However, there is a fifth pillar – markets, both domestic and overseas. To this we now turn.

2.6 Productivity growth

A major hazard of a concentration on productivity increases is that they mean that a given level of production can be sustained with less labour. If substitute jobs are not found for the displaced workers, there are two unwanted results:

- the resulting increase in incomes is offset by a decline in resource utilization; and
- the increase in incomes is concentrated on those who provide capital and those who remain in employment, thus generating an increase in inequality.

This hazard can be avoided if the extra capacity created by productivity growth is utilised to increase export production, hence the need for a careful assessment of export market prospects as part of regional strategy construction.

The key assumptions which drive the analysis are at the two digit ANZSIC industry level. The analysis was undertaken in terms of average annual growth rates over the decade ending in 2016. It is accordingly specified as ‘what if’ variations on the experience of the last decade.

The average annual productivity growth rate over the decade is given for the two digit National industries. Productivity is measured as real gross product at factor cost, which is equivalent to real value added per hour worked. The reported growth rates are the average of the 2006 and 2016 compound annual growth rates and the time coefficients of the log linear equations estimated from the data. Lower bound estimates were imposed on the rate of productivity growth. The overall national rate of growth over the decade was 1.8 per cent per annum.

Value added is distributed between households, governments and business through wages, profit retention and various other channels. During the decade, average annual income from work (wages, salaries and mixed income) was \$_{cvm} 855 billion¹. If productivity growth was spontaneous and due to ‘manna from heaven’ (that is, it did not result from any increase in inputs of capital, skills etc.) and the only factor input impacted was labour input measured in man-hours, a 1.8 per cent annual productivity growth rate would have generated total annual industry cost savings of \$_{cvm}15.4 billion. The demand impact on the economy of this productivity growth will depend on how the \$15.4 billion was distributed as income and on the expenditure changes which resulted from these income changes.

¹ cvm = chain volume measure, which is flows of constant 2014-15 value converted from current values by the ABS using their chain volume methodology.

The immediate effect of the increase in productivity is that hours worked fall and the workers who would have worked those hours lose \$15.4 billion in income. The corresponding immediate gains can be claimed by a number of groups. The first possible claimant group is those workers who remain in employment as a result of the productivity increase. Their likely share can be estimated using simple log linear trend equations in which the dependent variable is the real wage rate (in $\$_{CVM}$ per hour worked) and the independent variables are industry productivity and time. In column 2 of Table 2.2 the estimated response of the real wage rate to productivity increases is provided by industry, calculated on an Australia-wide basis over the past decade. The weighted average across industries is that a 1 per cent increase in productivity generates a 0.67 per cent increase in real wages, so that the wage share of value added falls. At the macroeconomic level, this echoes the fall in the wage share of GDP which has characterised the last couple of decades. A falling wage share is not a necessary accompaniment of increasing productivity – in times past there have been periods when rising productivity has been accompanied by a rising wage share. Explanations for the recent tendency of the wage share of income to fall when productivity increases have ranged from technological developments to institutional changes including the decline of the trade unions and the dismemberment of the arbitration system.

Whatever has been driving the fall in the wage share of income, it is a fact of the past decade which has to be factored into any analysis of the fruits of productivity gains. We accordingly focus is on the first-order responses of income changes to productivity growth as reported in column two of Table 2.2. At the national level, two-thirds of the $\$_{CVM}15.4$ billion will flow directly into income increases for those workers retain in employment. This means that \$4.9 billion will be retained by enterprises.

The next issue is how much of this \$4.9 billion initially gained by enterprises will be used to reduce prices. It is commonly assumed that competition will ensure that the whole lot will be distributed this way, but in practice businesses are often in a position to corner a little extra profit. Estimates of the extent to which they have done so over the past decade are reported in the third column of Table 2.2, which gives the trend percentage increase in the gross profit share in value added for a one per cent increase in productivity. Using these data it is simple to calculate how the \$4.9 billion will be shared between price reductions and distributions to equity holders. We estimate that the funds allocated to price reduction would be sufficient to reduce the gross domestic product deflator by 0.1 per cent. This price effect would increase real disposable incomes. (Those industries where the word 'residual' is entered in the third column of the table are industries where prices are fully determined by export prices. In these industries all productivity gains flow into gross surplus and hence benefit equity holders).

The final industry-level assessment required concerns the proportion of equity returns that accrues to foreign owners. The assumptions here are given in the last column of the table. It is estimated that the marginal share (the share to be applied to increases in surplus due to increases in productivity) will be greater than the average share on the basis that foreign-owned enterprises will, more often than not, have productivity higher than industry average. According to these assumptions, at the all-Australia level, 34 per cent of the increase in surplus after corporate taxes 34 per cent will be allocated to foreign equity holders.

After allowing for reduction in gross profits because of price reductions the total direct amount left over to be distributed from the $\$_{CVM}4.9$ billion is $\$_{CVM}2.8$ billion. Of this, $\$_{CVM}0.8$ billion will go to the Commonwealth government as corporate income tax, $\$_{CVM}0.7$ billion will actually or potentially be distributed as income to foreign holders of Australian equity assets and the residual $\$_{CVM}1.3$ billion is available for distribution to domestic equity holders. The sums available for distribution to equity holders will not necessarily be distributed, though over the last couple of decades shareholder activism combined with a subdued demand outlook has resulted in an increase in the proportion distributed and reduction in the proportion retained for re-investment in business.

This sets the stage for a multiplier analysis of employment and income gains as the various direct beneficiaries of the productivity increase spend their gains. To answer the questions posed at the beginning of this section it is necessary to carry out the estimations at the regional level, beginning with the regional implications of the direct allocation of the gains from productivity change which we have just described at the national level.

An integrated econometric model is required to evaluate the impact on productivity growth rates at the regional level. We use NIEIR's LGA-based modelling system.

2.7 Scenarios for the distribution of benefits from productivity increases

In the following analysis the base case for Australia and for each region is what actually happened in the decade from 2006 to 2016. Since the question concerns whether productivity increases enhance income in the absence of increased exports (or increased import substitution), international exports and the relationship between imports and incomes are the same in all cases. Three variant cases are considered, which differ in the assumptions made about how the productivity increase is distributed across regions.

Case one

In Case one it is assumed that all industries in all regions experience the same productivity increases. The factors which determine the distribution of the gains to the various claimants are laid out in the main SOR report and for each industry are assumed to be constant across the 67 regions. The results show the changes to incomes and employment compared to the base case, as estimated by the model after the increases in income have been spent, including multiplier effects. The multiplier effects are dampened, as always in Keynesian analysis, by:

- the overseas share of the income increase, which is assumed not to be spent anywhere in Australia;
- expenditure by domestic income recipients on imports; and
- increases in domestic savings, so that the income is not spent.

In these scenarios multiplier effects are dampened by two further assumptions.

- All additional income accruing to equity holders is paid out; there is no corporate retention and no counterpart business-sector purchases of capital goods.
- All additional income accruing to the government is saved.

Thanks to the diversion of income gains to overseas incomes and saving, the multiplier effects of the assumed productivity gain fail to raise spending sufficiently to maintain the levels of employment observed in the base case. The impact across Australia is the loss of 24 net annual hours worked per capita of the working age population which translates into an employment loss of 12 per thousand of the working age population. This loss is spread across all regions. On a place-of-work basis the heaviest losses are in the metropolitan core regions. This is associated with the importance of finance as an employer in these regions. Finance is a high-productivity industry (at least as productivity was measured in the decade to 2016) and a further increase in its productivity involves loss of hours worked, in part balanced by increased remuneration for those who remain in work, much of which is drawn from other regions by transfers within the finance sector – hence increases in average income from work. In similar fashion hours of work fall but income from work rises in the most productive of the mining regions. The regions least affected by falls in hours worked on a place

of work basis are those characterised by low-productivity, trade-sheltered industries – lifestyle regions and outer suburbs. However, in the metropolitan areas and also in the FIFO regions regional distinctions on a place-of-work basis are spread around by commuting. As a result the residents of some metropolitan outer suburbs, particularly in Sydney, lose well above the average hours worked.

Across Australia average net real income loss from work is \$_{CVM}665 a year per capita of the working age population, though this excludes the real price effect which raises real household disposable income thanks to the devotion of some of the additional surplus to price reductions. Income from work rises in the centres of Sydney and Melbourne thanks to the high propensity of financial sector to capture real income gains from productivity increases.

Increases in domestic capital incomes due to the productivity gains are distributed to regions in proportion to their net capital income. These benefit all regions and partially offset the losses in work incomes.

The average loss in real disposable income per capita of the working age population is \$_{CVM}353 while the loss in gross product is \$_{CVM}212. The decline in real gross product is less than that in real disposable income due to the increase in the amount remitted overseas and to the increase in the amount saved by governments. It is instructive to note that the largest reductions in GRP per capita occur in the metropolitan core regions, precisely the regions favoured by increases in income, highlighting the expertise of the finance sector in capturing income from productivity gains from all over the country.

By contrast, the public sector has no such expertise – the ACT loses both GRP and income from the productivity increase, though not by much. The most intriguing case is that of the Tasmanian regions, which in Case 1 lose GRP, but not by as much as most regions, and come very close to maintaining income. This could be due to low levels of diversion of productivity gain to overseas and to saving.

It should be noted that these results continue to apply, though not quite so strongly, if the whole of the increase in productivity is captured by those who remain at work. For sure, this helps to maintain regional demand, but it does not increase it sufficiently to maintain capacity utilisation.

Even if the productivity increases at a similar rate in all industries, as in this case, there will be (at a minimum) an increase in absolute inequality between regions, and there may be an increase in relative inequality, as would happen when the residents of the poorer regions spend their increased income on services provided by the richer regions – financial services, for example.

Case two

Case two is the same as Case one save that the exogenous productivity growth rates are differentiated by region, as follows.

- In each industry 40 per cent of productivity change due to technological factors at the national level applies in that industry in all regions.
- The remaining 60 per cent of national productivity cost savings are allocated on the basis of each region's capacity to grow local productivity in accordance with its endowments of the four productivity growth drivers evaluated in the first part of this chapter. If a region is 50 per cent or more below the national average for the weighted productivity growth drivers per capital of working age population it receives no more productivity growth than its allocation of 40 per cent of national productivity growth for each industry. After that its ability to capture national industry productivity growth depends on its relative endowments of the four local productivity growth drivers. The distribution of the productivity gains to a region for a given industry is constrained to the same aggregate productivity gain as applied in Case one.

In general the poorer regions have less real disposable income than in Case one. The lower productivity growth rates for these regions mean that less hours and income are lost, with multiplier effects. In the metropolitan regions the increased productivity growth rate across the metropolitan area as a whole cushions the impact of the higher employment losses so that in general net hours lost is less than in Case one. Also the metropolitan regions, and in particular the inner metropolitan regions, benefit from the reduced loss of economic activity in the nonmetropolitan regions. Essentially the pattern of loss is similar to Case one but less marked, with two exceptions – the scenario is unfavourable to the outer regions of Perth, perhaps because it is less kind to source regions for FIFO employment.

Case three

Case three allows for some of the unspent savings to be redirected to expand capacity (in old-fashioned Keynesian language for an accelerator effect). The capacity expansion effect was estimated for each of the 86 industries across the 536 Australian LGAs. The key independent variables as far as analysis here was industry productivity relative to the national average, which, to take care of non-linear relationships, was also entered into the estimating equations squared. These equations were used to estimate the capacity expansion effect for an industry in a given region given the increase in productivity for each industry based on the inputs used in Case two.

By contrast with the other two scenarios, this scenario generated a gain in GDP at the national level, though there was still a loss in household disposable income due to the diversion of the benefits of productivity gain to profits directed overseas and taxes left unspent by governments. GRP increased modestly in most regions, the main losers being the Outer Perth regions, again probably related to their links to the mining boom. Gains were still concentrated in the metropolitan core regions, particularly Sydney, Melbourne and Perth.

Judged by the change to household disposable income, most regions were again better off than in Case two, though not always compared to the base case. The outer commuter suburbs tended to lose income and the typical agriculture-based region suffered a small loss.

Policy implications

These model dynamics capture a process which has been under way for several decades both in Australia and overseas. Metropolitan core regions, their residents and their workers, have been gaining increasing shares of national income while regions distanced from the metropolitan centres or based on manufacturing activity have suffered significant declines in relative real incomes. The gap will widen even if productivity growth within each industry is distributed evenly across the regions because the central metropolitan areas host high productivity industries and therefore a given percentage productivity change will deliver relatively large absolute gains on real income compared to the more distant regions. If this simple arithmetic is allowed to continue it will lead to extreme political instability, as the world political events of 2016 portend.

At present there is no sign that the trend will be arrested, since high productivity growth generates high gross internal cash flow, permitting the high productivity industries of the metropolitan core regions to invest in the growth drivers thereby further increasing the productivity and real income differentials between the core metropolitan regions and other regions.

The only long-term solution is to supercharge the drivers of local area productivity change in regions which are currently at a disadvantage. But to do this resources have to be mobilised, in the first instance by governments and then by the private sector leveraging off the initial government investments. But as can be seen from the tables governments are net losers from the natural consequences of productivity change both in terms of direct and indirect taxes.

To keep governments solvent and capable of performing their essential role in economic development it will be necessary to increase the proportion of value added harvested in tax, for example by significantly higher marginal direct tax rates, so a greater percentage of the income gains in the core metropolitan regions will flow into the government pool from which they can be redistributed to the lagging regions, firstly as direct compensation for income loss but more important for investment in the drivers of local area productivity growth.

Again, it is important to remember that the Australian economy is bound by its imports, its exports and its overseas debt to the economies of the rest of the world. Over the past three decades it has depended far more than is sustainable on the accumulation of debt, both household debt and overseas debt. We shall see in Chapter 4 that this has depressed the trade-exposed industries and regions relative to the trade-sheltered industries and regions, and particularly the core metropolitan regions. It will be important to address this imbalance both at national level and as regional development strategies are prepared.

3. Industry structure and regional economic base

Policies and investments to increase output per hour worked can be of very dubious overall benefit if they result in an unwanted decline in hours worked. Economic development is therefore not only about raising productivity; it is about generating jobs and hence about expanding the economic base of the region as well as making it more productive. Regional economic planners need to be aware of the economic base of their region. The colonial governments of nineteenth-century Australia were in no doubt that their economic base resided in their export industries. Later governments added import-competing industries. Together these can be referred to as the trade-exposed industries.

3.1 Exports as the primary measure of economic base

It would be preferable to measure the exports which define the economic base of each region in terms of value added; that is, export sales revenue less the value of inputs from other industries used in the production of the exports. However, these data are not readily available and the custom is to measure exports as sales of goods and services to buyers outside the region without deduction for imported inputs. Exports so measured may be divided into two groups, international exports and interregional exports. The two groups contribute equally, dollar for dollar, to regional income generation and prosperity, but international exports are a special class for three reasons.

- They form the national economic base.
- They are strongly affected by international circumstances and by the exchange rate (though, as we shall see later, import-competing industries also fall into this category).
- Until the 1980s, and probably again in the not too distant future, export-promotion was a government preoccupation and policies were adopted to undergird the prosperity of the export industries.

National concern for the prosperity of industries which export internationally is important for regional planners, in that it provides an argument for national support for these industries at the regional level.

This report analyses the contribution of each industry to the economic base and superstructure of each region industry by industry, followed by a discussion of the income-pooling mechanisms including commuting, property incomes, taxes and social security benefits. In describing the contribution of each industry to regional economies, it is helpful to employ a classification of types of region.

3.2 International exports

Australia is heavily dependent on mining as a source of export revenue. As at early 2017, mine products (including smelted metals) accounted for 58 per cent of Australia's export revenue (Table 3.1). As a result of the mining boom, this proportion had increased from 40 per cent during the 1980s. The main increase was in metal ores and metals (chiefly iron ore) which rose from 23 per cent of exports in 1984 to 33 per cent in 2017. Three other broad groups increased their proportion of exports, as follows:

- coal exports, from 11 per cent of the total to 17 per cent;
- exports of travel services (overseas visitors) from 6 per cent of the total to 12 per cent; and

- exports of other fuels (mainly gas) from 6 per cent to 8 per cent.

These increases were matched by three declines:

- rural exports declined from 29 per cent of the total to 12 per cent – a very significant decline with strong regional implications;
- exports of transport services declined from 7 per cent of the total to 2 per cent, due to a decline in Australian-based shipping and (especially) air transport services; and
- exports of ‘other goods’ – basically manufacturing – declined from 14 to 11 per cent of the total, not perhaps as great a decline as might have been expected from publicity about the woes of manufacturing.

	1984	2017
Goods	82	81
Rural	29	12
Metal ores and metals	23	33
Coal	11	17
Other fuels	6	8
Other goods	14	11
Services	18	19
Travel	6	12
Transport	7	2
Other services	5	5

Source: ABS 5368.0 seasonally adjusted data, March quarter.

International exports are sourced from all over Australia, but there are pronounced regional patterns. These mean that changes in the composition of exports affect the regions differentially.

International exports as a whole

All regions contribute to international exports, but the exports from some of them are considerably greater than others. In summary:

- 18 per cent of international exports originate from the core metropolitan areas (6 per cent from Perth Central alone, thanks to its importance in services to mining);
- 26 per cent originate from other parts of the metropolitan areas. There are 21 of these so the average contribution per region is a little under 1 per cent of total exports;
- 39 per cent are generated in the major mining regions (17 per cent in WA Pilbara Kimberley alone); and
- 17 per cent come from the remaining non-metropolitan regions. There are 29 of these regions, so the average contribution is 0.6 per cent of exports, much less than in the days of rural prosperity.

When the national government again turns its mind to the importance of increasing export earnings to reduce the current account deficit (the balance of payments deficit, which is different from the budget deficit which the media are constantly fretting about) regional planners will be called on to cooperate with the national effort, and accordingly need to know their international export industries and have strategies developed for the future prosperity of these industries.

3.3 International and interregional exports

NIEIR estimates that international exports comprise a high proportion of total exports in mining-based regions. The proportion is highest (63 per cent) in NSW Inland Hunter, where the coal industry has a long history but has recently expanded into parts of the region which were wholly agricultural up to a few decades ago. The proportion is also high in WA Peel SW (61 per cent) and in the adjacent Perth Outer South, where international exports of smelter products (especially alumina) outweigh the traditional agricultural and tourism exports of the region. Perhaps surprisingly, the proportion of international exports is a little lower (48 per cent) in the current premier mining region, WA Pilbara Kimberley, due to interregional exports of gas by pipeline to other WA regions. Other mining regions where international exports are a little less than half total exports include Qld Fitzroy Central West and WA Gascoyne Goldfields.

Among agriculture-based regions, the highest ratio of international to total exports is reported by WA Wheatbelt Great Southern, at around 50 per cent. In other agricultural regions the ratio tends to lie in the 20-30 per cent range, while in lifestyle regions it clusters around 20 per cent. In these regions interregional exports of domestic tourism generally outweigh the international exports.

The lowest ratios of international to total exports, around 10 per cent, are reported by the metropolitan core regions and one independent city, the ACT. Though, as noted above, these regions are responsible for significant exports of services, their service exports are heavily weighted towards interregional sales. Commuter suburbs report higher proportions of international exports, reaching as high as 25 per cent in manufacturing-oriented regions.

However, as already noted, international exports are but part of the typical regional economic base. The other part comprises interregional exports.

3.4 Industry contributions to regional exports

The importance of the major industry groups in the economic base of each region can be gauged by the industry contributions to total exports (international plus interregional).

Mining and smelting

As indicated when discussing international exports, mining and smelting are overwhelmingly important in the exports several regions. The two regions most dependent on mining exports are:

- WA Pilbara Kimberley, 97 per cent of regional exports; and
- WA Gascoyne Goldfields, 90 per cent.

In nine more regions, mining and smelting accounts for more than half of regional exports.

Rural production, food processing and beverages

Farms and pastoral properties produce outputs for sale on both world and domestic markets, which means that they produce both for international export and for interregional export. The value of production is frequently enhanced by local processing, as in the wine, sugar and dairy industries. Rural production defined to include food processing and beverages provides a little more than half of total exports in three regions (Vic SW, SA East and Vic Loddon Mallee) and not far short of half in six more. We have identified 15 regions as agriculture-based, but agriculture also makes a significant contribution to exports in a number of mining-based, lifestyle and commuter-suburb regions.

Manufacturing other than food, beverages and primary metals

For over a century Australian manufacturing incurred a reputation as a job-generating but tariff-protected import-competing industry. It still labours under the sarcasm of the past generation of the advocates of free trade, with their talk of uncompetitive rust belts. However, as noted above, here and there Australian manufacturing generates international exports and its recent export performance has generally been better than the rural sector. Not surprisingly, when interregional exports are added in, manufacturing forms an important part of the economic base of a number of Australian regions. As a component of the economic base, manufacturing is most important in one independent city (Vic Geelong, where it accounts for half of total exports) and otherwise in an array of middle to outer commuter suburbs, where it accounts for 20-30 per cent of exports

Among the independent cities, one tends to think of Newcastle (NSW Coastal Hunter) and Wollongong (NSW Illawarra) as manufacturing centres but Wollongong in particular appears to have failed to diversify out of primary metal smelting. On the other hand, a number of regions which are primarily agriculture-based host diversified manufacturing industries as significant elements in their economic base. These regions include SA North, SA East, Tasmania North and Tasmania NW.

Tourism

The international trade accounts show a rising level of 'travel' exports, and there is no doubt that there is also substantial interregional trade due to travel and tourism. These exports are supplied by a wide variety of industries, frequently as minor additions to local demand.

Though the lion's share of the tourism trade is captured by the metropolitan centres, in these regions tourism is but one of many export industries. Judging by exports of accommodation and food services in relation to total exports, tourism comprises a significant proportion (around one fifth) of the economic base in the lifestyle regions.

Regional economic planners are often greatly exercised to attract tourists and the effort can be worthwhile, particularly if well-targeted. Even if the effort is not particularly successful, the kinds of regional facilities and promotions which are targeted at tourists are often appreciated by local residents, including prospective local residents.

Public utilities

By their nature, Australia's electricity and water supply industries cannot export internationally. Much of their activity is to meet local demand by maintaining and operating local networks. However, they can and do export inter-regionally. The most prominent region in this regard is Vic Gippsland, where public utility (electricity and gas) exports account for 19 per cent of total exports.

A switch from coal-based to renewable electricity is already under way and is likely to accelerate as old thermal power stations reach the end of their economic lives, the cost of renewable generation falls and means of dealing with the intermittency of wind and solar generation are developed. It is arguable that this switch will reduce interregional exports as regions increase their reliance on locally-generated solar power; however it is equally arguable that complex patterns of interregional trade will develop as regions match generation with demand. Regional planners will need to keep abreast of the changing technology of energy supply and of efficient energy use.

Wholesale trade

For the most part wholesale trade services are produced locally for local use and therefore do not form part of the economic base. However wholesale trade services, along with transport services, are exported internationally as part of the value of goods exported, and there is also interregional trade, largely between the middle suburbs of the major metropolitan cities (especially Sydney and to a lesser extent Melbourne) and the rest of the country. The contribution of wholesale trade to total exports is highest in the commuter suburbs of Sydney (28 per cent in Northern Shores) and Melbourne (22 per cent in Outer East).

Retail trade and other services to households requiring personal interaction

Like wholesale trade, retail services are mostly produced locally for local consumption. However, there is an element of export trade, a little of it international (sales to overseas tourists) and most of it interregional (sales to domestic tourists, sales to people who live in one area and shop in another). Retail trade looms particularly large as a proportion of total exports in commuter suburbs with major shopping centres and relatively weak general export industries, the prime examples being Melbourne Inner South, Sydney South East and Sydney Northern Shores. In regions like SEQ Sunshine Coast tourism exports are complemented by exports of retail services. By contrast, retail exports are swamped by other exports in the core metropolitan areas and are weak in most outer suburban commuter suburbs, independent cities, agriculture-based regions and benefit-based lifestyle regions.

Transport

Many transport services are produced locally for local consumption or as local business inputs; however a few regions specialise in transport. Transport services, both international and interregional, are most significant in the two regions with major airports, Sydney Eastern Shores and Melbourne Outer North, where they comprise more than half of total exports. However, all regions export transport services, whether air, road, rail or shipping. The typical contribution of transport to total exports is small in the metropolitan core regions, around 3 per cent in the mining-based regions and 5 per cent in the agriculture-based regions. In the independent cities, lifestyle regions and commuter suburbs it depends on the location of particular facilities, such as the port and airport of Darwin and similar facilities in Qld Torres Far North. Melbourne West and Sydney Outer West are both centres for logistics, hence their exports of road transport and warehousing services.

Telecommunications, media and information

Interregional exports of telecommunications, media and information services originate mainly in the core metropolitan regions – they are knowledge-economy services par excellence. In these regions they can form up to 20 per cent of the economic base. There is some overflow into inner commuter suburban regions and also to the ACT and to Tasmania South. Exports from non-metropolitan regions are negligible.

Finance

Exports of financial services comprise around 30 per cent of total exports from Sydney Metropolitan Core and the City of Melbourne. There is some overflow into the inner commuter suburbs of Sydney and to Adelaide South, Perth Central and SEQ Brisbane City, but very little to non-metropolitan regions – the only two with any financial services exports to speak of are Tasmania North and Vic Loddon Mallee.

Real estate and construction

By definition, construction activity takes place on the soil of a region and is therefore not exported. However, related financial services – real estate services – are exported. They form significant parts of the economic base in regions with inflowing property investment, reaching around 30 per cent of the total exports in SEQ Gold Coast and Sunshine Coast and 9 per cent in NSW South Coast. The level of activity is also high in the metropolitan core regions, but here it forms a smaller part of total exports due to the presence of other export industries, particularly finance. Otherwise, apart from overflow from the core metropolitan regions into the inner suburbs, export activity is generally negligible.

Professional services

Many professional services are produced for local consumption or as local inputs to other industries, but such services are significant exports from the metropolitan core regions, where they comprise around 12 per cent of total exports, with overflow into the inner suburban commuter regions. There are negligible exports from mining-based and agriculture-based regions and exports are also low from the independent cities (except the ACT) and lifestyle regions, which have yet to use their lifestyle advantages as drawcards for professional service providers.

Administrative services

Administrative services are various kinds of outsourced office activities including IT support. They are nearly all produced locally for the support of local business, though there is some interchange within metropolitan areas.

Public administration and defence

NIEIR estimates that public administration accounts for 73 per cent of exports from the ACT while among the metropolitan core regions it generates up to 12 per cent of exports – and in the Tasmanian capital too; 12 per cent in Tasmania South. Defence installations are important generators of export income in selected regions. Elsewhere the regional significance of a defence installation depends on the strength of other export industries. Where these industries are weak, as in NSW South Coast, public administration can provide 18 per cent of total exports; where they are strong, as in Qld Townsville NW, the relative significance of public administration exports is less but still significant at around 6 per cent.

Education

As with most other services, education is generally produced locally for local students. However, secondary students are mobile enough to cross regional boundaries and tertiary students move between regions and countries. In absolute amounts the largest exports of education come from the metropolitan core regions, however, the largest contributions to the regional economic base are from regions where the other export industries are subdued.

Health services

Health services are mostly produced locally for local clients but large hospitals generally serve an interregional clientele. Interregional exports by hospitals and other medical facilities located in core metropolitan regions are considerable, but the regions where they are constitute a significant proportion of total exports are generally commuter suburbs or independent cities.

Recreation services

Recreation services, including gambling, are mostly produced for local consumption but in a few regions add to tourism exports. They comprise 10 per cent of exports from SEQ Gold Coast, 7 per cent from NT Darwin and Melbourne Outer South and 6 per cent from NSW Southern Tablelands (which includes ski resorts).

3.5 From exports to regional incomes

Regional exports generate regional incomes (on a place of work basis) via their contribution to regional gross value added. Adding export revenues (both international and interregional) to local sales revenues gives total sales, from which imports (both international and interregional) are subtracted to give gross regional value added. Offsetting export revenues and payments for imports gives the regional balance of trade – the net extent to which a region is financed by transfers in the form of commuter transfers, property income, taxes, benefits and capital account items, broadly lending and borrowing. (In the structure adopted here, tax-financed government services are treated as exports, but as remarked above the estimation of exports and imports of government services is hazardous.)

Regional balances of international trade

The national balance of trade is calculated by offsetting revenue from exports of goods and services against spending on imports of goods and services. In 2015-16 Australia's payments for imports exceeded export revenues to generate a balance of trade deficit of \$36bn. In 2016-17 it is likely that a balance of trade surplus will be recorded.

Similar calculations can be performed when export revenues and import expenditures are allocated to regions, though the estimates should be treated with caution in that the algorithms used to allocate exports and imports to regions give approximate rather than definite answers. In 2015-16, against the background of a national trade deficit, only eight of the 67 regions recorded surplus balances of international trade. These comprised six of the eight mining-based regions, one of the 15 agriculture-based regions and one core metropolitan region. Reflecting the mining boom, five of the eight surplus regions were located in WA. All other regions recorded deficits on the balance of international trade. These deficits were relatively small (up to 6 per cent of gross value added) in the remaining mining-based regions and (up to 12 per cent of value added) in the remaining core metropolitan regions. In the remaining agriculture-based regions the deficits ranged up to 25 per cent of value added. In the independent cities the deficits ranged between 7 and 27 per cent of value added; in the commuter suburbs between 5 and 33 per cent of value added and in the lifestyle regions between 10 and 30 per cent.

These estimates once again emphasise that Australia's heavy reliance on mining exports, the result of the mining boom, has concentrated the generation of net exports in a few regions. The agriculture-based regions, which for much of Australia's history have been the mainstay of the national economy, have lost this position – it is decades since the sheep's back was strong enough for Australia to ride on. The core metropolitan areas have developed significant exports, but not enough to cover the cost of their own imports, let alone those of whole metropolitan areas and their attendant lifestyle regions.

Balances of interregional trade

In similar fashion, estimated interregional exports can be offset against estimated regional imports to provide regional balances of trade. Since these are at the end of a trail of calculations, with much opportunity for misestimation, they should be treated with caution; however it is possible to comment on broad patterns. Across the whole country, by definition, interregional imports counterbalance interregional exports, and one would therefore expect a rough balance between the number of net exporting and the number of net importing regions. However, this is not achieved: it is estimated that 14 of the 67 regions are net interregional exporters, the rest being net interregional importers.

Regional balances of trade

Adding international and interregional trade, we conclude as follows.

- In 2016, only 13 of the 67 regions generated surpluses on their balances of trade.
- 6 of the 9 mining-based regions generated surpluses. The largest surplus in relation to gross regional value added was in the iron-ore/gas region of WA Pilbara Kimberley followed by WA Gascoyne Goldfields. WA Peel SW and NT Lingiari turned in significant deficits.
- All six metropolitan core regions generated surpluses, those for Sydney and Melbourne being substantial.

- Only one commuter region reported a surplus (Sydney Eastern Shores); the rest recorded deficits which were substantial in some of the outer suburban regions.
- All the independent cities were in deficit.
- All of the lifestyle regions generated deficits, generally higher in the benefit-dependent regions than in those with export income from hospitality or agriculture.
- All of the agriculture-dependent regions generated deficits, reflecting the depressed state of agriculture as an international export industry.

By itself a negative balance of trade depresses income, but its effect on regional disposable incomes depends on the various transfer mechanisms which, inter alia, transfer income from regions with trade surpluses to regions with trade deficits, thus generating regional gross value added. Across all industries and all Australia regional incomes comprise around two-thirds of gross value added.

Across Australia and across all industries regional income generated by exports after the deduction of inputs sourced from other regions is approximately 75 per cent of the total of international and interregional export sales. There are, however, pronounced regional differences in this ratio.

- In the core metropolitan regions it mostly lies between 50 and 70 per cent, but rises to 100-per cent in SEQ Brisbane City.
- In commuter suburbs the range is wider, from 60 to 360 per cent, but mostly around 120 per cent (thanks to income which commuters bring into the region).
- In lifestyle regions the ratio runs from 70-80 per cent in Vic Gippsland and Tasmania to 220 per cent in Qld Sunshine Coast but is typically around 120 per cent.
- In the independent cities the ratio ranges upwards from 100 per cent (NSW Coastal Hunter) to 310 per cent (NSW Central Coast).
- In the agriculture-based regions the ratio ranges from 50 per cent (WA Wheatbelt Great Southern) to 120 per cent (Vic Loddon Mallee), but is generally below 100 per cent.
- Finally, in the mining-based regions the ratio ranges from 10 per cent (WA Pilbara Kimberley) to 50 per cent (NSW Inland Hunter, WA Peel SW and NT Lingiari).

These variations reflect industry mix. Regions with low ratios tend to specialise in industries like mining with low local income generation ratios and regions with high ratios tend to benefit from income transfers including commuting.

3.6 Industry contributions to regional income

Theoretically it would be possible to split regional income into two components: that generated by the economic (export) base and its multipliers and a positive or negative component generated by income transfers and their multipliers; however the split is not directly observable. It is, however, practicable to use ABS and taxation data to estimate the income generated by each industry in each region. These estimates are derived from multiple sources and involve an array of assumptions, and are not therefore accurate to the nearest cent; however they provide insights into the role of the various industries in regional economies.

Data on income earned can also be matched against data from on hours worked to obtain estimates of income generated per hour. The data on hours worked come from the ABS Labour Force surveys and are not precisely matched to the National Accounts data on income generated; hence further need for caution in interpretation. In particular, the regional data has been adjusted to state-level control totals provided by the ABS. This adjustment affects all regions in the state, lifting some states

and depressing others, and means that within-state patterns are more meaningful than comparisons between regions which are separated by state borders.

Growth in income generated per hour worked is a fundamental indicator of prosperity, since it permits increases in incomes, provided employment is maintained. It is noticeable that growth in both income generated per hour worked and in hours worked was more rapid during the land boom of the early 21st Century than they were during the succeeding mining boom.

Table 3.2 Average income generated per hour worked and rates of growth of income per hour worked, by industry, Australia, 1992 to 2016

Industry	\$₁₉₉₂₋₂₀₁₆	% p.a. 1992-08	% p.a. 2000-16	% p.a. 1992-16
Agriculture and food processing	31	1.8	1.2	1.5
Coal mining and petroleum extraction	67	1.3	0.2	0.7
Metal ore mining and smelting	43	0.8	2.6	1.7
Mining support (exploration)	63	-1.5	1.4	-0.1
Other manufacturing	34	2.6	1.1	1.8
Electricity, gas, water supply and sewerage	52	0.2	-1.6	-0.7
Waste management, cleaning, repairs	30	0.8	0.0	0.4
Construction	40	1.1	2.3	1.7
Wholesale trade	47	4.5	0.7	2.5
Retail trade, food services, entertainment	25	1.7	1.9	1.8
Accommodation	20	-0.5	-0.2	-0.3
Transport	33	2.4	2.4	2.4
Telecommunications	29	7.1	6.8	6.9
Media, information and administrative services	69	2.0	1.3	1.7
Finance and insurance	57	4.6	2.7	3.7
Real estate and rental services	39	4.9	2.4	3.6
Professional, scientific services	44	3.5	1.3	2.4
Public administration, justice and defence	52	1.2	0.3	0.8
Education	40	2.2	2.4	2.3
Medical services including hospitals	33	2.4	3.7	3.1
Residential care and welfare services	47	2.8	0.8	1.8
Gambling	30	9.4	0.8	5.1
TOTAL	39	2.5	1.9	2.2

Note: Income for each year deflated by the Chain Value Method. Rates of growth are for the spans 1992-2000 to 2001-2008, 2001-2008 to 2009-16, and 1992-2000 to 2009-16. Industry definitions are not the same as in Table 1.2 and consist of groups of 2-digit industries.

Source: ABS National Accounts and Labour Force survey.

Table 3.3 Hours worked and rates of growth of hours worked, by industry, Australia, 1992 to 2016				
Industry	% hours₁₉₉₂₋₂₀₁₆	%pa₁₉₉₂₋₀₈	%pa₂₀₀₀₋₁₆	%pa₁₉₉₂₋₂₀₁₆
Agriculture and food processing	6.5	1.3	-2.6	-0.6
Coal mining and petroleum extraction	0.6	4.7	8.2	6.4
Metal ore mining and smelting	1.5	6.4	1.9	4.1
Mining support (exploration)	0.4	2.4	6.2	4.3
Other manufacturing	8.2	1.8	-3.5	-0.9
Electricity, gas, water supply and sewerage	0.9	1.8	3.3	2.5
Waste management, cleaning, repairs	3.4	6.1	0.0	3.0
Construction	8.3	5.7	2.3	4.0
Wholesale trade	6.3	0.9	-1.4	-0.2
Retail trade, food services, entertainment	17.7	3.1	-0.5	1.3
Accommodation	1.3	5.7	-1.7	1.9
Transport	4.3	4.1	1.3	2.7
Telecommunications	0.9	-1.0	-1.4	-1.2
Media, information and administrative services	4.3	6.6	1.0	3.8
Finance and insurance	4.1	2.9	0.7	1.8
Real estate and rental services	1.3	4.8	0.4	2.6
Professional, scientific services	6.2	4.2	1.4	2.8
Public administration, justice and defence	6.5	3.9	2.2	3.0
Education	7.5	4.2	0.8	2.5
Medical services including hospitals	6.0	4.0	1.0	2.4
Residential care and welfare services	3.4	5.0	2.5	3.8
Gambling	0.3	2.1	-0.6	0.7
TOTAL	100.0	3.5	0.3	1.9

Note: Rates of growth are for the spans 1992-2000 to 2001-2008, 2001-2008 to 2009-16, and 1992-2000 to 2009-16. Industry definitions are not the same as in Table 1.2 and consist of groups of 2-digit industries.

Source: ABS Labour Force survey.

3.7 Conclusion

As local economic development personnel are only too aware, each industry has its location factors and requirements and much of the skill in regional economic strategy development lies in matching local assets with industry requirements and market demands. It's a competitive business, an innovative business, and what suits one region is unlikely to suit its neighbour. The fact that regional strategies will diverge means that diversified sources of finance will be important; financiers who understand particular industries and the combinations of industry which provide opportunities in particular regions and have available financial techniques which can deal with a wide range of levels of uncertainty.

4. Income transfers between regions including benefits

The discussion in Chapter 3 concentrated on incomes received by place of work. As mentioned in Chapter 1, many of these incomes accrue to households which live in the same region as they work in, but there are three main mechanisms by which these incomes can be shared by households in other regions. These mechanisms are:

- Commuting;
- Property income; and
- Cash benefits, financed by taxation.

We now consider these transfers.

4.1 Commuting at the regional level

4.1.1 The costs of commuting

Commuting has its costs, both cash costs and time costs. In present-day Australia the cash costs of commuting are paid by the commuter. Any employer contribution to commuting costs (as distinct from travel on the job) is taxed as a fringe benefit, the major exception being fly-in fly-out transport to remote locations in Australia or overseas. Similarly non-work travel costs are borne by the traveller.

In 2009-10 households receiving wages or salaries, and therefore nearly all including commuters, on average spent \$243 a week on transport, while households receiving private incomes from business or investments, and therefore with a lower proportion of commuters, on average spent \$175 a week on transport. The difference amounts to approximately 5 per cent of total expenditure, or roughly one-third of household transport costs. This is a minimum estimate of the significance of cash expenditure on commuting, since the second group (households receiving incomes from their own businesses) would have included a proportion of commuters.

4.1.2 Commuter behaviour

Many commuter journeys cross LGA boundaries; in very few LGAs do all the resident workers work in the same LGA and in very few are all the local jobs taken by residents; in few LGAs do residents other than the very old or poor confine their social, shopping and entertainment expenditure to the LGA.

Over all Australia, we estimate that in 2016 workers were distributed as follows.

1. Work at home or live on the job: 4 per cent of all workers
2. Live and commute to work within the same SOR region: 61.2 per cent. (This proportion would reduce considerably if we focused down on individual LGAs rather than SOR regions.)
3. Work in a region which neighbours their region of residence (across one SOR regional boundary): 26.7 per cent.
4. Work in a non-neighbouring region but within the same metropolitan area (e.g. commute to Sydney metropolitan core from Sydney outer west): 5 per cent.

5. Work in a region which is neither neighbouring nor in the same metropolitan area (e.g. live in WA Peel SW but work in WA Pilbara Kimberley): 2.9 per cent.

4.1.3 Working at home and living on the job

The advantages of living and working on the same property include the avoidance of commuting costs, both time and cash, sometimes further savings through the sharing of overheads and also the capacity to switch from work to home concerns at zero notice. A broad distinction can be made between working at home, where the primary purpose of the property is residential, and living on the job, where the primary purpose of the property is non-residential.

4.1.4 Commuters

Those workers who do not work at home constitute the great majority – at the 2011 Census 96 per cent of the working population. Many journeys to work cross LGA boundaries and create potential divergences between the work incomes paid out by employers within the LGA and work incomes earned by residents of the LGA. Though Council economic development practitioners are primarily interested in commuter flows across the borders of their particular LGA, in this report we broaden out to flows across the borders of the SOR regions. Much the same methodology can be applied at the LGA level, but the detail tends to become very location-specific and hence to obscure broad patterns.

At the regional level, in roughly half of all regions the number of jobs more or less balances against the number of resident workers; in a little over a quarter the number available exceeds the number of resident workers by more than 4 per cent, and in a little over a half the number available is less than the number of resident workers. This means that jobs are more geographically concentrated than workers' dwellings. The number of jobs available exceeds the number of resident workers by four per cent or more in the following types of region.

- Most obviously, in the five metropolitan core regions. In smaller cities this would apply at the LGA level but Hobart, Darwin and other independent cities are too small to generate job surpluses for their regions.
- In mining-based regions which attract long-distance commuters, as discussed below.
- In three suburban regions lying in the two largest metropolitan areas: Sydney Parramatta Ryde and (marginally) in two parts of inner Melbourne.

The actual regions identified are sensitive to the way regional boundaries are drawn – different boundaries could easily change the number of suburban regions in the list. However it remains that, at the scale of SOR regions, few suburban regions have more jobs than working residents, and all these are inner or middle rather than outer suburbs.

The number of jobs is less than the number of resident workers in the following types of region.

- Most commuter regions – most inner suburbs and all outer suburbs.
- Peri-metropolitan regions – regions bordering the metropolitan areas. Generally part of the region is within commuting distance, if not of the metropolitan centre, then at least of jobs in the outer suburbs. The regions concerned include NSW Southern Tablelands, which supplies commuters to the ACT, NSW Inland Hunter, from which commuters travel to Coastal Hunter, and NSW Northern Rivers, from which commuters travel to the Gold Coast and Brisbane.

- Source regions for commuting to adjacent non-metropolitan regions. These include NT Darwin (to NT Lingiari) and Qld Wide Bay Burnett (both north towards Gladstone and south into the Sunshine Coast).

The remaining regions, where employment numbers more or less balance against the resident workforce, include the three Tasmanian regions, SA East and much of NSW and Queensland.

Regions in which FIFO travel accounts for 2 per cent or more of working residents (up to a maximum of 4 per cent in WA Peel SW) are as follows.

- In Queensland, Wide Bay Burnett, Sunshine Coast, Gold Coast, Brisbane, Moreton Bay and Far North Torres.
- In NSW, South Coast.
- In SA, Adelaide North (with a long-distance flow to SA Far North).
- In WA, Peel SW, Wheatbelt Great Southern and all of Perth, particularly the outer suburbs.

4.1.5 Net flows of earned income

Interregional flows of commuters are matched by flows of earned income. Offsetting contrary flows (e.g. subtracting the flow carried by CBD residents who work in the suburbs from the larger flow in the opposite direction) we find as follows.

Metropolitan areas: from the central city to the suburbs.

Non-metropolitan areas: there is a net flow outwards from mining-based regions; generally net inwards elsewhere, especially into peri-metropolitan regions which often include commuter outskirts (WA Peel SW, SA Fleurieu, NSW southern inland) or provincial cities with commuting to a metropolitan centre (e.g. Vic Grampians).

This basic pattern has not changed since 1996, indeed probably since well before 1996. The major changes 1996-2016 have been:

- in Sydney, reduced net outflow of commuter earnings from Parramatta-Ryde, resulting in increased net long-distance flows of commuter earnings from Sydney Metropolitan Core to Outer West and Outer South West and increased net short-distance flow from Sydney Metropolitan Core to Near West;
- in Melbourne, similarly but not as marked, increased net dependence on commuting in Inner South (which includes Dandenong); also in Inner North; and
- in SEQ, Gold Coast has gone from a net outflow of commuter earnings to a net inflow with increased commuting to Brisbane. (This would be related to growing use of the Gold Coast railway line.)

4.1.6 Resident average earnings versus place of work average earnings

There is a general tendency for resident average earnings to exceed place-of-work average earnings, because longer-distance commuters tend to be paid more than short-distance commuters, if only to cover additional travel costs.

Conversely, in a limited number of regions average place-of-work earnings are higher than average resident earnings. In 2016 two types of region were in this position:

- Mining-based regions, where high-paying jobs are taken by FIFO commuters while the low-paying jobs tend to go to residents; and

- Manufacturing regions, where the high-paying jobs are taken by non-residents.

This pattern was noticeable both in 1996 and in 2016. Over the two decades there were several noticeable changes.

- In Sydney, the Near West gentrified from a manufacturing-type region in which resident average earnings were less than place-of-work average earnings to the reverse.
- In Melbourne, a similar change occurred with the gentrification of the Inner North. Conversely, however, in the City of Melbourne resident average earnings sank below place-of-work average earnings, a new phenomenon associated, not with manufacturing but with a high resident population of students and other young people.
- In South Australia three regions – Adelaide North, SA North and SA Far North and West –which in 1996 had experienced a mild manufacturing-type excess of place-of-work earnings over resident earnings moved towards the more usual position of a small excess of resident earnings over place-of-work earnings.

4.2 Property income

Property income derives from the ownership of assets which yield dividends, interest or cash rents. It excludes the capital return element of mixed income, while income from superannuation is not included until it is received in cash. Imputed income from owner-occupied dwellings is excluded from property income but included in GRP and is also included in disposable income to give an indicator of standard of living.

The significance of property income can be assessed by relating it to total household income. Over the country as a whole it accounted for 14.7 per cent of gross household income in 2016. In 2016-17 the contribution of property income was again highest in the ACT – Canberra increasingly houses generously-superannuated former public servants. This was reflected in the very rapid growth of property incomes in the ACT over the past 15 years –doubling in the period – as the cohort of public servants recruited in the 1970s retired onto superannuation and elected to stay in Canberra.

In the same way as last year reliance on property income in the ACT was followed by the wealthy parts of Sydney, particularly the Sydney Metropolitan Core, Sydney Eastern Shores and Sydney Outer Northern Shores. However, over the past 15 years these regions no more than kept their position and may well be overtaken by SEQ Brisbane City. Of the top ten regions for this indicator in 2016-17 property incomes per capita had declined marginally in five regions, namely the ACT, Sydney Outer Northern Shores, NT Darwin, Perth Central and Melbourne Southern Inner. Growth in the remaining five was slim.

4.3 Cash benefits

The Australian social security system provides a comprehensive range of pensions and benefits. The age pension is a prominent part of the range but disability pensions are also important along with payments to unemployed people. In 2017 cash benefits provided 12.2 per cent of household disposable income and offset 70 per cent of income taxes raised.

As originally designed the system provided a minimum income for most citizens, but this offended the advocates of free bargaining in the labour market. To sharpen the incentive to work, the nexus between unemployment benefits and the age pension (which prior to the 1980s were paid at the same rate through subject to different means tests) was broken and the safety net for young people is now well below that for the elderly and is well below the poverty line, however that is drawn.

In 2017 the average benefit per capita was \$5,634 per annum per person, a slight decrease over the previous year. Region by region several factors appear to influence the pattern. The highest per capita level of cash benefits in 2016-17 was in NSW Northern Inland at \$10,270 per annum per person followed by NSW North Coast at \$9,486 and NSW South Coast at \$9,453. The lowest level of benefits per capita were in WA Pilbara Kimberley at \$2,028 per capita per annum, NT Darwin \$2,059 and the Melbourne City at \$1,374.

In 2017 the average national social security take-up rate for people of workforce age was 11.7 per cent, a slight decrease over the previous year. Region by region several factors appear to influence the pattern. The highest take-up rate per capita in 2016-17 was in NT Lingiari at 26.1 per cent followed by QLD Wide Bay Burnett at 25.9 per cent and NSW North Coast at 22.8 per cent. The lowest take-up rate per capita were in Sydney Outer Northern Shores at 3.2 per cent, Melbourne City at 4.2 per cent and the Sydney Metropolitan Core at 4.6 per cent. Three factors drive social-security take-up rates.

Three factors drive social-security take-up rates.

- Job availability: the greater the availability, the less the take-up rate.
- Housing costs: unemployed people leave regions where they cannot afford housing costs, so reducing take-up in regions with high housing costs and increasing it in regions with low costs.
- The attractiveness of the region to early retirees and other people on low incomes: the chief attractor appears to be beaches but there is also high take-up in Aboriginal homelands (see Chapter 5 of main SOR report, Indigenous employment).

Social security take-up rates are high for people of pension age. When age pensions are added to payments to people of workforce age, demography dominates. At the other extreme, cash benefits per capita are high in some coastal regions, mainly due to their large number of age pensioners.

4.4 Disposable income

Disposable income is calculated by adding cash income (wages, mixed income, property income, social security benefits, income from dwelling ownership) and subtracting income taxes and debt service costs, chiefly mortgage interest. In 2016-17 it averaged \$46,200 per annum per adult citizen.

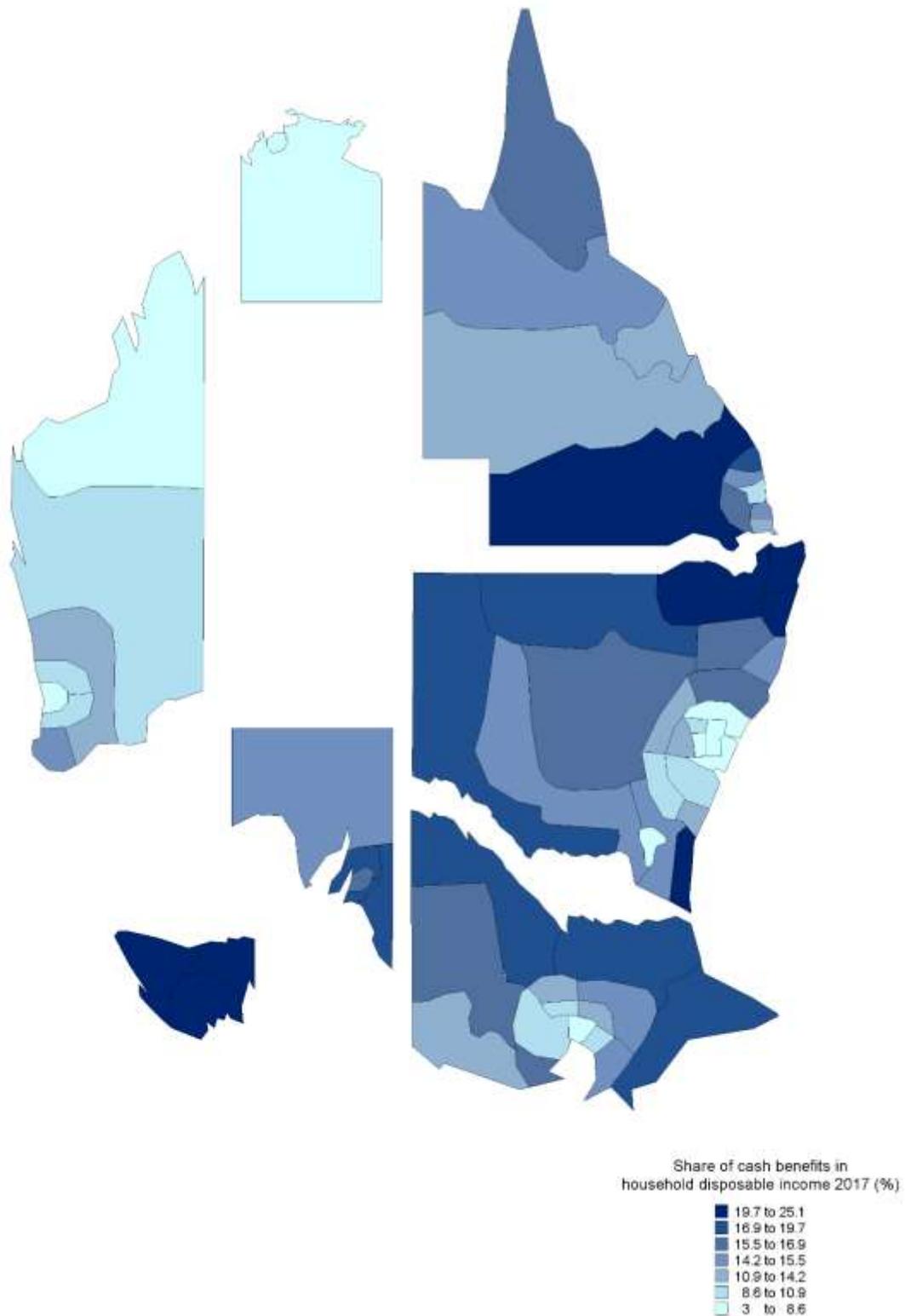
In 2016-17 the ACT still had the highest level of per capita disposable income at \$79,714, although this had declined from its peak in 2013 of \$85,764, possibly because of increasing housing costs. Yet again five of the top ten disposable income per capita regions in 2016-17 were Sydney regions, the highest at \$68,847 was Sydney Metropolitan Core.

As in the recent past, the resource-dominated regions continued the story of high mining-related earnings in remote regions. For WA Pilbara Kimberley 2017 estimates show per capita disposable income is trending upwards again after declines in the last few years. NT Darwin continued to perform strongly, ranked at number five for this indicator with per capita disposable income of \$61,196 in 2017. Given the tightening of employment opportunities in Darwin disposable income may come under pressure over the next year or two.

Once again the lowest level of per capita disposable income in 2016-17 was in QLD Wide Bay Burnett at \$34,261 and Queensland regions continue to occupy four places in the bottom ten regions for this indicator. QLD Far North Torres, with its population of Aboriginal and Torres Strait Islander peoples, is in the bottom ten regions once more with per capita disposable income of \$37,772.

The growth regions of Melbourne Outer North and Melbourne West also remain in the bottom ten regions with per capita disposable income of \$36,809 and \$38,416 respectively. Each of these Melbourne regions had per capita disposable income that is about half of that in the ACT. For the Melbourne growth regions debt servicing costs weigh heavily on the local economy.

Figure 4.1: Share of cash benefits in household disposable income – 2017 (%)



4.5 Conclusion

As noted in Chapter 3, most Australian regions spend more on international and interregional imports than they earn from international and interregional imports. The accounts are balanced in two ways:

- By interregional transfers of income; and
- By borrowing – both by the country at national scale and by residents at regional scale (chiefly household borrowing on mortgages, with a frightening proportion of the proceeds indirectly supporting consumption).

Interregional transfers of income are accomplished as follows.

- By commuting – a major source of income in commuter regions but significant elsewhere (except in Tasmania). For regional planners this raises the important question of balance between investment in commuting infrastructure (to take advantage of the economies of agglomeration and knowledge in metropolitan centres) and investment to decentralise employment.
- By the distribution of property income. By its nature, this rewards people who have saved and invested and tends to favour the wealthy and the elderly.
- By provision of tax-financed services at universal standards, especially education and health services but including others, like recreation facilities. Indeed there is a strong case that equality of educational opportunity, and hence the full utilisation of the human potential of the next generation, requires over-provision of education services in low-income areas to counter the disadvantages of limited regional horizons.
- By taxes and social security payments. It is important that the system should support regional development, in particular by providing a safety net so that people who take risks on a region's behalf are not left bereft if their risk-taking is unsuccessful. By the rules of equity taxes should especially target unearned economic rents and support should be provided to young people making risky decisions on investment in skills.

The remaining regional imbalances are covered by borrowing and lending. Since financial deregulation lending to households has ballooned, with complex but generally in egalitarian effects. There is a need to redesign the financial system so that it better serves the general welfare rather than the short-term interests of the financial services industry.

5. Employment and skills

Rapid advances in technology, particularly digital technology, are changing industry and changing the types of skills needed by industry. These changes mean that education is more important than ever in shaping employment opportunities and digital literacy sits alongside the fundamental importance of literacy and numeracy skills. Rapid change means a life-long learning approach to employment and career development. Local government can help promote these ideas within their communities.

5.1 Industry gross value added: National trends

Figure 5.1 and 5.2 give the share of industry gross value added in 2007 and 2017. The largest differences (growth) in the share of industry value added over the decade are in Mining from 6.1 per cent in 2007 to 8.2 per cent in 2017, Health services from 6.9 per cent to 8.2 per cent, Financial services from 9.9 per cent to 10.6 per cent and Professional services from 6.9 per cent to 7.6 per cent. The largest shares of industry gross value added in 2017 are in Financial services at 10.6 per cent, Construction at 9.1 per cent, Mining and Health, both at 8.2 per cent. The largest decline in the share of industry gross value added was in Manufacturing which fell from 9.9 per cent in 2007 to 6.9 per cent in 2017.

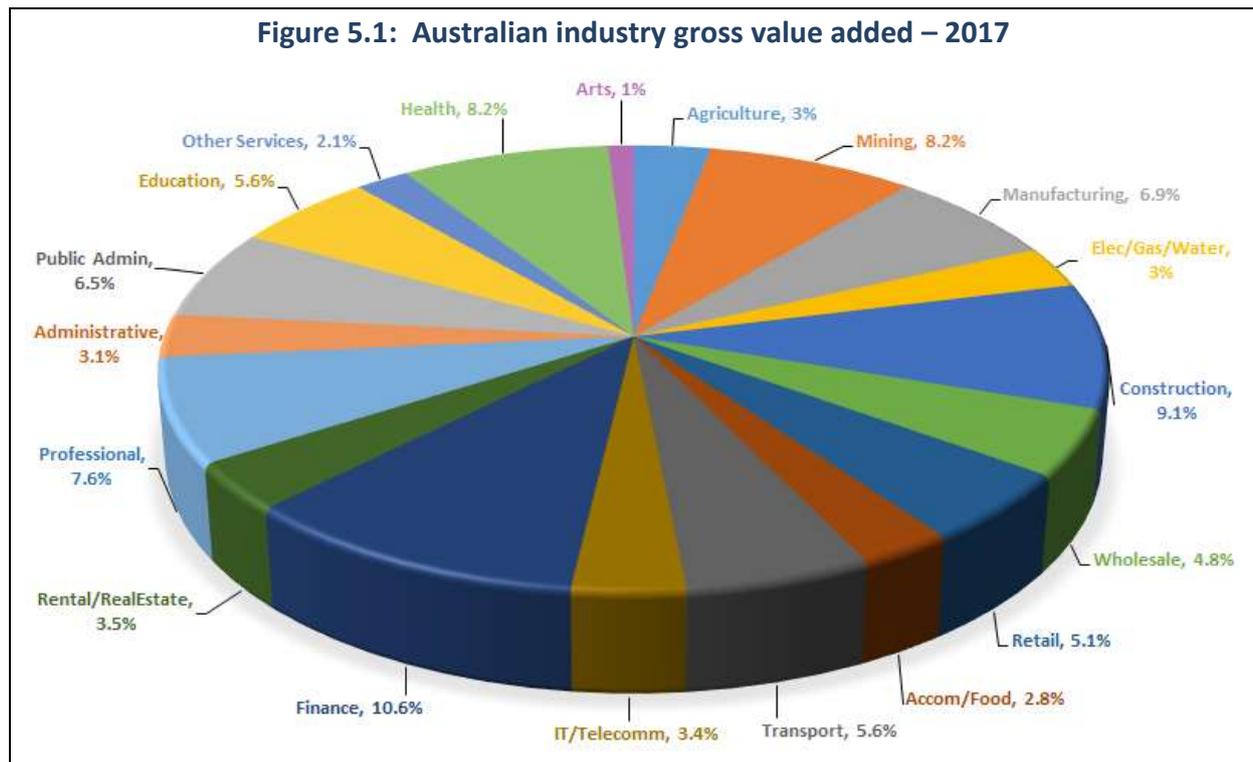
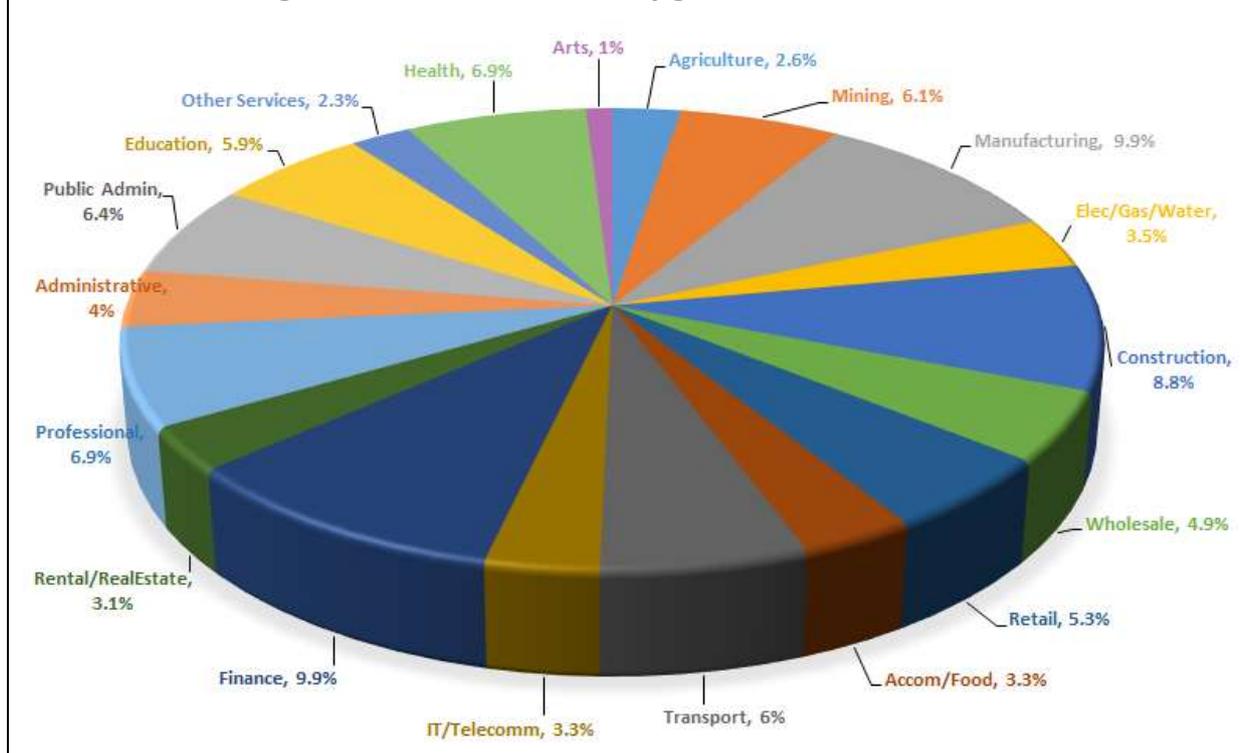


Figure 5.2: Australian industry gross value added – 2007



5.2 Employment and industry sectors: National trends

Figure 5.3 and 5.4 compare industry sector share of total employment in Australia in 2007 and 2017. The largest positive changes in employment by sector in this period have occurred in the Health and related sectors where employment share has risen from 10.3 per cent to 12.6 per cent of total employment, making this the largest employment sector in 2017. The Education sector increased its share of total employment, from 7.2 per cent in 2007 to 8 per cent in 2017, and Professional services, from 7.2 per cent in 2007 to 8.5 per cent in 2017. Mining also increased its share of employment, but from a relatively low base, its share rising from 1.3 per cent in 2007 to 1.9 per cent in 2017.

Notable declines in share of total employment occurred in the Manufacturing sector, from 9.9 per cent to 7.5 per cent and in retail, from 11.4 per cent to 10.2 per cent. While decline in total share of employment can be as a result of the rapid growth of other sectors, special attention is given in this chapter to the Retail and Manufacturing sectors because these sectors demonstrate both risks and opportunities related to changes in structure and the influence of technology, with a particular regard to outcomes for what have traditionally been sectors providing large scale employment across regions. Employment in these two sectors is examined in greater detail in this chapter.

NIEIR's forecasts indicate that the industry sectors that are likely to grow employment fastest and provide around half of all new jobs over the next five years are:

- Health care and social assistance;
- Education and training;
- Construction; and
- Professional, scientific and technical services.

Figure 5.3: Australian industry employment share – 2017

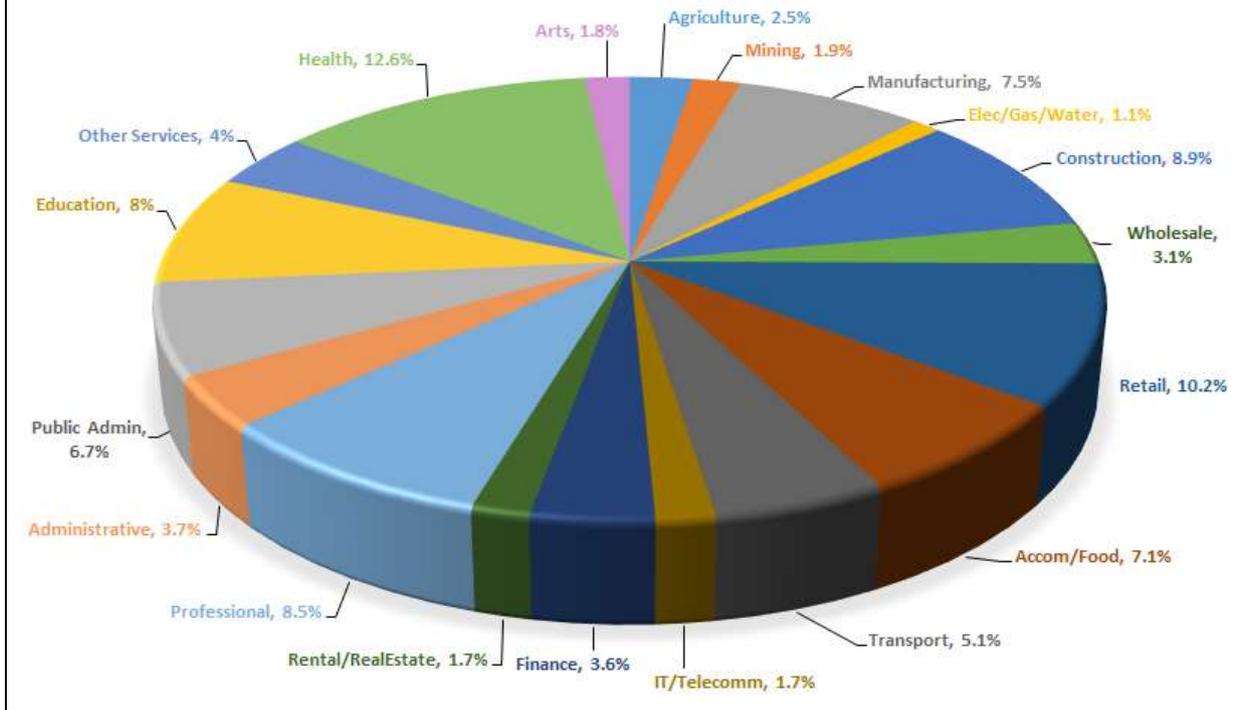
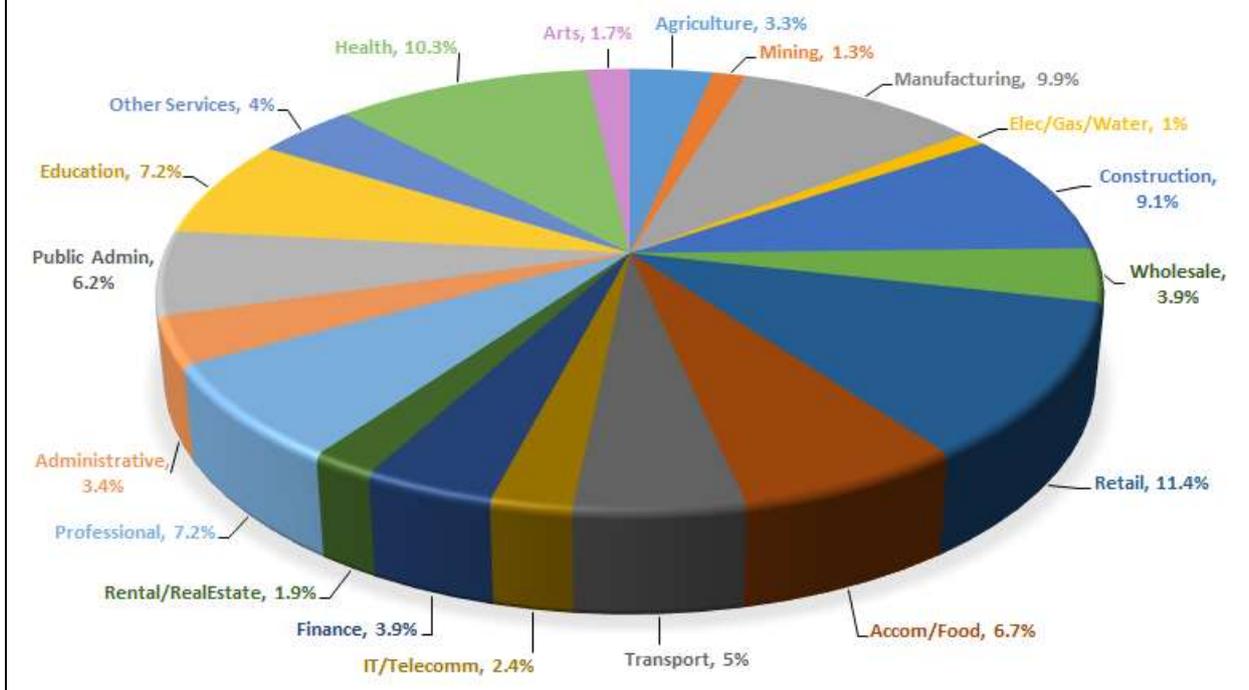


Figure 5.4: Australian industry employment share – 2007



5.3 Apprenticeships or traineeships

ABS data show that the total number of apprentices and trainees has declined from 226,500 in 2011 to 187,500 in 2016. While the decline occurred across all age groups over the period from 2001, apprentices in the 20 to 24 year age group increased in the period from May 2015. As of May 2016, 5.4 per cent of persons aged 20 to 24 years were apprentices or trainees, 42.8 per cent of all apprentices and trainees were in the 20 to 24 year old age group.

The main field of trade in 2016 was construction, which had 46,000 apprentices or trainees, followed by electro-technology and telecommunications, which had 36,500 apprentices or trainees. Those who successfully complete their apprenticeships will obtain a nationally recognised qualification.

The high dropout rate of apprentices and trainees is thought to be as a result of one or a combination of:

- Lack of knowledge about the industry apprentices are about to enter so that they decide the industry is not for them;
- low wages compared to other opportunities so they leave to seek employment outside of the apprentice system;
- difficulty in getting to work and study, poor access to public transport and probability of not having a car;
- Poor prepared for employment and issues with job readiness, particularly standards of numeracy and literacy;
- The status of apprentices and trainees does not reflect their importance. In other countries (Germany does this well) apprentices and trainees are more closely integrated into workforce development and planning; and
- In larger corporations in Australia a glass ceiling between employees with trade skills and the 'professional' workforce is now more common than was once the case. This means that career paths for much of the workforce are less clearly defined and opportunities for promotion are narrower.

So what is the future for apprenticeships? Given that construction trades play a significant role in the apprenticeship system we make reference to the Master Builders Australia report *Towards 2020* which sets out benchmarks for future training and the apprenticeship system. Master Builders Australia state that "the construction industry is in a situation of record workforce participation but experiencing a decline in accredited training outcomes". The report goes on to say that "Australia's future productivity and competitiveness depend on a highly skilled and trained workforce. The National Training System performs an undeniable public good in providing a supply of necessary and valued skills for the nation and a pathway for satisfying careers for many Australians".

Given the challenge for the construction industry is to meet the rising demand for a skilled workforce, particularly given that the workforce is ageing and the introduction of many new technologies, the apprenticeship system of training remains crucial to meeting the demand for skilled labour. The challenge will be to reverse the trend of the decline in the number of apprentice commencements of around 19 per cent since 2010. Master Builders Australia's benchmark for apprentices in training in the sector is 100,000, an increase of 132 per cent on the number in 2015.

5.4 Skills and jobs in the digital economy

No industry sector or business will escape the transition to the digital economy and increasing reliance on web-based communications and the use of data in shaping business transactions and markets. Among the most important future skills will be a set of skills that enable the development and ongoing function of the digital economy. It is important to remember that the rapid technology diffusion that accompanies fast pace digital change means that it is necessary to adopt the idea that the new economy requires individuals to keep their skillsets in line with the rapid change and opportunities that new technologies deliver.

5.5 Disruption

Big data requires data computing technology, engineering, analyst and marketing skills. Cloud services enable the outsourcing of business services. Apart from the usual back office functions, operating systems and software and IT solutions are among the services being offered. Convergence and mobile computing is changing the way people work and shop, and ways in which they spend their leisure time and communicate with friends.

All these new ways of doing things require high broadband capability, which means bandwidth capacity and fast speeds.

Cyber security

Given the dominance and ever increasing reliance of web-based systems in just about every part of our lives we can image, we all understand the absolute importance of cyber security. Not to get this right will undermine economies, democracies and security. So the highest standards of cyber security are vitally important to us all. Cyber security also represents a burgeoning industry as described in the report entitled *Cyber Security Market by Solution – Global Forecast to 2020* by consulting firm Markets and Markets which estimates the cyber security market to be worth US\$170.21 billion by 2020 (suggesting the cyber security industry has a compound annual growth rate of 9.8 per cent).

FinTech

FinTech is a revolution, driven by Silicon Valley venture capital, in the financial services industry. The FinTech industry is disrupting payment systems and wealth management, and enabling crowd funding and peer-to-peer lending. It is a start-up industry (and maturing) with potential revenues of \$4.7 trillion (Goldman Sachs).

MOOCs

Digital technologies are not only changing the workplace; the delivery of education is also changing rapidly. The higher education MOOCs (Massive Open Online Courses) have opened up access to tertiary education in terms of cost, distance and age.

5.6 NIEIR unemployment

As in previous *State of the Regions* reports the NIEIR unemployment rate is used in this chapter. The NIEIR Unemployment rate is calculated by adjusting the headline unemployment rate for excess take-up of disability support pension. As noted in previous *State of the Regions* reports, increases in the headline unemployment rate tend to be followed by transfer of many long-term unemployed to the disability pension. This transfer does not affect the social security take-up rate since the unemployed people who are transferred are generally already in receipt of Newstart allowances. However, in regions where NIEIR unemployment is significantly higher than the headline rate we generally find a disproportionately high rate of Social Security take-up. Though the NIEIR unemployment rate adjusts for the shift of unemployed people onto disability pensions, the Social Security take-up rate for persons of workforce age reflects additional aspects of community crisis, such as sole parents.

SOR name	2002	2007	2012	2017	Change				Rank out of 67	
					2002-2007	2007-2012	2012-2017	2002-2017	2017	2012-2017
QLD Wide Bay Burnett	17.8	12.7	15.5	16.7	-5.1	2.8	1.2	-1.1	1	20
QLD Far North Torres	7.7	7.0	11.4	14.2	-0.7	4.4	2.8	6.5	2	3
NSW South Coast	14.1	11.5	12.7	14.1	-2.5	1.1	1.5	0.1	3	15
VIC Gippsland	11.8	10.0	11.2	13.5	-1.8	1.2	2.3	1.7	4	7
QLD Townsville North West	10.5	7.6	8.3	12.7	-2.8	0.6	4.4	2.3	5	2
NSW Northern Inland	10.6	10.0	12.1	12.5	-0.5	2.1	0.4	2.0	6	31
NSW Northern Rivers	16.1	13.1	13.0	12.2	-3.0	0.0	-0.9	-3.9	7	60
TAS North West	16.5	14.0	13.3	12.1	-2.6	-0.7	-1.2	-4.4	8	62
WA Wheatbelt Great Southern	6.5	5.2	7.1	12.0	-1.3	1.9	4.9	5.5	9	1
TAS North	13.7	9.9	10.8	11.9	-3.9	1.0	1.1	-1.8	10	22
Average unemployment rate	12.4	10.0	11.6	13.4	-2.4	1.6	1.8	-15.8		
Australia	9.1	6.9	7.6	8.1	-2.2	0.7	0.5	-1.1		

Table 5.1 gives the regions with the highest NIEIR unemployment rates in 2017. QLD Wide Bay Burnett remains as the region with the nation's highest NIEIR unemployment rate, at 16.7 per cent, slightly down from 17.1 per cent in 2016, followed by Qld Far North Torres at 14.2 per cent, again slightly lower than last year's result of 14.8 per cent and NSW South Coast at 14.1 per cent. These regions continue to be beset by chronic problems such as low skilled, non-job ready and unqualified residents and lack of employment opportunities, or two or more of these in combination, resulting in a significant shift from unemployment benefits to disability pensions.

Table 5.2 gives the regions with the lowest NIER unemployment rates. In 2017 Melbourne City has the lowest NIEIR Unemployment rate in at 3.7 per cent. In 2016 Sydney Northern Beaches had the lowest NIEIR Unemployment rate at 3 per cent.

SOR name	2002	2007	2012	2017	Change				Rank out of 67	
					2002-2007	2007-2012	2012-2017	2002-2017	2017	2012-2017
Melbourne City	6.0	4.1	3.7	3.7	-1.8	-0.4	-0.1	-2.3	67	43
Sydney Outer Northern Shores	3.9	3.4	4.0	3.8	-0.5	0.5	-0.1	-0.1	66	46
Sydney Metropolitan Core	4.0	3.2	3.5	3.8	-0.8	0.4	0.3	-0.2	65	34
NT Darwin	8.2	5.7	4.9	4.1	-2.4	-0.9	-0.8	-4.1	64	58
Sydney Eastern Shores	5.2	3.8	4.7	4.5	-1.4	0.9	-0.1	-0.7	63	45
Sydney South East	3.7	3.4	4.7	4.6	-0.3	1.3	-0.1	0.9	62	44
Melbourne Eastern Inner	5.4	4.9	4.7	5.2	-0.5	-0.1	0.5	-0.2	61	29
Sydney Near West	5.7	4.2	5.0	5.4	-1.5	0.9	0.4	-0.2	60	33
ACT	6.5	4.2	5.2	5.7	-2.3	1.0	0.5	-0.8	59	28
Perth Central	8.6	4.1	4.0	5.8	-4.6	0.0	1.8	-2.8	58	11
Average unemployment rate	5.5	4.0	4.4	4.8	-1.6	0.4	0.4	-6.4		
Australia	9.1	6.9	7.6	8.1	-2.2	0.7	0.5	-1.1		

Metropolitan Core follow Melbourne City's lead in 2017 at 3.7 per cent with an unemployment rate of 3.8 per cent. NT Darwin follows at 4.1 per cent, but employment prospects are tightening in this part of the Northern Territory. The unemployment rate remains low among the affluent regions of Sydney and Melbourne and in Perth and the ACT. The top ten low unemployment regions continue all to be metropolitan.

SOR name	2002	2007	2012	2017	Change				Rank out of 67	
					2002-2007	2007-2012	2012-2017	2002-2017	2017	2012-2017
WA Wheatbelt Great Southern	6.5	5.2	7.1	12.0	-1.3	1.9	4.9	5.5	9	1
QLD Townsville North West	10.5	7.6	8.3	12.7	-2.8	0.6	4.4	2.3	5	2
QLD Far North Torres	7.7	7.0	11.4	14.2	-0.7	4.4	2.8	6.5	2	3
QLD Mackay	7.8	3.7	4.4	7.2	-4.2	0.8	2.7	-0.7	47	4
NSW Inland Hunter	13.6	11.1	7.6	10.0	-2.5	-3.5	2.4	-3.6	20	5
Perth Outer North	7.3	5.0	5.1	7.5	-2.4	0.1	2.4	0.2	42	6
VIC Gippsland	11.8	10.0	11.2	13.5	-1.8	1.2	2.3	1.7	4	7
QLD Fitzroy Central West	9.9	6.2	7.4	9.6	-3.7	1.2	2.1	-0.3	26	8
Perth Outer South	9.0	4.4	5.2	7.3	-4.5	0.8	2.1	-1.6	44	9
WA Gascoyne Goldfields	8.3	6.1	5.3	7.2	-2.2	-0.8	1.9	-1.1	46	10
Average unemployment rate	9.1	6.3	7.0	9.5	-2.8	0.7	2.6	-12.3		
Australia	9.1	6.9	7.6	8.1	-2.2	0.7	0.5	-1.1		

Table 5.3 shows the regions with the fastest rise in unemployment. The greatest rise in unemployment over the last five years has occurred in WA Wheatbelt Great Southern with a NIEIR unemployment rate of 12 per cent in 2017, followed by QLD Townsville North West, QLD Far North Torres, QLD Mackay and NSW Inland Hunter. The impact of farm consolidation and higher levels of automation in the agricultural sector is telling the story of productivity gains and declining or slow growth rates in employment in regions where agriculture predominates.

5.7 Youth unemployment: Highest and lowest unemployment regions

By January 2016 more than 50 per cent of 15 to 24 year olds were engaged in full-time education. Meanwhile, 11 per cent of this cohort were neither participating in full-time education or employment. The disengaged young remain a major concern, as does inequality of employment outcomes between regions.

SOR name	2002	2007	2012	2017	Change				Rank out of 67	
					2002-2007	2007-2012	2012-2017	2002-2017	2017	2012-2017
NSW South Coast	15.8	16.9	15.9	25.1	1.1	-0.9	9.2	9.4	1	2
QLD Townsville North West	11.8	9.2	15.4	23.5	-2.6	6.2	8.1	11.6	2	3
QLD Wide Bay Burnett	19.4	10.9	15.1	23.0	-8.5	4.2	7.9	3.6	3	5
WA Wheatbelt Great Southern	8.4	5.2	6.0	22.1	-3.1	0.8	16.1	13.7	4	1
QLD Far North Torres	12.9	6.9	12.2	20.2	-6.0	5.2	8.0	7.3	5	4
Melbourne Northern Outer	14.7	11.5	12.5	19.5	-3.1	0.9	7.0	4.8	6	6
Adelaide North	15.0	13.2	11.9	18.8	-1.8	-1.3	6.8	3.7	7	7
TAS North	17.2	11.7	13.4	18.2	-5.5	1.6	4.9	1.0	8	14
NSW Central Coast	14.6	10.1	13.5	17.3	-4.5	3.4	3.8	2.7	9	21
Melbourne City	15.9	13.7	18.0	17.3	-2.3	4.3	-0.7	1.4	10	48
Average unemployment rate	14.7	11.0	13.2	20.0	-3.7	2.2	6.8	5.3		
Australia	13.4	9.5	11.5	13.1	-3.9	2.0	1.6	-0.3		

Table 5.4 shows that in some regions, unemployment rates for the 15 to 24 year-old cohort remain high. In 2017 the ten regions with the highest headline unemployment rate for 15 to 24 year olds have an average unemployment rate of 20 per cent against a national average unemployment rate for this cohort of 13.1 per cent. This compares to average unemployment rate in 2016 of 17.8 per cent against a national average unemployment rate for this cohort of 12.6 per cent. The range of the ten highest unemployment regions for this group of young people in 2017 is between 17.3 per cent (Melbourne City) and 25.1 per cent (NSW South Coast). This compares to a range of between 16.4 per cent (NSW Northern Inland) and 25.9 per cent (QLD Far North Torres) in 2016.

NSW South Coast with the highest unemployment rate for this cohort has 2,400 unemployed young people. The largest numbers of unemployed in this cohort in 2017 are in SEQ Brisbane City at 15,500, Melbourne Western at 13,100 and Sydney Mid West at 9,300. Both inner and outer city regions continue to have significant numbers of unemployed 15 to 24 year olds. In 2017, there were 276,300 unemployed 15 to 24 year olds in Australia.

SOR name	2002	2007	2012	2017	Change				Rank out of 67	
					2002-2007	2007-2012	2012-2017	2002-2017	2017	2012-2017
WA Wheatbelt Great Southern	8.4	5.2	6.0	22.1	-3.1	0.8	16.1	13.7	4	1
NSW South Coast	15.8	16.9	15.9	25.1	1.1	-0.9	9.2	9.4	1	2
QLD Townsville North West	11.8	9.2	15.4	23.5	-2.6	6.2	8.1	11.6	2	3
QLD Far North Torres	12.9	6.9	12.2	20.2	-6.0	5.2	8.0	7.3	5	4
QLD Wide Bay Burnett	19.4	10.9	15.1	23.0	-8.5	4.2	7.9	3.6	3	5
Melbourne Northern Outer	14.7	11.5	12.5	19.5	-3.1	0.9	7.0	4.8	6	6
Adelaide North	15.0	13.2	11.9	18.8	-1.8	-1.3	6.8	3.7	7	7
NSW Murrumbidgee	11.7	8.1	7.6	13.5	-3.6	-0.5	6.0	1.9	29	8
NSW Orana	8.7	10.7	7.7	13.4	2.0	-3.0	5.7	4.8	31	9
NSW Inland Hunter	16.2	6.5	4.9	10.6	-9.7	-1.7	5.7	-5.6	49	10
Average unemployment rate	14.2	10.5	11.7	18.9	-3.6	1.2	7.2	4.8		
Australia	13.4	9.5	11.5	13.1	-3.9	2.0	1.6	-0.3		

Table 5.5 shows the regions with the fastest rates of unemployment rise for 15 to 24 year olds. WA Wheatbelt Great Southern had the most change with a decline in employment of 16.1 per cent in the period 2012 to 2017 reflecting the general employment outcomes in regions where agriculture predominates. Remote and outer metropolitan regions are also at risk. In 2017, the average unemployment rate for young people in the most rapidly declining regions was 18.9 per cent.

In 2016 the largest employer of young people was Retail Trade at 22.7 per cent of all those in employment in the age category, followed by Accommodation and Food Services at 20 per cent and Construction at 9.4 per cent. These three sectors accounted for 52.1 per cent of total employment for this cohort. Health Care and Social Assistance (a jobs growth sector) and Manufacturing (a jobs decline sector) are in the second tier of employers of the 15 to 24 year old age group, at 8.1 per cent and 5.9 per cent respectively.

6. Intelligent communities: Intersecting economic development, social capital and technology²

The term smart cities is often aligned to the deployment of smart technology such as Internet of Things (IoT) devices such as sensors to improve efficiency, leading to improvements in overall liveability. Real-time traffic management, real-time energy consumption management, integrated public transport networks and data collecting sensors are examples of smart technology contributing to the efficiency of a modern city. These technology based networks generate large volumes of data which is analysed and leveraged in real-time decision making.

The Australian Department of Prime Minister and Cabinet amongst others, defines smart cities to include, *“support for productive, accessible, liveable cities that encourage innovation and create jobs and growth, with a commitment in both regional and metropolitan areas for smart investment, smart policy, and smart technology”* (PM&C, 2016).

InnovationAus.com provides another perspective using the term intelligent community which includes *“all forms of infrastructure and data analytics, knowledge creation, talent attraction and digital inclusion, ‘intelligent communities’ create collaborative innovation ecosystems that encompass environmental, economic and social sustainability, as well as good governance and citizen participation in the community’s planning and development”* (InnovationAus.com, 2016). The phrase *“create collaborative innovation ecosystems”* takes the networking dimension beyond technology to include people and communities.

In this discussion paper, we propose to expand the “intelligent community” narrative by incorporating the technology aspects of a smart city, with parallel investment in social capital and liveability factors contributing to better outcomes through a virtuous circle effect. An intelligent community leverages data for business insight leading to innovation which is business and people driven rather than technology led.

The challenge for many communities is the lack of capacity and capability to derive value from data assets for innovation to occur. Higher levels of governance can generate value for all communities through investment in common platforms for hosting open data. This would empower communities to leverage publicly accessible data assets to derive business insight needed to enable community initiated innovation.

The full intelligent communities chapter is available in the main SOR report from ALGA.

The notion of a liveable city as a function of the efficiency of contributions to the ecosystem and supply chains of communities within the city and beyond to towns and rural areas, there needs to be a focus on the social capital and liveability of these smaller communities, including employment, education and health. Making smaller communities more liveable could enable an equilibrium point of sufficient populations within and outside cities, forming the all-important ecosystem for cities to be sustainable.

Social cohesion and social identities are vital aspects of a community. Without them, a diminished sense of belonging throughout the community will lead to social exclusion and isolation. In communities where isolation and social capital are an issue, the overall prosperity and economic output of communities is affected.

² A discussion paper from the SAP Institute for Digital Government (SIDG); released 16 March 2017; InnovationAus.com Intelligent Communities 2017, Melbourne Forum; Brian Lee-Archer, Belinda McKeon; www.sap.com/sidg; digitalgovernment@sap.com.

7. Protect your data with an information secure culture³

Cyber-related incidents and attacks have come to dominate news headlines in recent years, and for good reason.

Digital platforms are growing exponentially from desktop through to portable devices, and software companies are also driving the storage of information to the Cloud. This proliferation of data and technology, together with the increasing sophistication of targeted cyber-attacks and the potential for human error, mean that the likelihood of a cyber-related incident affecting an organisation's systems, data and reputation is perhaps now greater than ever.

As organisations globally face the threat of cyber-attacks, it is important to be just as aware of the dangers of errors by employees or third party service providers which can lead to cyber security issues.

Recently, a government organisation emailed a survey to a number of constituents, and the employee who emailed the survey accidentally attached the mailing list which incorporated personal details of all recipients with enough information to potentially enable identity theft.

In another example, a large retail chain sent out the names and passwords for gift and voucher cards with a total value of around \$1.5 million to all registered card owners by mistake.

In both of these instances, simple and avoidable errors were made leading to reputational, and in one case, financial damage.

At the forefront of combatting errors by employees and reducing the risk of cyber security issues is employee training. At the end of the day, employees and contractors are human and organisations need to ensure they have adequate security procedures and safe guards in place.

Evidence shows that in most cases, an organisation's lack of engagement with cyber security and appropriate training of staff is a leading cause of these mistakes. The foundation of effective cyber security policy and procedures is a well-developed information secure culture where privacy is seen and treated as an important component to the company's business.

To achieve this, everyone within the organisation needs to be aware they are responsible for the information they hold. Having the carrot rather than the stick approach is also important. Encouraging staff to take proactive steps around information security (for instance by following procedures to report suspicious emails or telephone calls, or for reporting irregularities to the IT team and management) is more successful than punishing simple and innocent errors.

A concept that may be useful here is the idea of being a High Reliability IT Organisation – where management understands that a mistake on a small scale can have a major impact on the entire organisation; and so eliminating the smaller threats such as human error is important for the greater good of the organisation.

How an organisation responds to a cyber incident is also essential. When an issue or incident arises, an organisation needs to be in front of the situation to mitigate any resulting damage as quickly as possible. Consequently, cyber risk and incident response should form a key component of an organisation's business continuity and disaster recovery plans, and organisations responsible for collecting and using personal information should ensure they also have effective procedures in place to respond following a data breach.

³ An article prepared by Local Government Professionals Australia in association with 2016-17 principal partner Jardine Lloyd Thompson, 10 March 2017.

Organisations cannot afford to underestimate their varying exposures. The belief that cyber security and the associated risks are limited purely to someone hacking their networks from outside needs to change. Cyber risk is much more than merely the idea of an external hacker; organisations also need to consider the full gamut of other possible scenarios, including a mistake as simple as sending a mailing list in error, right through to a rogue employee deliberately instigating a programme error or creating a system backdoor in order to breach security. It is imperative organisations continually look outside the square and continually analyse their systems to reduce their exposure.

At present, the potential loss to organisations from third party claims alleging purely a breach of privacy or loss of personal information is difficult to quantify – claims of this type have generally been unsuccessful in other jurisdictions due to the plaintiffs’ inability to prove damages, except in cases where there has been a loss of credit card data. However the potential for significant reputational damage should always be in the forefront of management’s thinking, and the potential for an investigation by a regulator such as the Office of the Australian Information Commissioner and the associated costs should not be overlooked, especially in light of the 2017 legislation establishing mandatory data breach notification requirements in Australia.

Establishing effective policies and procedures, building an information secure culture and having safe guards and mitigation strategies in place is fundamental in protecting an organisation’s data and technology systems, as well as its reputation. It is important for organisations not to underestimate their increasing reliance on information technology; and to take proper account of their need for the ongoing availability of those systems and associated data for the organisation’s continued operation.

8. Housing and construction

8.1 Changes in the regional distribution of wealth

Dwellings (including the land under dwellings) account for roughly two-thirds of household assets and financial assets for most of the remainder – other than farmland, the value of unincorporated businesses is mostly minor.

Table 8.1 shows that the region with the highest average wealth per household in 2017 is Sydney Outer Northern Shores at \$1.95 million, increasing from \$1.77 million in 2016. The region with the lowest average wealth per household in 2017 is WA Gascoyne Goldfields with an average household wealth of \$304,000.

Table 8.1 Wealth per household – Top 10 high and low regions (2014-15 \$'000 prices)										
SOR name	2001	2006	2010	2011	2012	2013	2014	2015	2016	2017
High regions										
Sydney Outer Northern Shores	1364	1562	1487	1469	1399	1462	1618	1760	1771	1953
Melbourne Eastern Inner	910	1233	1499	1452	1350	1403	1510	1617	1741	1888
Sydney Eastern Shores	1345	1574	1599	1557	1457	1526	1669	1795	1830	1773
Melbourne Southern Inner	930	1196	1423	1355	1237	1250	1336	1369	1448	1463
Sydney Metropolitan Core	1310	1448	1437	1403	1314	1383	1487	1644	1642	1389
Sydney Near West	905	1043	1042	1077	1053	1072	1217	1382	1370	1379
Sydney South East	883	1015	954	981	966	1004	1103	1245	1268	1373
Sydney Parramatta Ryde	916	1033	993	1000	963	1004	1119	1273	1270	1285
Melbourne Eastern Outer	503	724	831	832	776	798	833	875	967	1126
Melbourne Northern Inner	547	716	910	900	830	836	866	895	940	996
Low regions										
SA North	316	459	461	577	457	435	439	452	431	430
SA East	320	440	415	515	391	409	450	375	384	429
TAS North	320	522	487	497	451	439	436	429	428	424
Adelaide North	295	433	473	539	445	437	435	438	437	423
Perth Outer North	265	521	505	521	489	534	506	479	431	393
QLD Townsville North West	320	500	523	523	488	475	456	431	405	386
SA Far North and West	265	381	422	494	407	413	398	390	374	380
Melbourne City	895	969	1092	1003	860	845	861	821	757	344
WA Pilbara Kimberley	389	480	638	700	725	742	633	494	375	311
WA Gascoyne Goldfields	254	418	400	443	414	440	427	378	313	304
Australia	528	740	752	755	706	725	752	781	787	823

Australia's top ten regions ranked by average wealth and taking into account new LGA boundaries in Sydney are in Sydney and Melbourne. Six of these high wealth regions are in Sydney. Melbourne's highest ranked region for this indicator is Melbourne Eastern Inner with an average wealth per household in 2017 of \$1.89 million, rising from \$1.74 million in 2016. Melbourne City features at the lowest end of the scale with an average household wealth of \$344,000 as a result of the large student population now accommodated in Melbourne City and living in small apartments and as the general population of city apartment dwellers grows.

The greatest increases in household wealth in the period 2012 – 2017 occurred mostly in Sydney and relate to the increase in property prices. Melbourne regions grew more slowly partly because of the cyclical nature of land increases in different regions and the continuing development in its western suburbs. Residents of Melbourne’s western suburbs are able to access CBD employment, Sydney does not really have the equivalent region that has such significant potential to expand, which in Melbourne’s case is easing housing affordability issues.

In the period 2012 to 2017, the highest growth rates in household wealth among city regions were in Sydney Outer South West and Sydney Outer West, where household wealth grew at an average annual rate of 12.9 per cent and 12.7 per cent respectively. The highest growth in household wealth over the period in Melbourne occurred in Melbourne Eastern Outer and Melbourne Eastern Inner, where household wealth grew at an average annual rate of 7.7 per cent and 6.9 per cent respectively.

In the period 2012 to 2017, regional New South Wales had relatively strong growth in the household wealth indicator, particularly so when compared to non-city regions elsewhere in Australia. In NSW Central Coast household wealth grew at an average annual rate of 9.7 per cent, NSW Tablelands at 8.7 per cent, NSW Illawarra at 8.2 per cent and NSW Coastal Hunter at 7 per cent. In the non-Melbourne regions of Victoria household wealth grew more slowly and in the range of 3 to 4 per cent per annum, VIC South West grew the fastest at an average annual rate of 4.7 per cent in the period 2012 to 2017.

In the ACT, household wealth declined by -0.5 per cent per annum in the period.

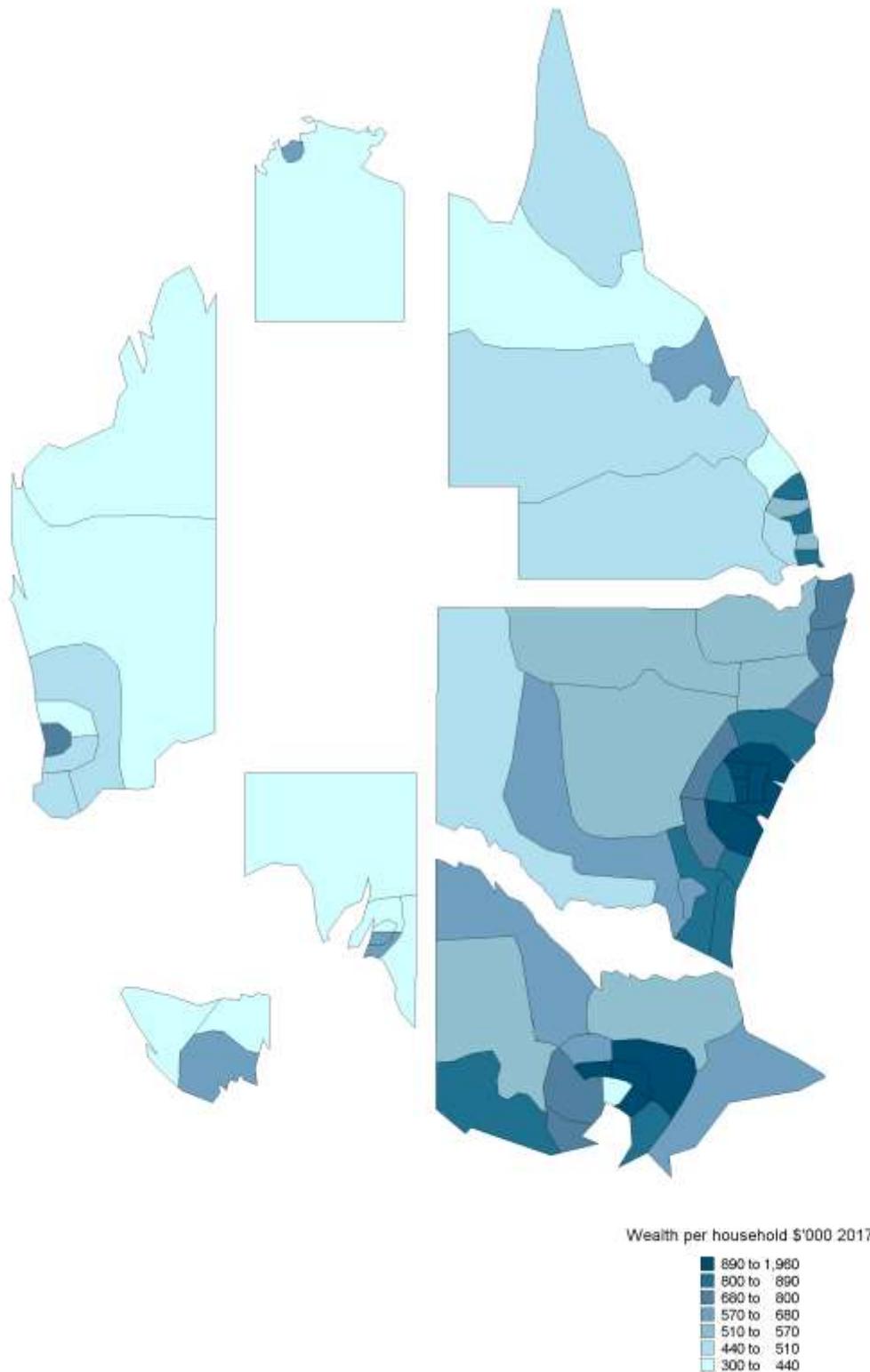
For Queensland regions in the period 2012 to 2017 household wealth in SEQ Brisbane City declined by an average annual rate of -1.1 per cent per annum, results here likely to be a combination of the increasing number of apartments which has the effect of reducing household scale and lowering per unit property prices and the general economic circumstances for Queensland in the period. Household wealth also declined in QLD Townsville North West at -4.6 per cent per annum, in QLD Mackay at -3.8 per cent and QLD Central West at -3.2 per cent.

In the period 2012 to 2017, the story for household wealth in South Australia is similar to that in Queensland. The only South Australian regions not to experience small declines in household wealth were SA East, where household wealth increased by 1.9 per cent per annum and SA Fleurieu at 1.2 per cent per annum.

Declines in household wealth in the period 2012 to 2017 were greater in Western Australia as the impact of the mining investment construction boom faded and with it a softening of dwelling prices. Declines in household wealth were most evident in WA Pilbara Kimberley at -15.8 per cent, WA Gascoyne Goldfields at -6 per cent and in Perth where household wealth in its SOR regions declined at around 4 per cent per annum in the period. There were also declines in household wealth in both SOR regions of the Northern Territory of around 4 per cent per annum.

For Tasmania in the period 2012 to 2017, TAS North West household wealth grew by 2.3 per cent per annum and TAS Hobart South, household wealth grew by 1.7 per cent per annum, household wealth declined slightly in TAS North at -1.2 per cent per annum.

Figure 8.1 Wealth per household – 2017



8.2 Household debt to gross income (less income tax) ratio

The debt to gross income ratio remains dangerously high in many of Australia's regions. Ratios remain the highest in urban regions with high levels of growth and increasing house prices as in the case of Sydney and Melbourne, however the trend is now a more general one and includes Western Australian and Queensland regions. The mortgage belts of the outer suburbs of Sydney, Melbourne and Perth are all areas where mortgages are very high in relation to incomes. Much of South East Queensland also fits this pattern.

Table 8.2 shows that the highest debt to gross income ratio regions in 2017 are Perth Outer North, SEQ Logan Redland, Melbourne Eastern Inner, Sydney Outer South West, Sydney Outer West and WA Peel South West, all of which have a ratio of 2 plus. In all these regions the debt to gross income ratio had risen when compared to the previous year.

Table 8.2 Household debt to gross income (less income tax) ratio – Top 10 High and low regions										
SOR name	2001	2006	2010	2011	2012	2013	2014	2015	2016	2017
High regions										
Perth Outer North	1.65	2.05	1.93	1.83	1.79	1.77	1.83	1.91	2.08	2.29
SEQ Logan Redland	1.49	1.71	1.76	1.73	1.77	1.80	1.83	1.90	1.99	2.18
Melbourne Eastern Inner	0.87	1.33	1.78	1.69	1.64	1.64	1.79	1.99	2.07	2.13
Sydney Outer South West	1.52	1.91	1.81	1.79	1.83	1.85	1.78	1.80	1.89	2.09
Sydney Outer West	1.65	1.89	1.80	1.78	1.81	1.81	1.76	1.78	1.87	2.09
WA Peel South West	1.28	1.72	1.65	1.59	1.55	1.54	1.58	1.65	1.83	2.06
Melbourne Eastern Outer	1.42	1.60	1.67	1.62	1.65	1.64	1.71	1.79	1.87	1.99
SEQ Moreton Bay	1.43	1.75	1.78	1.71	1.71	1.73	1.72	1.74	1.85	1.98
Melbourne Southern Outer	1.44	1.65	1.71	1.71	1.79	1.81	1.80	1.83	1.82	1.97
SEQ West Moreton	1.61	1.58	1.65	1.61	1.63	1.62	1.63	1.68	1.73	1.94
Low regions										
NSW Murray Far West	1.24	1.21	1.28	1.41	1.34	1.33	1.31	1.20	1.23	1.22
SA East	0.92	1.05	1.03	1.08	1.15	1.15	1.17	1.19	1.23	1.21
Melbourne City	0.55	1.10	1.52	1.81	1.91	2.09	2.17	2.37	2.42	1.21
SA Far North and West	0.84	1.00	1.06	1.13	1.14	1.17	1.17	1.11	1.11	1.19
TAS North West	0.96	0.92	1.03	1.06	1.07	1.11	1.11	1.10	1.15	1.19
NSW Orana	1.27	1.15	1.14	1.13	1.23	1.27	1.26	1.15	1.14	1.17
NSW Murrumbidgee	1.24	1.21	1.25	1.33	1.28	1.25	1.17	1.11	1.11	1.12
VIC South West	1.17	1.19	1.11	1.16	1.21	1.21	1.16	1.17	1.15	1.11
ACT	0.77	0.89	0.90	0.88	0.85	0.83	0.91	0.97	1.01	1.03
NT Lingiari	0.78	0.82	0.77	0.82	0.84	0.83	0.99	0.93	0.79	0.79
Australia	1.13	1.47	1.53	1.52	1.52	1.53	1.55	1.61	1.67	1.72

The greatest change to the debt to gross income ratio in the period 2002 to 2017 has occurred in Melbourne Eastern Inner, Melbourne Southern Inner, Sydney Northern Shores and SEQ Gold Coast. With the exception of Adelaide South the ten regions experiencing the greatest change, that is higher levels of debt to gross income, are in Melbourne, Sydney and South East Queensland. Typically the debt to gross income ratio is most stable in rural regions including regions in New South Wales and Victoria, which had a relatively stable debt to gross income ratio in the period 2002 to 2017.

The concern is that households in the most stressed regions, because of high levels of debt in relation to income, have less money to spend in the local economy with an increasing share of income directed at the repayment of existing debt. All this at a time when interest rates are at record lows, we can be certain that interest rates will rise and when they do the impact on household disposable income in many regions will be significant and this impact flows into regional economies and local service industries.

It is worth noting that for Australia in 2001 the average debt to gross income ratio was 1.1 per cent, by 2017 it had reached 1.72 per cent with the highest average ratio in a region now at 2.29.

8.3 The debt service ratio and mortgage burden on average dwelling prices

Not unexpectedly the debt service ratio is typically higher in metropolitan areas than it is in the rural regions. Table 8.3 shows that in 2017 the mortgage burden as measured by the ratio of average dwelling prices to average incomes is highest in Perth Outer North, Melbourne Eastern Inner, SEQ Logan Redland, Sydney Outer South West and Sydney Outer West. All these regions report debt service ratios over 20 per cent, the highest currently 23.4 per cent. Debt service ratios in the top ten highest regions have increased, most but slightly, in all of these regions. In Perth Outer North the debt service ratio increased from 21.9 per cent in 2016 to 23.4 per cent in 2017.

The regions with the lowest debt service ratios continue to be NT Lingiari and the ACT. These low debt service ratios go a long way towards explaining the high levels of household disposable income in these regions. The debt service ratio in the ACT at 10.8 per cent is approximately half of that experienced in the Sydney regions.

In the period 2002 to 2017 the greatest increase in the mortgage burden as measured by the ratio of average dwelling prices to average incomes has occurred in Melbourne Eastern Inner, Melbourne City, Melbourne Southern Inner, Sydney Metropolitan Core and Sydney Northern Outer Beaches. Least pressure from mortgages on households has occurred in regional areas such as NSW Murrumbidgee, NSW Orana and VIC South West.

In 2001 the average ratio for Australia was 13, in 2017 it was 18.

Table 8.3 Household debt service ratio – Top 10 High and low regions										
SOR name	2001	2006	2010	2011	2012	2013	2014	2015	2016	2017
High regions										
Perth Outer North	19.3	24.3	22.9	22.7	22.0	20.4	20.0	20.3	21.9	23.4
Melbourne Eastern Inner	10.2	15.7	21.0	20.9	20.0	18.8	19.5	21.0	21.8	21.9
SEQ Logan Redland	17.5	20.1	20.8	21.4	21.6	20.6	19.9	20.1	20.8	21.9
Sydney Outer South West	17.8	22.5	21.4	22.2	22.3	21.2	19.3	19.1	19.8	20.9
Sydney Outer West	19.3	22.3	21.2	21.9	22.1	20.8	19.1	18.8	19.5	20.9
Melbourne Eastern Outer	16.7	18.8	19.8	20.0	20.1	18.8	18.5	19.0	19.6	20.2
SEQ Moreton Bay	16.8	20.6	21.0	21.1	21.0	19.9	18.7	18.4	19.3	20.1
WA Peel South West	15.0	19.0	18.4	18.4	17.8	16.7	16.2	16.5	18.2	19.9
Sydney Parramatta Ryde	11.9	18.3	19.8	20.1	19.7	18.7	18.4	19.2	19.9	19.8
Melbourne Southern Outer	17.0	19.4	20.2	21.1	21.9	20.8	19.5	19.3	19.0	19.7
Low regions										
NSW Northern Inland	14.4	13.5	14.8	15.2	16.0	15.7	14.1	13.0	12.5	12.6
NSW Murray Far West	14.5	14.2	15.1	17.5	16.4	15.2	14.2	12.7	12.8	12.6
SA East	10.8	12.3	12.2	13.4	14.1	13.2	12.8	12.6	12.8	12.4
TAS North West	11.3	10.8	12.2	13.1	13.1	12.7	12.1	11.7	12.1	12.3
SA Far North and West	9.8	11.8	12.5	14.0	13.9	13.5	12.6	11.7	11.6	12.1
NSW Orana	14.9	13.6	13.5	13.9	15.0	14.5	13.7	12.1	11.9	11.9
NSW Murrumbidgee	14.6	14.2	14.8	16.4	15.7	14.4	12.8	11.7	11.6	11.5
VIC South West	13.8	14.0	13.1	14.3	14.7	13.9	12.6	12.4	12.0	11.3
ACT	9.0	10.5	10.6	10.8	10.4	9.5	9.8	10.3	10.5	10.6
NT Lingiari	9.1	9.7	9.1	10.2	10.3	9.7	11.5	10.8	8.7	8.4
Australia	13.3	17.3	18.1	18.8	18.6	17.6	16.9	17.0	17.4	17.7

9. Energy⁴

The *State of the Regions* report for 2007-08 included an extensive discussion of climate change and its implications for Australia's diverse regions. Updates have been provided in subsequent reports and this chapter provides a further update, with a particular focus on gas and electricity. Energy policy is a critical factor in determining competitiveness and productivity of Australia's industry sectors and in all its regions.

The mining sector, which has been driving the Australian economy, is changing from an investment in projects phase to a phase where production is dominant. This change is increasing the sector's demand for production energy (transport of materials and products, equipment operation and processing energy such as for LNG). Industrial energy demand is also increasing for agricultural product transport and processing as domestic and export of these products increases.

Domestically, besides export performance, population and household formation are driving growth in energy demands. Household formation is increasing at about 2 per cent per year (with regional variations) and this drives residential and, to a large extent, commercial energy demands. Each new household requires heating, cooling and appliance energy (for refrigeration, washing, etc.), plus transport and energy incorporated into clothing, food, health services and other consumption demands. These demands for energy services can sometimes be met by increases in energy efficiency but are also significant drivers of increases in demand for energy, including fuels and demand for energy capture through renewables.

9.1 International update

In 2016 United States electricity generation from gas increased so that it is now higher than that from coal. This trend continues. Ninety-four United States coal generation stations closed in 2015 and another 41 are likely to close by 2017. The main causes for the trend are low shale gas prices, growth in renewables and lower demand growth.

China plans to triple its solar capacity to reach 143 GW by 2020 (total global capacity of 181 GW in 2014). India proposes to install renewable capacity to 175 GW by 2022.

International negotiations over greenhouse gas emissions continue. At COP22, held in Marrakesh in November 2016, 48 under-developed countries committed to supplying their entire energy needs from renewables by 2050. Overall, COP22 confirmed the commitments made in Paris at COP21 commitments and advanced reviews and action pledges to meet the COP21 Agreement. COP22 did not, overall, view the Trump presidency as hindering positive global action on climate change, though it raised concerns over potential United States policy reversals such as pulling out of the Paris Agreement and freezing increases in appliance and equipment standards.

The Global Covenant of Mayors, chaired by Michael Bloomberg of New York, USA (a publisher), has a membership of about 7,000 towns and cities from 119 countries. The organisation has undertaken to promote best practice for reducing emissions and protecting against potential threats to members' environments. Membership accounts for about 8 per cent of global population and about 70 per cent of energy-related GHG emissions. The Trump impact on the COP21 Agreement is negative but it remains to be seen how strongly US industry and the states will go in an opposite direction when it comes to energy policy.

⁴ Paper prepared by Graham Armstrong as senior associate of National Institute of Economic and Industry Research in association with Saturn Corporate Resources, *Energy Working Party and Stakeholder Group – Energy update*, March 2017.

9.2 Australian developments

9.2.1 Australian Federal review of climate change policy

On 5 December 2016 the Federal Government announced a review of climate change policy that would attempt to balance energy security and affordability against Australia's Paris 2016 commitments. A discussion paper was released in March 2017 and submissions requested by 5 May 2017.

The discussion paper looks at opportunities for reducing emissions on a sector by sector basis, and provides an assessment of the Emissions Reduction Fund and a potential long-term emissions reduction goal post-2030. Minister Frydenburg, in announcing the review, claimed the current government's climate change policies are working in contrast to the previous government's carbon tax (which only lasted two years, which is not enough time to have a significant impact).

The Australian Energy Council, which represents 21 electricity and gas producers, said the Finkel review of energy security must be used in conjunction with the climate review to overhaul national energy systems as it transitions towards a greater share of intermittent renewable energy.

Terms of reference for the Review are as follows

- The opportunities and challenges of reducing emissions on a sector by sector basis.
- The impact of policies on jobs, investment, trade competitiveness, households and regional Australia.
- The integration of climate change and energy policy including the impact of state-based policies on achieving an effective national approach.
- The role and operation of the Emissions Reduction Fund (ERF) and its safeguard mechanism.
- The potential role of credible international permits in meeting emission targets.
- A potential long-term emissions reduction goal post-2030.

9.2.2 National Greenhouse Reporting System (NGERS), Department of Energy & Environment 2015-16 report, 22 December 2016

This report indicates Australian greenhouse gas emissions rose by 0.8 per cent in 2015-16, the increase mainly coming from electricity generation and new LNG projects. Per capita emissions fell to 23t CO₂e, down from 26t CO₂e ten years ago.

Emissions may not exceed the target of a 5 per cent reduction of 2000 levels by 2020 but remain unlikely to meet the Paris Agreement target of 26 to 28 per cent below 2005 levels by 2030. National emissions in 2030 are projected to be 592 million tonnes (Mt) in 2030 against a 2030 target of about 450 Mt. Although emission projections are uncertain and do not include impacts of such policies as the National Energy Productivity Plan (a 40 per cent energy productivity improvement over 2005 to 2030), the Government's rejection of any form of carbon pricing in its 2017 climate change policy review make it extremely unlikely the 2030 target will be achieved.

Although energy sector (stationary, mobile and fugitive) emissions account for over 60 per cent of national emissions, some analysts and observers speculate that the 2030 target could be attained by moderate action in the energy sector and an aggressive approach to other emission sources, particularly agricultural and forestry sector emissions. We doubt the effectiveness of relying on this approach due to:

- the magnitude of the target achievement task; and
- the uncertainty surrounding means of reducing non-energy emissions, means of measuring them and the genuineness and permanence of these emission reductions.

9.3 The role of local government

Local government has a long history of involvement in the energy industries. At various times Councils have run electricity generation and distribution businesses, though these have been superseded in the Eastern States by the National Electricity Market, in WA by the South West Integrated System and other state government initiatives, and in remote areas by decentralised generation, in the NT run by the Power and Water Corporation. It is unlikely that Councils will re-enter the generation business (apart from the installation of PV and perhaps wind capacity on Council properties) but possible that Councils will again be involved in aspects of reticulation. The current position is that electricity distribution is in the hands of large, cross-regional regulated monopolies, some of them privatised, which limits the scope for the reintroduction of municipal enterprise.

This said, local government has a strong interest in the reliability of electricity supply and hence in the local layout of the grid, including modifications required to meet the changed geography of supply as it moves from central to distributed generation. Other local government interests in energy efficiency include the local promotion of cogeneration – the joint generation of electricity and useable heat, which by capturing energy which would otherwise have gone to waste has considerable potential for greenhouse gas emission abatement. Energy efficiency is considerably improved by the utilisation of otherwise waste heat and waste cooling, and councils will often be in a position to identify sources and users and devise means to connect the two, at a minimum by facilitating the necessary easements and possibly by itself providing the service.

By and large Australia does not require the high levels of domestic heating to sustain life in winter in high-latitude countries, but there will still be opportunities. Such local institutions as hospitals and swimming pools are possible places to start. The adaptation of cogeneration to warm-country conditions which create a demand for air-conditioning is under way in countries like Singapore and the United Arab Emirates and there will be a role for local government in facilitating the reticulation of cold air and water.

Apart from the past role of some councils in the electricity supply industry and the possibilities in cogeneration, local government has a strong influence on the implementation of energy efficiency programs, particularly:

- the enforcement of building energy efficiency standards – both residential and commercial buildings, covering not only construction standards but such matters as building orientation. Building inspectors have traditionally concentrated on safety and fire regulations and have a very poor record in the enforcement of legislated energy efficiency standards. Even if councils are not directly responsible for the achievement of energy efficiency standards, it may be possible for them to test new buildings in order to certify that standards have been met;
- town-planning measures to encourage energy conservation, particularly in transport; and

- provision of waste management services at minimum energy cost, including such areas as methane recovery.

To drive home the importance of enforcing building energy efficiency standards the 2013-2014 CSIRO study of new 5-star housing in Melbourne, Brisbane and Sydney showed that 60 per cent of houses did not comply with the 5-star code because of poor quality installation of insulation and non-compliance to leakage guidelines. A common problem with insulation was found to be in walls and in the areas surrounding downlights in roof spaces. The CSIRO's rigorous inspection of new housing for this study used thermography and blower door testing to identify leakage and other energy inefficiencies. The report recommendations included improved training and auditing of building inspectors and training and certification of independent building thermal performance auditors. The CSIRO have also developed a software tool, AccuRate, to assist designers and architects to model their housing designs in fine detail to calculate temperatures, heating and cooling requirements and energy efficiency.

9.4 Conclusion

The way in which energy policy and the differing expectations of the community regarding the development of new energy technologies, coal fired generation, the environment and climate change have shown to be a disruptive mix with the potential for a significant and lasting impact on productivity and the competitiveness of much of Australian industry. The numerous changes to policy over the last decade or more have resulted in an inconsistent approach to energy policy, and the confusion thus created has not been good either for industry or for households. The risk for industry is the element of uncertainty, which the lack of clearly defined and consistent policy has introduced to future strategies and investments. The need for forward looking and durable energy policies is central to further productivity gains, economic development and prosperity across the nation.

In relation to energy efficiency improvements a number of issues stand out. While the design and planning for houses takes into account energy efficiency improvements these do not necessarily translate into successful implementation of standards during construction. Poor enforcement of required construction standards means that a significant proportion of new housing does not meet 5-star code requirements, which in turn means that householders will have higher energy bills than if homes complied with the standards. Expanded to scale and this issue becomes a regional economic burden as well as an environmental one.

To address this very serious issue, a greater effort is required to train building tradespeople in relation to energy efficiency standards. This means improved training of builders, and insulation/air sealing installers; improved training and auditing of building inspectors; and training and certification of independent building thermal performance auditors.

As well as training, the provision of timely and up to date information in relation to improving energy efficiency is an essential component in developing a region, which is protected, to at least some degree, from fluctuating energy prices and the vagaries of energy policy. Advice should cover such areas as installation and advice on insulation, renewables, including wind and solar and battery storage systems. The advice given should be based on sound training in these areas.

Skills requirements in the construction and energy sectors change with the use of new technologies, building techniques and materials and that means that there are both increasing and decreasing demand for particular skills. For example there is a decline in demand for skills in metallurgy and increasing demand for skills in renewables (solar, wind, biomass) and associated fields. Knowledge of energy efficiency improvement techniques in buildings is also important.

10. Local government finance

Across Australia, local government taxation revenue (mainly from rates) increased by 3.8 per cent from 2014-15 to 2015-16 (ABS government finance statistics). Given that the costs of local government service provision increased by an estimated 2.7 per cent, the real increase in revenue was 1.1 per cent. The national population increased by 1.4 per cent, so the increase in rate revenue was not quite sufficient to maintain real service expenditure per capita.

In six of the eight states and territories real rate revenue kept pace with population growth; the national shortfall was due to lagging revenue in NSW and Queensland. Within each state the majority of councils followed the state trend, though in WA rate collections in the metropolitan area increased more rapidly than those in the country.

The political culture of the states and territories affects local government revenue-raising, with revenue effort (and the level of local services) noticeably above national average, per capita, in Victoria, SA, WA and the ACT; around national average in Tasmania and below average in NSW and the NT.

Among SOR regions, in 2015-16 the highest rate revenue per capita was reported by Melbourne City, thanks to a high proportion of commercial ratepayers. Collections were also above national average in the core metropolitan regions of Perth and Adelaide, but not in Sydney or Brisbane.

Rate collections per capita were well above national average in non-metropolitan WA, SA and Victoria. Some of these are mining-based regions which have succeeded in collecting reasonable levels of rates from mine properties, but they also contain a high proportion of farm households not all of whom are in a good position to contribute large sums to local finance. Collections were at or a little above the national average of \$706 per capita in Tasmania and non-metropolitan Queensland but were well below the national average in rural NSW.

In the commuter suburbs rates collected per capita were generally below the rural areas and the metropolitan core regions of their state. Collections per capita were around national average in the commuter suburbs of Melbourne and Adelaide, somewhat below in the commuter suburbs of Perth, definitely below in the commuter suburbs of Brisbane and even further below in the commuter suburbs of Sydney. The long-standing NSW state government policy of capping rates has been effective in limiting rate effort in that state. These limits are particularly noticeable in the Sydney metropolitan area, where regions with some of Australia's wealthiest residents raised Australia's lowest levels of rate revenue per capita - \$400 a head in Sydney Northern Shores and Sydney South East.

As a tax, rates have several important advantages. Most obviously, rates cannot be avoided by shifting the tax base to a low-tax jurisdiction or overseas, as so often happens with corporate profits. Rates have the further economic advantage, at least in theory, that they do not affect incentives to put land to its best use. Their major disadvantage is inherent in taxation that is limited to local areas. It is scarcely fair that the wealthiest households in Australia pay low rates in the dollar, while farm households which are struggling against low prices and the effects of climate change pay high rates in the dollar, not only on their farmsteads but on their main business asset as well. The system of Commonwealth financial assistance grants for local government was designed to partially overcome this inequity, and as outlined in the preceding chapters of this report (especially chapters 2 and 3) the case for 'horizontal equalisation' grants to councils located in regions with low revenue-raising capacity, high expenditure needs and (as it happens) high potential for generating export revenue has never been stronger.

Federal grants to local government are divided into two main categories; general assistance and assistance for roads. General assistance is distributed on the recommendation of each state local government grants commission and the NT commission on a horizontal equalisation basis, subject to a minimum per-capita grant. The pattern of distribution of general purpose grants within each state/territory is similar; in 2016 metropolitan councils with high commercial rateable capacity received the minimum grant of around \$20 per capita, while outlying agriculture-based and mining-based councils received much larger amounts per capita – up to a regional average of \$374 per capita in WA Wheatbelt Great Southern. In other words, the general purpose grants redistribute strongly from wealthy regions, favoured by recent economic trends and policies, to regions which need catch-up assistance. This said, the grants are limited by the Commonwealth's budget allocations and are far too small to equalise completely.

Not only is the federal grant limited in total; it is divided between the states per capita, which means that equalisation funds fall particularly short in those states (and the NT) where high-needs councils serve large areas with small populations. Lack of total funds would be a factor in the assessment by the state grants commissions in WA and Queensland that the needs of remote-area councils outweigh the claims of low-wealth suburbs, so that most councils in SEQ and Perth are on the minimum grant. By contrast, in Sydney, Melbourne and Adelaide low-wealth outer suburban councils received nearly double the minimum grant, around \$40 per capita. This has not precluded the grants commissions in those states from providing grants of \$200-250 per capita (and sometimes more) to high-needs councils away from the metropolitan areas.

The greater part of roads assistance is distributed by the grants commissions on the basis of roads needs, but part is distributed on a project basis through the R2R program. In 2016 roads grants averaged \$29 per capita, with the amounts distributed ranging from \$5 per capita to councils in inner metropolitan Sydney and Melbourne to \$233 per capita in WA Wheatbelt Great Southern. Once again the program accords strongly with the need for regional redistribution of resources identified in Chapter 2 above.

Across Australia, in 2016 councils received grants of \$94 per capita, considerably less than their own rate revenue of \$706 per capita but an important source of funds in regions with high costs and low revenue-raising capacity. Across the regions, receipts per capita ranged from \$23 in Melbourne City to \$606 per capita in WA Wheatbelt Great Southern, with high receipts also in WA Gascoyne Goldfields, NSW Orana, NSW Murray Far West, NSW Murrumbidgee, Qld Darling Downs SW and SA Far North and West.

As a result of these distributions, councils in the metropolitan core regions are minimally grant-dependent – grants are 5 per cent or less of the total of grant plus rate revenue. Dependence rises to around 10 per cent in the outer metropolitan commuter suburbs of Sydney, Melbourne and Adelaide and in the independent cities. It reaches around 20 per cent in the benefit-dependent lifestyle regions and in the more prosperous mining-dependent regions, and rises to 40 per cent or so in the agriculture-based regions of WA (thanks to relatively generous grants) and their equivalent regions in NSW (thanks to capped rates).

Roads grants are particularly important component of the total grant in Tasmania and the NT, presumably to counteract the inadequacy of general purpose grants distributed between the states per-capita. They also form a relatively high proportion of the total grant in SEQ and Perth, where general purpose grants are curtailed to the minimum level despite the needs of low-income developing suburbs. The reverse applies in the outer suburbs of Melbourne and in some of the independent cities, where relatively generous general purpose grants are counterbalanced by less generous roads grants.

The local government grant program administered by the states and NT grants commissions (though not the R2R program) is effort-neutral; the Commonwealth does not place conditions that the funds should be spent this way or that rate effort should be maintained. However, in point of fact rate effort has been maintained (with a question mark over NSW, where the failure is not the fault of local government) and the grants have been spent to maintain and improve services, at local choice. There is a strong parallel with the need for local control over economic development strategy discussed in Chapter 1. This is not to argue that funds for economic development should be allocated in the same way as horizontal equalisation grants (though an increase in these grants, including the resumption of full indexation, would be a start) but it is to argue that those who are responsible for financing future regional economic development strategies will have much to learn from nearly 50 years' experience in the distribution of general purpose and roads grants.

Two conclusions stand out.

- With the exception of some rate-capped councils in NSW, local government continues to set an example to other levels of government in revenue effort.
- The grants program continues to address the need for horizontal equalisation, inadequately perhaps as regards total funding, but effectively given the funding available. As pointed out in Chapter 2, the need is increasing, and experience with the allocation of equalisation and roads grants has potential to contribute to the allocation of funds to regional economic development strategies.

APPENDIX 1

REGIONAL INDICATORS

In the report for 2011-12 the regions were revised to respect the regional boundaries defined by Regional Development Australia. In addition the recent changes to local government boundaries in New South Wales are included in this year's report.

Regional indicators and data – more indicators and at LGA level

The full online SOR report available from the ALGA website (alga.asn.au) contains a four page indicator set for each SOR region, selected metropolitan cities, Australia and Northern Australia. A similar set of indicator data is also available at LGA level from National Economics (www.nieir.com.au). Enquiries for LGA level data should be directed to Nick Marinopoulos at National Economics. Phone 03 9488 8444 or email nickm@nieir.com.au.

Sydney Metropolitan Core



In 1788 Captain Arthur Phillip rejected Botany Bay and selected Circular Quay as the centre of a new colonial capital, Sydney. His little convict settlement took advantage of its early foundation to become a cultural and intellectual centre as well as Australia's premier financial district. The commercial district has expanded by redevelopment of the former port and rail terminal at Darling Harbour, by integration of two major universities into the southern fringe of the CBD and by the redevelopment of much of the inner North Shore for offices. The addition of tourist icons to its scenic harbour side location has underpinned the importance of the region as a tourist destination.

[This region comprises part of the former Sydney Central]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	357	385	404	2.5%	2.5%
No. Households	157	169	180	2.6%	3.3%
NIEIR Workforce	230	246	257	2.2%	2.3%
NIEIR Employment	222	236	247	2.0%	2.4%
NIEIR Unemployment	8.1	9.9	9.9	6.6%	0.2%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	3.5%	4.0%	3.8%	0.2	-0.1
Headline U/E Rate	3.6%	4.1%	3.9%	0.2	-0.1
NIEIR Structural U/E Rate	4.6%	4.6%	4.1%	0.0	-0.2
Social Security Take-up	5.7%	5.3%	4.6%	-0.2	-0.3
Hours Per Week (1)	27.5	26.6	26.6	-0.3	0.0
Not Employed Share (1)	20.5%	20.9%	19.3%	0.1	-0.8
Not In Employment (1)	27.6%	30.1%	29.9%	0.8	-0.1

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	17,854	18,926	20,404	2.0%	3.8%
Taxes Paid	5,728	6,798	7,429	5.9%	4.5%
Benefits	1,057	1,077	1,013	0.6%	-3.0%
Business Income	3,862	5,103	5,308	9.7%	2.0%
Interest Paid	2,482	2,107	2,159	-5.3%	1.2%
Property Income	4,555	4,499	4,698	-0.4%	2.2%
Disposable Income	24,679	26,628	27,807	2.6%	2.2%
Rank	13	12	13		
Industry GRP (Local)	84,784	94,269	98,533	3.6%	2.2%
Rank	2	1	1		
Headline GRP	120,506	136,958	149,771	4.4%	4.6%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	1,351	1,487	1,389
Value of Property and Unincorporated Business	858	1,085	927
Value of Financial Assets	751	729	726
Value of Household Liabilities	259	327	264
Disposable Income after Debt Service Costs	154	160	156
Household Debt Service Ratio	17%	19%	17%
Household Debt to Gross Income Ratio	1.42	1.76	1.47

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	564.6	865.5	954.8
Ratio of adjusted dwelling price to adjusted average household disposable income	6.2	6.0	6.6
Avg household income from labour market catchment	78116	110064	116975
Ratio of average mortgage costs on established dwellings to average household catchment income	53.3%	67.0%	57.8%
Ratio of average mortgage costs on new dwellings to average household catchment income	52.0%	54.3%	43.1%
Share of flats in dwelling stock	58.8%	67.6%	68.9%
Ratio of houses in new dwelling approvals	4.7%	8.5%	8.6%
Adults per occupied dwelling	1.9	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	146,885	202,198	248,393
UR Hours (1000 hours)	268,236	361,834	423,241
UR Income (\$m cvm)	12,508	21,662	27,638
POW Emp	437,588	631,650	804,735
POW Hours (1000 hours)	834,866	1,137,569	1,421,284
POW Income (\$m cvm)	36,533	64,321	88,695
UR Avg Weekly Hours / Emp	35.1	34.4	32.8
UR Avg Hourly Rate / Emp (\$cvm)	46.6	59.9	65.3
POW Avg Weekly Hours / Emp	36.7	34.6	34.0
POW Avg Hourly Rate / Emp (\$cvm)	43.8	56.5	62.4

Sydney Eastern Shores



Starting in the late nineteenth century and continuing until the last remaining vacant land in the region was developed in the 1960s, the commuter suburbs of Sydney expanded east towards the Pacific Ocean beaches and south along the shore of Botany Bay. These suburbs are varied. East of the city centre some of them are highly fashionable while others are high-density; elsewhere there are suburbs which had their origin in war service homes. Port Botany and Kingsford Smith Airport separate the suburbs along the shore of Botany Bay from the eastern beaches while the University of New South Wales provides the region with a knowledge-economy hub.

[This region comprises the whole of Sydney Eastern Beaches plus parts of former Sydney Central and Sydney South]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	414	434	447	1.6%	1.4%
No. Households	155	164	171	1.9%	2.1%
NIEIR Workforce	232	243	252	1.5%	2.0%
NIEIR Employment	221	233	241	1.7%	1.7%
NIEIR Unemployment	10.8	10.0	11.5	-2.6%	7.0%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	4.7%	4.1%	4.5%	-0.2	0.2
Headline U/E Rate	4.0%	3.7%	4.4%	-0.1	0.4
NIEIR Structural U/E Rate	4.9%	5.0%	4.6%	0.0	-0.2
Social Security Take-up	6.4%	6.1%	5.2%	-0.1	-0.4
Hours Per Week (1)	25.6	25.3	25.7	-0.1	0.2
Not Employed Share (1)	23.7%	23.1%	21.2%	-0.2	-1.0
Not In Employment (1)	32.7%	33.5%	32.3%	0.3	-0.6

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	16,293	17,287	17,973	2.0%	2.0%
Taxes Paid	5,121	6,199	6,654	6.6%	3.6%
Benefits	1,731	1,767	1,638	0.7%	-3.7%
Business Income	4,322	5,770	6,124	10.1%	3.0%
Interest Paid	2,225	1,838	1,892	-6.2%	1.5%
Property Income	4,817	4,787	4,892	-0.2%	1.1%
Disposable Income	25,597	27,856	28,346	2.9%	0.9%
Rank	11	11	11		
Industry GRP (Local)	26,139	28,490	30,121	2.9%	2.8%
Rank	12	11	11		
Headline GRP	27,940	31,664	34,300	4.3%	4.1%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	1,500	1,669	1,773
Value of Property and Unincorporated Business	936	1,163	1,302
Value of Financial Assets	806	797	766
Value of Household Liabilities	242	290	294
Disposable Income after Debt Service Costs	154	172	167
Household Debt Service Ratio	16%	16%	16%
Household Debt to Gross Income Ratio	1.31	1.45	1.52

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	526.8	974.8	1044.0
Ratio of adjusted dwelling price to adjusted average household disposable income	6.2	6.6	6.8
Avg household income from labour market catchment	67114	92052	95868
Ratio of average mortgage costs on established dwellings to average household catchment income	54.0%	81.7%	70.7%
Ratio of average mortgage costs on new dwellings to average household catchment income	60.5%	79.4%	56.2%
Share of flats in dwelling stock	50.2%	51.7%	52.3%
Ratio of houses in new dwelling approvals	14.4%	33.1%	21.4%
Adults per occupied dwelling	2.1	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	189,174	205,445	240,875
UR Hours (1000 hours)	343,635	356,195	406,272
UR Income (\$m cvm)	13,544	19,424	24,363
POW Emp	158,622	176,915	217,027
POW Hours (1000 hours)	283,090	302,541	357,975
POW Income (\$m cvm)	10,829	14,830	19,722
UR Avg Weekly Hours / Emp	34.9	33.3	32.4
UR Avg Hourly Rate / Emp (\$cvm)	39.4	54.5	60.0
POW Avg Weekly Hours / Emp	34.3	32.9	31.7
POW Avg Hourly Rate / Emp (\$cvm)	38.3	49.0	55.1

Sydney Mid West



After the First World War the Cumberland plain was the favoured part of the Sydney metropolitan area for manufacturing development. Its then-new factories were supported by tracts of working-class suburbs. This pattern continued after the Second World War, but with the faltering of growth in manufacturing the region has increased its dependence on commuting, straining its rail and road links in the process. The region is ethnically diverse and a reception area for new immigrants.

[This region comprises most of former Parramatta-Bankstown plus part of Sydney Old West]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	747	782	808	1.5%	1.7%
No. Households	235	246	261	1.7%	2.9%
NIEIR Workforce	347	356	373	0.9%	2.4%
NIEIR Employment	310	321	338	1.1%	2.7%
NIEIR Unemployment	36.8	35.3	35.0	-1.3%	-0.4%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	10.6%	9.9%	9.4%	-0.2	-0.3
Headline U/E Rate	8.1%	7.9%	8.3%	-0.1	0.2
NIEIR Structural U/E Rate	11.0%	11.9%	10.8%	0.3	-0.6
Social Security Take-up	13.7%	13.9%	12.4%	0.0	-0.7
Hours Per Week (1)	20.0	19.8	20.2	-0.1	0.2
Not Employed Share (1)	37.8%	38.0%	35.7%	0.0	-1.1
Not In Employment (1)	47.3%	48.0%	46.9%	0.2	-0.6

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	16,873	17,324	18,486	0.9%	3.3%
Taxes Paid	3,500	4,020	4,405	4.7%	4.7%
Benefits	3,283	3,645	3,418	3.6%	-3.2%
Business Income	2,779	3,894	4,220	11.9%	4.1%
Interest Paid	2,732	2,142	2,215	-7.8%	1.7%
Property Income	3,686	3,844	4,017	1.4%	2.2%
Disposable Income	25,898	28,687	29,940	3.5%	2.2%
Rank	10	10	7		
Industry GRP (Local)	26,295	27,613	29,781	1.6%	3.9%
Rank	11	12	12		
Headline GRP	30,297	31,723	34,550	1.5%	4.4%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	496	663	820
Value of Property and Unincorporated Business	470	648	843
Value of Financial Assets	225	244	225
Value of Household Liabilities	200	229	248
Disposable Income after Debt Service Costs	106	115	115
Household Debt Service Ratio	19%	19%	19%
Household Debt to Gross Income Ratio	1.58	1.70	1.84

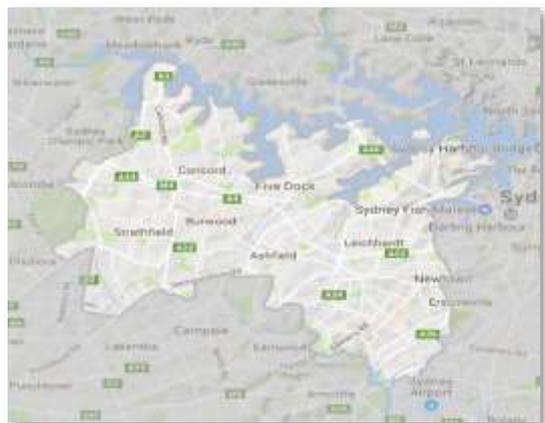
HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	276.0	510.2	602.2
Ratio of adjusted dwelling price to adjusted average household disposable income	3.6	4.9	5.6
Avg household income from labour market catchment	65999	86077	89933
Ratio of average mortgage costs on established dwellings to average household catchment income	29.2%	47.3%	44.8%
Ratio of average mortgage costs on new dwellings to average household catchment income	33.6%	42.5%	36.0%
Share of flats in dwelling stock	20.2%	23.3%	24.8%
Ratio of houses in new dwelling approvals	31.9%	42.0%	35.5%
Adults per occupied dwelling	2.3	2.4	2.4

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	258,473	284,360	337,593
UR Hours (1000 hours)	474,473	494,059	552,309
UR Income (\$m cvm)	15,056	18,532	25,123
POW Emp	234,284	249,839	268,134
POW Hours (1000 hours)	433,754	440,731	449,979
POW Income (\$m cvm)	14,625	17,217	20,970
UR Avg Weekly Hours / Emp	35.3	33.4	31.5
UR Avg Hourly Rate / Emp (\$cvm)	31.7	37.5	45.5
POW Avg Weekly Hours / Emp	35.6	33.9	32.3
POW Avg Hourly Rate / Emp (\$cvm)	33.7	39.1	46.6

Sydney Near West



The southern shore of the inner harbour, which comprises the northern boundary of the region, was initially developed for port purposes but has recently been redeveloped and gentrified as a residential and commercial area. The flatter parts of the rest of the region supported industrial development in the nineteenth century but are again being redeveloped. The gently sloping country along the main suburban railway line became commuter suburbs, varying from high-density in Newtown to a mansion belt in Strathfield. Owing to a dearth of large sites, redevelopment along this strip has been relatively slow.

[This region comprises most of former Sydney Old West and part of Sydney Central]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	336	353	361	1.6%	1.1%
No. Households	126	133	138	1.8%	1.9%
NIEIR Workforce	198	207	219	1.4%	3.0%
NIEIR Employment	188	198	207	1.7%	2.4%
NIEIR Unemployment	10.0	9.1	11.9	-3.0%	14.1%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	5.0%	4.4%	5.4%	-0.2	0.5
Headline U/E Rate	5.0%	4.3%	5.3%	-0.2	0.5
NIEIR Structural U/E Rate	5.5%	5.2%	4.8%	-0.1	-0.2
Social Security Take-up	7.0%	6.6%	5.7%	-0.1	-0.4
Hours Per Week (1)	25.9	25.6	26.4	-0.1	0.4
Not Employed Share (1)	22.3%	21.3%	17.4%	-0.3	-1.9
Not In Employment (1)	31.9%	32.7%	30.5%	0.2	-1.1

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	13,538	14,069	14,762	1.3%	2.4%
Taxes Paid	3,687	4,357	4,730	5.7%	4.2%
Benefits	1,267	1,373	1,323	2.7%	-1.8%
Business Income	2,624	3,826	4,150	13.4%	4.2%
Interest Paid	2,000	1,625	1,657	-6.7%	1.0%
Property Income	2,962	3,019	3,138	0.6%	2.0%
Disposable Income	18,965	21,059	21,842	3.6%	1.8%
Rank	22	20	20		
Industry GRP (Local)	18,945	19,750	20,490	1.4%	1.9%
Rank	21	21	21		
Headline GRP	21,826	22,849	23,961	1.5%	2.4%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	958	1,217	1,379
Value of Property and Unincorporated Business	786	1,029	1,283
Value of Financial Assets	434	501	437
Value of Household Liabilities	262	313	341
Disposable Income after Debt Service Costs	139	157	159
Household Debt Service Ratio	19%	18%	19%
Household Debt to Gross Income Ratio	1.56	1.69	1.81

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	441.6	848.2	941.0
Ratio of adjusted dwelling price to adjusted average household disposable income	5.8	6.2	6.6
Avg household income from labour market catchment	64625	78891	80297
Ratio of average mortgage costs on established dwellings to average household catchment income	49.6%	82.7%	74.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	51.5%	52.0%	42.7%
Share of flats in dwelling stock	34.3%	39.9%	41.9%
Ratio of houses in new dwelling approvals	14.9%	16.2%	11.2%
Adults per occupied dwelling	2.1	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	135,136	170,780	207,218
UR Hours (1000 hours)	247,526	298,682	342,734
UR Income (\$m cvm)	9,494	14,975	20,422
POW Emp	119,320	138,275	155,760
POW Hours (1000 hours)	220,960	242,385	258,469
POW Income (\$m cvm)	8,155	10,598	13,092
UR Avg Weekly Hours / Emp	35.2	33.6	31.8
UR Avg Hourly Rate / Emp (\$cvm)	38.4	50.1	59.6
POW Avg Weekly Hours / Emp	35.6	33.7	31.9
POW Avg Hourly Rate / Emp (\$cvm)	36.9	43.7	50.7

Sydney Outer Northern Shores



From the metropolitan core, the stratum of sandstone on which Sydney is built rises till it falls abruptly down to Broken Bay to the north and to the Pacific Ocean to the east. Several valleys cut deeply into this sloping plateau, notably the valley of Middle Harbour which separates the Northern Beaches from the rest of the region. Though the first commuter suburbs in the region were built in the late nineteenth century, most of them were developed in the second half of the twentieth, with many homes commanding views out over the valleys or even the ocean. The region is accordingly of generally high social status. Except in some parts of the Northern Beaches, commuting has been promoted in preference to local employment development.

[This region comprises the whole of Sydney Northern Beaches and most of former Sydney Outer North]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	667	701	728	1.7%	1.9%
No. Households	221	231	243	1.5%	2.6%
NIEIR Workforce	362	378	392	1.5%	1.8%
NIEIR Employment	348	362	377	1.4%	2.0%
NIEIR Unemployment	14.3	16.0	15.0	3.8%	-3.4%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	4.0%	4.2%	3.8%	0.1	-0.2
Headline U/E Rate	3.3%	3.7%	3.5%	0.1	-0.1
NIEIR Structural U/E Rate	2.9%	2.9%	2.6%	0.0	-0.1
Social Security Take-up	3.8%	3.7%	3.2%	0.0	-0.2
Hours Per Week (1)	26.0	25.6	25.8	-0.1	0.1
Not Employed Share (1)	20.3%	20.3%	19.8%	0.0	-0.2
Not In Employment (1)	31.6%	32.7%	32.0%	0.3	-0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	26,823	27,812	28,847	1.2%	1.8%
Taxes Paid	7,627	8,769	9,122	4.8%	2.0%
Benefits	3,724	3,927	3,703	1.8%	-2.9%
Business Income	5,281	6,904	7,389	9.3%	3.5%
Interest Paid	3,644	2,934	3,038	-7.0%	1.8%
Property Income	7,458	7,136	7,257	-1.5%	0.8%
Disposable Income	41,088	43,812	45,273	2.2%	1.7%
Rank	2	2	2		
Industry GRP (Local)	33,422	35,212	37,500	1.8%	3.2%
Rank	8	7	6		
Headline GRP	33,947	36,437	40,056	2.4%	4.8%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	1,394	1,618	1,953
Value of Property and Unincorporated Business	898	1,091	1,594
Value of Financial Assets	800	852	770
Value of Household Liabilities	304	326	411
Disposable Income after Debt Service Costs	164	191	187
Household Debt Service Ratio	18%	16%	18%
Household Debt to Gross Income Ratio	1.51	1.44	1.84

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	530.4	901.7	995.6
Ratio of adjusted dwelling price to adjusted average household disposable income	4.9	5.2	5.6
Avg household income from labour market catchment	64762	82829	87079
Ratio of average mortgage costs on established dwellings to average household catchment income	56.5%	84.3%	73.6%
Ratio of average mortgage costs on new dwellings to average household catchment income	64.4%	68.0%	55.2%
Share of flats in dwelling stock	18.3%	20.7%	21.6%
Ratio of houses in new dwelling approvals	53.8%	41.0%	33.6%
Adults per occupied dwelling	2.3	2.3	2.3

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	298,213	329,966	377,204
UR Hours (1000 hours)	527,073	558,178	643,728
UR Income (\$m cvm)	22,933	30,242	38,820
POW Emp	222,905	224,236	262,075
POW Hours (1000 hours)	377,088	370,421	418,014
POW Income (\$m cvm)	14,510	17,279	21,935
UR Avg Weekly Hours / Emp	34.0	32.5	32.8
UR Avg Hourly Rate / Emp (\$cvm)	43.5	54.2	60.3
POW Avg Weekly Hours / Emp	32.5	31.8	30.7
POW Avg Hourly Rate / Emp (\$cvm)	38.5	46.6	52.5

Sydney Outer South West



Lying an hour or more from the Sydney CBD by the fastest commuter service, Sydney Outer South West is painfully distant from the action. It began urban life in the post-war period as an extension of the manufacturing areas on the Cumberland plain, but when manufacturing faltered as a basis for economic growth it 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.

[This region is unchanged from previous State of the Regions reports.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	450	484	516	2.4%	3.2%
No. Households	140	152	165	2.7%	4.2%
NIEIR Workforce	231	243	258	1.8%	3.0%
NIEIR Employment	212	224	240	1.8%	3.5%
NIEIR Unemployment	18.5	19.5	18.3	1.7%	-3.0%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	8.0%	8.0%	7.1%	0.0	-0.4
Headline U/E Rate	5.3%	5.7%	5.6%	0.1	-0.1
NIEIR Structural U/E Rate	9.3%	9.9%	8.9%	0.2	-0.5
Social Security Take-up	12.5%	12.6%	11.3%	0.0	-0.6
Hours Per Week (1)	22.7	21.9	21.6	-0.3	-0.1
Not Employed Share (1)	30.6%	31.1%	30.0%	0.2	-0.5
Not In Employment (1)	40.3%	42.5%	43.1%	0.7	0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	12,778	13,372	14,259	1.5%	3.3%
Taxes Paid	2,669	3,061	3,302	4.7%	3.9%
Benefits	1,971	2,259	2,149	4.7%	-2.5%
Business Income	1,449	1,949	2,242	10.4%	7.2%
Interest Paid	1,981	1,449	1,521	-9.9%	2.5%
Property Income	2,197	2,329	2,470	2.0%	3.0%
Disposable Income	17,429	19,539	20,904	3.9%	3.4%
Rank	24	24	22		
Industry GRP (Local)	15,468	16,414	17,777	2.0%	4.1%
Rank	24	24	24		
Headline GRP	18,218	19,747	21,718	2.7%	4.9%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	385	497	759
Value of Property and Unincorporated Business	422	514	834
Value of Financial Assets	228	245	235
Value of Household Liabilities	265	262	310
Disposable Income after Debt Service Costs	116	128	127
Household Debt Service Ratio	23%	19%	21%
Household Debt to Gross Income Ratio	1.90	1.78	2.09

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	215.9	414.1	480.0
Ratio of adjusted dwelling price to adjusted average household disposable income	2.6	3.3	3.8
Avg household income from labour market catchment	50078	61119	62080
Ratio of average mortgage costs on established dwellings to average household catchment income	28.9%	49.3%	46.7%
Ratio of average mortgage costs on new dwellings to average household catchment income	42.0%	53.5%	49.0%
Share of flats in dwelling stock	7.5%	7.3%	8.1%
Ratio of houses in new dwelling approvals	86.2%	73.0%	74.3%
Adults per occupied dwelling	2.2	2.3	2.4

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	145,674	196,284	239,660
UR Hours (1000 hours)	259,933	338,352	389,814
UR Income (\$m cvm)	9,380	13,218	18,382
POW Emp	116,445	137,560	170,450
POW Hours (1000 hours)	204,423	232,517	273,644
POW Income (\$m cvm)	7,082	8,960	12,784
UR Avg Weekly Hours / Emp	34.3	33.1	31.3
UR Avg Hourly Rate / Emp (\$cvm)	36.1	39.1	47.2
POW Avg Weekly Hours / Emp	33.8	32.5	30.9
POW Avg Hourly Rate / Emp (\$cvm)	34.6	38.5	46.7

Sydney Outer West



The upper reaches of the Hawkesbury Valley were first settled for farming and during the Second World War acquired a couple of defence airfields. After the war they gained urban development from the extension of manufacturing. As the growth of manufacturing faltered, they continued to grow as commuter suburbs. Unfortunately they are a long way from the Sydney metropolitan core, but have potential to benefit from relative proximity to developments in Parramatta-Ryde. Across the Hawkesbury River the region includes extensive national parks and the strip of resorts and commuter housing along the Blue Mountains ridge.

[This region is unchanged from previous State of the Regions reports.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	649	684	712	1.8%	2.1%
No. Households	211	223	236	1.9%	2.7%
NIEIR Workforce	344	363	368	1.8%	0.7%
NIEIR Employment	317	331	342	1.5%	1.6%
NIEIR Unemployment	27.3	31.6	26.2	5.0%	-8.9%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	7.9%	8.7%	7.1%	0.3	-0.8
Headline U/E Rate	5.5%	6.6%	5.7%	0.4	-0.5
NIEIR Structural U/E Rate	8.9%	9.7%	8.8%	0.3	-0.5
Social Security Take-up	12.1%	12.1%	10.8%	0.0	-0.6
Hours Per Week (1)	23.9	23.5	23.7	-0.2	0.1
Not Employed Share (1)	27.8%	27.6%	27.4%	-0.1	-0.1
Not In Employment (1)	37.0%	38.2%	37.7%	0.4	-0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	19,014	19,824	20,380	1.4%	1.4%
Taxes Paid	4,009	4,563	4,724	4.4%	1.7%
Benefits	3,216	3,489	3,257	2.7%	-3.4%
Business Income	2,102	2,764	3,011	9.6%	4.4%
Interest Paid	2,949	2,123	2,183	-10.4%	1.4%
Property Income	3,365	3,519	3,590	1.5%	1.0%
Disposable Income	26,257	29,044	29,872	3.4%	1.4%
Rank	9	9	8		
Industry GRP (Local)	23,145	24,752	27,005	2.3%	4.5%
Rank	15	14	14		
Headline GRP	26,058	28,038	30,622	2.5%	4.5%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	388	515	782
Value of Property and Unincorporated Business	413	517	844
Value of Financial Assets	235	259	248
Value of Household Liabilities	260	261	310
Disposable Income after Debt Service Costs	116	129	128
Household Debt Service Ratio	23%	19%	21%
Household Debt to Gross Income Ratio	1.86	1.76	2.09

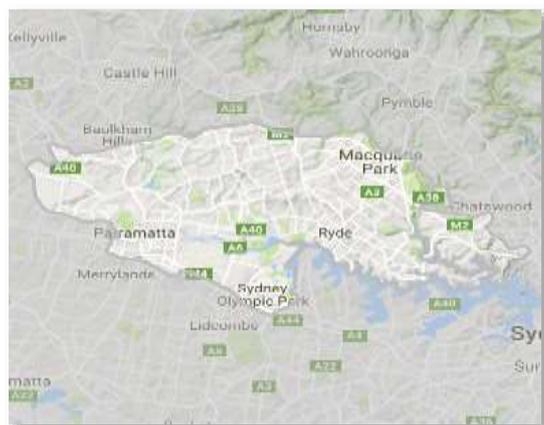
HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	207.2	411.4	478.5
Ratio of adjusted dwelling price to adjusted average household disposable income	2.4	3.3	3.8
Avg household income from labour market catchment	60179	73094	76847
Ratio of average mortgage costs on established dwellings to average household catchment income	24.2%	44.5%	41.0%
Ratio of average mortgage costs on new dwellings to average household catchment income	36.9%	49.3%	40.2%
Share of flats in dwelling stock	4.9%	5.3%	6.0%
Ratio of houses in new dwelling approvals	79.2%	82.6%	70.8%
Adults per occupied dwelling	2.2	2.3	2.3

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	253,075	292,389	341,846
UR Hours (1000 hours)	457,360	511,974	574,656
UR Income (\$m cvm)	16,091	20,088	27,757
POW Emp	193,061	206,772	250,453
POW Hours (1000 hours)	337,385	352,158	413,055
POW Income (\$m cvm)	11,778	13,723	19,733
UR Avg Weekly Hours / Emp	34.8	33.7	32.3
UR Avg Hourly Rate / Emp (\$cvm)	35.2	39.2	48.3
POW Avg Weekly Hours / Emp	33.6	32.8	31.7
POW Avg Hourly Rate / Emp (\$cvm)	34.9	39.0	47.8

Sydney Parramatta Ryde



North of the inner part of Sydney Harbour, residential suburbs rise to a former green belt, now adorned by Macquarie University and its associated knowledge-economy business park. South of the inner harbour previously industrial land is undergoing redevelopment for residential and commercial purposes, plus the sporting complex of Olympic Park. At the very head of the inner harbour the Parramatta CBD is on its way to becoming the vibrant second city centre for the metropolitan area, while over a park, just beyond walking distance, lies the Westmead hospital and its associated medical complex. Transport investments are gradually tying the region together.

[This region comprises parts of former Sydney Parramatta Bankstown, Sydney Central and Sydney Outer North]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	366	392	416	2.3%	3.0%
No. Households	126	136	149	2.7%	4.5%
NIEIR Workforce	196	211	219	2.4%	2.1%
NIEIR Employment	184	197	206	2.2%	2.3%
NIEIR Unemployment	11.9	13.8	13.3	5.2%	-1.8%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	6.1%	6.6%	6.1%	0.2	-0.2
Headline U/E Rate	4.8%	5.6%	5.8%	0.3	0.1
NIEIR Structural U/E Rate	5.8%	5.9%	5.2%	0.0	-0.3
Social Security Take-up	7.4%	7.3%	6.3%	0.0	-0.5
Hours Per Week (1)	23.6	22.8	22.7	-0.3	0.0
Not Employed Share (1)	27.6%	27.3%	27.0%	-0.1	-0.1
Not In Employment (1)	37.9%	40.0%	40.3%	0.7	0.1

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	12,551	13,306	13,787	2.0%	1.8%
Taxes Paid	3,213	3,729	3,936	5.1%	2.7%
Benefits	1,735	1,891	1,778	2.9%	-3.0%
Business Income	2,181	2,915	3,157	10.1%	4.1%
Interest Paid	1,858	1,557	1,616	-5.7%	1.9%
Property Income	2,924	2,978	3,053	0.6%	1.2%
Disposable Income	18,325	20,268	20,755	3.4%	1.2%
Rank	23	22	23		
Industry GRP (Local)	31,076	32,720	33,939	1.7%	1.8%
Rank	9	9	8		
Headline GRP	40,070	42,483	45,173	2.0%	3.1%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	921	1,119	1,285
Value of Property and Unincorporated Business	711	930	1,139
Value of Financial Assets	467	487	461
Value of Household Liabilities	257	297	315
Disposable Income after Debt Service Costs	130	148	141
Household Debt Service Ratio	20%	18%	20%
Household Debt to Gross Income Ratio	1.61	1.70	1.89

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	411.9	747.7	864.7
Ratio of adjusted dwelling price to adjusted average household disposable income	4.4	5.5	6.3
Avg household income from labour market catchment	80660	102286	104949
Ratio of average mortgage costs on established dwellings to average household catchment income	36.0%	56.3%	52.2%
Ratio of average mortgage costs on new dwellings to average household catchment income	38.2%	45.0%	28.9%
Share of flats in dwelling stock	27.7%	31.7%	34.3%
Ratio of houses in new dwelling approvals	32.7%	27.4%	11.2%
Adults per occupied dwelling	2.2	2.3	2.3

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	156,014	167,303	204,956
UR Hours (1000 hours)	280,057	289,445	336,442
UR Income (\$m cvm)	10,962	13,913	18,767
POW Emp	208,952	243,042	286,011
POW Hours (1000 hours)	387,743	429,247	488,308
POW Income (\$m cvm)	15,615	20,269	26,767
UR Avg Weekly Hours / Emp	34.5	33.3	31.6
UR Avg Hourly Rate / Emp (\$cvm)	39.1	48.1	55.8
POW Avg Weekly Hours / Emp	35.7	34.0	32.8
POW Avg Hourly Rate / Emp (\$cvm)	40.3	47.2	54.8

Sydney South East



The region comprises two LGAs. Georges River was mainly built up as residential suburbs in the first half of the twentieth century and Sutherland in the second. The region has its concentrations of knowledge-economy employment but is heavily dependent on commuting to the metropolitan core. To the south, Port Hacking protects most of the residential part of the region from the bushfires which periodically ravage The Royal National Park. Both Port Hacking and the Georges River offer similar drowned-valley scenery to Sydney Harbour but somehow fail to generate quite the same social status.

[This region comprises most of former Sydney South]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	365	375	381	0.9%	0.8%
No. Households	127	131	135	1.0%	1.5%
NIEIR Workforce	202	204	212	0.3%	2.0%
NIEIR Employment	192	195	202	0.4%	1.8%
NIEIR Unemployment	9.4	8.7	9.7	-2.5%	5.5%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	4.7%	4.3%	4.6%	-0.1	0.2
Headline U/E Rate	3.7%	3.6%	4.1%	0.0	0.3
NIEIR Structural U/E Rate	4.8%	4.8%	4.5%	0.0	-0.2
Social Security Take-up	6.2%	6.0%	5.3%	-0.1	-0.4
Hours Per Week (1)	25.6	25.9	26.6	0.1	0.4
Not Employed Share (1)	20.9%	21.0%	18.4%	0.0	-1.3
Not In Employment (1)	32.7%	31.8%	29.9%	-0.3	-0.9

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	12,765	12,761	13,212	0.0%	1.8%
Taxes Paid	3,076	3,406	3,623	3.5%	3.1%
Benefits	2,077	2,131	1,953	0.9%	-4.3%
Business Income	1,971	2,551	2,769	9.0%	4.2%
Interest Paid	1,945	1,431	1,474	-9.7%	1.5%
Property Income	3,100	3,009	3,082	-1.0%	1.2%
Disposable Income	19,063	19,998	20,445	1.6%	1.1%
Rank	21	23	24		
Industry GRP (Local)	14,752	15,314	16,220	1.3%	2.9%
Rank	25	25	25		
Headline GRP	15,808	16,669	17,907	1.8%	3.6%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	883	1,103	1,373
Value of Property and Unincorporated Business	677	875	1,200
Value of Financial Assets	472	519	506
Value of Household Liabilities	266	291	333
Disposable Income after Debt Service Costs	130	154	153
Household Debt Service Ratio	20%	17%	19%
Household Debt to Gross Income Ratio	1.66	1.60	1.83

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	427.2	730.6	810.6
Ratio of adjusted dwelling price to adjusted average household disposable income	4.6	5.3	5.8
Avg household income from labour market catchment	74147	101194	106480
Ratio of average mortgage costs on established dwellings to average household catchment income	39.0%	53.8%	47.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	41.1%	50.5%	34.5%
Share of flats in dwelling stock	20.6%	25.8%	26.3%
Ratio of houses in new dwelling approvals	28.8%	52.5%	30.9%
Adults per occupied dwelling	2.2	2.2	2.3

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	167,960	182,923	202,246
UR Hours (1000 hours)	300,728	310,802	345,430
UR Income (\$m cvm)	11,450	14,027	18,792
POW Emp	112,181	110,514	126,467
POW Hours (1000 hours)	191,152	180,202	200,580
POW Income (\$m cvm)	6,597	7,313	9,605
UR Avg Weekly Hours / Emp	34.4	32.7	32.8
UR Avg Hourly Rate / Emp (\$cvm)	38.1	45.1	54.4
POW Avg Weekly Hours / Emp	32.8	31.4	30.5
POW Avg Hourly Rate / Emp (\$cvm)	34.5	40.6	47.9

NSW Central Coast



Historically the Central Coast, now drawn together as a single LGA, was neither Sydney nor Newcastle; it was an area of beach-side holiday and retirement homes backing into infertile sandstone hills. Over recent decades it has received overflow from Sydney, initially long-distance commuters. During the 1990s it gained manufacturing employment and more recently there has been growth in knowledge-economy activities. The population now includes many young families.

[This region is unchanged from previous State of the Regions reports.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	325	333	337	0.8%	0.5%
No. Households	121	125	128	0.9%	1.3%
NIEIR Workforce	160	166	182	1.2%	4.7%
NIEIR Employment	146	150	165	1.1%	4.6%
NIEIR Unemployment	14.2	15.4	17.2	2.6%	5.7%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	8.9%	9.3%	9.5%	0.1	0.1
Headline U/E Rate	6.2%	6.6%	7.4%	0.1	0.4
NIEIR Structural U/E Rate	12.1%	12.9%	12.0%	0.3	-0.4
Social Security Take-up	15.8%	16.3%	15.2%	0.2	-0.5
Hours Per Week (1)	22.8	22.9	23.6	0.1	0.4
Not Employed Share (1)	27.5%	26.2%	19.3%	-0.4	-3.4
Not In Employment (1)	40.1%	39.6%	37.8%	-0.2	-0.9

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	8,243	8,458	9,251	0.9%	4.6%
Taxes Paid	1,829	2,069	2,317	4.2%	5.8%
Benefits	2,640	2,869	2,671	2.8%	-3.5%
Business Income	1,387	1,591	1,843	4.7%	7.6%
Interest Paid	1,248	898	921	-10.4%	1.3%
Property Income	2,099	2,125	2,299	0.4%	4.0%
Disposable Income	14,106	15,042	16,154	2.2%	3.6%
Rank	28	28	28		
Industry GRP (Local)	11,124	11,279	11,893	0.5%	2.7%
Rank	37	34	30		
Headline GRP	12,216	12,482	13,065	0.7%	2.3%

- Notes: (1) All years stated above are fiscal year ending.
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 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	525	618	865
Value of Property and Unincorporated Business	435	501	790
Value of Financial Assets	279	312	322
Value of Household Liabilities	189	196	247
Disposable Income after Debt Service Costs	100	122	126
Household Debt Service Ratio	19%	15%	17%
Household Debt to Gross Income Ratio	1.58	1.42	1.72

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	232.0	396.6	430.1
Ratio of adjusted dwelling price to adjusted average household disposable income	3.4	3.6	3.7
Avg household income from labour market catchment	58817	74885	76939
Ratio of average mortgage costs on established dwellings to average household catchment income	28.6%	42.4%	37.6%
Ratio of average mortgage costs on new dwellings to average household catchment income	44.7%	44.7%	35.4%
Share of flats in dwelling stock	7.8%	7.7%	8.2%
Ratio of houses in new dwelling approvals	69.2%	68.5%	52.5%
Adults per occupied dwelling	2.0	2.1	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	104,646	134,084	165,358
UR Hours (1000 hours)	183,436	219,892	247,713
UR Income (\$m cvm)	6,638	9,017	11,702
POW Emp	88,815	103,659	117,917
POW Hours (1000 hours)	148,984	163,557	167,890
POW Income (\$m cvm)	5,134	6,379	7,652
UR Avg Weekly Hours / Emp	33.7	31.5	28.8
UR Avg Hourly Rate / Emp (\$cvm)	36.2	41.0	47.2
POW Avg Weekly Hours / Emp	32.3	30.3	27.4
POW Avg Hourly Rate / Emp (\$cvm)	34.5	39.0	45.6

NSW Central West



The Central West stretches from the plateaux of the Great Divide across the western slopes to the inland plains. The eastern part of the region includes towns dating from a nineteenth-century gold rush and others founded to serve a coal mining industry which is now in decline. Though it is connected across the Blue Mountains to Sydney, the region is outside commuter range and hobby farm development has been limited. During the 1970s Bathurst and Orange were promoted as growth centres. Though they have grown less rapidly than was hoped, they remain major provincial cities and the high country round Orange is a premium farming area. Further west, Parkes is developing as a transport hub and a centre for broad-acre farming.

[This region is unchanged from previous State of the Regions reports.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	181	186	189	0.9%	0.7%
No. Households	68	70	72	1.1%	1.4%
NIEIR Workforce	92	96	96	1.2%	0.4%
NIEIR Employment	83	85	87	0.7%	1.5%
NIEIR Unemployment	9.3	10.8	9.0	5.1%	-8.9%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	10.1%	11.3%	9.3%	0.4	-1.0
Headline U/E Rate	5.1%	6.7%	5.1%	0.5	-0.8
NIEIR Structural U/E Rate	12.3%	12.4%	11.7%	0.0	-0.4
Social Security Take-up	15.6%	16.8%	16.3%	0.4	-0.2
Hours Per Week (1)	25.2	25.3	25.9	0.0	0.3
Not Employed Share (1)	26.8%	26.5%	24.8%	-0.1	-0.9
Not In Employment (1)	33.8%	33.4%	31.9%	-0.1	-0.7

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	4,589	4,589	4,680	0.0%	1.0%
Taxes Paid	1,127	1,237	1,361	3.1%	4.9%
Benefits	1,309	1,469	1,403	3.9%	-2.3%
Business Income	1,159	1,399	1,736	6.5%	11.4%
Interest Paid	653	421	412	-13.6%	-1.0%
Property Income	1,051	1,043	1,099	-0.3%	2.6%
Disposable Income	7,860	8,445	8,860	2.4%	2.4%
Rank	51	51	51		
Industry GRP (Local)	7,325	7,744	8,255	1.9%	3.2%
Rank	53	53	49		
Headline GRP	10,527	10,938	11,213	1.3%	1.2%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	373	452	544
Value of Property and Unincorporated Business	279	333	432
Value of Financial Assets	267	297	295
Value of Household Liabilities	173	178	183
Disposable Income after Debt Service Costs	118	121	123
Household Debt Service Ratio	16%	14%	14%
Household Debt to Gross Income Ratio	1.29	1.33	1.35

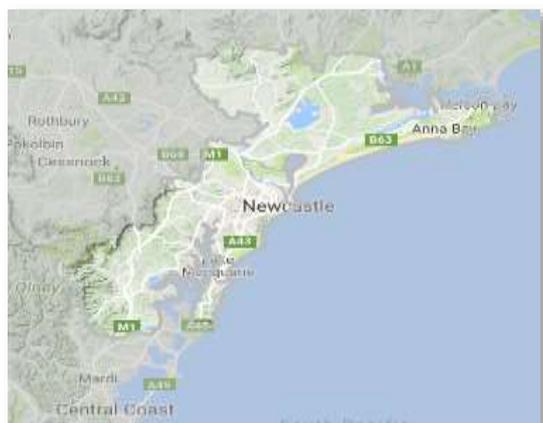
HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	137.8	242.5	274.3
Ratio of adjusted dwelling price to adjusted average household disposable income	1.7	2.1	2.3
Avg household income from labour market catchment	51704	63345	65551
Ratio of average mortgage costs on established dwellings to average household catchment income	18.2%	29.2%	26.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	44.5%	43.2%	35.7%
Share of flats in dwelling stock	6.4%	5.2%	5.2%
Ratio of houses in new dwelling approvals	87.7%	92.5%	89.5%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	74,905	78,850	87,155
UR Hours (1000 hours)	134,140	138,866	154,690
UR Income (\$m cvm)	4,473	4,995	6,886
POW Emp	71,439	75,838	83,712
POW Hours (1000 hours)	127,175	132,627	147,410
POW Income (\$m cvm)	4,271	4,736	6,581
UR Avg Weekly Hours / Emp	34.4	33.9	34.1
UR Avg Hourly Rate / Emp (\$cvm)	33.3	36.0	44.5
POW Avg Weekly Hours / Emp	34.2	33.6	33.9
POW Avg Hourly Rate / Emp (\$cvm)	33.6	35.7	44.6

NSW Coastal Hunter



Within a decade of the foundation of New South Wales Australia's first coal mine was opened in Newcastle. An economy based on coal mining and heavy manufacturing developed, served by a port located in the estuary of the Hunter River and linked by rail to north-west New South Wales. Coal mining has now retreated inland from Newcastle and suburbs, but the port has become one of Australia's premier bulk ports, based chiefly on coal exports. The wharves near the mouth of the Hunter no longer serve ocean-going shipping and the adjacent city centre is desperately trying to re-invent itself. The coastline north and south of Newcastle is a picturesque as any in Australia and has attracted retirees, particularly to Port Stephens.

[This region includes most of former NSW Newcastle and part of former Outer Hunter]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	424	436	443	0.9%	0.8%
No. Households	158	162	165	0.8%	1.2%
NIEIR Workforce	217	225	232	1.3%	1.5%
NIEIR Employment	198	202	212	0.7%	2.5%
NIEIR Unemployment	18.2	22.6	19.4	7.6%	-7.4%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	8.4%	10.1%	8.4%	0.6	-0.8
Headline U/E Rate	4.9%	7.1%	5.8%	0.7	-0.7
NIEIR Structural U/E Rate	11.6%	12.7%	11.9%	0.3	-0.4
Social Security Take-up	14.7%	15.4%	14.8%	0.3	-0.3
Hours Per Week (1)	23.0	23.0	23.8	0.0	0.4
Not Employed Share (1)	27.5%	27.4%	24.0%	0.0	-1.7
Not In Employment (1)	39.4%	39.6%	37.4%	0.1	-1.1

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	12,306	12,280	12,677	-0.1%	1.6%
Taxes Paid	2,939	3,197	3,409	2.8%	3.3%
Benefits	2,986	3,322	3,229	3.6%	-1.4%
Business Income	1,802	2,255	2,495	7.8%	5.2%
Interest Paid	1,673	1,106	1,084	-12.9%	-1.0%
Property Income	2,947	2,916	3,008	-0.3%	1.6%
Disposable Income	19,357	20,521	21,170	2.0%	1.6%
Rank	20	21	21		
Industry GRP (Local)	20,165	20,233	20,697	0.1%	1.1%
Rank	20	20	20		
Headline GRP	24,793	25,103	25,785	0.4%	1.3%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	531	649	794
Value of Property and Unincorporated Business	413	486	665
Value of Financial Assets	307	359	348
Value of Household Liabilities	190	196	219
Disposable Income after Debt Service Costs	108	126	128
Household Debt Service Ratio	18%	15%	15%
Household Debt to Gross Income Ratio	1.49	1.38	1.52

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	194.6	402.2	425.0
Ratio of adjusted dwelling price to adjusted average household disposable income	2.6	3.4	3.5
Avg household income from labour market catchment	58579	80731	81453
Ratio of average mortgage costs on established dwellings to average household catchment income	23.2%	38.2%	33.1%
Ratio of average mortgage costs on new dwellings to average household catchment income	42.3%	43.0%	35.0%
Share of flats in dwelling stock	9.1%	9.1%	9.4%
Ratio of houses in new dwelling approvals	67.7%	72.9%	62.4%
Adults per occupied dwelling	2.1	2.1	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	147,847	181,271	211,115
UR Hours (1000 hours)	256,929	302,195	341,367
UR Income (\$m cvm)	9,188	12,855	16,620
POW Emp	146,212	178,845	201,570
POW Hours (1000 hours)	250,132	295,728	322,092
POW Income (\$m cvm)	8,910	12,565	15,509
UR Avg Weekly Hours / Emp	33.4	32.1	31.1
UR Avg Hourly Rate / Emp (\$cvm)	35.8	42.5	48.7
POW Avg Weekly Hours / Emp	32.9	31.8	30.7
POW Avg Hourly Rate / Emp (\$cvm)	35.6	42.5	48.1

NSW Illawarra



South of Sydney, the coast and the sandstone cliffs of the Illawarra range define a narrow urban triangle with its apex at Coalcliff. The coal seams under the cliffs supported coal mining and hence the development of heavy industry, both of which survive though no longer as reliable drivers of economic growth. Despite the transport costs imposed by the necessity to descend the escarpment, Port Kembla is active in the export of coal and grain as well as serving local industry. The northern part of the region is within commuting range of Sydney South East.

[This region is unchanged from previous State of the Regions reports.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	291	300	307	1.1%	1.1%
No. Households	105	108	112	1.1%	1.8%
NIEIR Workforce	147	153	163	1.4%	3.3%
NIEIR Employment	132	138	147	1.6%	3.1%
NIEIR Unemployment	14.7	14.7	16.1	-0.1%	4.8%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	10.0%	9.6%	9.9%	-0.1	0.1
Headline U/E Rate	6.6%	6.1%	7.2%	-0.2	0.6
NIEIR Structural U/E Rate	11.1%	11.4%	10.6%	0.1	-0.4
Social Security Take-up	14.1%	14.5%	13.6%	0.1	-0.5
Hours Per Week (1)	22.0	21.9	22.5	0.0	0.3
Not Employed Share (1)	30.1%	28.6%	25.0%	-0.5	-1.8
Not In Employment (1)	42.2%	42.4%	40.8%	0.1	-0.8

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	8,214	8,566	9,002	1.4%	2.5%
Taxes Paid	1,850	2,168	2,324	5.4%	3.5%
Benefits	1,793	1,939	1,848	2.6%	-2.4%
Business Income	1,046	1,517	1,687	13.2%	5.4%
Interest Paid	1,139	765	784	-12.4%	1.3%
Property Income	1,814	1,892	1,970	1.4%	2.0%
Disposable Income	12,475	13,811	14,434	3.4%	2.2%
Rank	32	31	30		
Industry GRP (Local)	11,417	11,833	12,535	1.2%	2.9%
Rank	35	32	27		
Headline GRP	13,481	14,057	14,750	1.4%	2.4%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	533	631	854
Value of Property and Unincorporated Business	447	515	775
Value of Financial Assets	281	310	314
Value of Household Liabilities	196	194	235
Disposable Income after Debt Service Costs	111	126	129
Household Debt Service Ratio	18%	15%	16%
Household Debt to Gross Income Ratio	1.49	1.36	1.60

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	237.7	454.9	463.0
Ratio of adjusted dwelling price to adjusted average household disposable income	3.2	4.0	3.8
Avg household income from labour market catchment	80310	112234	118394
Ratio of average mortgage costs on established dwellings to average household catchment income	20.3%	30.8%	24.8%
Ratio of average mortgage costs on new dwellings to average household catchment income	33.2%	32.0%	23.6%
Share of flats in dwelling stock	15.1%	14.2%	14.6%
Ratio of houses in new dwelling approvals	70.7%	57.5%	47.7%
Adults per occupied dwelling	2.1	2.1	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	97,120	125,322	146,602
UR Hours (1000 hours)	173,027	207,777	232,396
UR Income (\$m cvm)	6,260	8,974	11,330
POW Emp	87,420	105,380	121,202
POW Hours (1000 hours)	151,724	171,478	186,548
POW Income (\$m cvm)	5,380	7,213	8,848
UR Avg Weekly Hours / Emp	34.3	31.9	30.5
UR Avg Hourly Rate / Emp (\$cvm)	36.2	43.2	48.8
POW Avg Weekly Hours / Emp	33.4	31.3	29.6
POW Avg Hourly Rate / Emp (\$cvm)	35.5	42.1	47.4

NSW Inland Hunter



Away from the coast, the Hunter Valley comprises a fertile bowl surrounded by ranges including striking sandstone cliffs. It has a very mixed identity. Old-established towns which serve the weekend interests of the upper crust of Sydney contrast with equally old working-class colliery villages. Vineyards and horse studs clash with the moonscape coal mines which expanded during the coal-mining boom of the 2000s. Most of the time the Hunter River flows gently by, but occasionally it floods.

[This region comprises most of former Outer Hunter plus part of former Newcastle]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	189	198	201	1.5%	1.0%
No. Households	67	72	74	2.0%	1.6%
NIEIR Workforce	97	102	104	1.6%	0.9%
NIEIR Employment	89	90	93	0.1%	2.0%
NIEIR Unemployment	7.4	12.0	10.4	17.7%	-7.0%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	7.6%	11.8%	10.0%	1.4	-0.9
Headline U/E Rate	3.3%	8.3%	6.4%	1.7	-1.0
NIEIR Structural U/E Rate	11.0%	11.9%	11.6%	0.3	-0.2
Social Security Take-up	14.2%	16.5%	16.7%	0.7	0.1
Hours Per Week (1)	24.2	23.6	24.3	-0.2	0.3
Not Employed Share (1)	27.6%	30.1%	28.0%	0.9	-1.1
Not In Employment (1)	36.4%	37.9%	36.1%	0.5	-0.9

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	6,193	5,855	5,992	-1.9%	1.2%
Taxes Paid	1,504	1,473	1,537	-0.7%	2.1%
Benefits	1,097	1,418	1,496	8.9%	2.7%
Business Income	598	689	773	4.8%	5.9%
Interest Paid	785	500	483	-14.0%	-1.7%
Property Income	1,200	1,096	1,105	-3.0%	0.4%
Disposable Income	8,534	8,766	9,082	0.9%	1.8%
Rank	48	49	49		
Industry GRP (Local)	8,327	8,264	8,502	-0.3%	1.4%
Rank	50	49	47		
Headline GRP	11,553	12,062	11,644	1.4%	-1.7%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	400	475	555
Value of Property and Unincorporated Business	334	390	491
Value of Financial Assets	275	294	276
Value of Household Liabilities	208	209	212
Disposable Income after Debt Service Costs	112	125	123
Household Debt Service Ratio	19%	16%	16%
Household Debt to Gross Income Ratio	1.59	1.48	1.53

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	144.2	324.3	347.8
Ratio of adjusted dwelling price to adjusted average household disposable income	1.6	2.6	2.8
Avg household income from labour market catchment	47934	64621	65512
Ratio of average mortgage costs on established dwellings to average household catchment income	20.2%	37.5%	33.2%
Ratio of average mortgage costs on new dwellings to average household catchment income	41.9%	42.6%	36.7%
Share of flats in dwelling stock	4.8%	4.6%	5.2%
Ratio of houses in new dwelling approvals	89.4%	81.3%	81.0%
Adults per occupied dwelling	2.1	2.1	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	65,715	79,829	93,779
UR Hours (1000 hours)	116,831	138,827	161,766
UR Income (\$m cvm)	4,003	5,841	7,497
POW Emp	58,361	72,240	85,809
POW Hours (1000 hours)	100,618	122,608	145,045
POW Income (\$m cvm)	3,429	5,061	6,624
UR Avg Weekly Hours / Emp	34.2	33.4	33.2
UR Avg Hourly Rate / Emp (\$cvm)	34.3	42.1	46.3
POW Avg Weekly Hours / Emp	33.2	32.6	32.5
POW Avg Hourly Rate / Emp (\$cvm)	34.1	41.3	45.7

NSW Murray Far West



The government of NSW seems to recognise that parts of the state which receive commercial services from Melbourne and Adelaide rather than Sydney should be separate regions, hence this region which comprises two state-government regions, one on the north bank of the Murray and the other along the SA border. Land use in the part alongside the Murray is similar to the Murrumbidgee region and combines irrigation districts with broad-acre farming, while the part alongside the SA border is dry pastoral country which includes the legendary mining town of Broken Hill.

[This region is unchanged from previous State of the Regions reports, save that it no longer includes the former Jerilderie shire.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	133	135	136	0.6%	0.2%
No. Households	52	52	53	0.3%	0.7%
NIEIR Workforce	70	69	66	-0.5%	-2.0%
NIEIR Employment	62	60	59	-1.2%	-0.5%
NIEIR Unemployment	7.4	8.7	6.5	5.3%	-13.1%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	10.6%	12.6%	9.9%	0.7	-1.4
Headline U/E Rate	6.5%	9.7%	7.0%	1.1	-1.4
NIEIR Structural U/E Rate	13.1%	13.5%	12.8%	0.1	-0.4
Social Security Take-up	16.6%	17.8%	17.4%	0.4	-0.2
Hours Per Week (1)	25.4	25.7	26.7	0.1	0.5
Not Employed Share (1)	24.6%	28.0%	28.0%	1.1	0.0
Not In Employment (1)	33.1%	32.3%	29.6%	-0.3	-1.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	3,151	3,044	2,992	-1.1%	-0.9%
Taxes Paid	783	857	948	3.1%	5.1%
Benefits	1,121	1,276	1,274	4.4%	-0.1%
Business Income	1,050	1,202	1,574	4.6%	14.4%
Interest Paid	473	293	288	-14.7%	-0.9%
Property Income	790	766	794	-1.0%	1.8%
Disposable Income	5,997	6,281	6,616	1.6%	2.6%
Rank	58	59	58		
Industry GRP (Local)	5,053	5,043	5,232	-0.1%	1.9%
Rank	61	61	59		
Headline GRP	6,881	6,769	6,995	-0.5%	1.7%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	365	392	498
Value of Property and Unincorporated Business	268	284	360
Value of Financial Assets	270	273	304
Value of Household Liabilities	172	165	166
Disposable Income after Debt Service Costs	116	114	125
Household Debt Service Ratio	16%	14%	13%
Household Debt to Gross Income Ratio	1.32	1.31	1.22

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	120.8	213.0	217.0
Ratio of adjusted dwelling price to adjusted average household disposable income	1.5	2.0	1.9
Avg household income from labour market catchment	56297	70067	73405
Ratio of average mortgage costs on established dwellings to average household catchment income	14.5%	22.5%	18.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	42.5%	36.5%	29.7%
Share of flats in dwelling stock	10.6%	9.7%	9.7%
Ratio of houses in new dwelling approvals	92.0%	81.4%	89.4%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	55,325	62,291	59,974
UR Hours (1000 hours)	100,257	108,599	112,925
UR Income (\$m cvm)	3,379	3,946	4,834
POW Emp	53,289	60,598	56,447
POW Hours (1000 hours)	95,737	104,811	103,063
POW Income (\$m cvm)	3,096	3,644	4,153
UR Avg Weekly Hours / Emp	34.8	33.5	36.2
UR Avg Hourly Rate / Emp (\$cvm)	33.7	36.3	42.8
POW Avg Weekly Hours / Emp	34.5	33.3	35.1
POW Avg Hourly Rate / Emp (\$cvm)	32.3	34.8	40.3

NSW Murrumbidgee



The Murrumbidgee region slopes westward from the forested Snowy Mountains out to the saltbush plains round Hay. Most of the region is quintessential mixed farming country, with rainfall diminishing inland and subject to the occasional drought. Though most of its agriculture is rain-fed, there are significant irrigation areas, notably the Murrumbidgee Irrigation Area with its wine industry. Though the principal economic connections of the region are with Sydney, its position between state capitals places it astride major national transport routes and is responsible for the location of logistics activity as well as rural processing.

[This region comprises the former NSW Riverina plus the former Jerilderie, Gundagai, Tumut and Tumbarumba shires]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	160	163	165	0.6%	0.4%
No. Households	58	59	59	0.2%	0.5%
NIEIR Workforce	85	87	84	0.9%	-1.6%
NIEIR Employment	77	80	78	1.2%	-1.0%
NIEIR Unemployment	7.9	7.3	6.0	-2.8%	-8.8%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	9.3%	8.3%	7.2%	-0.3	-0.6
Headline U/E Rate	5.9%	4.8%	4.0%	-0.4	-0.4
NIEIR Structural U/E Rate	10.3%	10.6%	10.1%	0.1	-0.3
Social Security Take-up	13.2%	14.2%	14.0%	0.3	-0.1
Hours Per Week (1)	25.8	26.0	26.7	0.1	0.3
Not Employed Share (1)	24.1%	21.9%	23.6%	-0.7	0.8
Not In Employment (1)	32.1%	31.4%	29.6%	-0.2	-0.9

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	3,922	4,034	3,987	0.9%	-0.6%
Taxes Paid	986	1,124	1,270	4.5%	6.3%
Benefits	1,143	1,244	1,253	2.9%	0.3%
Business Income	1,399	1,593	2,187	4.4%	17.2%
Interest Paid	551	336	330	-15.2%	-0.9%
Property Income	939	933	992	-0.2%	3.1%
Disposable Income	7,309	7,843	8,457	2.4%	3.8%
Rank	52	52	52		
Industry GRP (Local)	6,630	6,619	7,070	-0.1%	3.4%
Rank	55	55	55		
Headline GRP	8,302	8,259	8,771	-0.2%	3.0%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	409	471	580
Value of Property and Unincorporated Business	289	314	409
Value of Financial Assets	294	326	344
Value of Household Liabilities	174	169	173
Disposable Income after Debt Service Costs	126	132	143
Household Debt Service Ratio	15%	13%	11%
Household Debt to Gross Income Ratio	1.23	1.17	1.12

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	145.8	241.2	241.1
Ratio of adjusted dwelling price to adjusted average household disposable income	1.8	2.1	1.9
Avg household income from labour market catchment	57500	75540	77869
Ratio of average mortgage costs on established dwellings to average household catchment income	17.3%	24.5%	19.9%
Ratio of average mortgage costs on new dwellings to average household catchment income	41.7%	36.7%	30.2%
Share of flats in dwelling stock	8.8%	7.7%	7.9%
Ratio of houses in new dwelling approvals	85.6%	88.0%	94.1%
Adults per occupied dwelling	2.0	2.0	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	67,506	75,647	77,733
UR Hours (1000 hours)	123,466	133,802	140,273
UR Income (\$m cvm)	4,331	4,933	6,183
POW Emp	65,058	73,177	72,762
POW Hours (1000 hours)	118,386	128,701	130,460
POW Income (\$m cvm)	4,164	4,732	5,728
UR Avg Weekly Hours / Emp	35.2	34.0	34.7
UR Avg Hourly Rate / Emp (\$cvm)	35.1	36.9	44.1
POW Avg Weekly Hours / Emp	35.0	33.8	34.5
POW Avg Hourly Rate / Emp (\$cvm)	35.2	36.8	43.9

NSW North Coast



The NSW North Coast region runs from Bulahdelah in the south to Coffs Harbour in the north. Along its attractive coastline a series of resorts and retirement settlements looks out to sea while agriculture thrives in the valleys of its short but flood-prone rivers. On the slopes and ridges there are substantial state forests. With the growth of tourism the coastal towns are gradually coming to dominate the region.

[This region comprises former NSW Mid North Coast plus former Great Lakes and Gloucester shires.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	298	305	309	0.7%	0.7%
No. Households	116	119	121	0.8%	1.1%
NIEIR Workforce	132	142	146	2.6%	1.1%
NIEIR Employment	115	124	128	2.3%	2.0%
NIEIR Unemployment	16.4	18.9	17.1	4.9%	-4.8%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	12.4%	13.2%	11.7%	0.3	-0.8
Headline U/E Rate	5.9%	7.2%	6.4%	0.4	-0.4
NIEIR Structural U/E Rate	18.0%	19.6%	18.4%	0.5	-0.6
Social Security Take-up	22.7%	23.7%	22.8%	0.3	-0.4
Hours Per Week (1)	20.2	20.9	21.5	0.2	0.3
Not Employed Share (1)	34.2%	29.7%	26.8%	-1.5	-1.5
Not In Employment (1)	46.7%	45.0%	43.3%	-0.6	-0.8

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	5,334	5,907	6,112	3.5%	1.7%
Taxes Paid	1,128	1,447	1,534	8.7%	3.0%
Benefits	2,853	3,086	2,928	2.6%	-2.6%
Business Income	1,271	1,653	1,743	9.2%	2.7%
Interest Paid	990	670	666	-12.2%	-0.4%
Property Income	1,883	2,022	2,057	2.4%	0.9%
Disposable Income	11,326	12,904	13,079	4.4%	0.7%
Rank	35	33	33		
Industry GRP (Local)	10,057	10,399	10,683	1.1%	1.4%
Rank	43	39	37		
Headline GRP	12,326	12,862	13,584	1.4%	2.8%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	508	562	699
Value of Property and Unincorporated Business	394	426	587
Value of Financial Assets	267	296	298
Value of Household Liabilities	153	159	186
Disposable Income after Debt Service Costs	91	103	108
Household Debt Service Ratio	18%	15%	15%
Household Debt to Gross Income Ratio	1.43	1.37	1.53

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	181.8	349.8	352.6
Ratio of adjusted dwelling price to adjusted average household disposable income	2.9	3.8	3.5
Avg household income from labour market catchment	48848	63573	66384
Ratio of average mortgage costs on established dwellings to average household catchment income	25.2%	40.7%	32.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	44.3%	48.1%	38.4%
Share of flats in dwelling stock	10.6%	9.4%	9.6%
Ratio of houses in new dwelling approvals	78.1%	84.0%	85.1%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	87,294	109,227	128,220
UR Hours (1000 hours)	149,331	174,291	196,420
UR Income (\$m cvm)	4,518	6,449	8,339
POW Emp	82,970	103,302	114,748
POW Hours (1000 hours)	139,999	162,954	173,436
POW Income (\$m cvm)	4,252	5,964	7,304
UR Avg Weekly Hours / Emp	32.9	30.7	29.5
UR Avg Hourly Rate / Emp (\$cvm)	30.3	37.0	42.5
POW Avg Weekly Hours / Emp	32.4	30.3	29.1
POW Avg Hourly Rate / Emp (\$cvm)	30.4	36.6	42.1

NSW Northern Inland



The NSW Northern Inland comprises three distinct sub-regions. In the area around Tamworth mixed farming has recently been invaded by coal mining. Tamworth itself has significant commercial and resource-processing activity. The second area, the New England plateau, is devoted mainly to pasture for beef and wool. Armidale stands out as an academic centre. The third area, the North West plains, comprises broad-acre black-soil country. Crops include wheat, sorghum and cotton. Much of this agriculture depends on pumping from the local rivers. Sadly, the rivers are unreliable; they sometimes flood and in other years run dry.

[This region is unchanged from previous State of the Regions reports.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	184	187	188	0.5%	0.2%
No. Households	69	70	71	0.6%	0.7%
NIEIR Workforce	95	95	96	-0.3%	0.7%
NIEIR Employment	84	83	84	-0.4%	0.6%
NIEIR Unemployment	11.6	11.7	12.0	0.4%	1.4%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	12.1%	12.4%	12.5%	0.1	0.1
Headline U/E Rate	7.5%	8.0%	8.9%	0.2	0.5
NIEIR Structural U/E Rate	13.7%	15.2%	14.4%	0.5	-0.4
Social Security Take-up	18.0%	19.5%	19.1%	0.5	-0.2
Hours Per Week (1)	25.3	25.8	26.5	0.2	0.4
Not Employed Share (1)	26.8%	27.9%	26.7%	0.4	-0.6
Not In Employment (1)	33.5%	32.2%	30.3%	-0.4	-0.9

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	4,031	4,084	4,072	0.4%	-0.2%
Taxes Paid	1,075	1,142	1,304	2.0%	6.9%
Benefits	1,487	1,779	1,929	6.2%	4.1%
Business Income	1,699	1,616	2,215	-1.7%	17.1%
Interest Paid	632	408	401	-13.5%	-0.9%
Property Income	1,106	1,047	1,117	-1.8%	3.3%
Disposable Income	8,196	8,527	9,323	1.3%	4.6%
Rank	49	50	47		
Industry GRP (Local)	7,275	7,306	7,889	0.1%	3.9%
Rank	54	54	52		
Headline GRP	-2,011	-4,157	-4,497	27.4%	4.0%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	410	457	568
Value of Property and Unincorporated Business	285	319	424
Value of Financial Assets	290	307	321
Value of Household Liabilities	166	169	177
Disposable Income after Debt Service Costs	117	118	132
Household Debt Service Ratio	15%	14%	13%
Household Debt to Gross Income Ratio	1.26	1.30	1.23

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	126.4	234.8	253.2
Ratio of adjusted dwelling price to adjusted average household disposable income	1.5	2.0	2.2
Avg household income from labour market catchment	71958	88677	92305
Ratio of average mortgage costs on established dwellings to average household catchment income	12.4%	20.4%	17.7%
Ratio of average mortgage costs on new dwellings to average household catchment income	33.4%	30.2%	25.2%
Share of flats in dwelling stock	8.6%	7.4%	7.4%
Ratio of houses in new dwelling approvals	87.3%	87.5%	88.9%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	78,622	80,026	83,770
UR Hours (1000 hours)	142,605	142,444	155,436
UR Income (\$m cvm)	5,107	5,227	6,815
POW Emp	74,155	77,044	77,456
POW Hours (1000 hours)	133,828	136,569	143,016
POW Income (\$m cvm)	4,809	4,963	6,236
UR Avg Weekly Hours / Emp	34.9	34.2	35.7
UR Avg Hourly Rate / Emp (\$cvm)	35.8	36.7	43.8
POW Avg Weekly Hours / Emp	34.7	34.1	35.5
POW Avg Hourly Rate / Emp (\$cvm)	35.9	36.3	43.6

NSW Northern Rivers



In its mixture of coastal resorts and retirement settlements, agricultural valleys and forested hills, the Northern Rivers region is similar to the NSW North Coast region, but it differs in that, commercially, it tends to look to Brisbane – it is nearer to the Queensland capital than to Sydney. It also has a strong cross-border relationship with the Gold Coast and, like the Queensland coastal regions grows, mills and refines sugar alongside other high-rainfall crops.

[This region is unchanged from previous State of the Regions reports.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	289	296	301	0.8%	0.9%
No. Households	111	113	116	0.7%	1.1%
NIEIR Workforce	139	137	140	-0.4%	1.4%
NIEIR Employment	120	117	123	-1.1%	2.9%
NIEIR Unemployment	18.1	20.2	17.1	3.7%	-7.9%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	13.0%	14.7%	12.2%	0.6	-1.3
Headline U/E Rate	6.0%	8.3%	6.5%	0.8	-0.9
NIEIR Structural U/E Rate	16.9%	18.1%	16.8%	0.4	-0.7
Social Security Take-up	21.8%	22.5%	21.2%	0.2	-0.7
Hours Per Week (1)	20.8	21.1	21.6	0.1	0.2
Not Employed Share (1)	32.6%	35.4%	32.0%	1.0	-1.7
Not In Employment (1)	45.2%	44.4%	43.1%	-0.3	-0.6

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	5,344	5,278	5,547	-0.4%	2.5%
Taxes Paid	1,135	1,313	1,450	5.0%	5.1%
Benefits	2,516	2,691	2,562	2.3%	-2.4%
Business Income	1,471	1,765	1,957	6.2%	5.3%
Interest Paid	1,083	719	713	-12.8%	-0.4%
Property Income	1,803	1,779	1,844	-0.5%	1.8%
Disposable Income	11,018	11,615	12,012	1.8%	1.7%
Rank	37	35	36		
Industry GRP (Local)	10,265	10,180	10,648	-0.3%	2.3%
Rank	40	42	38		
Headline GRP	11,314	11,281	11,766	-0.1%	2.1%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	570	596	739
Value of Property and Unincorporated Business	474	478	658
Value of Financial Assets	282	298	290
Value of Household Liabilities	187	180	209
Disposable Income after Debt Service Costs	96	102	104
Household Debt Service Ratio	20%	17%	17%
Household Debt to Gross Income Ratio	1.63	1.53	1.75

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	188.5	419.9	402.5
Ratio of adjusted dwelling price to adjusted average household disposable income	2.7	4.3	3.9
Avg household income from labour market catchment	64790	84368	86750
Ratio of average mortgage costs on established dwellings to average household catchment income	21.4%	40.8%	32.1%
Ratio of average mortgage costs on new dwellings to average household catchment income	38.9%	44.5%	36.8%
Share of flats in dwelling stock	10.8%	10.0%	10.2%
Ratio of houses in new dwelling approvals	74.2%	74.5%	82.7%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	91,098	116,218	125,157
UR Hours (1000 hours)	157,663	186,594	200,930
UR Income (\$m cvm)	4,763	7,065	8,719
POW Emp	84,410	107,884	108,856
POW Hours (1000 hours)	143,851	171,399	171,528
POW Income (\$m cvm)	4,311	6,359	7,291
UR Avg Weekly Hours / Emp	33.3	30.9	30.9
UR Avg Hourly Rate / Emp (\$cvm)	30.2	37.9	43.4
POW Avg Weekly Hours / Emp	32.8	30.6	30.3
POW Avg Hourly Rate / Emp (\$cvm)	30.0	37.1	42.5

NSW Orana



The Orana region is characterised by low and unreliable rainfall, though its plains can be flooded when it rains heavily including across the border in Queensland. The Western part is pastoral country, by long tradition sheep for wool but gradually diversifying, with base metal mining around Cobar. The eastern part of the region supports broad-acre farming, with viticulture and coal mining around Mudgee. The Aboriginal population of the region is substantial and increasing.

[This region is unchanged from previous State of the Regions reports.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	121	123	123	0.5%	0.1%
No. Households	44	45	46	0.6%	0.6%
NIEIR Workforce	61	62	63	0.4%	0.4%
NIEIR Employment	56	56	58	0.2%	1.3%
NIEIR Unemployment	5.5	5.9	4.9	2.1%	-8.8%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	9.0%	9.5%	7.8%	0.2	-0.8
Headline U/E Rate	5.0%	5.9%	4.7%	0.3	-0.6
NIEIR Structural U/E Rate	14.3%	14.9%	14.2%	0.2	-0.4
Social Security Take-up	18.5%	19.8%	19.8%	0.4	0.0
Hours Per Week (1)	26.0	26.5	27.4	0.2	0.4
Not Employed Share (1)	25.3%	25.1%	22.3%	0.0	-1.4
Not In Employment (1)	31.5%	30.3%	27.9%	-0.4	-1.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	2,949	3,004	3,090	0.6%	1.4%
Taxes Paid	809	855	974	1.9%	6.7%
Benefits	910	1,026	1,049	4.1%	1.1%
Business Income	1,159	1,116	1,364	-1.3%	10.6%
Interest Paid	405	260	250	-13.7%	-2.1%
Property Income	758	725	767	-1.5%	2.9%
Disposable Income	5,666	5,852	6,223	1.1%	3.1%
Rank	61	61	61		
Industry GRP (Local)	4,748	4,821	5,100	0.5%	2.9%
Rank	64	64	61		
Headline GRP	6,447	6,441	6,571	0.0%	1.0%

- Notes: (1) All years stated above are fiscal year ending.
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 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	380	428	516
Value of Property and Unincorporated Business	273	294	386
Value of Financial Assets	280	302	302
Value of Household Liabilities	172	168	172
Disposable Income after Debt Service Costs	127	121	136
Household Debt Service Ratio	15%	14%	12%
Household Debt to Gross Income Ratio	1.21	1.26	1.17

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	108.1	198.1	226.6
Ratio of adjusted dwelling price to adjusted average household disposable income	1.3	1.6	1.9
Avg household income from labour market catchment	62781	79161	82486
Ratio of average mortgage costs on established dwellings to average household catchment income	11.8%	19.7%	17.9%
Ratio of average mortgage costs on new dwellings to average household catchment income	35.0%	31.9%	26.5%
Share of flats in dwelling stock	7.2%	6.2%	6.1%
Ratio of houses in new dwelling approvals	90.0%	79.4%	82.6%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	52,624	53,675	57,165
UR Hours (1000 hours)	96,237	95,806	104,657
UR Income (\$m cvm)	3,159	3,330	4,470
POW Emp	50,433	51,821	52,435
POW Hours (1000 hours)	91,774	92,090	95,104
POW Income (\$m cvm)	3,041	3,185	4,036
UR Avg Weekly Hours / Emp	35.2	34.3	35.2
UR Avg Hourly Rate / Emp (\$cvm)	32.8	34.8	42.7
POW Avg Weekly Hours / Emp	35.0	34.2	34.9
POW Avg Hourly Rate / Emp (\$cvm)	33.1	34.6	42.4

NSW Southern Tablelands



Most of the Southern Tablelands region is over 600 metres above sea level, though the region slopes down to 500 metres at its north-west corner. Its high plains were once famous for fine-wool merino sheep while the slopes around Young are well-known for horticulture. The region includes Sydney's Southern Highlands, which have long offered rural escapes for well-heeled city people. More recently the growth of Canberra has resulted in Queanbeyan becoming a commuter suburb and much of the surrounding area being bought up for hobby farms. Winter tourism to the Australian Alps has also developed.

[This region comprises former NSW Southern Inland less the former Gundagai, Tumut and Tumbarumba shires.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	194	198	202	0.8%	0.9%
No. Households	73	75	77	1.0%	1.6%
NIEIR Workforce	103	103	106	0.0%	1.0%
NIEIR Employment	98	97	99	-0.3%	0.9%
NIEIR Unemployment	5.6	6.6	7.0	5.3%	3.1%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	5.5%	6.4%	6.6%	0.3	0.1
Headline U/E Rate	2.5%	3.6%	4.3%	0.4	0.4
NIEIR Structural U/E Rate	8.3%	8.3%	7.9%	0.0	-0.2
Social Security Take-up	10.7%	11.2%	10.7%	0.2	-0.3
Hours Per Week (1)	26.4	26.9	27.4	0.2	0.3
Not Employed Share (1)	20.7%	21.9%	21.3%	0.4	-0.3
Not In Employment (1)	30.5%	29.1%	27.8%	-0.5	-0.7

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	5,734	5,694	5,741	-0.2%	0.4%
Taxes Paid	1,382	1,504	1,556	2.9%	1.7%
Benefits	1,312	1,450	1,414	3.4%	-1.2%
Business Income	1,097	1,324	1,521	6.5%	7.2%
Interest Paid	869	601	588	-11.5%	-1.1%
Property Income	1,391	1,353	1,375	-0.9%	0.8%
Disposable Income	9,117	9,622	9,914	1.8%	1.5%
Rank	45	43	45		
Industry GRP (Local)	7,614	7,752	8,125	0.6%	2.4%
Rank	52	52	50		
Headline GRP	9,511	9,686	10,239	0.6%	2.8%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	550	651	848
Value of Property and Unincorporated Business	397	498	717
Value of Financial Assets	369	385	392
Value of Household Liabilities	216	232	261
Disposable Income after Debt Service Costs	117	125	128
Household Debt Service Ratio	19%	17%	18%
Household Debt to Gross Income Ratio	1.57	1.61	1.77

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	165.7	353.3	411.5
Ratio of adjusted dwelling price to adjusted average household disposable income	1.9	2.8	3.3
Avg household income from labour market catchment	68124	89420	93502
Ratio of average mortgage costs on established dwellings to average household catchment income	17.6%	30.8%	29.3%
Ratio of average mortgage costs on new dwellings to average household catchment income	36.3%	35.3%	33.2%
Share of flats in dwelling stock	9.5%	6.7%	7.0%
Ratio of houses in new dwelling approvals	90.3%	80.1%	84.2%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	80,068	91,241	98,866
UR Hours (1000 hours)	143,144	158,716	177,569
UR Income (\$m cvm)	4,852	6,556	8,809
POW Emp	65,785	70,503	72,231
POW Hours (1000 hours)	115,140	119,640	124,947
POW Income (\$m cvm)	3,741	4,546	5,771
UR Avg Weekly Hours / Emp	34.4	33.5	34.5
UR Avg Hourly Rate / Emp (\$cvm)	33.9	41.3	49.6
POW Avg Weekly Hours / Emp	33.7	32.6	33.3
POW Avg Hourly Rate / Emp (\$cvm)	32.5	38.0	46.2

NSW South Coast



The NSW coast south of Nowra relied on coastal shipping for transport longer than any other closer-settled part of Australia and therefore was slow to develop – first for fishing, forestry and dairying and now as a resort and retirement area for Sydney and Canberra. Coastal attractions include headlands and secluded beaches while the ranges inland include national parks as well as woodchip forests. Industry spills over from Wollongong to Nowra near the northern boundary of the region.

[This region is unchanged from previous State of the Regions reports.]

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	167	172	174	0.8%	0.7%
No. Households	66	68	70	1.1%	1.5%
NIEIR Workforce	75	75	76	0.1%	0.2%
NIEIR Employment	65	65	65	-0.5%	0.3%
NIEIR Unemployment	9.5	10.7	10.7	4.0%	0.1%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	12.7%	14.2%	14.1%	0.5	0.0
Headline U/E Rate	6.7%	8.4%	9.5%	0.6	0.6
NIEIR Structural U/E Rate	15.8%	16.8%	15.9%	0.3	-0.5
Social Security Take-up	20.1%	21.1%	20.2%	0.4	-0.4
Hours Per Week (1)	20.3	20.8	21.4	0.2	0.3
Not Employed Share (1)	33.6%	34.9%	34.2%	0.4	-0.3
Not In Employment (1)	46.6%	45.3%	43.7%	-0.5	-0.8

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	2,992	2,995	3,005	0.0%	0.2%
Taxes Paid	613	716	712	5.3%	-0.2%
Benefits	1,637	1,739	1,646	2.0%	-2.7%
Business Income	735	939	943	8.5%	0.2%
Interest Paid	530	370	369	-11.3%	-0.1%
Property Income	1,073	1,075	1,062	0.1%	-0.6%
Disposable Income	6,560	6,963	6,907	2.0%	-0.4%
Rank	55	55	55		
Industry GRP (Local)	5,945	6,002	6,229	0.3%	1.9%
Rank	58	59	56		
Headline GRP	7,008	7,202	7,437	0.9%	1.6%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	612	652	832
Value of Property and Unincorporated Business	468	502	743
Value of Financial Assets	288	301	288
Value of Household Liabilities	143	151	199
Disposable Income after Debt Service Costs	92	101	99
Household Debt Service Ratio	16%	14%	17%
Household Debt to Gross Income Ratio	1.32	1.31	1.75

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	174.6	354.1	355.9
Ratio of adjusted dwelling price to adjusted average household disposable income	2.7	3.9	3.8
Avg household income from labour market catchment	60261	83077	87189
Ratio of average mortgage costs on established dwellings to average household catchment income	19.5%	31.4%	25.0%
Ratio of average mortgage costs on new dwellings to average household catchment income	36.1%	36.2%	29.7%
Share of flats in dwelling stock	6.8%	5.9%	6.5%
Ratio of houses in new dwelling approvals	87.8%	81.1%	87.7%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	50,125	61,885	65,338
UR Hours (1000 hours)	84,509	98,665	107,753
UR Income (\$m cvm)	2,755	3,770	4,780
POW Emp	47,000	57,684	58,766
POW Hours (1000 hours)	78,414	91,124	96,002
POW Income (\$m cvm)	2,541	3,437	4,198
UR Avg Weekly Hours / Emp	32.4	30.7	31.7
UR Avg Hourly Rate / Emp (\$cvm)	32.6	38.2	44.4
POW Avg Weekly Hours / Emp	32.1	30.4	31.4
POW Avg Hourly Rate / Emp (\$cvm)	32.4	37.7	43.7

Melbourne City



The City of Melbourne is effectively an orphan within the RDA structure and is hence a small region both in population and area but not in employment. It is located at the head of navigation on the Yarra River, where 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 downstream by about a kilometre. 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 high-rise redevelopment.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	105	129	144	7.0%	5.5%
No. Households	51	64	77	7.9%	9.6%
NIEIR Workforce	64	76	83	6.1%	4.5%
NIEIR Employment	62	73	80	5.7%	5.1%
NIEIR Unemployment	2.4	3.7	3.1	15.3%	-8.8%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	3.7%	4.8%	3.7%	0.4	-0.6
Headline U/E Rate	3.6%	4.8%	3.8%	0.4	-0.5
NIEIR Structural U/E Rate	4.0%	3.5%	3.1%	-0.2	-0.2
Social Security Take-up	5.1%	4.6%	4.2%	-0.2	-0.2
Hours Per Week (1)	22.1	18.6	18.2	-1.2	-0.2
Not Employed Share (1)	32.4%	35.1%	34.2%	0.9	-0.5
Not In Employment (1)	41.8%	51.1%	52.2%	3.1	0.5

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	3,800	4,145	4,915	2.9%	8.9%
Taxes Paid	1,187	1,362	1,651	4.7%	10.1%
Benefits	196	197	197	0.3%	0.0%
Business Income	756	1,080	1,215	12.6%	6.1%
Interest Paid	589	570	573	-1.1%	0.3%
Property Income	813	810	879	-0.1%	4.2%
Disposable Income	4,840	5,491	6,275	4.3%	6.9%
Rank	64	64	60		
Industry GRP (Local)	45,737	45,592	45,858	-0.1%	0.3%
Rank	4	4	4		
Headline GRP	72,946	77,460	85,254	2.0%	4.9%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	942	861	344
Value of Property and Unincorporated Business	687	754	217
Value of Financial Assets	431	345	237
Value of Household Liabilities	175	237	109
Disposable Income after Debt Service Costs	111	93	79
Household Debt Service Ratio	17%	24%	17%
Household Debt to Gross Income Ratio	1.38	2.17	1.21

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	316.6	585.7	559.8
Ratio of adjusted dwelling price to adjusted average household disposable income	4.2	6.0	6.4
Avg household income from labour market catchment	66652	94418	91303
Ratio of average mortgage costs on established dwellings to average household catchment income	31.7%	45.2%	37.1%
Ratio of average mortgage costs on new dwellings to average household catchment income	63.8%	39.6%	33.9%
Share of flats in dwelling stock	64.6%	79.0%	82.8%
Ratio of houses in new dwelling approvals	9.5%	0.4%	0.4%
Adults per occupied dwelling	2.0	2.0	1.9

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	25,463	48,757	80,567
UR Hours (1000 hours)	43,851	83,819	114,113
UR Income (\$m cvm)	1,815	4,436	5,311
POW Emp	246,847	387,255	533,527
POW Hours (1000 hours)	465,139	685,351	925,924
POW Income (\$m cvm)	17,849	34,212	43,917
UR Avg Weekly Hours / Emp	33.1	33.1	27.2
UR Avg Hourly Rate / Emp (\$cvm)	41.4	52.9	46.5
POW Avg Weekly Hours / Emp	36.2	34.0	33.4
POW Avg Hourly Rate / Emp (\$cvm)	38.4	49.9	47.4

Melbourne Eastern Inner



The present municipality of Boroondarra began with the land boom of the 1880s and was for the most part built up by 1950. Whitehorse and Monash likewise began as rail-served commuter settlements but filled up rapidly in the post-war period as motoring improved the accessibility of housing built away from railway stations. The region remains a commuter residential area for Melbourne City, with some development of knowledge-economy activities in Boroondarra and a cluster of knowledge-related activities around Monash University. It also retains the middle to high social status it originally derived from being located on gentle hills.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	508	528	541	1.3%	1.2%
No. Households	180	187	193	1.3%	1.7%
NIEIR Workforce	268	274	293	0.8%	3.4%
NIEIR Employment	255	259	278	0.5%	3.6%
NIEIR Unemployment	12.7	15.0	15.2	5.8%	0.8%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	4.7%	5.5%	5.2%	0.3	-0.1
Headline U/E Rate	3.5%	4.7%	4.7%	0.4	0.0
NIEIR Structural U/E Rate	4.5%	4.6%	4.2%	0.0	-0.2
Social Security Take-up	5.7%	5.6%	5.0%	0.0	-0.3
Hours Per Week (1)	23.5	23.3	24.5	-0.1	0.6
Not Employed Share (1)	25.1%	26.8%	22.8%	0.6	-2.0
Not In Employment (1)	38.1%	38.7%	35.6%	0.2	-1.6

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	15,929	15,669	17,278	-0.5%	5.0%
Taxes Paid	4,539	4,688	5,243	1.1%	5.7%
Benefits	2,918	3,031	3,022	1.3%	-0.1%
Business Income	3,346	4,499	4,940	10.4%	4.8%
Interest Paid	2,583	2,265	2,398	-4.3%	2.9%
Property Income	4,553	4,282	4,500	-2.0%	2.5%
Disposable Income	24,549	25,709	27,408	1.6%	3.3%
Rank	14	15	14		
Industry GRP (Local)	29,673	30,520	31,439	0.9%	1.5%
Rank	10	10	10		
Headline GRP	33,970	36,203	39,228	2.1%	4.1%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	1,309	1,510	1,888
Value of Property and Unincorporated Business	943	1,189	1,665
Value of Financial Assets	608	623	601
Value of Household Liabilities	242	302	377
Disposable Income after Debt Service Costs	128	138	142
Household Debt Service Ratio	19%	19%	22%
Household Debt to Gross Income Ratio	1.54	1.79	2.13

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	303.1	896.2	919.4
Ratio of adjusted dwelling price to adjusted average household disposable income	3.5	6.9	7.3
Avg household income from labour market catchment	65448	91948	89416
Ratio of average mortgage costs on established dwellings to average household catchment income	30.9%	70.9%	62.0%
Ratio of average mortgage costs on new dwellings to average household catchment income	53.8%	56.7%	44.2%
Share of flats in dwelling stock	13.9%	14.4%	15.7%
Ratio of houses in new dwelling approvals	64.5%	43.3%	36.1%
Adults per occupied dwelling	2.2	2.3	2.3

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	228,069	244,138	276,893
UR Hours (1000 hours)	397,882	403,497	454,037
UR Income (\$m cvm)	13,960	18,692	20,756
POW Emp	230,194	258,674	292,527
POW Hours (1000 hours)	408,107	437,989	487,706
POW Income (\$m cvm)	13,748	18,532	20,950
UR Avg Weekly Hours / Emp	33.5	31.8	31.5
UR Avg Hourly Rate / Emp (\$cvm)	35.1	46.3	45.7
POW Avg Weekly Hours / Emp	34.1	32.6	32.1
POW Avg Hourly Rate / Emp (\$cvm)	33.7	42.3	43.0

Melbourne Eastern Outer



Melbourne Outer East comprises an arc of outer suburbs on the eastern boundary of the metropolitan area. In the inner part of the region hills restrict the Yarra river to a gorge, but above Yarra Glen there are 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 and the Ringwood railway line for access to Melbourne City.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	529	539	546	0.6%	0.6%
No. Households	185	191	196	1.0%	1.4%
NIEIR Workforce	298	300	309	0.2%	1.5%
NIEIR Employment	279	275	286	-0.4%	2.0%
NIEIR Unemployment	19.9	25.0	22.8	8.0%	-4.4%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	6.7%	8.3%	7.4%	0.6	-0.5
Headline U/E Rate	4.1%	5.8%	5.2%	0.6	-0.3
NIEIR Structural U/E Rate	6.3%	7.2%	6.7%	0.3	-0.2
Social Security Take-up	8.2%	9.0%	8.4%	0.3	-0.3
Hours Per Week (1)	24.9	25.6	27.0	0.2	0.7
Not Employed Share (1)	21.4%	22.6%	19.4%	0.4	-1.6
Not In Employment (1)	34.5%	32.8%	29.0%	-0.6	-1.9

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	15,067	14,320	15,331	-1.7%	3.5%
Taxes Paid	3,535	3,466	3,692	-0.7%	3.2%
Benefits	3,373	3,503	3,438	1.3%	-0.9%
Business Income	2,113	2,575	2,851	6.8%	5.2%
Interest Paid	2,329	1,736	1,806	-9.3%	2.0%
Property Income	3,431	3,190	3,290	-2.4%	1.6%
Disposable Income	22,513	22,802	23,944	0.4%	2.5%
Rank	17	18	18		
Industry GRP (Local)	18,471	18,424	19,232	-0.1%	2.2%
Rank	22	22	22		
Headline GRP	20,912	21,327	23,354	0.7%	4.6%

- Notes: (1) All years stated above are fiscal year ending.
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 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	739	833	1,126
Value of Property and Unincorporated Business	611	699	1,045
Value of Financial Assets	357	377	375
Value of Household Liabilities	228	243	294
Disposable Income after Debt Service Costs	113	121	122
Household Debt Service Ratio	20%	19%	20%
Household Debt to Gross Income Ratio	1.67	1.71	1.99

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	207.4	547.4	542.5
Ratio of adjusted dwelling price to adjusted average household disposable income	2.5	4.5	4.7
Avg household income from labour market catchment	60448	83504	81822
Ratio of average mortgage costs on established dwellings to average household catchment income	22.8%	47.2%	39.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	42.3%	45.2%	33.3%
Share of flats in dwelling stock	4.8%	4.6%	5.3%
Ratio of houses in new dwelling approvals	84.7%	64.8%	49.3%
Adults per occupied dwelling	2.2	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	227,716	269,020	286,151
UR Hours (1000 hours)	402,947	450,163	500,941
UR Income (\$m cvm)	12,676	17,285	19,765
POW Emp	170,409	185,415	202,122
POW Hours (1000 hours)	292,911	305,646	336,899
POW Income (\$m cvm)	8,645	11,071	12,430
UR Avg Weekly Hours / Emp	34.0	32.2	33.7
UR Avg Hourly Rate / Emp (\$cvm)	31.5	38.4	39.5
POW Avg Weekly Hours / Emp	33.1	31.7	32.1
POW Avg Hourly Rate / Emp (\$cvm)	29.5	36.2	36.9

Melbourne Northern Inner



Melbourne North begins five kilometres north of the CBD and extends to the inner ring road; it also includes Richmond in the inner east. The western half of the region is relatively flat and its development was originally based on brick-making. For over a century this part of the region was working class but the decline of manufacturing has resulted increased commuting, as has always been the mainstay of the hillier eastern half of the region. LaTrobe University is the centre of a knowledge precinct and Heidelberg of a medical precinct. The region is noted for its ethnic diversity.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	506	533	552	1.8%	1.7%
No. Households	194	205	215	1.8%	2.4%
NIEIR Workforce	286	300	312	1.5%	2.0%
NIEIR Employment	269	277	293	1.0%	2.9%
NIEIR Unemployment	17.8	22.6	18.5	8.4%	-9.6%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	6.2%	7.5%	5.9%	0.4	-0.8
Headline U/E Rate	5.4%	7.2%	5.6%	0.6	-0.8
NIEIR Structural U/E Rate	8.4%	8.4%	7.6%	0.0	-0.4
Social Security Take-up	10.5%	10.4%	9.4%	0.0	-0.5
Hours Per Week (1)	24.0	23.4	24.6	-0.2	0.6
Not Employed Share (1)	24.4%	26.1%	22.9%	0.6	-1.6
Not In Employment (1)	36.7%	38.3%	35.3%	0.5	-1.5

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	15,430	15,279	16,567	-0.3%	4.1%
Taxes Paid	3,965	4,216	4,689	2.1%	5.5%
Benefits	2,140	2,228	2,220	1.4%	-0.2%
Business Income	2,355	3,212	3,628	10.9%	6.3%
Interest Paid	2,287	1,740	1,734	-8.7%	-0.2%
Property Income	3,343	3,311	3,443	-0.3%	2.0%
Disposable Income	21,422	22,732	24,245	2.0%	3.3%
Rank	19	19	17		
Industry GRP (Local)	23,137	23,200	23,352	0.1%	0.3%
Rank	16	17	15		
Headline GRP	26,962	27,753	29,330	1.0%	2.8%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	781	866	996
Value of Property and Unincorporated Business	676	785	945
Value of Financial Assets	304	310	294
Value of Household Liabilities	199	229	243
Disposable Income after Debt Service Costs	108	111	113
Household Debt Service Ratio	19%	19%	19%
Household Debt to Gross Income Ratio	1.54	1.74	1.82

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	224.1	631.1	608.1
Ratio of adjusted dwelling price to adjusted average household disposable income	3.3	6.0	5.9
Avg household income from labour market catchment	66879	95867	92846
Ratio of average mortgage costs on established dwellings to average household catchment income	22.4%	48.0%	39.6%
Ratio of average mortgage costs on new dwellings to average household catchment income	42.9%	35.7%	27.8%
Share of flats in dwelling stock	19.8%	20.5%	22.7%
Ratio of houses in new dwelling approvals	47.2%	31.7%	22.0%
Adults per occupied dwelling	2.1	2.1	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	206,701	241,276	293,378
UR Hours (1000 hours)	366,029	406,378	486,478
UR Income (\$m cvm)	11,160	16,497	20,858
POW Emp	188,285	206,585	243,505
POW Hours (1000 hours)	336,307	350,909	396,262
POW Income (\$m cvm)	10,485	13,960	16,143
UR Avg Weekly Hours / Emp	34.1	32.4	31.9
UR Avg Hourly Rate / Emp (\$cvm)	30.5	40.6	42.9
POW Avg Weekly Hours / Emp	34.3	32.7	31.3
POW Avg Hourly Rate / Emp (\$cvm)	31.2	39.8	40.7

Melbourne Northern Outer



The western part of Melbourne Outer North comprises gentle basalt slopes, the sites of manufacturing industries and increasingly of wholesale and logistics enterprises attached to the southern end of the Hume Highway and Melbourne Airport – which lies on the boundary of Western Melbourne. The population of this half of the region was traditionally working class and ethnically diverse, and so quite distinct from the people of the hilly commuter residential area which comprises the east of the region. Latrobe University lies at the junction of the two.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	411	452	482	3.3%	3.2%
No. Households	130	144	155	3.5%	3.6%
NIEIR Workforce	218	237	253	2.8%	3.4%
NIEIR Employment	198	213	230	2.4%	4.1%
NIEIR Unemployment	20.1	24.1	23.0	6.2%	-2.2%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	9.2%	10.2%	9.1%	0.3	-0.5
Headline U/E Rate	6.2%	7.8%	7.5%	0.5	-0.2
NIEIR Structural U/E Rate	9.2%	9.6%	8.7%	0.1	-0.4
Social Security Take-up	11.9%	12.6%	12.0%	0.2	-0.3
Hours Per Week (1)	22.1	20.8	21.0	-0.4	0.1
Not Employed Share (1)	29.9%	30.4%	28.2%	0.2	-1.1
Not In Employment (1)	41.9%	45.3%	44.7%	1.1	-0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	10,544	10,729	11,945	0.6%	5.5%
Taxes Paid	2,359	2,523	2,820	2.3%	5.7%
Benefits	1,658	1,864	1,933	4.0%	1.8%
Business Income	1,303	1,787	2,078	11.1%	7.8%
Interest Paid	1,571	1,121	1,100	-10.6%	-0.9%
Property Income	2,016	2,061	2,197	0.7%	3.2%
Disposable Income	14,559	16,028	17,738	3.3%	5.2%
Rank	27	27	25		
Industry GRP (Local)	14,342	14,694	15,331	0.8%	2.1%
Rank	26	26	26		
Headline GRP	17,915	19,215	21,389	2.4%	5.5%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	522	540	676
Value of Property and Unincorporated Business	483	511	677
Value of Financial Assets	257	247	230
Value of Household Liabilities	218	218	231
Disposable Income after Debt Service Costs	110	111	114
Household Debt Service Ratio	20%	18%	18%
Household Debt to Gross Income Ratio	1.66	1.69	1.75

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	185.5	442.4	398.5
Ratio of adjusted dwelling price to adjusted average household disposable income	2.1	3.9	3.6
Avg household income from labour market catchment	68812	100590	97054
Ratio of average mortgage costs on established dwellings to average household catchment income	18.1%	32.2%	24.9%
Ratio of average mortgage costs on new dwellings to average household catchment income	30.8%	33.8%	26.3%
Share of flats in dwelling stock	3.8%	3.8%	5.0%
Ratio of houses in new dwelling approvals	90.3%	80.2%	77.1%
Adults per occupied dwelling	2.3	2.4	2.3

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	131,669	166,240	229,462
UR Hours (1000 hours)	234,043	283,446	351,601
UR Income (\$m cvm)	7,155	10,292	12,874
POW Emp	118,335	140,008	196,686
POW Hours (1000 hours)	212,914	240,796	316,564
POW Income (\$m cvm)	6,234	8,782	11,460
UR Avg Weekly Hours / Emp	34.2	32.8	29.5
UR Avg Hourly Rate / Emp (\$cvm)	30.6	36.3	36.6
POW Avg Weekly Hours / Emp	34.6	33.1	31.0
POW Avg Hourly Rate / Emp (\$cvm)	29.3	36.5	36.2

Melbourne Southern Inner



The region begins across the Yarra from the City of Melbourne and has benefited from the spillover of CBD functions into the inner suburbs. The bayside suburbs a little further out have long been solidly prosperous while at the other extreme Dandenong was a low-status former market town with saleyards and manufacturing. The part of the region away from the Bay is known for its ethnically diverse population and has several successful shopping malls, including Chadstone and Southlands. The manufacturing base is doing its best to convert to knowledge-intensive industry.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	732	770	795	1.7%	1.6%
No. Households	280	292	303	1.4%	1.9%
NIEIR Workforce	416	428	447	1.0%	2.1%
NIEIR Employment	389	396	418	0.6%	2.7%
NIEIR Unemployment	26.4	32.0	28.9	6.7%	-5.0%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	6.3%	7.5%	6.5%	0.4	-0.5
Headline U/E Rate	4.8%	6.2%	5.6%	0.5	-0.3
NIEIR Structural U/E Rate	6.7%	7.0%	6.4%	0.1	-0.3
Social Security Take-up	8.3%	8.7%	7.9%	0.1	-0.4
Hours Per Week (1)	24.8	24.3	25.6	-0.2	0.6
Not Employed Share (1)	23.0%	24.8%	22.0%	0.6	-1.4
Not In Employment (1)	34.7%	36.1%	32.7%	0.5	-1.7

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	24,894	24,182	25,959	-1.0%	3.6%
Taxes Paid	7,445	7,652	8,386	0.9%	4.7%
Benefits	3,505	3,737	3,731	2.2%	-0.1%
Business Income	4,898	6,252	6,915	8.5%	5.2%
Interest Paid	3,623	2,864	2,953	-7.5%	1.5%
Property Income	6,759	6,306	6,517	-2.3%	1.7%
Disposable Income	36,515	37,638	39,546	1.0%	2.5%
Rank	3	3	3		
Industry GRP (Local)	42,493	42,098	42,943	-0.3%	1.0%
Rank	5	5	5		
Headline GRP	49,433	50,918	54,456	1.0%	3.4%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	1,284	1,336	1,463
Value of Property and Unincorporated Business	887	996	1,214
Value of Financial Assets	620	594	528
Value of Household Liabilities	223	254	279
Disposable Income after Debt Service Costs	126	132	131
Household Debt Service Ratio	18%	18%	19%
Household Debt to Gross Income Ratio	1.48	1.63	1.78

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	305.5	791.8	758.1
Ratio of adjusted dwelling price to adjusted average household disposable income	4.0	6.3	6.2
Avg household income from labour market catchment	66627	93285	90574
Ratio of average mortgage costs on established dwellings to average household catchment income	30.3%	61.2%	50.1%
Ratio of average mortgage costs on new dwellings to average household catchment income	55.1%	43.4%	36.3%
Share of flats in dwelling stock	29.4%	31.8%	33.3%
Ratio of houses in new dwelling approvals	51.4%	29.4%	25.2%
Adults per occupied dwelling	2.0	2.1	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	306,424	357,728	417,730
UR Hours (1000 hours)	544,760	611,635	711,248
UR Income (\$m cvm)	18,827	28,418	31,733
POW Emp	323,672	390,788	434,401
POW Hours (1000 hours)	587,712	676,555	736,043
POW Income (\$m cvm)	19,056	28,031	29,070
UR Avg Weekly Hours / Emp	34.2	32.9	32.7
UR Avg Hourly Rate / Emp (\$cvm)	34.6	46.5	44.6
POW Avg Weekly Hours / Emp	34.9	33.3	32.6
POW Avg Hourly Rate / Emp (\$cvm)	32.4	41.4	39.5

Melbourne Southern Outer



By an accident of local government boundary reform Melbourne Outer South 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	630	676	711	2.3%	2.6%
No. Households	218	232	244	2.1%	2.5%
NIEIR Workforce	340	361	386	2.0%	3.5%
NIEIR Employment	310	325	351	1.5%	4.0%
NIEIR Unemployment	29.7	35.8	34.8	6.4%	-1.3%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	8.7%	9.9%	9.0%	0.4	-0.4
Headline U/E Rate	5.6%	6.9%	6.6%	0.4	-0.2
NIEIR Structural U/E Rate	8.4%	9.1%	8.3%	0.2	-0.4
Social Security Take-up	11.4%	12.2%	11.3%	0.3	-0.4
Hours Per Week (1)	23.7	22.8	23.5	-0.3	0.4
Not Employed Share (1)	25.2%	26.1%	23.1%	0.3	-1.5
Not In Employment (1)	37.5%	40.1%	38.1%	0.9	-1.0

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	15,949	16,012	17,813	0.1%	5.5%
Taxes Paid	3,666	3,851	4,294	1.7%	5.6%
Benefits	3,785	4,135	4,160	3.0%	0.3%
Business Income	2,639	3,183	3,663	6.5%	7.3%
Interest Paid	2,730	1,969	1,956	-10.3%	-0.3%
Property Income	3,498	3,433	3,642	-0.6%	3.0%
Disposable Income	24,284	26,020	28,511	2.3%	4.7%
Rank	15	14	10		
Industry GRP (Local)	17,774	18,128	18,701	0.7%	1.6%
Rank	23	23	23		
Headline GRP	20,063	21,069	23,132	1.6%	4.8%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	630	658	839
Value of Property and Unincorporated Business	534	598	830
Value of Financial Assets	310	296	277
Value of Household Liabilities	213	236	269
Disposable Income after Debt Service Costs	105	112	117
Household Debt Service Ratio	21%	19%	20%
Household Debt to Gross Income Ratio	1.70	1.80	1.97

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	166.4	442.5	420.2
Ratio of adjusted dwelling price to adjusted average household disposable income	2.2	3.9	3.9
Avg household income from labour market catchment	51850	60299	59925
Ratio of average mortgage costs on established dwellings to average household catchment income	21.6%	54.6%	43.2%
Ratio of average mortgage costs on new dwellings to average household catchment income	45.7%	61.0%	47.2%
Share of flats in dwelling stock	5.6%	5.4%	5.8%
Ratio of houses in new dwelling approvals	93.2%	86.4%	80.2%
Adults per occupied dwelling	2.1	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	192,168	267,703	351,359
UR Hours (1000 hours)	339,843	454,626	566,763
UR Income (\$m cvm)	11,038	17,167	20,728
POW Emp	130,498	160,194	213,548
POW Hours (1000 hours)	216,811	256,742	324,818
POW Income (\$m cvm)	6,688	9,191	11,909
UR Avg Weekly Hours / Emp	34.0	32.7	31.0
UR Avg Hourly Rate / Emp (\$cvm)	32.5	37.8	36.6
POW Avg Weekly Hours / Emp	32.0	30.8	29.3
POW Avg Hourly Rate / Emp (\$cvm)	30.8	35.8	36.7

Melbourne Western



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 increased commuting to Melbourne CBD. 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	769	840	892	3.0%	3.1%
No. Households	264	285	302	2.6%	3.1%
NIEIR Workforce	411	451	484	3.1%	3.6%
NIEIR Employment	377	411	441	2.9%	3.6%
NIEIR Unemployment	34.7	39.6	42.8	4.5%	3.9%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	8.4%	8.8%	8.8%	0.1	0.0
Headline U/E Rate	6.7%	7.4%	8.1%	0.2	0.4
NIEIR Structural U/E Rate	9.0%	9.2%	8.3%	0.1	-0.5
Social Security Take-up	11.8%	12.0%	10.8%	0.1	-0.6
Hours Per Week (1)	22.5	21.3	22.1	-0.4	0.4
Not Employed Share (1)	29.5%	28.7%	26.6%	-0.2	-1.1
Not In Employment (1)	40.8%	44.0%	41.8%	1.1	-1.1

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	21,276	22,070	24,099	1.2%	4.5%
Taxes Paid	4,857	5,294	5,855	2.9%	5.2%
Benefits	3,197	3,520	3,562	3.3%	0.6%
Business Income	2,327	3,270	3,706	12.0%	6.5%
Interest Paid	3,248	2,387	2,369	-9.8%	-0.4%
Property Income	4,016	4,202	4,405	1.5%	2.4%
Disposable Income	28,469	31,750	34,260	3.7%	3.9%
Rank	7	5	5		
Industry GRP (Local)	25,447	26,673	27,467	1.6%	1.5%
Rank	13	13	13		
Headline GRP	23,845	25,375	26,977	2.1%	3.1%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	573	624	778
Value of Property and Unincorporated Business	542	608	795
Value of Financial Assets	242	248	237
Value of Household Liabilities	210	232	253
Disposable Income after Debt Service Costs	107	111	113
Household Debt Service Ratio	20%	19%	19%
Household Debt to Gross Income Ratio	1.65	1.79	1.91

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	191.7	503.0	472.0
Ratio of adjusted dwelling price to adjusted average household disposable income	2.7	4.6	4.4
Avg household income from labour market catchment	67463	91372	87578
Ratio of average mortgage costs on established dwellings to average household catchment income	19.2%	41.7%	33.9%
Ratio of average mortgage costs on new dwellings to average household catchment income	35.4%	40.2%	31.8%
Share of flats in dwelling stock	12.1%	10.8%	11.7%
Ratio of houses in new dwelling approvals	73.6%	66.9%	59.6%
Adults per occupied dwelling	2.2	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	232,103	309,122	438,060
UR Hours (1000 hours)	414,488	532,356	691,327
UR Income (\$m cvm)	12,544	20,412	26,806
POW Emp	183,545	235,797	328,991
POW Hours (1000 hours)	327,893	403,988	515,934
POW Income (\$m cvm)	9,822	14,803	18,884
UR Avg Weekly Hours / Emp	34.3	33.1	30.3
UR Avg Hourly Rate / Emp (\$cvm)	30.3	38.3	38.8
POW Avg Weekly Hours / Emp	34.4	32.9	30.2
POW Avg Hourly Rate / Emp (\$cvm)	30.0	36.6	36.6

VIC Geelong



The Geelong region comprises the City of Greater Geelong plus the small Borough of Queenscliff. 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	221	233	242	1.7%	1.9%
No. Households	85	91	95	2.0%	2.2%
NIEIR Workforce	116	117	127	0.5%	3.9%
NIEIR Employment	105	105	116	-0.1%	5.0%
NIEIR Unemployment	10.4	12.4	11.2	6.3%	-5.3%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	8.9%	10.6%	8.8%	0.6	-0.9
Headline U/E Rate	5.6%	7.7%	6.1%	0.7	-0.8
NIEIR Structural U/E Rate	10.9%	11.8%	11.1%	0.3	-0.4
Social Security Take-up	14.0%	14.8%	14.2%	0.3	-0.3
Hours Per Week (1)	22.7	22.7	23.6	0.0	0.5
Not Employed Share (1)	26.3%	29.3%	23.9%	1.0	-2.7
Not In Employment (1)	40.3%	40.2%	37.8%	0.0	-1.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	5,496	5,219	5,946	-1.7%	6.7%
Taxes Paid	1,300	1,306	1,534	0.1%	8.4%
Benefits	1,609	1,600	1,577	-0.2%	-0.7%
Business Income	778	991	1,192	8.4%	9.7%
Interest Paid	834	599	571	-10.5%	-2.3%
Property Income	1,370	1,283	1,391	-2.2%	4.1%
Disposable Income	8,777	8,846	9,822	0.3%	5.4%
Rank	47	48	46		
Industry GRP (Local)	8,422	8,360	8,443	-0.2%	0.5%
Rank	49	48	48		
Headline GRP	10,042	10,354	10,971	1.0%	2.9%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	615	644	739
Value of Property and Unincorporated Business	463	536	646
Value of Financial Assets	313	293	287
Value of Household Liabilities	161	186	194
Disposable Income after Debt Service Costs	100	99	104
Household Debt Service Ratio	17%	18%	16%
Household Debt to Gross Income Ratio	1.38	1.62	1.63

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	142.4	386.3	385.0
Ratio of adjusted dwelling price to adjusted average household disposable income	2.1	3.8	4.1
Avg household income from labour market catchment	66139	89570	86012
Ratio of average mortgage costs on established dwellings to average household catchment income	14.5%	32.2%	27.6%
Ratio of average mortgage costs on new dwellings to average household catchment income	32.8%	38.0%	32.6%
Share of flats in dwelling stock	9.3%	9.0%	9.1%
Ratio of houses in new dwelling approvals	85.7%	88.5%	88.0%
Adults per occupied dwelling	2.1	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	75,515	96,771	116,329
UR Hours (1000 hours)	131,783	158,811	186,253
UR Income (\$m cvm)	4,052	6,004	7,098
POW Emp	70,312	88,597	104,011
POW Hours (1000 hours)	119,524	142,351	160,062
POW Income (\$m cvm)	3,648	5,290	6,040
UR Avg Weekly Hours / Emp	33.6	31.6	30.8
UR Avg Hourly Rate / Emp (\$cvm)	30.7	37.8	38.1
POW Avg Weekly Hours / Emp	32.7	30.9	29.6
POW Avg Hourly Rate / Emp (\$cvm)	30.5	37.2	37.7

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 La Trobe Valley is known for its brown-coal based power stations, which produce Australia's cheapest electricity at the cost of high greenhouse gas emissions.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	263	268	271	0.6%	0.5%
No. Households	104	108	111	1.2%	1.1%
NIEIR Workforce	133	131	137	-0.6%	2.2%
NIEIR Employment	118	116	118	-0.8%	1.2%
NIEIR Unemployment	15.0	15.3	18.5	0.8%	10.0%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	11.2%	11.7%	13.5%	0.2	0.9
Headline U/E Rate	5.0%	5.6%	8.3%	0.2	1.4
NIEIR Structural U/E Rate	13.2%	14.7%	14.2%	0.5	-0.3
Social Security Take-up	16.7%	18.5%	19.0%	0.6	0.3
Hours Per Week (1)	23.1	23.7	25.3	0.2	0.8
Not Employed Share (1)	28.0%	29.1%	26.8%	0.4	-1.1
Not In Employment (1)	39.3%	37.7%	33.5%	-0.5	-2.1

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	5,792	5,541	5,905	-1.5%	3.2%
Taxes Paid	1,478	1,493	1,662	0.3%	5.5%
Benefits	2,086	2,200	2,208	1.8%	0.2%
Business Income	1,558	1,734	2,027	3.6%	8.1%
Interest Paid	833	569	539	-12.0%	-2.6%
Property Income	1,575	1,503	1,581	-1.5%	2.5%
Disposable Income	10,699	10,912	11,591	0.7%	3.1%
Rank	40	39	37		
Industry GRP (Local)	10,166	9,933	9,617	-0.8%	-1.6%
Rank	41	43	44		
Headline GRP	17,120	17,083	18,457	-0.1%	3.9%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	527	562	635
Value of Property and Unincorporated Business	399	426	496
Value of Financial Assets	267	287	293
Value of Household Liabilities	138	150	154
Disposable Income after Debt Service Costs	100	99	105
Household Debt Service Ratio	15%	15%	13%
Household Debt to Gross Income Ratio	1.20	1.35	1.31

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	115.0	278.2	265.6
Ratio of adjusted dwelling price to adjusted average household disposable income	1.7	2.8	2.9
Avg household income from labour market catchment	50524	63673	65123
Ratio of average mortgage costs on established dwellings to average household catchment income	15.2%	32.0%	24.8%
Ratio of average mortgage costs on new dwellings to average household catchment income	40.3%	40.9%	32.0%
Share of flats in dwelling stock	5.6%	6.4%	6.5%
Ratio of houses in new dwelling approvals	90.7%	91.6%	91.9%
Adults per occupied dwelling	2.0	1.9	1.9

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	97,586	110,323	117,625
UR Hours (1000 hours)	171,908	185,603	212,576
UR Income (\$m cvm)	5,403	7,149	7,957
POW Emp	93,584	103,444	107,944
POW Hours (1000 hours)	162,276	171,897	190,986
POW Income (\$m cvm)	5,084	6,552	7,127
UR Avg Weekly Hours / Emp	33.9	32.4	34.8
UR Avg Hourly Rate / Emp (\$cvm)	31.4	38.5	37.4
POW Avg Weekly Hours / Emp	33.3	32.0	34.0
POW Avg Hourly Rate / Emp (\$cvm)	31.3	38.1	37.3

VIC Grampians



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, extending west to the Wimmera plains on the SA border. 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 while that further west concentrates on the small but spectacular peaks of the Grampians. The Wimmera is some of Australia's best grain-growing country.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	227	235	239	1.1%	0.8%
No. Households	88	93	96	1.7%	1.6%
NIEIR Workforce	120	123	127	0.8%	1.6%
NIEIR Employment	108	111	114	0.9%	1.3%
NIEIR Unemployment	12.0	11.9	12.9	-0.3%	4.0%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	10.0%	9.7%	10.1%	-0.1	0.2
Headline U/E Rate	5.1%	5.0%	6.2%	0.0	0.6
NIEIR Structural U/E Rate	12.4%	13.1%	12.5%	0.3	-0.3
Social Security Take-up	15.5%	16.6%	16.5%	0.4	0.0
Hours Per Week (1)	23.6	23.8	25.0	0.1	0.6
Not Employed Share (1)	25.8%	24.9%	23.2%	-0.3	-0.8
Not In Employment (1)	37.8%	37.2%	34.3%	-0.2	-1.5

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	5,107	5,078	5,437	-0.2%	3.5%
Taxes Paid	1,291	1,321	1,558	0.8%	8.6%
Benefits	1,729	1,705	1,680	-0.5%	-0.7%
Business Income	1,487	1,579	2,206	2.0%	18.2%
Interest Paid	752	539	518	-10.5%	-2.0%
Property Income	1,292	1,233	1,336	-1.5%	4.1%
Disposable Income	9,328	9,523	10,553	0.7%	5.3%
Rank	44	45	42		
Industry GRP (Local)	7,856	7,828	7,826	-0.1%	0.0%
Rank	51	51	53		
Headline GRP	9,185	9,428	10,382	0.9%	4.9%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	461	482	555
Value of Property and Unincorporated Business	327	378	460
Value of Financial Assets	279	268	261
Value of Household Liabilities	145	164	167
Disposable Income after Debt Service Costs	107	104	110
Household Debt Service Ratio	15%	15%	14%
Household Debt to Gross Income Ratio	1.21	1.40	1.37

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	118.0	258.9	263.6
Ratio of adjusted dwelling price to adjusted average household disposable income	1.8	2.5	2.6
Avg household income from labour market catchment	49442	62534	62901
Ratio of average mortgage costs on established dwellings to average household catchment income	16.6%	31.7%	26.9%
Ratio of average mortgage costs on new dwellings to average household catchment income	41.9%	43.0%	35.7%
Share of flats in dwelling stock	6.9%	5.5%	5.5%
Ratio of houses in new dwelling approvals	87.4%	92.9%	92.7%
Adults per occupied dwelling	2.0	2.0	1.9

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	79,038	100,160	113,620
UR Hours (1000 hours)	141,981	170,032	193,617
UR Income (\$m cvm)	4,388	5,930	7,088
POW Emp	70,169	86,643	95,349
POW Hours (1000 hours)	124,765	145,763	160,913
POW Income (\$m cvm)	3,826	4,989	5,833
UR Avg Weekly Hours / Emp	34.5	32.6	32.8
UR Avg Hourly Rate / Emp (\$cvm)	30.9	34.9	36.6
POW Avg Weekly Hours / Emp	34.2	32.4	32.5
POW Avg Hourly Rate / Emp (\$cvm)	30.7	34.2	36.3

VIC Hume



The North East of Victoria comprises the triangle 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 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 including mountain-top ski resorts. There are worries as to the effect of climate change both on the snowfields and on agriculture.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	269	276	279	0.8%	0.6%
No. Households	103	106	109	1.2%	1.1%
NIEIR Workforce	144	150	155	1.6%	1.4%
NIEIR Employment	129	134	140	1.3%	2.0%
NIEIR Unemployment	14.3	16.1	15.0	4.0%	-3.6%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	10.0%	10.7%	9.7%	0.2	-0.5
Headline U/E Rate	5.7%	6.3%	5.7%	0.2	-0.3
NIEIR Structural U/E Rate	11.7%	12.8%	12.2%	0.4	-0.3
Social Security Take-up	15.2%	16.2%	15.9%	0.3	-0.1
Hours Per Week (1)	24.5	24.9	26.4	0.1	0.7
Not Employed Share (1)	24.0%	21.6%	18.4%	-0.8	-1.6
Not In Employment (1)	35.5%	34.4%	30.5%	-0.3	-2.0

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	5,847	5,962	6,286	0.7%	2.7%
Taxes Paid	1,370	1,512	1,690	3.3%	5.7%
Benefits	2,201	2,230	2,264	0.4%	0.8%
Business Income	1,515	1,885	2,321	7.5%	11.0%
Interest Paid	868	606	582	-11.3%	-2.0%
Property Income	1,439	1,434	1,499	-0.1%	2.2%
Disposable Income	10,727	11,514	12,320	2.4%	3.4%
Rank	39	37	34		
Industry GRP (Local)	9,860	9,758	9,843	-0.3%	0.4%
Rank	44	45	41		
Headline GRP	12,428	12,630	14,026	0.5%	5.4%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	475	483	558
Value of Property and Unincorporated Business	364	373	460
Value of Financial Assets	262	270	263
Value of Household Liabilities	151	160	165
Disposable Income after Debt Service Costs	108	105	113
Household Debt Service Ratio	15%	15%	13%
Household Debt to Gross Income Ratio	1.24	1.36	1.32

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	142.7	270.4	256.7
Ratio of adjusted dwelling price to adjusted average household disposable income	2.0	2.6	2.5
Avg household income from labour market catchment	53433	69118	69547
Ratio of average mortgage costs on established dwellings to average household catchment income	18.0%	28.8%	22.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	39.6%	37.1%	29.8%
Share of flats in dwelling stock	6.3%	6.2%	6.2%
Ratio of houses in new dwelling approvals	92.0%	92.5%	96.7%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	105,732	124,851	138,824
UR Hours (1000 hours)	190,520	213,269	236,705
UR Income (\$m cvm)	5,698	7,392	8,411
POW Emp	95,667	112,280	120,724
POW Hours (1000 hours)	170,494	189,860	204,849
POW Income (\$m cvm)	5,182	6,613	7,493
UR Avg Weekly Hours / Emp	34.7	32.8	32.8
UR Avg Hourly Rate / Emp (\$cvm)	29.9	34.7	35.5
POW Avg Weekly Hours / Emp	34.3	32.5	32.6
POW Avg Hourly Rate / Emp (\$cvm)	30.4	34.8	36.6

VIC Loddon Mallee



Bendigo lies where the hills of Central Victoria give way to the plains of Northern Victoria and the region continues north and west to the Murray and to the SA border. The region is accordingly divided into relatively well-watered hill country which is well within the Melbourne hobby-farm belt and much drier farmland with small pockets of intensive irrigation along the river. 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 underpin tourism and proximity to Melbourne encourages retirement migration. 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	312	319	321	0.7%	0.4%
No. Households	120	125	127	1.2%	1.0%
NIEIR Workforce	162	168	167	1.2%	-0.4%
NIEIR Employment	146	149	148	0.8%	-0.5%
NIEIR Unemployment	15.7	18.5	18.5	5.6%	0.2%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	9.7%	11.0%	11.1%	0.4	0.1
Headline U/E Rate	5.0%	6.3%	7.4%	0.4	0.6
NIEIR Structural U/E Rate	12.7%	13.8%	13.0%	0.3	-0.4
Social Security Take-up	16.1%	17.4%	17.1%	0.5	-0.2
Hours Per Week (1)	23.9	24.9	25.6	0.3	0.4
Not Employed Share (1)	25.6%	24.2%	24.6%	-0.5	0.2
Not In Employment (1)	37.2%	34.6%	32.5%	-0.9	-1.0

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	6,753	6,626	6,849	-0.6%	1.7%
Taxes Paid	1,728	1,781	2,092	1.0%	8.4%
Benefits	2,484	2,570	2,640	1.1%	1.4%
Business Income	2,187	2,388	3,408	3.0%	19.5%
Interest Paid	1,027	733	701	-10.6%	-2.2%
Property Income	1,844	1,785	1,936	-1.1%	4.1%
Disposable Income	12,929	13,322	14,725	1.0%	5.1%
Rank	31	32	29		
Industry GRP (Local)	10,880	11,037	10,806	0.5%	-1.1%
Rank	39	36	34		
Headline GRP	14,465	15,017	15,828	1.3%	2.7%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	458	515	600
Value of Property and Unincorporated Business	337	398	479
Value of Financial Assets	266	283	288
Value of Household Liabilities	145	166	168
Disposable Income after Debt Service Costs	110	107	116
Household Debt Service Ratio	14%	15%	13%
Household Debt to Gross Income Ratio	1.17	1.38	1.31

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	128.8	272.9	279.4
Ratio of adjusted dwelling price to adjusted average household disposable income	1.8	2.6	2.7
Avg household income from labour market catchment	53715	64074	65422
Ratio of average mortgage costs on established dwellings to average household catchment income	16.5%	31.4%	26.3%
Ratio of average mortgage costs on new dwellings to average household catchment income	40.1%	41.8%	35.0%
Share of flats in dwelling stock	6.7%	6.0%	6.1%
Ratio of houses in new dwelling approvals	94.1%	93.3%	95.8%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	117,802	140,790	146,854
UR Hours (1000 hours)	213,778	239,877	263,400
UR Income (\$m cvm)	6,669	8,499	9,529
POW Emp	107,045	125,356	126,612
POW Hours (1000 hours)	191,835	211,612	223,984
POW Income (\$m cvm)	5,962	7,330	7,985
UR Avg Weekly Hours / Emp	34.9	32.8	34.5
UR Avg Hourly Rate / Emp (\$cvm)	31.2	35.4	36.2
POW Avg Weekly Hours / Emp	34.5	32.5	34.0
POW Avg Hourly Rate / Emp (\$cvm)	31.1	34.6	35.7

VIC South 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 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	150	150	150	0.1%	0.0%
No. Households	58	59	59	0.6%	0.6%
NIEIR Workforce	81	81	84	-0.1%	1.6%
NIEIR Employment	74	74	77	-0.3%	2.0%
NIEIR Unemployment	6.9	7.4	6.9	2.3%	-3.1%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	8.5%	9.1%	8.3%	0.2	-0.4
Headline U/E Rate	4.9%	5.4%	4.8%	0.2	-0.3
NIEIR Structural U/E Rate	10.1%	11.4%	11.1%	0.4	-0.2
Social Security Take-up	12.8%	14.1%	14.2%	0.4	0.1
Hours Per Week (1)	25.5	26.3	28.2	0.3	1.0
Not Employed Share (1)	21.2%	20.4%	16.1%	-0.3	-2.2
Not In Employment (1)	32.9%	30.7%	25.7%	-0.7	-2.5

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	3,348	3,160	3,448	-1.9%	4.5%
Taxes Paid	926	963	1,220	1.3%	12.5%
Benefits	1,150	1,175	1,138	0.7%	-1.6%
Business Income	1,480	1,737	2,541	5.5%	20.9%
Interest Paid	491	327	317	-12.7%	-1.6%
Property Income	938	901	1,043	-1.3%	7.6%
Disposable Income	6,828	7,049	8,235	1.1%	8.1%
Rank	54	54	53		
Industry GRP (Local)	6,240	6,135	6,050	-0.6%	-0.7%
Rank	57	58	57		
Headline GRP	7,776	7,807	8,740	0.1%	5.8%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	703	732	885
Value of Property and Unincorporated Business	506	541	685
Value of Financial Assets	345	349	371
Value of Household Liabilities	148	158	171
Disposable Income after Debt Service Costs	123	121	139
Household Debt Service Ratio	13%	13%	11%
Household Debt to Gross Income Ratio	1.06	1.16	1.11

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	133.3	344.1	328.3
Ratio of adjusted dwelling price to adjusted average household disposable income	1.9	3.0	2.9
Avg household income from labour market catchment	54917	70242	71438
Ratio of average mortgage costs on established dwellings to average household catchment income	16.7%	38.6%	30.7%
Ratio of average mortgage costs on new dwellings to average household catchment income	47.7%	52.1%	42.0%
Share of flats in dwelling stock	5.6%	5.6%	5.8%
Ratio of houses in new dwelling approvals	95.9%	96.1%	97.0%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	58,175	71,764	77,408
UR Hours (1000 hours)	106,446	123,258	134,908
UR Income (\$m cvm)	3,477	4,766	5,251
POW Emp	54,298	65,454	67,333
POW Hours (1000 hours)	98,482	112,062	116,542
POW Income (\$m cvm)	3,202	4,250	4,452
UR Avg Weekly Hours / Emp	35.2	33.0	33.5
UR Avg Hourly Rate / Emp (\$cvm)	32.7	38.7	38.9
POW Avg Weekly Hours / Emp	34.9	32.9	33.3
POW Avg Hourly Rate / Emp (\$cvm)	32.5	37.9	38.2

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 development, the urban area has now overflowed these 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, though these areas are vulnerable to rising sea levels. The knowledge economy is flourishing around Brisbane CBD and supports large areas of rather hilly commuter suburbs.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	1,110	1,162	1,196	1.5%	1.4%
No. Households	401	426	453	2.0%	3.2%
NIEIR Workforce	640	665	678	1.3%	1.0%
NIEIR Employment	608	626	636	1.0%	0.8%
NIEIR Unemployment	31.7	38.6	41.8	6.8%	4.1%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	5.0%	5.8%	6.2%	0.3	0.2
Headline U/E Rate	4.2%	5.3%	6.1%	0.4	0.4
NIEIR Structural U/E Rate	5.8%	6.1%	5.7%	0.1	-0.2
Social Security Take-up	7.7%	8.0%	7.8%	0.1	-0.1
Hours Per Week (1)	25.7	24.9	24.8	-0.3	-0.1
Not Employed Share (1)	22.7%	23.4%	23.4%	0.2	0.0
Not In Employment (1)	32.2%	34.5%	34.8%	0.8	0.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	39,145	40,315	39,468	1.0%	-1.1%
Taxes Paid	10,723	11,964	12,006	3.7%	0.2%
Benefits	5,269	5,474	5,221	1.3%	-2.3%
Business Income	6,723	5,357	5,475	-7.3%	1.1%
Interest Paid	5,219	4,009	4,171	-8.4%	2.0%
Property Income	11,532	11,424	11,883	-0.3%	2.0%
Disposable Income	58,775	59,670	59,128	0.5%	-0.5%
Rank	1	1	1		
Industry GRP (Local)	85,430	83,135	78,649	-0.9%	-2.7%
Rank	1	2	2		
Headline GRP	101,523	109,864	112,586	2.7%	1.2%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	975	929	865
Value of Property and Unincorporated Business	646	665	667
Value of Financial Assets	562	516	464
Value of Household Liabilities	233	252	266
Disposable Income after Debt Service Costs	142	141	130
Household Debt Service Ratio	17%	17%	18%
Household Debt to Gross Income Ratio	1.39	1.52	1.72

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	231.2	548.9	536.1
Ratio of adjusted dwelling price to adjusted average household disposable income	2.9	3.9	4.1
Avg household income from labour market catchment	68421	106642	101508
Ratio of average mortgage costs on established dwellings to average household catchment income	22.6%	37.5%	31.9%
Ratio of average mortgage costs on new dwellings to average household catchment income	44.0%	31.2%	24.8%
Share of flats in dwelling stock	17.0%	19.8%	21.2%
Ratio of houses in new dwelling approvals	55.1%	30.8%	21.4%
Adults per occupied dwelling	2.1	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	412,298	553,464	635,469
UR Hours (1000 hours)	735,536	959,348	1,064,087
UR Income (\$m cvm)	24,400	42,280	42,938
POW Emp	495,853	734,319	858,712
POW Hours (1000 hours)	894,870	1,280,553	1,443,317
POW Income (\$m cvm)	29,174	54,871	56,881
UR Avg Weekly Hours / Emp	34.3	33.3	32.2
UR Avg Hourly Rate / Emp (\$cvm)	33.2	44.1	40.4
POW Avg Weekly Hours / Emp	34.7	33.5	32.3
POW Avg Hourly Rate / Emp (\$cvm)	32.6	42.8	39.4

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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	527	556	584	1.8%	2.6%
No. Households	193	196	205	0.5%	2.3%
NIEIR Workforce	286	298	311	1.4%	2.1%
NIEIR Employment	264	276	288	1.5%	2.1%
NIEIR Unemployment	22.0	21.9	22.5	-0.1%	1.3%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	7.7%	7.4%	7.2%	-0.1	-0.1
Headline U/E Rate	6.0%	5.8%	6.3%	-0.1	0.3
NIEIR Structural U/E Rate	8.3%	9.3%	8.4%	0.3	-0.5
Social Security Take-up	11.9%	12.1%	10.9%	0.1	-0.6
Hours Per Week (1)	24.2	23.6	23.4	-0.2	-0.1
Not Employed Share (1)	25.3%	24.7%	24.2%	-0.2	-0.3
Not In Employment (1)	36.4%	37.9%	38.5%	0.5	0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	13,322	14,464	14,605	2.8%	0.5%
Taxes Paid	2,961	3,564	3,706	6.4%	2.0%
Benefits	3,424	3,491	3,277	0.6%	-3.1%
Business Income	2,897	2,319	2,428	-7.1%	2.3%
Interest Paid	2,173	1,633	1,720	-9.1%	2.6%
Property Income	3,420	3,302	3,503	-1.2%	3.0%
Disposable Income	22,280	23,251	23,537	1.4%	0.6%
Rank	18	17	19		
Industry GRP (Local)	22,979	22,315	22,115	-1.0%	-0.4%
Rank	17	18	17		
Headline GRP	26,534	28,689	30,391	2.6%	2.9%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	858	792	802
Value of Property and Unincorporated Business	669	635	698
Value of Financial Assets	394	379	365
Value of Household Liabilities	206	221	262
Disposable Income after Debt Service Costs	112	117	115
Household Debt Service Ratio	19%	17%	19%
Household Debt to Gross Income Ratio	1.52	1.60	1.90

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	259.9	517.2	481.3
Ratio of adjusted dwelling price to adjusted average household disposable income	4.8	4.8	4.5
Avg household income from labour market catchment	55060	77647	74115
Ratio of average mortgage costs on established dwellings to average household catchment income	31.5%	48.6%	39.3%
Ratio of average mortgage costs on new dwellings to average household catchment income	45.1%	49.1%	40.6%
Share of flats in dwelling stock	23.1%	21.8%	21.7%
Ratio of houses in new dwelling approvals	51.2%	52.8%	50.5%
Adults per occupied dwelling	1.9	2.1	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	138,163	241,691	288,824
UR Hours (1000 hours)	252,767	415,018	468,811
UR Income (\$m cvm)	7,367	15,876	16,313
POW Emp	147,741	231,860	263,522
POW Hours (1000 hours)	265,936	392,727	417,257
POW Income (\$m cvm)	7,600	14,626	14,439
UR Avg Weekly Hours / Emp	35.2	33.0	31.2
UR Avg Hourly Rate / Emp (\$cvm)	29.1	38.3	34.8
POW Avg Weekly Hours / Emp	34.6	32.6	30.4
POW Avg Hourly Rate / Emp (\$cvm)	28.6	37.2	34.6

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 and the hills in the south of the region have attracted retirees and horse-lovers. Intensive agriculture is practised in the several fertile valleys of tributaries of the Brisbane river.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	275	295	311	2.5%	2.6%
No. Households	94	100	107	2.2%	3.2%
NIEIR Workforce	141	150	153	2.1%	1.3%
NIEIR Employment	127	132	136	1.2%	1.6%
NIEIR Unemployment	13.6	17.8	17.4	9.5%	-1.1%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	9.7%	11.9%	11.3%	0.8	-0.3
Headline U/E Rate	5.5%	8.0%	8.2%	0.8	0.1
NIEIR Structural U/E Rate	11.9%	13.1%	12.0%	0.4	-0.5
Social Security Take-up	15.9%	17.3%	16.7%	0.5	-0.3
Hours Per Week (1)	23.7	22.4	21.5	-0.4	-0.4
Not Employed Share (1)	29.3%	31.0%	31.5%	0.6	0.3
Not In Employment (1)	37.7%	41.0%	43.4%	1.1	1.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	6,723	7,031	7,080	1.5%	0.3%
Taxes Paid	1,407	1,597	1,649	4.3%	1.6%
Benefits	1,651	1,792	1,769	2.8%	-0.6%
Business Income	991	737	784	-9.4%	3.1%
Interest Paid	1,040	751	771	-10.3%	1.3%
Property Income	1,378	1,408	1,502	0.7%	3.3%
Disposable Income	10,325	10,875	11,118	1.7%	1.1%
Rank	41	40	40		
Industry GRP (Local)	9,304	8,898	8,564	-1.5%	-1.9%
Rank	45	46	46		
Headline GRP	11,878	12,431	12,809	1.5%	1.5%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	513	451	450
Value of Property and Unincorporated Business	458	417	478
Value of Financial Assets	262	238	208
Value of Household Liabilities	207	204	236
Disposable Income after Debt Service Costs	107	109	105
Household Debt Service Ratio	20%	18%	20%
Household Debt to Gross Income Ratio	1.62	1.63	1.94

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	138.1	359.4	325.2
Ratio of adjusted dwelling price to adjusted average household disposable income	2.1	3.3	3.1
Avg household income from labour market catchment	60639	89203	85585
Ratio of average mortgage costs on established dwellings to average household catchment income	15.6%	31.7%	24.7%
Ratio of average mortgage costs on new dwellings to average household catchment income	31.6%	36.0%	28.6%
Share of flats in dwelling stock	3.0%	3.0%	3.3%
Ratio of houses in new dwelling approvals	90.4%	88.2%	87.7%
Adults per occupied dwelling	2.1	2.1	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	78,139	110,131	136,702
UR Hours (1000 hours)	141,399	194,366	221,943
UR Income (\$m cvm)	4,063	7,093	7,622
POW Emp	67,246	87,400	104,507
POW Hours (1000 hours)	117,431	150,367	163,803
POW Income (\$m cvm)	3,378	5,473	5,618
UR Avg Weekly Hours / Emp	34.8	33.9	31.2
UR Avg Hourly Rate / Emp (\$cvm)	28.7	36.5	34.3
POW Avg Weekly Hours / Emp	33.6	33.1	30.1
POW Avg Hourly Rate / Emp (\$cvm)	28.8	36.4	34.3

SEQ Logan Redland



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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	440	459	472	1.4%	1.5%
No. Households	147	155	162	1.7%	2.5%
NIEIR Workforce	239	231	237	-1.2%	1.4%
NIEIR Employment	216	208	214	-1.3%	1.5%
NIEIR Unemployment	23.7	23.1	23.3	-0.8%	0.4%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	9.9%	10.0%	9.8%	0.0	-0.1
Headline U/E Rate	6.6%	6.8%	7.1%	0.1	0.2
NIEIR Structural U/E Rate	9.5%	10.9%	10.2%	0.5	-0.3
Social Security Take-up	13.2%	14.3%	14.1%	0.4	-0.1
Hours Per Week (1)	24.5	24.0	23.4	-0.2	-0.3
Not Employed Share (1)	26.5%	31.0%	30.0%	1.5	-0.5
Not In Employment (1)	35.5%	36.9%	38.5%	0.5	0.8

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	11,753	11,446	11,668	-0.9%	1.0%
Taxes Paid	2,420	2,585	2,685	2.2%	1.9%
Benefits	2,525	2,612	2,472	1.1%	-2.7%
Business Income	1,620	1,225	1,314	-8.9%	3.5%
Interest Paid	1,899	1,339	1,369	-11.0%	1.1%
Property Income	2,053	1,905	2,043	-2.5%	3.6%
Disposable Income	16,990	16,737	17,182	-0.5%	1.3%
Rank	25	26	27		
Industry GRP (Local)	13,410	12,770	12,309	-1.6%	-1.8%
Rank	27	29	28		
Headline GRP	14,501	15,212	15,635	1.6%	1.4%

- Notes: (1) All years stated above are fiscal year ending.
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 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	568	503	517
Value of Property and Unincorporated Business	532	493	576
Value of Financial Assets	274	247	218
Value of Household Liabilities	239	238	276
Disposable Income after Debt Service Costs	115	110	106
Household Debt Service Ratio	21%	20%	22%
Household Debt to Gross Income Ratio	1.72	1.83	2.18

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	185.5	437.0	399.4
Ratio of adjusted dwelling price to adjusted average household disposable income	2.5	3.8	3.8
Avg household income from labour market catchment	39392	58028	54001
Ratio of average mortgage costs on established dwellings to average household catchment income	31.9%	56.6%	46.1%
Ratio of average mortgage costs on new dwellings to average household catchment income	50.0%	57.3%	50.2%
Share of flats in dwelling stock	3.3%	3.3%	4.0%
Ratio of houses in new dwelling approvals	80.2%	70.7%	80.3%
Adults per occupied dwelling	2.1	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	145,775	199,116	217,078
UR Hours (1000 hours)	264,815	348,822	374,881
UR Income (\$m cvm)	7,594	12,720	13,195
POW Emp	101,052	128,084	142,867
POW Hours (1000 hours)	171,418	213,148	226,523
POW Income (\$m cvm)	4,892	7,698	7,845
UR Avg Weekly Hours / Emp	34.9	33.7	33.2
UR Avg Hourly Rate / Emp (\$cvm)	28.7	36.5	35.2
POW Avg Weekly Hours / Emp	32.6	32.0	30.5
POW Avg Hourly Rate / Emp (\$cvm)	28.5	36.1	34.6

SEQ Moreton Bay



Moreton Bay regional council covers the suburbs between Brisbane and the Sunshine Coast. 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. As a resort dating from the 1920s, Redcliffe has the largest concentration of pre-war housing in the region.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	400	425	442	2.1%	1.9%
No. Households	139	149	158	2.5%	2.8%
NIEIR Workforce	209	225	231	2.5%	1.3%
NIEIR Employment	193	204	212	2.0%	1.7%
NIEIR Unemployment	16.3	21.0	19.7	8.8%	-3.0%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	7.8%	9.3%	8.5%	0.5	-0.4
Headline U/E Rate	5.1%	6.7%	6.2%	0.5	-0.3
NIEIR Structural U/E Rate	9.2%	10.1%	9.5%	0.3	-0.3
Social Security Take-up	12.8%	14.1%	13.6%	0.4	-0.2
Hours Per Week (1)	24.4	23.6	22.9	-0.3	-0.4
Not Employed Share (1)	26.0%	25.1%	24.5%	-0.3	-0.3
Not In Employment (1)	35.8%	37.8%	39.7%	0.7	0.9

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	10,850	11,691	11,830	2.5%	0.6%
Taxes Paid	2,254	2,695	2,767	6.1%	1.3%
Benefits	2,560	2,792	2,697	2.9%	-1.7%
Business Income	1,358	1,115	1,153	-6.4%	1.7%
Interest Paid	1,714	1,259	1,299	-9.8%	1.6%
Property Income	1,953	2,016	2,155	1.1%	3.4%
Disposable Income	15,817	17,252	17,622	2.9%	1.1%
Rank	26	25	26		
Industry GRP (Local)	11,231	11,041	10,783	-0.6%	-1.2%
Rank	36	35	35		
Headline GRP	12,362	13,416	13,958	2.8%	2.0%

- Notes: (1) All years stated above are fiscal year ending.
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 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	569	525	537
Value of Property and Unincorporated Business	528	505	565
Value of Financial Assets	269	252	235
Value of Household Liabilities	228	232	263
Disposable Income after Debt Service Costs	107	114	111
Household Debt Service Ratio	21%	19%	20%
Household Debt to Gross Income Ratio	1.76	1.72	1.98

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	183.6	434.0	402.3
Ratio of adjusted dwelling price to adjusted average household disposable income	2.8	3.8	3.7
Avg household income from labour market catchment	30039	40363	37760
Ratio of average mortgage costs on established dwellings to average household catchment income	40.8%	78.4%	64.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	63.0%	73.4%	66.0%
Share of flats in dwelling stock	5.9%	5.9%	7.6%
Ratio of houses in new dwelling approvals	84.7%	60.4%	71.8%
Adults per occupied dwelling	2.1	2.1	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	106,949	165,363	210,505
UR Hours (1000 hours)	192,383	286,591	337,412
UR Income (\$m cvm)	5,641	10,906	12,199
POW Emp	74,849	97,915	122,806
POW Hours (1000 hours)	124,807	160,184	182,495
POW Income (\$m cvm)	3,493	5,704	6,254
UR Avg Weekly Hours / Emp	34.6	33.3	30.8
UR Avg Hourly Rate / Emp (\$cvm)	29.3	38.1	36.2
POW Avg Weekly Hours / Emp	32.1	31.5	28.6
POW Avg Hourly Rate / Emp (\$cvm)	28.0	35.6	34.3

SEQ Sunshine Coast



The Sunshine Coast 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 the major urban developments in the region have been along the coast, prompted by tourism and retirement, but the cool, wet townships along the top of the range have also become retirement destinations. 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	324	341	355	1.7%	2.0%
No. Households	121	123	128	0.7%	2.1%
NIEIR Workforce	163	174	170	2.3%	-1.2%
NIEIR Employment	149	157	158	1.9%	0.2%
NIEIR Unemployment	14.1	16.9	12.1	6.2%	-15.3%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	8.7%	9.7%	7.1%	0.3	-1.3
Headline U/E Rate	6.0%	7.0%	4.8%	0.3	-1.1
NIEIR Structural U/E Rate	9.7%	10.7%	9.9%	0.4	-0.4
Social Security Take-up	13.5%	14.0%	13.3%	0.2	-0.4
Hours Per Week (1)	23.2	23.1	22.1	0.0	-0.5
Not Employed Share (1)	27.2%	25.5%	27.2%	-0.6	0.8
Not In Employment (1)	39.1%	39.2%	41.9%	0.1	1.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	7,191	7,970	7,744	3.5%	-1.4%
Taxes Paid	1,542	1,899	1,893	7.2%	-0.1%
Benefits	2,752	2,770	2,594	0.2%	-3.2%
Business Income	1,697	1,391	1,428	-6.4%	1.3%
Interest Paid	1,225	930	970	-8.8%	2.1%
Property Income	2,133	2,174	2,287	0.6%	2.6%
Disposable Income	13,500	14,325	14,148	2.0%	-0.6%
Rank	29	29	31		
Industry GRP (Local)	12,647	12,475	12,169	-0.5%	-1.2%
Rank	32	30	29		
Headline GRP	14,143	15,408	16,068	2.9%	2.1%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	866	797	844
Value of Property and Unincorporated Business	670	621	719
Value of Financial Assets	386	376	373
Value of Household Liabilities	190	199	248
Disposable Income after Debt Service Costs	104	115	111
Household Debt Service Ratio	18%	16%	19%
Household Debt to Gross Income Ratio	1.49	1.46	1.85

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	235.8	497.9	466.0
Ratio of adjusted dwelling price to adjusted average household disposable income	4.5	4.9	4.4
Avg household income from labour market catchment	45439	66095	63121
Ratio of average mortgage costs on established dwellings to average household catchment income	34.8%	55.0%	44.7%
Ratio of average mortgage costs on new dwellings to average household catchment income	53.4%	56.9%	49.3%
Share of flats in dwelling stock	15.4%	13.2%	13.0%
Ratio of houses in new dwelling approvals	68.3%	64.6%	73.6%
Adults per occupied dwelling	1.9	2.0	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	80,504	138,390	158,094
UR Hours (1000 hours)	141,725	229,669	254,402
UR Income (\$m cvm)	4,103	8,326	8,631
POW Emp	78,484	128,173	142,792
POW Hours (1000 hours)	135,761	209,401	223,566
POW Income (\$m cvm)	3,892	7,434	7,450
UR Avg Weekly Hours / Emp	33.9	31.9	30.9
UR Avg Hourly Rate / Emp (\$cvm)	29.0	36.3	33.9
POW Avg Weekly Hours / Emp	33.3	31.4	30.1
POW Avg Hourly Rate / Emp (\$cvm)	28.7	35.5	33.3

QLD Darling Downs South West



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. Toowoomba is 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 dry and pastoral. On the Darling Downs coal is mined to feed power stations and for export. Coal seam methane production is expanding rapidly, also with an eye to export markets via Gladstone.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	263	270	271	0.9%	0.1%
No. Households	97	102	105	1.8%	1.5%
NIEIR Workforce	139	138	141	-0.2%	1.0%
NIEIR Employment	128	128	128	-0.2%	0.0%
NIEIR Unemployment	11.0	10.7	13.4	-0.8%	11.8%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	7.9%	7.7%	9.5%	0.0	0.9
Headline U/E Rate	4.2%	4.2%	6.5%	0.0	1.2
NIEIR Structural U/E Rate	10.5%	10.9%	10.5%	0.1	-0.2
Social Security Take-up	13.6%	14.7%	15.3%	0.4	0.3
Hours Per Week (1)	27.2	27.1	26.9	0.0	-0.1
Not Employed Share (1)	22.3%	23.7%	23.1%	0.5	-0.3
Not In Employment (1)	28.5%	28.7%	29.1%	0.1	0.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	6,449	6,513	6,473	0.3%	-0.3%
Taxes Paid	1,570	1,687	1,904	2.4%	6.2%
Benefits	1,891	2,167	2,411	4.6%	5.5%
Business Income	2,229	1,823	2,313	-6.5%	12.7%
Interest Paid	989	743	750	-9.1%	0.4%
Property Income	1,273	1,171	1,279	-2.7%	4.5%
Disposable Income	11,487	11,484	12,231	0.0%	3.2%
Rank	34	38	35		
Industry GRP (Local)	11,607	10,964	10,196	-1.9%	-3.6%
Rank	34	37	39		
Headline GRP	18,860	18,895	18,741	0.1%	-0.4%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	480	480	475
Value of Property and Unincorporated Business	389	421	432
Value of Financial Assets	264	259	259
Value of Household Liabilities	173	200	217
Disposable Income after Debt Service Costs	116	112	116
Household Debt Service Ratio	16%	17%	17%
Household Debt to Gross Income Ratio	1.29	1.55	1.63

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	145.9	302.9	308.8
Ratio of adjusted dwelling price to adjusted average household disposable income	2.0	2.7	3.0
Avg household income from labour market catchment	57680	76949	72995
Ratio of average mortgage costs on established dwellings to average household catchment income	17.5%	29.2%	26.2%
Ratio of average mortgage costs on new dwellings to average household catchment income	37.8%	35.1%	29.0%
Share of flats in dwelling stock	7.2%	7.9%	8.4%
Ratio of houses in new dwelling approvals	86.8%	82.6%	67.8%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	99,635	122,514	127,838
UR Hours (1000 hours)	182,375	222,527	231,557
UR Income (\$m cvm)	5,571	7,529	7,594
POW Emp	101,332	124,067	129,807
POW Hours (1000 hours)	183,986	223,705	232,541
POW Income (\$m cvm)	5,640	7,591	7,611
UR Avg Weekly Hours / Emp	35.2	34.9	34.8
UR Avg Hourly Rate / Emp (\$cvm)	30.5	33.8	32.8
POW Avg Weekly Hours / Emp	34.9	34.7	34.5
POW Avg Hourly Rate / Emp (\$cvm)	30.7	33.9	32.7

QLD Far North Torres



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 the 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. Beyond the high rainfall country is a vast area of sparsely-populated pastoral country, while to the north lie the islands which are the home of the Torres Strait Island peoples.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	268	277	281	1.1%	0.7%
No. Households	96	97	99	0.4%	0.6%
NIEIR Workforce	148	144	149	-0.9%	1.8%
NIEIR Employment	131	128	128	-0.8%	0.0%
NIEIR Unemployment	16.8	15.7	21.1	-2.2%	15.7%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	11.4%	11.0%	14.2%	-0.1	1.6
Headline U/E Rate	8.2%	7.9%	12.4%	-0.1	2.3
NIEIR Structural U/E Rate	12.3%	13.3%	12.5%	0.3	-0.4
Social Security Take-up	17.1%	18.9%	18.5%	0.6	-0.2
Hours Per Week (1)	25.1	24.5	24.1	-0.2	-0.2
Not Employed Share (1)	26.7%	29.4%	29.4%	0.9	0.0
Not In Employment (1)	34.0%	35.6%	36.5%	0.5	0.4

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	6,502	6,357	6,415	-0.7%	0.5%
Taxes Paid	1,444	1,466	1,521	0.5%	1.9%
Benefits	1,681	1,709	1,642	0.6%	-2.0%
Business Income	1,639	1,190	1,360	-10.1%	6.9%
Interest Paid	999	717	738	-10.5%	1.5%
Property Income	1,329	1,172	1,260	-4.1%	3.7%
Disposable Income	10,779	10,307	10,619	-1.5%	1.5%
Rank	38	41	41		
Industry GRP (Local)	10,987	10,232	9,679	-2.3%	-2.7%
Rank	38	40	42		
Headline GRP	15,297	15,585	15,676	0.6%	0.3%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	551	495	506
Value of Property and Unincorporated Business	474	439	467
Value of Financial Assets	271	257	262
Value of Household Liabilities	194	200	223
Disposable Income after Debt Service Costs	121	105	108
Household Debt Service Ratio	17%	18%	18%
Household Debt to Gross Income Ratio	1.39	1.64	1.77

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	200.4	350.2	327.6
Ratio of adjusted dwelling price to adjusted average household disposable income	2.8	3.2	3.3
Avg household income from labour market catchment	50591	67836	64592
Ratio of average mortgage costs on established dwellings to average household catchment income	27.5%	38.4%	31.5%
Ratio of average mortgage costs on new dwellings to average household catchment income	52.2%	54.4%	46.6%
Share of flats in dwelling stock	15.9%	17.1%	17.1%
Ratio of houses in new dwelling approvals	72.8%	90.5%	92.9%
Adults per occupied dwelling	2.1	2.0	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	103,839	126,969	129,392
UR Hours (1000 hours)	190,017	226,001	229,009
UR Income (\$m cvm)	5,395	8,441	7,575
POW Emp	98,591	124,929	122,709
POW Hours (1000 hours)	178,219	219,970	214,502
POW Income (\$m cvm)	5,012	8,154	7,011
UR Avg Weekly Hours / Emp	35.2	34.2	34.0
UR Avg Hourly Rate / Emp (\$cvm)	28.4	37.4	33.1
POW Avg Weekly Hours / Emp	34.8	33.9	33.6
POW Avg Hourly Rate / Emp (\$cvm)	28.1	37.1	32.7

QLD Fitzroy Central West



The Fitzroy Central West region comprises an east-west strip from the coast to the NT border, perceived as a region by the uniting effect of the Central Railway – though highway access from Brisbane to the western parts of the region is now via Toowoomba and Roma. Coal is mined in the central part of the region and railed to the port of Gladstone for export, but coal seam methane is taking over as fuel for the energy-intensive industries which have developed there and is shortly to be exported. As the long-standing commercial capital of the region, Rockhampton has 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	235	247	246	1.7%	-0.4%
No. Households	82	89	90	2.4%	0.7%
NIEIR Workforce	132	134	133	0.6%	-0.4%
NIEIR Employment	122	124	120	0.7%	-1.6%
NIEIR Unemployment	9.8	9.8	12.7	0.0%	14.0%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	7.4%	7.3%	9.6%	0.0	1.1
Headline U/E Rate	5.2%	5.5%	8.0%	0.1	1.3
NIEIR Structural U/E Rate	8.2%	8.2%	8.3%	0.0	0.0
Social Security Take-up	11.0%	12.4%	14.2%	0.5	0.9
Hours Per Week (1)	28.0	26.7	26.5	-0.5	-0.1
Not Employed Share (1)	22.2%	23.9%	24.8%	0.6	0.5
Not In Employment (1)	26.2%	29.8%	30.4%	1.2	0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	8,212	8,536	8,151	1.3%	-2.3%
Taxes Paid	2,080	2,399	2,482	4.9%	1.7%
Benefits	1,167	1,395	1,526	6.1%	4.6%
Business Income	1,396	1,207	1,481	-4.7%	10.8%
Interest Paid	1,093	727	701	-12.7%	-1.8%
Property Income	1,262	1,251	1,314	-0.3%	2.5%
Disposable Income	11,028	11,593	11,582	1.7%	0.0%
Rank	36	36	38		
Industry GRP (Local)	13,040	11,814	10,728	-3.2%	-4.7%
Rank	29	33	36		
Headline GRP	17,696	19,376	19,719	3.1%	0.9%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	522	531	463
Value of Property and Unincorporated Business	470	483	407
Value of Financial Assets	272	287	286
Value of Household Liabilities	221	240	230
Disposable Income after Debt Service Costs	126	131	129
Household Debt Service Ratio	18%	17%	16%
Household Debt to Gross Income Ratio	1.49	1.58	1.55

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	140.1	365.3	353.9
Ratio of adjusted dwelling price to adjusted average household disposable income	1.8	2.8	2.9
Avg household income from labour market catchment	61862	97092	87711
Ratio of average mortgage costs on established dwellings to average household catchment income	16.5%	30.4%	26.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	36.3%	36.0%	30.8%
Share of flats in dwelling stock	7.3%	7.5%	7.5%
Ratio of houses in new dwelling approvals	83.2%	85.8%	83.7%
Adults per occupied dwelling	2.1	2.1	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	89,094	110,050	118,395
UR Hours (1000 hours)	160,463	202,043	218,990
UR Income (\$m cvm)	5,167	8,582	7,968
POW Emp	90,405	111,063	122,333
POW Hours (1000 hours)	161,481	202,524	224,525
POW Income (\$m cvm)	5,235	8,621	8,200
UR Avg Weekly Hours / Emp	34.6	35.3	35.6
UR Avg Hourly Rate / Emp (\$cvm)	32.2	42.5	36.4
POW Avg Weekly Hours / Emp	34.3	35.1	35.3
POW Avg Hourly Rate / Emp (\$cvm)	32.4	42.6	36.5

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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	176	182	179	1.1%	-0.9%
No. Households	59	64	64	2.3%	0.0%
NIEIR Workforce	102	105	103	1.0%	-0.9%
NIEIR Employment	98	98	96	0.2%	-1.2%
NIEIR Unemployment	4.5	6.9	7.4	15.4%	3.3%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	4.4%	6.6%	7.2%	0.7	0.3
Headline U/E Rate	3.6%	5.9%	6.2%	0.8	0.2
NIEIR Structural U/E Rate	5.8%	6.6%	6.8%	0.2	0.1
Social Security Take-up	8.3%	10.2%	11.8%	0.7	0.8
Hours Per Week (1)	29.4	28.7	28.9	-0.3	0.1
Not Employed Share (1)	19.6%	20.7%	20.2%	0.4	-0.3
Not In Employment (1)	22.5%	24.6%	23.9%	0.7	-0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	7,047	6,682	6,676	-1.8%	0.0%
Taxes Paid	1,796	1,785	1,865	-0.2%	2.2%
Benefits	763	985	1,110	8.9%	6.1%
Business Income	989	734	872	-9.5%	9.0%
Interest Paid	775	486	462	-14.4%	-2.5%
Property Income	1,070	951	1,014	-3.9%	3.3%
Disposable Income	9,095	8,889	9,195	-0.8%	1.7%
Rank	46	46	48		
Industry GRP (Local)	12,102	10,546	9,448	-4.5%	-5.3%
Rank	33	38	45		
Headline GRP	15,736	17,880	18,837	4.3%	2.6%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	708	639	571
Value of Property and Unincorporated Business	576	544	429
Value of Financial Assets	355	324	351
Value of Household Liabilities	223	229	209
Disposable Income after Debt Service Costs	145	142	144
Household Debt Service Ratio	16%	15%	13%
Household Debt to Gross Income Ratio	1.31	1.39	1.27

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	177.5	430.8	398.0
Ratio of adjusted dwelling price to adjusted average household disposable income	2.2	2.9	3.0
Avg household income from labour market catchment	63015	112547	101837
Ratio of average mortgage costs on established dwellings to average household catchment income	21.6%	35.2%	29.5%
Ratio of average mortgage costs on new dwellings to average household catchment income	43.0%	41.4%	34.0%
Share of flats in dwelling stock	10.5%	9.8%	10.2%
Ratio of houses in new dwelling approvals	84.1%	81.0%	76.0%
Adults per occupied dwelling	2.1	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	65,227	86,836	94,964
UR Hours (1000 hours)	119,610	161,358	179,117
UR Income (\$m cvm)	3,944	7,244	6,866
POW Emp	66,873	87,687	103,973
POW Hours (1000 hours)	122,012	161,734	193,997
POW Income (\$m cvm)	4,077	7,285	7,549
UR Avg Weekly Hours / Emp	35.3	35.7	36.3
UR Avg Hourly Rate / Emp (\$cvm)	33.0	44.9	38.3
POW Avg Weekly Hours / Emp	35.1	35.5	35.9
POW Avg Hourly Rate / Emp (\$cvm)	33.4	45.0	38.9

QLD Townsville North West



Townsville is a major city and port with an economic base emphasising defence and minerals processing. Nearby are two intensive agricultural areas both originally developed for sugar: the Burdekin Delta and the Herbert River Valley. Despite nearby Magnetic Island and the Barrier Reef, the region is less involved in tourism than the other Queensland east coast regions. The Great Northern Railway runs west from Townsville across pastoral black soil plains to Mt Isa, a mining town not far from the Queensland border now servicing a number of other significant base metal mines.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	265	274	274	1.1%	0.0%
No. Households	92	97	98	1.5%	0.8%
NIEIR Workforce	151	149	146	-0.4%	-0.9%
NIEIR Employment	138	135	128	-0.8%	-2.8%
NIEIR Unemployment	12.5	13.9	18.6	3.7%	15.6%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	8.3%	9.3%	12.7%	0.4	1.7
Headline U/E Rate	6.4%	7.5%	12.0%	0.4	2.3
NIEIR Structural U/E Rate	8.6%	9.7%	9.5%	0.4	-0.1
Social Security Take-up	12.3%	14.0%	14.7%	0.6	0.3
Hours Per Week (1)	27.1	26.3	25.9	-0.3	-0.2
Not Employed Share (1)	23.2%	26.6%	29.8%	1.1	1.6
Not In Employment (1)	28.6%	30.8%	31.7%	0.7	0.5

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	8,310	8,165	7,484	-0.6%	-4.3%
Taxes Paid	1,969	2,087	2,007	2.0%	-1.9%
Benefits	1,391	1,646	1,714	5.8%	2.1%
Business Income	1,699	1,338	1,491	-7.6%	5.6%
Interest Paid	1,139	774	766	-12.1%	-0.5%
Property Income	1,266	1,145	1,136	-3.3%	-0.4%
Disposable Income	11,899	11,806	11,307	-0.3%	-2.1%
Rank	33	34	39		
Industry GRP (Local)	12,857	12,399	11,204	-1.2%	-4.9%
Rank	31	31	33		
Headline GRP	20,408	21,112	20,434	1.1%	-1.6%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	524	456	386
Value of Property and Unincorporated Business	480	438	398
Value of Financial Assets	266	243	216
Value of Household Liabilities	221	225	229
Disposable Income after Debt Service Costs	128	120	115
Household Debt Service Ratio	18%	18%	18%
Household Debt to Gross Income Ratio	1.47	1.62	1.72

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	174.0	362.5	329.0
Ratio of adjusted dwelling price to adjusted average household disposable income	2.0	2.9	2.9
Avg household income from labour market catchment	63329	82000	79946
Ratio of average mortgage costs on established dwellings to average household catchment income	18.6%	32.8%	25.8%
Ratio of average mortgage costs on new dwellings to average household catchment income	38.8%	41.3%	32.4%
Share of flats in dwelling stock	11.9%	12.3%	12.5%
Ratio of houses in new dwelling approvals	75.9%	83.2%	67.6%
Adults per occupied dwelling	2.1	2.1	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	112,254	126,589	127,186
UR Hours (1000 hours)	199,752	229,988	244,498
UR Income (\$m cvm)	6,655	9,496	9,019
POW Emp	112,670	125,764	126,947
POW Hours (1000 hours)	198,446	226,824	240,581
POW Income (\$m cvm)	6,667	9,379	8,835
UR Avg Weekly Hours / Emp	34.2	34.9	37.0
UR Avg Hourly Rate / Emp (\$cvm)	33.3	41.3	36.9
POW Avg Weekly Hours / Emp	33.9	34.7	36.4
POW Avg Hourly Rate / Emp (\$cvm)	33.6	41.4	36.7

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 traditional 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	284	289	291	0.6%	0.3%
No. Households	107	110	112	0.8%	1.0%
NIEIR Workforce	131	127	131	-0.9%	1.4%
NIEIR Employment	111	105	109	-1.9%	2.1%
NIEIR Unemployment	20.3	22.8	21.9	3.9%	-1.9%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	15.5%	17.9%	16.7%	0.8	-0.6
Headline U/E Rate	7.7%	10.1%	9.0%	0.8	-0.6
NIEIR Structural U/E Rate	17.9%	20.0%	19.3%	0.7	-0.3
Social Security Take-up	23.1%	25.5%	25.9%	0.8	0.2
Hours Per Week (1)	21.3	21.6	21.3	0.1	-0.1
Not Employed Share (1)	35.3%	38.2%	34.9%	1.0	-1.7
Not In Employment (1)	44.0%	43.2%	43.9%	-0.3	0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	5,254	4,988	5,138	-1.7%	1.5%
Taxes Paid	1,075	1,098	1,187	0.7%	4.0%
Benefits	2,343	2,449	2,503	1.5%	1.1%
Business Income	1,119	855	923	-8.6%	3.9%
Interest Paid	983	691	703	-11.1%	0.9%
Property Income	1,413	1,276	1,382	-3.3%	4.1%
Disposable Income	9,824	9,534	9,972	-1.0%	2.3%
Rank	42	44	44		
Industry GRP (Local)	9,143	8,404	8,010	-2.8%	-2.4%
Rank	46	47	51		
Headline GRP	11,048	11,415	11,625	1.1%	0.9%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	507	441	440
Value of Property and Unincorporated Business	425	383	418
Value of Financial Assets	247	231	222
Value of Household Liabilities	166	173	201
Disposable Income after Debt Service Costs	95	87	89
Household Debt Service Ratio	18%	18%	19%
Household Debt to Gross Income Ratio	1.47	1.69	1.90

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	140.1	309.1	280.2
Ratio of adjusted dwelling price to adjusted average household disposable income	2.3	3.5	3.4
Avg household income from labour market catchment	42490	56407	53506
Ratio of average mortgage costs on established dwellings to average household catchment income	22.5%	40.6%	32.3%
Ratio of average mortgage costs on new dwellings to average household catchment income	45.5%	48.6%	39.5%
Share of flats in dwelling stock	6.2%	6.7%	6.9%
Ratio of houses in new dwelling approvals	86.0%	91.1%	91.2%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	84,587	105,689	110,578
UR Hours (1000 hours)	151,471	183,642	187,288
UR Income (\$m cvm)	4,036	6,264	5,880
POW Emp	84,278	103,071	102,474
POW Hours (1000 hours)	149,500	177,394	170,134
POW Income (\$m cvm)	3,991	6,002	5,270
UR Avg Weekly Hours / Emp	34.4	33.4	32.6
UR Avg Hourly Rate / Emp (\$cvm)	26.6	34.1	31.4
POW Avg Weekly Hours / Emp	34.1	33.1	31.9
POW Avg Hourly Rate / Emp (\$cvm)	26.7	33.8	31.0

Adelaide South



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. Adelaide airport lies within the region, close to the CBD. The gracious beach-side suburbs of Holdfast Bay are nearby. Up to 1950 the suburbs ended where the Mt Lofty scarp reached the sea, but the commuter belt now extends well south. The CBD provides the economic base of the region, with much of the rest comprising commuter suburbs.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	560	573	580	0.8%	0.6%
No. Households	222	227	232	0.7%	1.1%
NIEIR Workforce	308	303	314	-0.5%	1.7%
NIEIR Employment	286	278	286	-0.9%	1.4%
NIEIR Unemployment	22.0	24.7	27.7	3.9%	5.9%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	7.2%	8.1%	8.8%	0.3	0.3
Headline U/E Rate	4.4%	5.9%	7.1%	0.5	0.6
NIEIR Structural U/E Rate	8.7%	9.0%	8.5%	0.1	-0.3
Social Security Take-up	11.1%	11.5%	11.3%	0.1	-0.1
Hours Per Week (1)	23.7	23.3	23.6	-0.1	0.1
Not Employed Share (1)	24.0%	26.6%	24.3%	0.9	-1.1
Not In Employment (1)	37.8%	38.6%	38.0%	0.3	-0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	15,623	16,328	15,883	1.5%	-1.4%
Taxes Paid	3,889	4,222	4,183	2.8%	-0.5%
Benefits	3,826	4,139	4,003	2.7%	-1.7%
Business Income	3,074	2,677	2,744	-4.5%	1.3%
Interest Paid	2,218	1,653	1,725	-9.3%	2.1%
Property Income	3,982	3,840	3,947	-1.2%	1.4%
Disposable Income	25,221	26,160	25,881	1.2%	-0.5%
Rank	12	13	15		
Industry GRP (Local)	34,473	34,406	32,438	-0.1%	-2.9%
Rank	7	8	9		
Headline GRP	42,487	45,340	47,527	2.2%	2.4%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	765	700	663
Value of Property and Unincorporated Business	514	500	514
Value of Financial Assets	431	395	371
Value of Household Liabilities	181	195	223
Disposable Income after Debt Service Costs	113	113	112
Household Debt Service Ratio	17%	16%	18%
Household Debt to Gross Income Ratio	1.36	1.48	1.71

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	204.5	513.3	480.4
Ratio of adjusted dwelling price to adjusted average household disposable income	2.8	4.8	4.5
Avg household income from labour market catchment	63029	82779	86901
Ratio of average mortgage costs on established dwellings to average household catchment income	26.7%	61.6%	46.3%
Ratio of average mortgage costs on new dwellings to average household catchment income	53.7%	60.4%	48.9%
Share of flats in dwelling stock	15.1%	15.1%	15.7%
Ratio of houses in new dwelling approvals	80.0%	57.9%	62.6%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	235,026	268,206	286,702
UR Hours (1000 hours)	402,511	441,862	461,168
UR Income (\$m cvm)	13,038	17,996	18,401
POW Emp	289,136	343,147	386,363
POW Hours (1000 hours)	507,543	574,222	629,868
POW Income (\$m cvm)	16,127	22,903	24,539
UR Avg Weekly Hours / Emp	32.9	31.7	30.9
UR Avg Hourly Rate / Emp (\$cvm)	32.4	40.7	39.9
POW Avg Weekly Hours / Emp	33.8	32.2	31.4
POW Avg Hourly Rate / Emp (\$cvm)	31.8	39.9	39.0

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 but much of the region comprises post-war planned suburbs in which public housing was provided to house workers in new manufacturing industries. These industries 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 South have experienced some gentrification but not yet much decentralisation of inner-city activities.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	615	637	649	1.2%	0.9%
No. Households	235	240	246	0.8%	1.1%
NIEIR Workforce	328	333	337	0.5%	0.7%
NIEIR Employment	293	296	302	0.3%	1.0%
NIEIR Unemployment	34.1	36.6	35.0	2.4%	-2.2%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	10.4%	11.0%	10.4%	0.2	-0.3
Headline U/E Rate	6.7%	7.9%	8.1%	0.4	0.1
NIEIR Structural U/E Rate	12.9%	13.7%	12.8%	0.3	-0.4
Social Security Take-up	16.4%	17.1%	16.8%	0.2	-0.1
Hours Per Week (1)	22.3	21.5	21.5	-0.3	0.0
Not Employed Share (1)	28.7%	29.8%	28.5%	0.4	-0.6
Not In Employment (1)	41.3%	43.4%	43.4%	0.7	0.0

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	15,146	16,305	15,665	2.5%	-2.0%
Taxes Paid	3,144	3,576	3,499	4.4%	-1.1%
Benefits	3,798	4,152	3,998	3.0%	-1.9%
Business Income	1,792	1,585	1,652	-4.0%	2.1%
Interest Paid	2,096	1,512	1,583	-10.3%	2.3%
Property Income	3,035	3,185	3,212	1.6%	0.4%
Disposable Income	22,825	24,865	24,301	2.9%	-1.1%
Rank	16	16	16		
Industry GRP (Local)	21,954	21,915	20,730	-0.1%	-2.7%
Rank	19	19	19		
Headline GRP	25,613	26,577	27,235	1.2%	1.2%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	459	435	423
Value of Property and Unincorporated Business	388	373	405
Value of Financial Assets	234	233	217
Value of Household Liabilities	163	170	199
Disposable Income after Debt Service Costs	95	101	99
Household Debt Service Ratio	18%	16%	18%
Household Debt to Gross Income Ratio	1.46	1.48	1.73

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	158.1	396.8	365.1
Ratio of adjusted dwelling price to adjusted average household disposable income	2.5	4.3	3.8
Avg household income from labour market catchment	46229	59948	60021
Ratio of average mortgage costs on established dwellings to average household catchment income	22.9%	48.6%	36.8%
Ratio of average mortgage costs on new dwellings to average household catchment income	39.8%	49.7%	39.3%
Share of flats in dwelling stock	8.4%	8.3%	8.5%
Ratio of houses in new dwelling approvals	93.9%	72.9%	79.6%
Adults per occupied dwelling	2.0	2.0	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	229,604	269,353	300,922
UR Hours (1000 hours)	393,923	451,047	474,901
UR Income (\$m cvm)	11,522	16,261	17,319
POW Emp	193,490	224,378	240,830
POW Hours (1000 hours)	337,086	381,325	389,558
POW Income (\$m cvm)	10,113	13,945	14,277
UR Avg Weekly Hours / Emp	33.0	32.2	30.3
UR Avg Hourly Rate / Emp (\$cvm)	29.2	36.1	36.5
POW Avg Weekly Hours / Emp	33.5	32.7	31.1
POW Avg Hourly Rate / Emp (\$cvm)	30.0	36.6	36.7

SA 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, and further north again lies the narrow irrigated strip of the Riverland – an area whose water supplies proved unreliable during the recent drought. 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 and the Riverland for both wine and fruit juice.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	133	134	133	0.1%	-0.4%
No. Households	53	53	54	0.3%	0.2%
NIEIR Workforce	71	70	71	-0.6%	0.7%
NIEIR Employment	64	62	63	-1.1%	1.1%
NIEIR Unemployment	7.4	8.1	7.7	2.9%	-2.5%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	10.4%	11.6%	10.9%	0.4	-0.4
Headline U/E Rate	5.5%	6.8%	6.4%	0.4	-0.2
NIEIR Structural U/E Rate	13.8%	15.3%	14.9%	0.5	-0.2
Social Security Take-up	17.1%	18.3%	18.6%	0.4	0.1
Hours Per Week (1)	25.2	25.9	26.1	0.2	0.1
Not Employed Share (1)	24.8%	25.8%	22.4%	0.3	-1.7
Not In Employment (1)	33.6%	31.8%	31.4%	-0.6	-0.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	2,720	2,826	2,861	1.3%	0.6%
Taxes Paid	719	792	931	3.3%	8.4%
Benefits	1,007	1,152	1,196	4.6%	1.9%
Business Income	1,423	1,349	1,784	-1.8%	15.0%
Interest Paid	387	279	285	-10.4%	1.2%
Property Income	640	614	706	-1.4%	7.2%
Disposable Income	5,749	5,956	6,617	1.2%	5.4%
Rank	60	60	57		
Industry GRP (Local)	5,259	5,217	4,913	-0.3%	-3.0%
Rank	59	60	62		
Headline GRP	6,325	6,299	6,870	-0.1%	4.4%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	420	450	429
Value of Property and Unincorporated Business	288	267	294
Value of Financial Assets	264	324	299
Value of Household Liabilities	131	142	164
Disposable Income after Debt Service Costs	122	109	124
Household Debt Service Ratio	12%	13%	12%
Household Debt to Gross Income Ratio	0.98	1.17	1.21

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	109.1	216.1	204.3
Ratio of adjusted dwelling price to adjusted average household disposable income	1.5	2.1	2.0
Avg household income from labour market catchment	89914	103022	105212
Ratio of average mortgage costs on established dwellings to average household catchment income	13.3%	25.9%	19.8%
Ratio of average mortgage costs on new dwellings to average household catchment income	34.9%	36.5%	29.5%
Share of flats in dwelling stock	5.5%	5.0%	5.5%
Ratio of houses in new dwelling approvals	90.5%	94.7%	98.8%
Adults per occupied dwelling	2.0	1.9	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	56,247	64,362	63,129
UR Hours (1000 hours)	103,512	112,447	109,880
UR Income (\$m cvm)	3,925	4,370	3,796
POW Emp	55,275	62,347	60,742
POW Hours (1000 hours)	100,886	108,234	104,551
POW Income (\$m cvm)	3,814	4,204	3,630
UR Avg Weekly Hours / Emp	35.4	33.6	33.5
UR Avg Hourly Rate / Emp (\$cvm)	37.9	38.9	34.5
POW Avg Weekly Hours / Emp	35.1	33.4	33.1
POW Avg Hourly Rate / Emp (\$cvm)	37.8	38.8	34.7

SA Far North and West



The transport town of Port Augusta and industrial Whyalla lie 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 comprise a vast dry outback, much of which is Aboriginal land.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	87	88	87	0.3%	-0.7%
No. Households	33	34	34	0.7%	0.0%
NIEIR Workforce	48	48	47	0.1%	-0.8%
NIEIR Employment	43	43	42	-0.3%	-0.1%
NIEIR Unemployment	4.7	5.2	4.5	3.5%	-6.9%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	9.9%	10.9%	9.6%	0.3	-0.7
Headline U/E Rate	5.5%	7.0%	6.1%	0.5	-0.5
NIEIR Structural U/E Rate	13.4%	14.6%	14.0%	0.4	-0.3
Social Security Take-up	18.0%	19.5%	20.3%	0.5	0.4
Hours Per Week (1)	25.2	25.3	25.5	0.0	0.1
Not Employed Share (1)	25.5%	26.3%	24.0%	0.2	-1.1
Not In Employment (1)	33.7%	33.3%	32.9%	-0.1	-0.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	2,465	2,643	2,542	2.4%	-1.9%
Taxes Paid	636	729	755	4.7%	1.8%
Benefits	540	611	640	4.2%	2.3%
Business Income	632	652	736	1.0%	6.2%
Interest Paid	261	185	182	-10.8%	-1.0%
Property Income	453	474	492	1.5%	1.9%
Disposable Income	3,922	4,259	4,304	2.8%	0.5%
Rank	67	66	67		
Industry GRP (Local)	3,809	3,687	3,308	-1.1%	-5.3%
Rank	66	67	67		
Headline GRP	7,753	7,840	8,150	0.4%	2.0%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	394	398	380
Value of Property and Unincorporated Business	294	306	285
Value of Financial Assets	237	246	260
Value of Household Liabilities	137	154	165
Disposable Income after Debt Service Costs	122	119	126
Household Debt Service Ratio	12%	13%	12%
Household Debt to Gross Income Ratio	1.01	1.17	1.19

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	110.6	248.5	240.7
Ratio of adjusted dwelling price to adjusted average household disposable income	1.6	2.4	2.2
Avg household income from labour market catchment	60931	75776	78037
Ratio of average mortgage costs on established dwellings to average household catchment income	15.8%	34.0%	26.9%
Ratio of average mortgage costs on new dwellings to average household catchment income	38.3%	44.7%	35.7%
Share of flats in dwelling stock	6.1%	5.4%	5.7%
Ratio of houses in new dwelling approvals	94.7%	93.7%	98.4%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	38,348	40,366	42,014
UR Hours (1000 hours)	66,926	69,267	73,462
UR Income (\$m cvm)	2,422	2,854	2,492
POW Emp	38,197	40,884	43,659
POW Hours (1000 hours)	65,934	69,962	75,921
POW Income (\$m cvm)	2,418	2,862	2,516
UR Avg Weekly Hours / Emp	33.6	33.0	33.6
UR Avg Hourly Rate / Emp (\$cvm)	36.2	41.2	33.9
POW Avg Weekly Hours / Emp	33.2	32.9	33.4
POW Avg Hourly Rate / Emp (\$cvm)	36.7	40.9	33.1

SA Fleurieu



The highest rainfall in South Australia falls on the Mt Lofty ranges and the area has many beautiful gardens, as well as being a commuter zone for Adelaide. Similarly the southern shore of the region is picturesque and provides the site for a row of retirement resorts. On the southern edge of the metropolitan area viticulture is being pushed aside by commuter suburbs. Kangaroo Island is becoming well-known as a destination for eco-tourism.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	119	122	124	1.1%	0.8%
No. Households	45	47	48	1.1%	1.3%
NIEIR Workforce	62	63	65	0.3%	1.6%
NIEIR Employment	58	58	60	0.0%	1.6%
NIEIR Unemployment	4.4	5.0	5.2	4.3%	1.8%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	7.1%	8.0%	8.0%	0.3	0.0
Headline U/E Rate	4.4%	5.4%	5.9%	0.3	0.3
NIEIR Structural U/E Rate	8.6%	9.3%	8.8%	0.2	-0.2
Social Security Take-up	11.2%	11.9%	11.9%	0.2	0.0
Hours Per Week (1)	24.4	24.4	24.4	0.0	0.0
Not Employed Share (1)	21.9%	22.1%	19.4%	0.1	-1.4
Not In Employment (1)	35.7%	35.7%	35.8%	0.0	0.0

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	2,827	3,099	3,040	3.1%	-1.0%
Taxes Paid	695	799	816	4.8%	1.0%
Benefits	976	1,115	1,132	4.5%	0.8%
Business Income	802	748	848	-2.3%	6.5%
Interest Paid	430	317	333	-9.7%	2.6%
Property Income	740	757	808	0.7%	3.4%
Disposable Income	5,189	5,661	5,832	2.9%	1.5%
Rank	63	62	63		
Industry GRP (Local)	3,781	3,800	3,637	0.2%	-2.2%
Rank	67	66	66		
Headline GRP	4,103	4,193	4,406	0.7%	2.5%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	690	640	673
Value of Property and Unincorporated Business	478	459	512
Value of Financial Assets	383	365	385
Value of Household Liabilities	171	184	223
Disposable Income after Debt Service Costs	114	116	122
Household Debt Service Ratio	16%	15%	16%
Household Debt to Gross Income Ratio	1.29	1.37	1.58

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	169.9	406.8	374.5
Ratio of adjusted dwelling price to adjusted average household disposable income	2.4	3.8	3.5
Avg household income from labour market catchment	109525	133778	135538
Ratio of average mortgage costs on established dwellings to average household catchment income	22.4%	50.2%	37.2%
Ratio of average mortgage costs on new dwellings to average household catchment income	46.7%	59.8%	45.0%
Share of flats in dwelling stock	3.4%	2.7%	2.7%
Ratio of houses in new dwelling approvals	98.7%	95.0%	96.2%
Adults per occupied dwelling	2.1	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	40,857	53,870	59,714
UR Hours (1000 hours)	70,597	88,496	93,906
UR Income (\$m cvm)	2,456	3,590	3,602
POW Emp	29,953	35,117	38,858
POW Hours (1000 hours)	50,113	56,236	58,781
POW Income (\$m cvm)	1,662	2,167	2,127
UR Avg Weekly Hours / Emp	33.2	31.6	30.2
UR Avg Hourly Rate / Emp (\$cvm)	34.8	40.6	38.4
POW Avg Weekly Hours / Emp	32.2	30.8	29.1
POW Avg Hourly Rate / Emp (\$cvm)	33.2	38.5	36.2

SA North



The belt from Yorke Peninsula to Goyder's Line 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. 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 visited by tourists as well as the still-active smelters at Port Pirie.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	141	144	146	0.7%	0.5%
No. Households	56	58	59	0.9%	0.8%
NIEIR Workforce	72	74	72	0.7%	-1.4%
NIEIR Employment	65	65	64	0.0%	-0.7%
NIEIR Unemployment	7.1	8.6	7.5	6.7%	-6.4%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	9.8%	11.6%	10.5%	0.6	-0.6
Headline U/E Rate	4.2%	6.7%	6.2%	0.8	-0.3
NIEIR Structural U/E Rate	13.3%	14.2%	13.4%	0.3	-0.4
Social Security Take-up	16.5%	17.7%	18.0%	0.4	0.1
Hours Per Week (1)	24.5	24.5	24.2	0.0	-0.1
Not Employed Share (1)	25.4%	25.7%	26.5%	0.1	0.4
Not In Employment (1)	35.6%	35.6%	36.2%	0.0	0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	3,081	3,350	3,107	2.8%	-3.7%
Taxes Paid	778	916	957	5.6%	2.2%
Benefits	1,083	1,248	1,243	4.8%	-0.2%
Business Income	1,135	1,218	1,527	2.4%	12.0%
Interest Paid	454	325	333	-10.5%	1.1%
Property Income	760	801	837	1.8%	2.2%
Disposable Income	5,926	6,594	6,733	3.6%	1.0%
Rank	59	57	56		
Industry GRP (Local)	4,906	4,871	4,547	-0.2%	-3.4%
Rank	63	63	64		
Headline GRP	5,991	6,149	6,593	0.9%	3.5%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	467	439	430
Value of Property and Unincorporated Business	328	323	348
Value of Financial Assets	278	268	259
Value of Household Liabilities	139	152	176
Disposable Income after Debt Service Costs	109	109	115
Household Debt Service Ratio	14%	13%	14%
Household Debt to Gross Income Ratio	1.13	1.24	1.37

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	113.6	280.2	254.5
Ratio of adjusted dwelling price to adjusted average household disposable income	1.6	2.8	2.5
Avg household income from labour market catchment	55225	65576	66382
Ratio of average mortgage costs on established dwellings to average household catchment income	14.1%	32.4%	24.2%
Ratio of average mortgage costs on new dwellings to average household catchment income	32.5%	39.3%	30.9%
Share of flats in dwelling stock	4.4%	2.8%	3.0%
Ratio of houses in new dwelling approvals	96.9%	96.1%	97.8%
Adults per occupied dwelling	2.0	1.9	1.9

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	50,523	61,224	64,258
UR Hours (1000 hours)	89,432	105,429	110,051
UR Income (\$m cvm)	3,243	4,054	3,864
POW Emp	44,978	51,931	53,927
POW Hours (1000 hours)	79,197	88,577	91,172
POW Income (\$m cvm)	2,858	3,320	3,165
UR Avg Weekly Hours / Emp	34.0	33.1	32.9
UR Avg Hourly Rate / Emp (\$cvm)	36.3	38.5	35.1
POW Avg Weekly Hours / Emp	33.9	32.8	32.5
POW Avg Hourly Rate / Emp (\$cvm)	36.1	37.5	34.7

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 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	621	651	662	1.6%	0.8%
No. Households	234	245	254	1.5%	1.9%
NIEIR Workforce	353	375	376	2.0%	0.2%
NIEIR Employment	339	356	354	1.7%	-0.3%
NIEIR Unemployment	14.2	18.4	21.9	8.9%	9.1%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	4.0%	4.9%	5.8%	0.3	0.5
Headline U/E Rate	3.9%	4.8%	5.6%	0.3	0.4
NIEIR Structural U/E Rate	5.5%	5.4%	5.1%	0.0	-0.2
Social Security Take-up	7.2%	7.1%	7.5%	0.0	0.2
Hours Per Week (1)	25.5	25.6	25.1	0.0	-0.3
Not Employed Share (1)	22.9%	22.0%	22.3%	-0.3	0.2
Not In Employment (1)	32.9%	32.6%	34.0%	-0.1	0.7

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	25,371	26,841	25,057	1.9%	-3.4%
Taxes Paid	7,478	8,273	7,907	3.4%	-2.2%
Benefits	2,653	2,505	2,530	-1.9%	0.5%
Business Income	4,944	3,816	3,600	-8.3%	-2.9%
Interest Paid	3,361	2,552	2,542	-8.8%	-0.2%
Property Income	6,220	5,990	5,979	-1.3%	-0.1%
Disposable Income	36,358	37,106	35,027	0.7%	-2.8%
Rank	4	4	4		
Industry GRP (Local)	66,252	67,550	61,005	0.6%	-5.0%
Rank	3	3	3		
Headline GRP	81,818	89,235	81,696	2.9%	-4.3%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	979	984	779
Value of Property and Unincorporated Business	656	700	569
Value of Financial Assets	575	570	497
Value of Household Liabilities	252	285	288
Disposable Income after Debt Service Costs	139	156	138
Household Debt Service Ratio	18%	17%	18%
Household Debt to Gross Income Ratio	1.50	1.55	1.74

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	279.8	736.4	740.6
Ratio of adjusted dwelling price to adjusted average household disposable income	4.1	5.1	5.2
Avg household income from labour market catchment	74029	146039	149948
Ratio of average mortgage costs on established dwellings to average household catchment income	33.9%	56.0%	45.5%
Ratio of average mortgage costs on new dwellings to average household catchment income	65.0%	61.8%	42.1%
Share of flats in dwelling stock	15.5%	19.2%	20.0%
Ratio of houses in new dwelling approvals	69.0%	67.2%	46.8%
Adults per occupied dwelling	2.0	2.1	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	238,849	295,158	353,300
UR Hours (1000 hours)	422,234	506,240	595,489
UR Income (\$m cvm)	13,796	23,217	28,259
POW Emp	376,946	496,100	608,180
POW Hours (1000 hours)	701,064	880,224	1,054,098
POW Income (\$m cvm)	22,686	38,805	48,305
UR Avg Weekly Hours / Emp	34.0	33.0	32.4
UR Avg Hourly Rate / Emp (\$cvm)	32.7	45.9	47.5
POW Avg Weekly Hours / Emp	35.8	34.1	33.3
POW Avg Hourly Rate / Emp (\$cvm)	32.4	44.1	45.8

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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	577	617	637	2.3%	1.6%
No. Households	192	208	219	2.7%	2.6%
NIEIR Workforce	323	347	352	2.4%	0.7%
NIEIR Employment	307	328	326	2.3%	-0.3%
NIEIR Unemployment	16.3	19.4	26.4	5.9%	16.5%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	5.1%	5.6%	7.5%	0.2	0.9
Headline U/E Rate	3.9%	4.5%	6.6%	0.2	1.1
NIEIR Structural U/E Rate	5.5%	5.6%	5.3%	0.1	-0.1
Social Security Take-up	7.5%	7.9%	8.8%	0.1	0.4
Hours Per Week (1)	25.6	25.2	23.7	-0.1	-0.8
Not Employed Share (1)	22.6%	21.8%	23.6%	-0.3	0.9
Not In Employment (1)	32.8%	33.6%	37.7%	0.3	2.1

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	21,000	22,507	20,854	2.3%	-3.7%
Taxes Paid	5,161	5,919	5,655	4.7%	-2.3%
Benefits	2,607	2,632	2,685	0.3%	1.0%
Business Income	2,834	2,223	2,186	-7.8%	-0.8%
Interest Paid	3,184	2,443	2,514	-8.5%	1.4%
Property Income	3,666	3,870	3,884	1.8%	0.2%
Disposable Income	27,723	29,773	28,119	2.4%	-2.8%
Rank	8	8	12		
Industry GRP (Local)	22,712	23,909	21,793	1.7%	-4.5%
Rank	18	16	18		
Headline GRP	22,643	25,248	23,892	3.7%	-2.7%

- Notes: (1) All years stated above are fiscal year ending.
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 (3) Figures for disposable income (less depreciation expense) include imputed income from ownership of dwellings.
 (4) Figures for Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	485	506	393
Value of Property and Unincorporated Business	462	486	444
Value of Financial Assets	323	337	303
Value of Household Liabilities	301	317	354
Disposable Income after Debt Service Costs	129	146	128
Household Debt Service Ratio	23%	20%	23%
Household Debt to Gross Income Ratio	1.90	1.83	2.29

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	193.6	511.5	526.6
Ratio of adjusted dwelling price to adjusted average household disposable income	2.4	3.6	3.8
Avg household income from labour market catchment	44474	73576	74465
Ratio of average mortgage costs on established dwellings to average household catchment income	30.8%	54.2%	47.1%
Ratio of average mortgage costs on new dwellings to average household catchment income	62.7%	61.1%	51.7%
Share of flats in dwelling stock	3.4%	4.5%	4.8%
Ratio of houses in new dwelling approvals	90.4%	89.2%	87.1%
Adults per occupied dwelling	2.2	2.2	2.3

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	189,993	261,121	327,180
UR Hours (1000 hours)	338,918	452,952	530,511
UR Income (\$m cvm)	10,227	18,155	23,126
POW Emp	127,730	163,748	211,338
POW Hours (1000 hours)	222,531	279,700	334,001
POW Income (\$m cvm)	6,251	10,668	13,835
UR Avg Weekly Hours / Emp	34.3	33.4	31.2
UR Avg Hourly Rate / Emp (\$cvm)	30.2	40.1	43.6
POW Avg Weekly Hours / Emp	33.5	32.8	30.4
POW Avg Hourly Rate / Emp (\$cvm)	28.1	38.1	41.4

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 is changing with completion of the new fast rail connection.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	596	646	669	2.7%	1.7%
No. Households	203	223	236	3.1%	3.0%
NIEIR Workforce	322	343	353	2.1%	1.5%
NIEIR Employment	305	322	327	1.8%	0.9%
NIEIR Unemployment	16.9	21.1	25.8	7.7%	10.5%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	5.2%	6.2%	7.3%	0.3	0.6
Headline U/E Rate	4.7%	6.1%	7.2%	0.5	0.6
NIEIR Structural U/E Rate	6.2%	6.3%	5.9%	0.0	-0.2
Social Security Take-up	8.5%	8.9%	9.8%	0.1	0.4
Hours Per Week (1)	25.2	24.3	23.3	-0.3	-0.5
Not Employed Share (1)	24.5%	25.7%	25.8%	0.4	0.0
Not In Employment (1)	33.7%	36.0%	38.8%	0.7	1.4

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	21,609	22,917	21,829	2.0%	-2.4%
Taxes Paid	5,413	6,109	6,026	4.1%	-0.7%
Benefits	2,885	2,961	3,092	0.9%	2.2%
Business Income	2,573	1,854	1,851	-10.3%	-0.1%
Interest Paid	2,848	2,159	2,196	-8.8%	0.8%
Property Income	4,033	4,129	4,238	0.8%	1.3%
Disposable Income	29,062	30,624	29,755	1.8%	-1.4%
Rank	6	7	9		
Industry GRP (Local)	23,284	24,024	22,259	1.0%	-3.7%
Rank	14	15	16		
Headline GRP	25,685	27,430	25,555	2.2%	-3.5%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	519	567	444
Value of Property and Unincorporated Business	436	468	421
Value of Financial Assets	343	363	306
Value of Household Liabilities	260	265	283
Disposable Income after Debt Service Costs	125	142	126
Household Debt Service Ratio	21%	17%	19%
Household Debt to Gross Income Ratio	1.72	1.60	1.89

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	190.3	490.1	506.8
Ratio of adjusted dwelling price to adjusted average household disposable income	2.5	3.5	3.8
Avg household income from labour market catchment	43587	69905	69810
Ratio of average mortgage costs on established dwellings to average household catchment income	29.5%	53.4%	46.7%
Ratio of average mortgage costs on new dwellings to average household catchment income	58.8%	59.2%	50.0%
Share of flats in dwelling stock	3.6%	4.8%	5.5%
Ratio of houses in new dwelling approvals	93.7%	84.6%	79.6%
Adults per occupied dwelling	2.1	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	190,115	254,341	329,302
UR Hours (1000 hours)	337,754	439,705	534,153
UR Income (\$m cvm)	10,224	17,929	23,249
POW Emp	123,684	160,130	205,308
POW Hours (1000 hours)	212,537	271,018	321,707
POW Income (\$m cvm)	6,259	10,930	13,699
UR Avg Weekly Hours / Emp	34.2	33.2	31.2
UR Avg Hourly Rate / Emp (\$cvm)	30.3	40.8	43.5
POW Avg Weekly Hours / Emp	33.0	32.5	30.1
POW Avg Hourly Rate / Emp (\$cvm)	29.4	40.3	42.6

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 pastoral properties. The region includes two 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	127	128	126	0.3%	-0.8%
No. Households	43	44	44	0.5%	0.7%
NIEIR Workforce	70	75	72	2.0%	-1.6%
NIEIR Employment	67	69	67	1.1%	-1.2%
NIEIR Unemployment	3.8	5.8	5.2	15.8%	-5.5%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	5.3%	7.8%	7.2%	0.8	-0.3
Headline U/E Rate	3.5%	6.4%	5.6%	1.0	-0.4
NIEIR Structural U/E Rate	8.5%	9.6%	9.4%	0.4	-0.1
Social Security Take-up	11.7%	13.3%	14.6%	0.5	0.6
Hours Per Week (1)	28.7	29.2	29.4	0.2	0.1
Not Employed Share (1)	23.0%	20.5%	20.0%	-0.9	-0.3
Not In Employment (1)	24.6%	23.1%	22.7%	-0.5	-0.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	4,588	4,662	4,309	0.5%	-3.9%
Taxes Paid	1,237	1,367	1,375	3.4%	0.3%
Benefits	558	560	627	0.1%	5.8%
Business Income	1,109	1,045	1,186	-2.0%	6.5%
Interest Paid	677	457	477	-12.3%	2.1%
Property Income	747	752	792	0.2%	2.6%
Disposable Income	6,440	6,652	6,537	1.1%	-0.9%
Rank	56	56	59		
Industry GRP (Local)	8,523	8,177	7,106	-1.4%	-6.8%
Rank	48	50	54		
Headline GRP	16,151	20,277	19,280	7.9%	-2.5%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	396	427	304
Value of Property and Unincorporated Business	380	349	285
Value of Financial Assets	298	360	319
Value of Household Liabilities	281	281	301
Disposable Income after Debt Service Costs	141	154	147
Household Debt Service Ratio	21%	18%	19%
Household Debt to Gross Income Ratio	1.70	1.60	1.78

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	193.6	350.6	311.4
Ratio of adjusted dwelling price to adjusted average household disposable income	2.2	2.4	2.2
Avg household income from labour market catchment	54631	87675	88045
Ratio of average mortgage costs on established dwellings to average household catchment income	29.5%	34.2%	25.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	74.4%	53.1%	42.9%
Share of flats in dwelling stock	6.2%	6.0%	6.1%
Ratio of houses in new dwelling approvals	84.6%	86.1%	88.7%
Adults per occupied dwelling	2.3	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	59,445	60,632	66,792
UR Hours (1000 hours)	108,791	112,375	128,748
UR Income (\$m cvm)	3,944	4,583	5,410
POW Emp	59,738	65,315	68,229
POW Hours (1000 hours)	109,185	122,074	132,397
POW Income (\$m cvm)	4,110	5,212	5,706
UR Avg Weekly Hours / Emp	35.2	35.6	37.1
UR Avg Hourly Rate / Emp (\$cvm)	36.3	40.8	42.0
POW Avg Weekly Hours / Emp	35.1	35.9	37.3
POW Avg Hourly Rate / Emp (\$cvm)	37.6	42.7	43.1

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 since the completion of the fast rail connection is virtually part of the Perth metropolitan area. The second is centred on Bunbury, which is a bulk 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	283	308	319	2.8%	1.8%
No. Households	101	109	115	2.6%	2.5%
NIEIR Workforce	143	154	154	2.4%	0.0%
NIEIR Employment	134	144	142	2.4%	-0.7%
NIEIR Unemployment	9.4	10.0	12.0	2.1%	9.5%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	6.6%	6.5%	7.8%	0.0	0.6
Headline U/E Rate	5.0%	5.2%	6.8%	0.1	0.8
NIEIR Structural U/E Rate	8.2%	8.9%	8.4%	0.2	-0.3
Social Security Take-up	11.2%	12.1%	13.3%	0.3	0.6
Hours Per Week (1)	24.6	24.1	23.0	-0.2	-0.6
Not Employed Share (1)	26.2%	25.7%	28.3%	-0.2	1.3
Not In Employment (1)	35.1%	36.6%	39.5%	0.5	1.5

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	8,905	9,710	8,837	2.9%	-4.6%
Taxes Paid	2,252	2,663	2,524	5.7%	-2.6%
Benefits	1,759	1,799	1,901	0.8%	2.8%
Business Income	1,433	1,220	1,207	-5.2%	-0.6%
Interest Paid	1,089	819	866	-9.0%	2.8%
Property Income	1,837	1,917	1,908	1.4%	-0.2%
Disposable Income	13,314	14,244	13,423	2.3%	-2.9%
Rank	30	30	32		
Industry GRP (Local)	12,981	12,887	11,853	-0.2%	-4.1%
Rank	30	28	31		
Headline GRP	17,499	19,018	17,599	2.8%	-3.8%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	540	546	463
Value of Property and Unincorporated Business	451	427	414
Value of Financial Assets	316	358	332
Value of Household Liabilities	228	239	284
Disposable Income after Debt Service Costs	118	132	117
Household Debt Service Ratio	19%	16%	20%
Household Debt to Gross Income Ratio	1.63	1.58	2.06

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	164.2	419.9	396.8
Ratio of adjusted dwelling price to adjusted average household disposable income	2.4	3.5	3.2
Avg household income from labour market catchment	44400	70328	69327
Ratio of average mortgage costs on established dwellings to average household catchment income	26.6%	50.7%	41.6%
Ratio of average mortgage costs on new dwellings to average household catchment income	55.4%	59.3%	49.9%
Share of flats in dwelling stock	3.3%	3.9%	3.9%
Ratio of houses in new dwelling approvals	94.8%	94.1%	94.8%
Adults per occupied dwelling	2.1	2.1	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	76,586	112,649	141,685
UR Hours (1000 hours)	136,381	196,372	237,364
UR Income (\$m cvm)	4,130	8,061	9,993
POW Emp	69,201	99,492	118,634
POW Hours (1000 hours)	120,936	170,088	194,212
POW Income (\$m cvm)	3,509	6,717	7,940
UR Avg Weekly Hours / Emp	34.2	33.5	32.2
UR Avg Hourly Rate / Emp (\$cvm)	30.3	41.1	42.1
POW Avg Weekly Hours / Emp	33.6	32.9	31.5
POW Avg Hourly Rate / Emp (\$cvm)	29.0	39.5	40.9

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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	102	105	102	0.8%	-1.4%
No. Households	26	30	31	5.0%	0.8%
NIEIR Workforce	66	73	71	3.2%	-1.4%
NIEIR Employment	63	67	66	2.3%	-0.9%
NIEIR Unemployment	3.8	5.9	5.1	15.4%	-7.1%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	5.8%	8.1%	7.2%	0.8	-0.5
Headline U/E Rate	3.4%	6.2%	5.2%	0.9	-0.5
NIEIR Structural U/E Rate	7.9%	8.8%	8.6%	0.3	-0.1
Social Security Take-up	11.0%	12.5%	12.9%	0.5	0.2
Hours Per Week (1)	32.4	31.9	32.4	-0.1	0.2
Not Employed Share (1)	20.1%	16.6%	14.5%	-1.2	-1.0
Not In Employment (1)	14.9%	15.9%	14.7%	0.4	-0.6

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	5,849	6,231	5,760	2.1%	-3.9%
Taxes Paid	1,633	1,839	1,748	4.0%	-2.5%
Benefits	166	170	206	0.9%	10.1%
Business Income	523	314	332	-15.6%	2.9%
Interest Paid	639	414	384	-13.5%	-3.6%
Property Income	699	745	752	2.1%	0.5%
Disposable Income	6,208	6,553	6,200	1.8%	-2.7%
Rank	57	58	62		
Industry GRP (Local)	13,113	13,179	11,576	0.2%	-6.3%
Rank	28	27	32		
Headline GRP	34,229	50,019	57,733	13.5%	7.4%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	599	633	311
Value of Property and Unincorporated Business	619	649	281
Value of Financial Assets	371	391	357
Value of Household Liabilities	392	408	327
Disposable Income after Debt Service Costs	216	227	198
Household Debt Service Ratio	19%	17%	15%
Household Debt to Gross Income Ratio	1.54	1.57	1.43

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	486.0	704.4	651.4
Ratio of adjusted dwelling price to adjusted average household disposable income	10.1	3.3	3.3
Avg household income from labour market catchment	55588	108669	112283
Ratio of average mortgage costs on established dwellings to average household catchment income	60.5%	55.6%	41.0%
Ratio of average mortgage costs on new dwellings to average household catchment income	102.4%	66.6%	46.1%
Share of flats in dwelling stock	8.0%	7.9%	10.0%
Ratio of houses in new dwelling approvals	82.9%	72.4%	75.8%
Adults per occupied dwelling	2.4	3.0	2.8

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	38,896	44,120	64,736
UR Hours (1000 hours)	70,802	83,519	129,660
UR Income (\$m cvm)	2,450	3,882	6,656
POW Emp	42,062	52,696	101,147
POW Hours (1000 hours)	77,063	100,684	203,035
POW Income (\$m cvm)	2,835	4,883	10,289
UR Avg Weekly Hours / Emp	35.0	36.4	38.5
UR Avg Hourly Rate / Emp (\$cvm)	34.6	46.5	51.3
POW Avg Weekly Hours / Emp	35.2	36.7	38.6
POW Avg Hourly Rate / Emp (\$cvm)	36.8	48.5	50.7

WA Wheatbelt Great Southern



The WA Wheat Belt and Great Southern are here brought together as 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	132	135	134	0.6%	-0.2%
No. Households	49	50	50	0.4%	0.4%
NIEIR Workforce	67	66	67	-0.8%	0.6%
NIEIR Employment	63	61	59	-0.9%	-2.0%
NIEIR Unemployment	4.8	4.8	8.0	0.4%	28.4%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	7.1%	7.4%	12.0%	0.1	2.3
Headline U/E Rate	3.7%	4.1%	9.8%	0.1	2.9
NIEIR Structural U/E Rate	10.0%	10.7%	10.6%	0.3	-0.1
Social Security Take-up	12.9%	13.7%	15.0%	0.3	0.6
Hours Per Week (1)	27.5	28.4	28.2	0.3	-0.1
Not Employed Share (1)	24.8%	26.6%	27.9%	0.6	0.6
Not In Employment (1)	27.7%	25.3%	25.7%	-0.8	0.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	3,225	3,219	2,917	-0.1%	-4.8%
Taxes Paid	1,065	1,313	1,340	7.2%	1.0%
Benefits	878	893	994	0.6%	5.5%
Business Income	2,325	2,686	2,897	4.9%	3.9%
Interest Paid	589	394	402	-12.5%	1.0%
Property Income	861	862	896	0.0%	2.0%
Disposable Income	7,138	7,626	7,740	2.2%	0.7%
Rank	53	53	54		
Industry GRP (Local)	6,540	6,326	5,785	-1.1%	-4.4%
Rank	56	57	58		
Headline GRP	11,217	11,375	9,498	0.5%	-8.6%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	536	549	502
Value of Property and Unincorporated Business	397	395	399
Value of Financial Assets	349	367	353
Value of Household Liabilities	209	213	250
Disposable Income after Debt Service Costs	139	152	155
Household Debt Service Ratio	16%	14%	15%
Household Debt to Gross Income Ratio	1.31	1.26	1.44

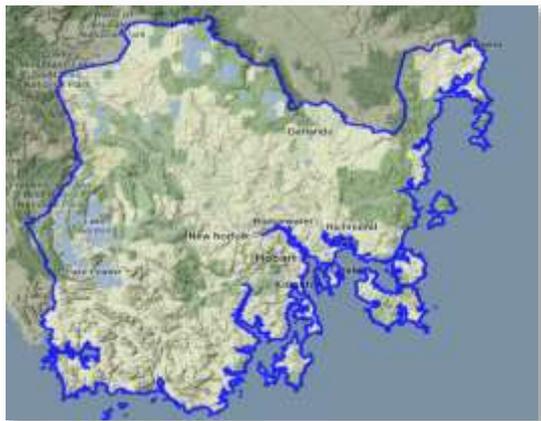
HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	151.9	316.6	286.2
Ratio of adjusted dwelling price to adjusted average household disposable income	1.9	2.7	2.3
Avg household income from labour market catchment	71946	108035	109976
Ratio of average mortgage costs on established dwellings to average household catchment income	18.5%	27.0%	20.1%
Ratio of average mortgage costs on new dwellings to average household catchment income	43.9%	36.4%	28.5%
Share of flats in dwelling stock	2.7%	3.0%	3.4%
Ratio of houses in new dwelling approvals	93.4%	89.4%	93.0%
Adults per occupied dwelling	2.1	2.0	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	57,725	62,476	58,886
UR Hours (1000 hours)	108,549	116,128	120,554
UR Income (\$m cvm)	4,103	5,149	4,657
POW Emp	55,052	58,943	54,249
POW Hours (1000 hours)	103,793	109,420	110,230
POW Income (\$m cvm)	3,891	4,837	4,254
UR Avg Weekly Hours / Emp	36.2	35.7	39.4
UR Avg Hourly Rate / Emp (\$cvm)	37.8	44.3	38.6
POW Avg Weekly Hours / Emp	36.3	35.7	39.1
POW Avg Hourly Rate / Emp (\$cvm)	37.5	44.2	38.6

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 more mixed 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	255	259	263	0.6%	0.7%
No. Households	100	103	104	0.8%	0.9%
NIEIR Workforce	135	140	138	1.3%	-0.6%
NIEIR Employment	120	124	123	0.9%	-0.1%
NIEIR Unemployment	14.7	16.8	15.3	4.5%	-4.6%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	10.9%	12.0%	11.0%	0.4	-0.5
Headline U/E Rate	5.2%	6.7%	6.0%	0.5	-0.4
NIEIR Structural U/E Rate	13.2%	14.3%	13.8%	0.4	-0.3
Social Security Take-up	16.8%	17.8%	17.5%	0.3	-0.1
Hours Per Week (1)	21.9	22.3	22.5	0.2	0.1
Not Employed Share (1)	27.8%	25.8%	25.6%	-0.6	-0.1
Not In Employment (1)	42.5%	41.2%	40.9%	-0.4	-0.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	5,769	5,662	5,726	-0.6%	0.6%
Taxes Paid	1,246	1,352	1,397	2.8%	1.6%
Benefits	1,952	2,315	2,196	5.9%	-2.6%
Business Income	704	868	965	7.2%	5.5%
Interest Paid	722	533	551	-9.6%	1.7%
Property Income	1,480	1,442	1,551	-0.9%	3.7%
Disposable Income	9,693	10,164	10,273	1.6%	0.5%
Rank	43	42	43		
Industry GRP (Local)	10,078	9,809	9,647	-0.9%	-0.8%
Rank	42	44	43		
Headline GRP	12,619	13,017	13,783	1.0%	2.9%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	573	531	589
Value of Property and Unincorporated Business	426	409	474
Value of Financial Assets	277	263	283
Value of Household Liabilities	130	140	168
Disposable Income after Debt Service Costs	101	95	98
Household Debt Service Ratio	14%	14%	15%
Household Debt to Gross Income Ratio	1.11	1.26	1.46

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	151.0	350.2	324.7
Ratio of adjusted dwelling price to adjusted average household disposable income	2.6	3.7	3.6
Avg household income from labour market catchment	50291	70437	68582
Ratio of average mortgage costs on established dwellings to average household catchment income	20.1%	36.3%	28.7%
Ratio of average mortgage costs on new dwellings to average household catchment income	43.7%	39.9%	37.6%
Share of flats in dwelling stock	9.5%	9.4%	9.8%
Ratio of houses in new dwelling approvals	76.8%	71.3%	89.1%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	98,907	113,825	122,880
UR Hours (1000 hours)	169,196	186,896	193,562
UR Income (\$m cvm)	4,798	6,973	6,490
POW Emp	100,653	114,284	128,164
POW Hours (1000 hours)	171,637	186,895	200,632
POW Income (\$m cvm)	4,950	6,948	6,694
UR Avg Weekly Hours / Emp	32.9	31.6	30.3
UR Avg Hourly Rate / Emp (\$cvm)	28.4	37.3	33.5
POW Avg Weekly Hours / Emp	32.8	31.4	30.1
POW Avg Hourly Rate / Emp (\$cvm)	28.8	37.2	33.4

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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	143	144	144	0.1%	0.2%
No. Households	56	57	58	0.7%	0.8%
NIEIR Workforce	73	74	74	0.2%	-0.2%
NIEIR Employment	65	65	65	-0.2%	-0.2%
NIEIR Unemployment	7.9	8.7	8.7	3.3%	0.0%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	10.8%	11.8%	11.9%	0.3	0.0
Headline U/E Rate	6.1%	7.3%	7.6%	0.4	0.2
NIEIR Structural U/E Rate	13.5%	15.3%	14.9%	0.6	-0.2
Social Security Take-up	17.3%	18.8%	19.0%	0.5	0.1
Hours Per Week (1)	21.9	22.5	22.9	0.2	0.2
Not Employed Share (1)	29.1%	28.2%	27.5%	-0.3	-0.3
Not In Employment (1)	42.3%	40.8%	39.7%	-0.5	-0.6

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	2,953	2,810	2,851	-1.6%	0.7%
Taxes Paid	704	747	794	2.0%	3.1%
Benefits	1,104	1,255	1,142	4.4%	-4.6%
Business Income	698	805	890	4.9%	5.2%
Interest Paid	372	263	276	-10.9%	2.4%
Property Income	745	717	777	-1.2%	4.1%
Disposable Income	5,431	5,569	5,594	0.8%	0.2%
Rank	62	63	64		
Industry GRP (Local)	5,186	4,884	4,632	-2.0%	-2.6%
Rank	60	62	63		
Headline GRP	6,576	6,624	6,667	0.2%	0.3%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	494	436	424
Value of Property and Unincorporated Business	350	324	339
Value of Financial Assets	263	236	223
Value of Household Liabilities	118	124	138
Disposable Income after Debt Service Costs	101	95	96
Household Debt Service Ratio	13%	13%	13%
Household Debt to Gross Income Ratio	1.03	1.15	1.26

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	114.6	278.6	249.7
Ratio of adjusted dwelling price to adjusted average household disposable income	2.0	3.0	2.8
Avg household income from labour market catchment	46750	62577	58150
Ratio of average mortgage costs on established dwellings to average household catchment income	16.4%	32.6%	26.1%
Ratio of average mortgage costs on new dwellings to average household catchment income	43.3%	37.0%	31.9%
Share of flats in dwelling stock	7.7%	6.8%	7.2%
Ratio of houses in new dwelling approvals	87.4%	74.7%	77.7%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	52,920	62,889	64,710
UR Hours (1000 hours)	90,993	105,437	106,647
UR Income (\$m cvm)	2,645	3,822	3,461
POW Emp	52,670	62,176	61,105
POW Hours (1000 hours)	89,944	103,611	99,834
POW Income (\$m cvm)	2,655	3,753	3,238
UR Avg Weekly Hours / Emp	33.1	32.2	31.7
UR Avg Hourly Rate / Emp (\$cvm)	29.1	36.3	32.5
POW Avg Weekly Hours / Emp	32.8	32.0	31.4
POW Avg Hourly Rate / Emp (\$cvm)	29.5	36.2	32.4

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 forestry 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	114	114	114	-0.1%	-0.1%
No. Households	44	45	45	0.6%	0.6%
NIEIR Workforce	58	60	58	1.0%	-1.1%
NIEIR Employment	50	51	51	0.6%	0.2%
NIEIR Unemployment	7.7	8.5	7.1	3.5%	-8.9%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	13.3%	14.3%	12.1%	0.3	-1.1
Headline U/E Rate	7.2%	7.9%	5.6%	0.2	-1.2
NIEIR Structural U/E Rate	14.6%	16.7%	16.3%	0.7	-0.2
Social Security Take-up	18.8%	20.8%	20.9%	0.7	0.1
Hours Per Week (1)	22.1	22.7	23.1	0.2	0.2
Not Employed Share (1)	30.4%	27.7%	26.2%	-0.9	-0.8
Not In Employment (1)	41.8%	40.3%	39.3%	-0.5	-0.5

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	2,342	2,282	2,314	-0.9%	0.7%
Taxes Paid	573	614	652	2.3%	3.1%
Benefits	874	1,024	961	5.4%	-3.1%
Business Income	628	717	808	4.5%	6.1%
Interest Paid	277	202	211	-9.9%	2.2%
Property Income	546	544	594	-0.1%	4.5%
Disposable Income	4,348	4,566	4,644	1.6%	0.9%
Rank	65	65	65		
Industry GRP (Local)	4,016	3,877	3,695	-1.2%	-2.4%
Rank	65	65	65		
Headline GRP	5,209	5,280	5,301	0.5%	0.2%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	421	389	433
Value of Property and Unincorporated Business	322	300	319
Value of Financial Assets	216	211	251
Value of Household Liabilities	117	123	136
Disposable Income after Debt Service Costs	102	98	102
Household Debt Service Ratio	12%	12%	12%
Household Debt to Gross Income Ratio	1.01	1.11	1.19

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	120.6	252.0	232.3
Ratio of adjusted dwelling price to adjusted average household disposable income	2.0	2.6	2.5
Avg household income from labour market catchment	40447	57087	54260
Ratio of average mortgage costs on established dwellings to average household catchment income	19.9%	32.8%	26.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	51.6%	42.2%	33.9%
Share of flats in dwelling stock	6.9%	6.1%	6.2%
Ratio of houses in new dwelling approvals	86.9%	90.6%	75.6%
Adults per occupied dwelling	2.0	2.0	2.0

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	44,919	47,664	50,949
UR Hours (1000 hours)	77,331	80,923	83,662
UR Income (\$m cvm)	2,281	3,016	2,705
POW Emp	45,291	47,544	49,824
POW Hours (1000 hours)	76,836	79,940	81,066
POW Income (\$m cvm)	2,260	2,986	2,625
UR Avg Weekly Hours / Emp	33.1	32.7	31.6
UR Avg Hourly Rate / Emp (\$cvm)	29.5	37.3	32.3
POW Avg Weekly Hours / Emp	32.6	32.3	31.3
POW Avg Hourly Rate / Emp (\$cvm)	29.4	37.3	32.4

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. 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 is gaining gas-processing industries.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	133	143	147	2.5%	1.6%
No. Households	43	46	48	2.0%	1.9%
NIEIR Workforce	81	88	94	2.9%	3.2%
NIEIR Employment	77	85	90	3.2%	3.1%
NIEIR Unemployment	3.9	3.4	3.8	-4.3%	5.4%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	4.9%	3.9%	4.1%	-0.3	0.1
Headline U/E Rate	3.1%	3.2%	4.0%	0.0	0.4
NIEIR Structural U/E Rate	6.9%	6.0%	5.5%	-0.3	-0.3
Social Security Take-up	9.2%	8.8%	8.7%	-0.1	0.0
Hours Per Week (1)	29.0	29.2	29.6	0.0	0.2
Not Employed Share (1)	20.3%	17.6%	13.6%	-0.9	-2.0
Not In Employment (1)	23.6%	23.2%	22.2%	-0.1	-0.5

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	5,346	6,528	6,858	6.9%	2.5%
Taxes Paid	1,125	1,596	1,723	12.4%	3.9%
Benefits	371	286	303	-8.3%	3.0%
Business Income	676	246	276	-28.6%	6.0%
Interest Paid	613	413	463	-12.3%	5.9%
Property Income	1,356	1,404	1,419	1.2%	0.5%
Disposable Income	8,074	8,847	9,012	3.1%	0.9%
Rank	50	47	50		
Industry GRP (Local)	9,037	10,184	9,882	4.1%	-1.5%
Rank	47	41	40		
Headline GRP	10,504	13,139	13,436	7.7%	1.1%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	663	701	615
Value of Property and Unincorporated Business	641	632	548
Value of Financial Assets	282	333	368
Value of Household Liabilities	260	263	302
Disposable Income after Debt Service Costs	178	189	187
Household Debt Service Ratio	15%	13%	14%
Household Debt to Gross Income Ratio	1.25	1.23	1.41

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	251.8	563.2	560.4
Ratio of adjusted dwelling price to adjusted average household disposable income	2.7	3.3	3.4
Avg household income from labour market catchment	61577	95088	108422
Ratio of average mortgage costs on established dwellings to average household catchment income	27.6%	46.3%	34.7%
Ratio of average mortgage costs on new dwellings to average household catchment income	53.2%	47.4%	34.0%
Share of flats in dwelling stock	21.5%	21.3%	23.3%
Ratio of houses in new dwelling approvals	35.3%	44.3%	37.0%
Adults per occupied dwelling	2.3	2.3	2.4

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	51,120	64,838	90,568
UR Hours (1000 hours)	93,457	122,393	160,120
UR Income (\$m cvm)	3,027	5,251	6,486
POW Emp	50,820	62,726	90,655
POW Hours (1000 hours)	91,710	116,899	156,964
POW Income (\$m cvm)	2,943	4,903	6,778
UR Avg Weekly Hours / Emp	35.2	36.3	34.0
UR Avg Hourly Rate / Emp (\$cvm)	32.4	42.9	40.5
POW Avg Weekly Hours / Emp	34.7	35.8	33.3
POW Avg Hourly Rate / Emp (\$cvm)	32.1	41.9	43.2

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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	103	102	102	-0.4%	-0.2%
No. Households	23	23	24	0.1%	0.5%
NIEIR Workforce	53	54	55	0.5%	1.3%
NIEIR Employment	46	46	49	0.5%	2.2%
NIEIR Unemployment	7.0	7.2	6.5	0.8%	-4.9%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	13.3%	13.4%	11.8%	0.0	-0.8
Headline U/E Rate	4.8%	5.7%	5.0%	0.3	-0.4
NIEIR Structural U/E Rate	17.9%	19.9%	18.9%	0.7	-0.5
Social Security Take-up	23.5%	26.0%	26.1%	0.8	0.0
Hours Per Week (1)	22.2	23.3	24.4	0.4	0.5
Not Employed Share (1)	36.5%	34.5%	30.9%	-0.7	-1.8
Not In Employment (1)	41.6%	38.6%	35.7%	-1.0	-1.4

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	2,806	2,858	3,165	0.6%	5.2%
Taxes Paid	541	628	691	5.1%	4.9%
Benefits	207	157	300	-8.7%	38.3%
Business Income	320	231	300	-10.4%	14.0%
Interest Paid	197	187	142	-1.7%	-12.8%
Property Income	490	462	498	-1.9%	3.9%
Disposable Income	3,997	3,906	4,556	-0.8%	8.0%
Rank	66	67	66		
Industry GRP (Local)	4,986	6,565	5,136	9.6%	-11.6%
Rank	62	56	60		
Headline GRP	7,981	9,223	8,619	4.9%	-3.3%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	457	565	435
Value of Property and Unincorporated Business	424	520	369
Value of Financial Assets	190	207	194
Value of Household Liabilities	157	163	128
Disposable Income after Debt Service Costs	176	148	148
Household Debt Service Ratio	10%	12%	8%
Household Debt to Gross Income Ratio	0.81	0.99	0.79

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	217.9	341.5	482.8
Ratio of adjusted dwelling price to adjusted average household disposable income	2.1	2.1	3.7
Avg household income from labour market catchment	55757	78898	84882
Ratio of average mortgage costs on established dwellings to average household catchment income	28.8%	35.1%	32.1%
Ratio of average mortgage costs on new dwellings to average household catchment income	53.1%	50.1%	41.6%
Share of flats in dwelling stock	13.1%	13.4%	14.2%
Ratio of houses in new dwelling approvals	83.0%	57.1%	59.9%
Adults per occupied dwelling	2.9	3.1	3.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	38,434	39,985	49,192
UR Hours (1000 hours)	67,255	73,239	90,271
UR Income (\$m cvm)	2,117	3,339	3,052
POW Emp	40,588	44,161	54,363
POW Hours (1000 hours)	71,261	81,134	98,799
POW Income (\$m cvm)	2,280	3,752	4,168
UR Avg Weekly Hours / Emp	33.7	35.2	35.3
UR Avg Hourly Rate / Emp (\$cvm)	31.5	45.6	33.8
POW Avg Weekly Hours / Emp	33.8	35.3	34.9
POW Avg Hourly Rate / Emp (\$cvm)	32.0	46.2	42.2

ACT



Canberra was founded 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.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	375	391	401	1.4%	1.2%
No. Households	139	150	158	2.6%	2.8%
NIEIR Workforce	220	222	229	0.3%	1.5%
NIEIR Employment	208	209	216	0.1%	1.6%
NIEIR Unemployment	11.4	13.1	13.0	4.7%	-0.3%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	5.2%	5.9%	5.7%	0.2	-0.1
Headline U/E Rate	3.8%	4.3%	4.4%	0.2	0.1
NIEIR Structural U/E Rate	4.7%	5.3%	5.0%	0.2	-0.1
Social Security Take-up	6.1%	6.9%	6.7%	0.3	-0.1
Hours Per Week (1)	25.1	24.2	24.8	-0.3	0.3
Not Employed Share (1)	21.5%	22.7%	20.6%	0.4	-1.0
Not In Employment (1)	34.0%	36.2%	34.8%	0.8	-0.7

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	19,764	18,797	19,716	-1.7%	2.4%
Taxes Paid	3,812	3,709	3,932	-0.9%	3.0%
Benefits	924	971	948	1.7%	-1.2%
Business Income	2,101	1,544	1,568	-9.8%	0.8%
Interest Paid	1,529	1,169	1,181	-8.6%	0.5%
Property Income	8,568	8,947	9,196	1.5%	1.4%
Disposable Income	31,378	30,847	31,936	-0.6%	1.7%
Rank	5	6	6		
Industry GRP (Local)	38,338	36,442	36,320	-1.7%	-0.2%
Rank	6	6	7		
Headline GRP	32,444	34,003	37,276	1.6%	4.7%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	646	664	663
Value of Property and Unincorporated Business	443	461	506
Value of Financial Assets	402	414	388
Value of Household Liabilities	199	211	231
Disposable Income after Debt Service Costs	201	214	204
Household Debt Service Ratio	11%	10%	11%
Household Debt to Gross Income Ratio	0.90	0.91	1.03

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	211.9	557.1	473.9
Ratio of adjusted dwelling price to adjusted average household disposable income	2.0	2.6	2.3
Avg household income from labour market catchment	75510	116004	117633
Ratio of average mortgage costs on established dwellings to average household catchment income	18.7%	35.0%	24.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	31.5%	27.5%	22.1%
Share of flats in dwelling stock	9.5%	12.9%	16.9%
Ratio of houses in new dwelling approvals	73.8%	31.2%	41.4%
Adults per occupied dwelling	2.1	2.1	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	157,683	195,914	215,135
UR Hours (1000 hours)	268,459	330,719	349,953
UR Income (\$m cvm)	12,111	17,826	21,007
POW Emp	173,919	216,935	240,237
POW Hours (1000 hours)	295,671	366,232	393,148
POW Income (\$m cvm)	13,197	19,538	23,362
UR Avg Weekly Hours / Emp	32.7	32.5	31.3
UR Avg Hourly Rate / Emp (\$cvm)	45.1	53.9	60.0
POW Avg Weekly Hours / Emp	32.7	32.5	31.5
POW Avg Hourly Rate / Emp (\$cvm)	44.6	53.3	59.4

APPENDIX 2

AGGREGATED REGIONAL INDICATORS

This Appendix includes:

1. Indicator values for Australia as a whole.
2. Indicator values for the five metropolitan regions. The definition of each metropolitan area will be found in the heading; data for the smaller major cities (Canberra, Sunshine Coast, Gold Coast, Newcastle, Wollongong (Illawarra), Hobart, Geelong and Darwin) will be found in Appendix 1.
3. Indicator values for Northern Australia as a whole.

Australia



Australia

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	22,725	23,788	24,449	1.5%	1.4%
No. Households	8,193	8,602	8,963	1.6%	2.1%
NIEIR Workforce	12,206	12,658	13,049	1.2%	1.5%
NIEIR Employment	11,277	11,609	11,994	1.0%	1.6%
NIEIR Unemployment	928.6	1049.2	1054.7	4.2%	0.3%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	7.6%	8.3%	8.1%	0.2	-0.1
Headline U/E Rate	5.1%	6.1%	6.3%	0.3	0.1
NIEIR Structural U/E Rate	8.9%	9.4%	8.7%	0.2	-0.3
Social Security Take-up	11.6%	12.1%	11.7%	0.2	-0.2
Hours Per Week (1)	24.3	23.9	24.1	-0.1	0.1
Not Employed Share (1)	25.8%	26.2%	24.8%	0.1	-0.7
Not In Employment (1)	36.1%	37.1%	36.5%	0.3	-0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	678,872	696,192	712,058	0.8%	1.1%
Taxes Paid	168,779	187,421	197,585	3.6%	2.7%
Benefits	130,480	139,791	137,740	2.3%	-0.7%
Business Income	125,270	135,596	151,479	2.7%	5.7%
Interest Paid	97,802	72,916	74,232	-9.3%	0.9%
Property Income	161,741	160,276	166,591	-0.3%	2.0%
Disposable Income	1,041,055	1,098,112	1,130,712	1.8%	1.5%
Rank	n/a	n/a	n/a		
Industry GRP (Local)	1,184,435	1,201,094	1,195,248	0.5%	-0.2%
Rank	1	1	1		
Headline GRP	1,460,911	1,570,760	1,644,499	2.4%	2.3%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	707	752	823
Value of Property and Unincorporated Business	544	604	720
Value of Financial Assets	375	378	357
Value of Household Liabilities	212	230	253
Disposable Income after Debt Service Costs	121	128	126
Household Debt Service Ratio	18%	17%	18%
Household Debt to Gross Income Ratio	1.48	1.55	1.72

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	228.6	491.8	495.6
Ratio of adjusted dwelling price to adjusted average household disposable income	3.0	4.0	4.1
Avg household income from labour market catchment	59622	82187	82294
Ratio of average mortgage costs on established dwellings to average household catchment income	26.4%	46.2%	38.6%
Ratio of average mortgage costs on new dwellings to average household catchment income	45.3%	46.8%	37.7%
Share of flats in dwelling stock	13.6%	14.2%	14.9%
Ratio of houses in new dwelling approvals	69.5%	63.9%	60.6%
Adults per occupied dwelling	2.1	2.1	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	8,350,322	10,289,653	11,991,566
UR Hours (1000 hours)	14,870,188	17,677,585	20,048,549
UR Income (\$m cvm)	500,101	737,067	871,035
POW Emp	8,350,322	10,289,653	11,991,566
POW Hours (1000 hours)	14,870,188	17,677,585	20,048,549
POW Income (\$m cvm)	500,101	737,067	871,035
UR Avg Weekly Hours / Emp	34.2	33.0	32.2
UR Avg Hourly Rate / Emp (\$cvm)	33.6	41.7	43.4
POW Avg Weekly Hours / Emp	34.2	33.0	32.2
POW Avg Hourly Rate / Emp (\$cvm)	33.6	41.7	43.4

Sydney Metro



The Sydney metropolitan area comprises the nine regions which in Appendix 1 of this report bear the prefix 'Sydney'. The metropolitan area is bounded by the Pacific Ocean to the east and by Broken Bay and the Hawkesbury River to the north. It extends across the Blue Mountains to the west, where it includes an expanse of uninhabited national parks. The south west is the only direction in which Sydney tapers out into peri-urban farming country.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	4,351	4,589	4,773	1.8%	2.0%
No. Households	4,351	4,589	4,773	1.8%	2.0%
NIEIR Workforce	2,342	2,451	2,551	1.5%	2.0%
NIEIR Employment	2,195	2,297	2,400	1.5%	2.2%
NIEIR Unemployment	147.1	153.9	150.8	1.5%	-1.0%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	6.3%	6.3%	5.9%	0.0	-0.2
Headline U/E Rate	4.9%	5.2%	5.2%	0.1	n/a
NIEIR Structural U/E Rate	6.8%	7.1%	6.4%	0.1	-0.3
Social Security Take-up	8.8%	8.6%	7.7%	0.0	-0.5
Hours Per Week (1)	24.2	23.8	24.0	-0.1	0.1
Not Employed Share (1)	26.6%	26.5%	25.1%	0.0	-0.7
Not In Employment (1)	36.3%	37.4%	36.7%	0.4	-0.3

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	148,489	154,682	162,110	1.4%	2.4%
Taxes Paid	38,630	44,902	47,926	5.1%	3.3%
Benefits	20,060	21,558	20,232	2.4%	-3.1%
Business Income	26,572	35,676	38,370	10.3%	3.7%
Interest Paid	21,816	17,206	17,756	-7.6%	1.6%
Property Income	35,062	35,121	36,198	0.1%	1.5%
Disposable Income	217,300	236,891	245,183	2.9%	1.7%
Rank	n/a	n/a	n/a		
Industry GRP (Local)	274,026	294,534	311,365	2.4%	2.8%
Rank	1	1	1		
Headline GRP	334,668	366,567	398,060	3.1%	4.2%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	905	1,080	1,263
Value of Property and Unincorporated Business	675	856	1,098
Value of Financial Assets	486	509	478
Value of Household Liabilities	256	286	313
Disposable Income after Debt Service Costs	134	150	147
Household Debt Service Ratio	19%	18%	19%
Household Debt to Gross Income Ratio	1.58	1.63	1.81

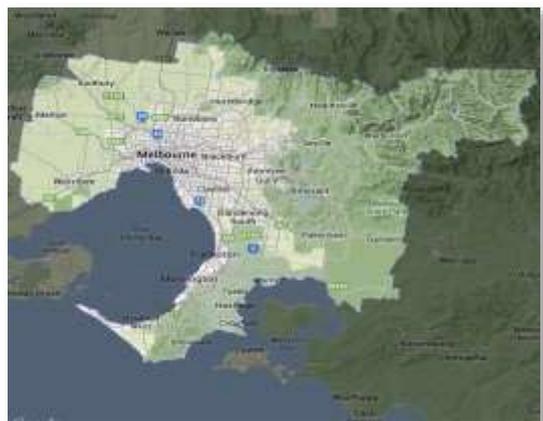
HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	394.4	700.2	784.7
Ratio of adjusted dwelling price to adjusted average household disposable income	4.4	5.1	5.6
Avg household income from labour market catchment	66789	86740	90507
Ratio of average mortgage costs on established dwellings to average household catchment income	40.8%	62.6%	56.2%
Ratio of average mortgage costs on new dwellings to average household catchment income	46.8%	55.1%	43.4%
Share of flats in dwelling stock	25.7%	29.0%	30.2%
Ratio of houses in new dwelling approvals	40.0%	43.3%	34.8%
Adults per occupied dwelling	2.2	2.3	2.3

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	1,750,604	2,031,648	2,399,992
UR Hours (1000 hours)	3,159,021	3,519,520	4,014,625
UR Income (\$m cvm)	121,419	166,082	220,064
POW Emp	1,803,358	2,118,804	2,541,114
POW Hours (1000 hours)	3,270,462	3,687,771	4,281,308
POW Income (\$m cvm)	125,724	174,509	233,302
UR Avg Weekly Hours / Emp	34.7	33.3	32.2
UR Avg Hourly Rate / Emp (\$cvm)	38.4	47.2	54.8
POW Avg Weekly Hours / Emp	34.9	33.5	32.4
POW Avg Hourly Rate / Emp (\$cvm)	38.4	47.3	54.5

Melbourne Metro



The Melbourne metropolitan area comprises the eight regions which in Appendix 1 of this report bear the prefix 'Melbourne'. The metropolitan area lies at the head of Port Phillip Bay and is bounded by hills and water reserves to the north-east, but in other directions is not confined by natural boundaries. Every so often the urban growth boundary is expanded into the surrounding peri-urban areas.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	4,190	4,466	4,661	2.1%	2.2%
No. Households	4,190	4,466	4,661	2.1%	2.2%
NIEIR Workforce	2,302	2,426	2,567	1.8%	2.9%
NIEIR Employment	2,138	2,229	2,378	1.4%	3.3%
NIEIR Unemployment	163.5	197.7	189.1	6.5%	-2.2%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	7.1%	8.1%	7.4%	0.3	-0.4
Headline U/E Rate	5.2%	6.5%	6.2%	0.4	-0.2
NIEIR Structural U/E Rate	7.4%	7.8%	7.1%	0.1	-0.3
Social Security Take-up	9.6%	9.9%	9.1%	0.1	-0.4
Hours Per Week (1)	23.6	22.9	23.8	-0.3	0.5
Not Employed Share (1)	25.7%	26.8%	24.1%	0.4	-1.4
Not In Employment (1)	37.8%	39.8%	37.5%	0.7	-1.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	122,890	122,406	133,907	-0.1%	4.6%
Taxes Paid	31,554	33,051	36,629	1.6%	5.3%
Benefits	20,772	22,216	22,265	2.3%	0.1%
Business Income	19,736	25,858	28,997	9.4%	5.9%
Interest Paid	18,960	14,652	14,889	-8.2%	0.8%
Property Income	28,428	27,594	28,873	-1.0%	2.3%
Disposable Income	177,151	188,169	201,926	2.0%	3.6%
Rank	n/a	n/a	n/a		
Industry GRP (Local)	217,076	219,329	224,323	0.3%	1.1%
Rank	2	2	2		
Headline GRP	266,047	279,319	303,120	1.6%	4.2%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	864	922	1,075
Value of Property and Unincorporated Business	683	777	985
Value of Financial Assets	399	390	359
Value of Household Liabilities	218	245	269
Disposable Income after Debt Service Costs	114	119	120
Household Debt Service Ratio	19%	19%	19%
Household Debt to Gross Income Ratio	1.58	1.74	1.89

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	236.7	615.5	591.6
Ratio of adjusted dwelling price to adjusted average household disposable income	3.1	5.3	5.2
Avg household income from labour market catchment	64000	87428	84956
Ratio of average mortgage costs on established dwellings to average household catchment income	24.6%	51.8%	42.3%
Ratio of average mortgage costs on new dwellings to average household catchment income	45.7%	45.5%	35.8%
Share of flats in dwelling stock	15.7%	16.5%	17.9%
Ratio of houses in new dwelling approvals	67.9%	54.1%	47.0%
Adults per occupied dwelling	2.1	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	1,550,313	1,903,984	2,373,601
UR Hours (1000 hours)	2,743,843	3,225,919	3,876,509
UR Income (\$m cvm)	89,176	133,199	158,831
POW Emp	1,591,785	1,964,716	2,445,307
POW Hours (1000 hours)	2,847,794	3,357,976	4,040,149
POW Income (\$m cvm)	92,528	138,581	164,762
UR Avg Weekly Hours / Emp	34.0	32.6	31.4
UR Avg Hourly Rate / Emp (\$cvm)	32.5	41.3	41.0
POW Avg Weekly Hours / Emp	34.4	32.9	31.8
POW Avg Hourly Rate / Emp (\$cvm)	32.5	41.3	40.8

Brisbane Metro



The Brisbane metropolitan area comprises five LGAs: Brisbane, Redland, Logan, Ipswich and Moreton Bay. This includes the greater part of South East Queensland, but excludes the Sunshine Coast and the Gold Coast, both of which are regarded as independent cities, and also the peri-urban part of the West Moreton region. The metropolitan area is indented by the inlets of Moreton Bay and confined, especially to the north-west, by ranges; it is confined to the north and to the south-east by the proximity of independent cities, but is relatively free to expand into peri-urban farmland to the south and to the west.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	2,225	2,342	2,421	1.7%	1.7%
No. Households	2,225	2,342	2,421	1.7%	1.7%
NIEIR Workforce	1,229	1,271	1,300	1.1%	1.1%
NIEIR Employment	1,144	1,170	1,197	0.8%	1.2%
NIEIR Unemployment	85.2	100.5	102.3	5.7%	0.9%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	6.9%	7.9%	7.9%	0.3	0.0
Headline U/E Rate	5.0%	6.1%	6.5%	0.4	0.2
NIEIR Structural U/E Rate	7.8%	8.5%	8.0%	0.2	-0.3
Social Security Take-up	10.6%	11.4%	11.1%	0.3	-0.2
Hours Per Week (1)	25.0	24.2	23.8	-0.3	-0.2
Not Employed Share (1)	24.8%	26.1%	25.8%	0.4	-0.1
Not In Employment (1)	41.4%	43.4%	44.4%	0.7	0.5

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	68,471	70,483	70,045	1.0%	-0.3%
Taxes Paid	16,805	18,842	19,108	3.9%	0.7%
Benefits	12,004	12,671	12,160	1.8%	-2.0%
Business Income	10,693	8,435	8,726	-7.6%	1.7%
Interest Paid	9,871	7,357	7,610	-9.3%	1.7%
Property Income	16,915	16,753	17,583	-0.3%	2.4%
Disposable Income	101,907	104,533	105,051	0.9%	0.2%
Rank	n/a	n/a	n/a		
Industry GRP (Local)	116,389	113,023	107,624	-1.0%	-2.4%
Rank	3	4	4		
Headline GRP	136,017	146,615	150,661	2.5%	1.4%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	774	719	692
Value of Property and Unincorporated Business	582	574	609
Value of Financial Assets	422	384	347
Value of Household Liabilities	230	240	264
Disposable Income after Debt Service Costs	127	127	119
Household Debt Service Ratio	19%	18%	19%
Household Debt to Gross Income Ratio	1.52	1.61	1.86

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	204.4	484.9	460.3
Ratio of adjusted dwelling price to adjusted average household disposable income	2.8	3.8	3.8
Avg household income from labour market catchment	56091	83770	79135
Ratio of average mortgage costs on established dwellings to average household catchment income	26.3%	47.6%	39.6%
Ratio of average mortgage costs on new dwellings to average household catchment income	46.7%	44.1%	37.5%
Share of flats in dwelling stock	11.0%	12.2%	13.3%
Ratio of houses in new dwelling approvals	68.5%	50.4%	49.7%
Adults per occupied dwelling	2.1	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	714,582	988,098	1,154,549
UR Hours (1000 hours)	1,281,890	1,718,202	1,922,986
UR Income (\$m cvm)	40,190	70,536	73,522
POW Emp	713,661	1,017,465	1,195,507
POW Hours (1000 hours)	1,262,362	1,750,832	1,962,534
POW Income (\$m cvm)	39,672	71,976	74,905
UR Avg Weekly Hours / Emp	34.5	33.4	32.0
UR Avg Hourly Rate / Emp (\$cvm)	31.4	41.1	38.2
POW Avg Weekly Hours / Emp	34.0	33.1	31.6
POW Avg Hourly Rate / Emp (\$cvm)	31.4	41.1	38.2

Adelaide Metro



The Adelaide metropolitan area comprises the two regions which in Appendix 1 of this report bear the prefix 'Adelaide' plus two additional LGAs, Gawler to the north and Adelaide Hills to the east. Adelaide is bounded by St Vincents Gulf to the west but is not otherwise constrained by geographic features - the Adelaide hills and the hills of the Fleurieu peninsula include many valleys which are flat enough for urban development. The metropolitan area accordingly peters out into farms, vineyards and orchards to the west, east and south.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	1,435	1,477	1,499	1.0%	0.8%
No. Households	1,435	1,477	1,499	1.0%	0.8%
NIEIR Workforce	770	773	788	0.1%	1.0%
NIEIR Employment	702	698	712	-0.2%	1.0%
NIEIR Unemployment	67.7	74.9	75.4	3.5%	0.3%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	8.8%	9.7%	9.6%	0.3	-0.1
Headline U/E Rate	5.3%	6.8%	7.3%	0.5	0.3
NIEIR Structural U/E Rate	10.9%	11.6%	10.9%	0.2	-0.3
Social Security Take-up	13.9%	14.5%	14.4%	0.2	-0.1
Hours Per Week (1)	23.2	22.7	22.8	-0.2	0.0
Not Employed Share (1)	26.0%	27.6%	26.0%	0.5	-0.8
Not In Employment (1)	49.5%	50.6%	50.4%	0.4	-0.1

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	36,678	39,082	37,695	2.1%	-1.8%
Taxes Paid	8,506	9,514	9,454	3.8%	-0.3%
Benefits	9,684	10,654	10,376	3.2%	-1.3%
Business Income	6,803	6,228	6,771	-2.9%	4.3%
Interest Paid	5,198	3,808	3,973	-9.9%	2.2%
Property Income	8,518	8,583	8,805	0.3%	1.3%
Disposable Income	59,162	63,279	62,747	2.3%	-0.4%
Rank	n/a	n/a	n/a		
Industry GRP (Local)	58,267	58,168	54,952	-0.1%	-2.8%
Rank	6	6	6		
Headline GRP	69,760	73,584	76,461	1.8%	1.9%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	601	558	540
Value of Property and Unincorporated Business	440	426	452
Value of Financial Assets	329	311	296
Value of Household Liabilities	168	179	208
Disposable Income after Debt Service Costs	105	108	108
Household Debt Service Ratio	17%	16%	17%
Household Debt to Gross Income Ratio	1.37	1.45	1.67

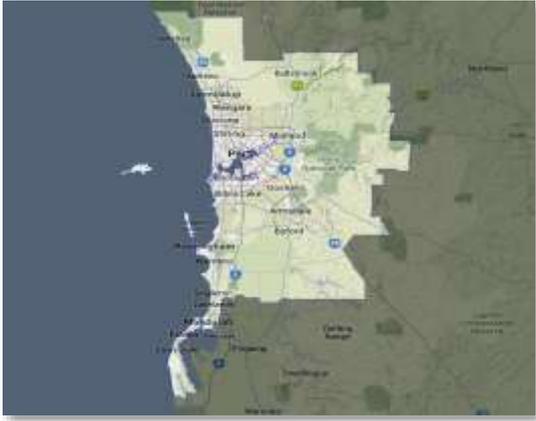
HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	180.2	449.2	416.6
Ratio of adjusted dwelling price to adjusted average household disposable income	2.6	4.4	4.1
Avg household income from labour market catchment	59203	77549	79646
Ratio of average mortgage costs on established dwellings to average household catchment income	24.6%	54.5%	41.0%
Ratio of average mortgage costs on new dwellings to average household catchment income	46.7%	55.5%	44.1%
Share of flats in dwelling stock	11.0%	10.7%	11.1%
Ratio of houses in new dwelling approvals	88.0%	68.5%	73.9%
Adults per occupied dwelling	2.0	2.0	2.1

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	490,585	568,051	620,044
UR Hours (1000 hours)	840,842	943,326	988,268
UR Income (\$m cvm)	26,045	36,295	37,817
POW Emp	498,811	584,160	645,806
POW Hours (1000 hours)	871,014	982,070	1,047,273
POW Income (\$m cvm)	27,060	37,824	39,840
UR Avg Weekly Hours / Emp	33.0	31.9	30.7
UR Avg Hourly Rate / Emp (\$cvm)	31.0	38.5	38.3
POW Avg Weekly Hours / Emp	33.6	32.3	31.2
POW Avg Hourly Rate / Emp (\$cvm)	31.1	38.5	38.0

Perth Metro



The Perth metropolitan area comprises the three regions which in Appendix 1 of this report bear the prefix 'Perth' plus two additional LGAs, Mandurah and Serpentine Jarrahdale, both of which adjoin the Perth Outer South region. Perth is bounded by the Indian Ocean to the west but is otherwise not constrained by geographic features, though it has shown a propensity to expand north and south along the beach. The metropolitan area accordingly tapers out into farms, vineyards and bushland to the north, east and south.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	2,077	2,222	2,286	2.3%	1.4%
No. Households	2,077	2,222	2,286	2.3%	1.4%
NIEIR Workforce	1,141	1,218	1,235	2.2%	0.7%
NIEIR Employment	1,084	1,150	1,149	2.0%	0.0%
NIEIR Unemployment	56.9	68.9	86.0	6.6%	11.7%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	5.0%	5.7%	7.0%	0.2	0.7
Headline U/E Rate	4.3%	5.1%	6.5%	0.3	0.7
NIEIR Structural U/E Rate	6.0%	6.2%	5.8%	0.0	-0.2
Social Security Take-up	8.2%	8.5%	9.3%	0.1	0.4
Hours Per Week (1)	25.3	24.9	23.9	-0.1	-0.5
Not Employed Share (1)	23.7%	23.5%	24.5%	-0.1	0.5
Not In Employment (1)	41.6%	42.4%	44.9%	0.3	1.2

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	76,885	81,974	76,578	2.2%	-3.3%
Taxes Paid	20,304	22,963	22,111	4.2%	-1.9%
Benefits	9,904	9,898	10,207	0.0%	1.6%
Business Income	11,784	9,114	8,844	-8.2%	-1.5%
Interest Paid	10,482	7,973	8,118	-8.7%	0.9%
Property Income	15,757	15,906	16,009	0.3%	0.3%
Disposable Income	106,458	111,747	106,323	1.6%	-2.5%
Rank	n/a	n/a	n/a		
Industry GRP (Local)	115,244	118,681	108,226	1.0%	-4.5%
Rank	4	3	3		
Headline GRP	133,143	145,248	134,643	2.9%	-3.7%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	665	680	536
Value of Property and Unincorporated Business	518	540	472
Value of Financial Assets	411	421	368
Value of Household Liabilities	264	281	303
Disposable Income after Debt Service Costs	130	146	129
Household Debt Service Ratio	20%	18%	20%
Household Debt to Gross Income Ratio	1.68	1.64	1.97

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	228.9	591.0	600.3
Ratio of adjusted dwelling price to adjusted average household disposable income	3.1	4.1	4.3
Avg household income from labour market catchment	56656	100203	101202
Ratio of average mortgage costs on established dwellings to average household catchment income	31.7%	54.6%	46.4%
Ratio of average mortgage costs on new dwellings to average household catchment income	62.5%	60.8%	47.6%
Share of flats in dwelling stock	8.6%	10.2%	10.7%
Ratio of houses in new dwelling approvals	82.4%	79.3%	69.6%
Adults per occupied dwelling	2.1	2.2	2.2

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	636,772	842,941	1,056,976
UR Hours (1000 hours)	1,129,768	1,454,848	1,738,422
UR Income (\$m cvm)	35,266	61,829	78,074
POW Emp	642,277	842,149	1,052,959
POW Hours (1000 hours)	1,158,874	1,466,606	1,751,770
POW Income (\$m cvm)	35,859	61,833	77,549
UR Avg Weekly Hours / Emp	34.1	33.2	31.6
UR Avg Hourly Rate / Emp (\$cvm)	31.2	42.5	44.9
POW Avg Weekly Hours / Emp	34.7	33.5	32.0
POW Avg Hourly Rate / Emp (\$cvm)	30.9	42.2	44.3

Northern Australia



Northern Australia comprises the seven Australian regions which lie substantially north of the Tropic of Capricorn - in WA Pilbara Kimberley, in the NT Lingiari and Darwin and in Queensland Fitzroy Central West, Mackay, Townsville North West and Far North Torres. These combined regions account for not far short of half the land area of Australia and are bounded to the west, north and east by the coast. From an economic point of view the Tropic of Capricorn is an arbitrary line, but it serves as a southern boundary for the part of the country with a strongly monsoonal, tropical climate.

LABOUR FORCE

	2012 (000s)	2015 (000s)	2017 (000s)	2012 -2015	2015 -2017
Population	1,283	1,330	1,330	1.2%	0.0%
No. Households	1,283	1,330	1,330	1.2%	0.0%
NIEIR Workforce	732	746	751	0.6%	0.3%
NIEIR Employment	674	683	676	0.5%	-0.6%
NIEIR Unemployment	58.4	62.9	75.2	2.5%	9.3%

UNEMPLOYMENT AND UNDER EMPLOYMENT

	2012	2015	2017	2012 -2015	2015 -2017
NIEIR U/E Rate	8.0%	8.4%	10.0%	0.2	0.8
Headline U/E Rate	5.4%	6.2%	8.3%	0.3	1.1
NIEIR Structural U/E Rate	9.4%	10.0%	9.7%	0.2	-0.2
Social Security Take-up	12.9%	14.4%	15.0%	0.5	0.3
Hours Per Week (1)	27.5	26.9	26.9	-0.2	0.0
Not Employed Share (1)	23.7%	24.6%	24.4%	0.3	-0.1
Not In Employment (1)	27.7%	29.2%	29.1%	0.5	0.0

Note: (1) Relative to Working Age Population, Not in Employment is based on FTE.

INCOME FLOWS & PRODUCTIVITY

	2012 \$m cvm	2015 \$m cvm	2017 \$m cvm	2012 -2015	2015 -2017
Wages/Salaries	44,073	45,356	44,509	1.0%	-0.9%
Taxes Paid	10,588	11,799	12,037	3.7%	1.0%
Benefits	5,745	6,348	6,802	3.4%	3.5%
Business Income	7,241	5,259	6,112	-10.1%	7.8%
Interest Paid	5,455	3,718	3,657	-12.0%	-0.8%
Property Income	7,473	7,130	7,393	-1.6%	1.8%
Disposable Income	61,080	61,902	62,470	0.4%	0.5%
Rank	n/a	n/a	n/a		
Industry GRP (Local)	76,122	74,920	67,652	-0.5%	-5.0%
Rank	5	5	5		
Headline GRP	121,851	146,334	154,454	6.3%	2.7%

- Notes: (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 Resident GRP (Local) are per working age population and figures for Industry GRP (Local) are per industry employee. Both are at Factor Cost.
 (5) \$m cvm = \$ million chain volume measure, which is flows of constant 2014-2015 value converted from current values by the ABS using their chain volume methodology.

HOUSEHOLD WEALTH & DEBT

Indicator	2009	2014	2017
Wealth per Household (\$cvm '000s)	570	548	474
Value of Property and Unincorporated Business	511	501	425
Value of Financial Assets	284	283	282
Value of Household Liabilities	225	236	233
Disposable Income after Debt Service Costs	141	138	136
Household Debt Service Ratio	17%	16%	16%
Household Debt to Gross Income Ratio	1.37	1.48	1.49

HOUSING

Housing Indicator	1999.3	2013.2	2016.2
Average established dwelling price (\$cvm '000s)	202.0	408.9	396.2
Ratio of adjusted dwelling price to adjusted average household disposable income	2.7	3.0	3.1
Avg household income from labour market catchment	59036	88731	86437
Ratio of average mortgage costs on established dwellings to average household catchment income	24.5%	36.8%	29.9%
Ratio of average mortgage costs on new dwellings to average household catchment income	47.9%	45.9%	37.1%
Share of flats in dwelling stock	12.4%	12.8%	13.2%
Ratio of houses in new dwelling approvals	74.8%	79.1%	74.7%
Adults per occupied dwelling	2.2	2.2	2.3

EMPLOYED, HOURS WORKED AND INCOME (UR=Place of Residence, POW=Place of Work)

Indicator	1997	2007	2017
UR Emp	498,865	599,388	674,435
UR Hours (1000 hours)	901,355	1,098,541	1,251,666
UR Income (\$m cvm)	28,755	46,236	47,622
POW Emp	502,009	609,025	722,128
POW Hours (1000 hours)	900,193	1,109,770	1,332,403
POW Income (\$m cvm)	29,049	46,978	52,830
UR Avg Weekly Hours / Emp	34.7	35.2	35.7
UR Avg Hourly Rate / Emp (\$cvm)	31.9	42.1	38.0
POW Avg Weekly Hours / Emp	34.5	35.0	35.5
POW Avg Hourly Rate / Emp (\$cvm)	32.3	42.3	39.7

APPENDIX 3

INDICATOR EXPLANATIONS AND KEY MAP

Appendix 3: Indicator explanations and key map

Regional indicators

Population

Residential population by region for 2012 to 2015 is taken from the *ABS estimated resident population* (ERP) series. The 2017 population was derived from household growth for 2015-16 and constrained to 2017 state population growth. The 2017 household total was derived by increasing the 2016 household total by the number of dwelling approvals.

No. of households

The number of households per region uses the *ABS Censuses* for 2006 and 2011. From the 2011 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 2011 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 2011 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 Employment* (DE). 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 2007 to 2017. The average DE 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 is therefore assumed that there is a natural level of people (expressed as a percentage of the population) who need to access the DSP. The DSP data is ascertained from the Department of Social Security. 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 2012 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.

NIEIR unemployment

This is derived from unemployment numbers from DE and the excess disability figure discussed above, it combines the official definitions of unemployed with an adjustment for any excess shift to Disability Support Pensions.

Social Security take-up

This is a National Economics' measure derived from Social Security data. It includes all people aged 16 to 64 years receiving Newstart Allowance, Disability Support Pensions, Parenting Payment – Single, and Youth Allowance for non-students/apprentices. It is expressed as a percentage of the population aged 16 to 64 years.

Headline unemployment

This is the unemployment rate produced by the *Department of Employment (DE)*. Their *Small Area Labour Markets* publication 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 designated the headline unemployment rate to denote that it is not exactly equal to the DE series.

NIEIR structural unemployment

This is a measure of the level of long-term unemployed as a percentage of the NIEIR workforce. 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.

Hours per week per working age population

This is a measure of the amount of work available relative to the number of people available to work. In effect it is a measure of underemployment in that a low ratio indicates that the adult population is under-utilised in an employment sense.

Not-Employed share of working age population

This is a simple measure of those not in employment as per the NIEIR Employment definition, as a proportion of the working age population.

Not in Employment share of working age population (Full Time Equivalent)

This is similar to the above measure but the employment definition is adjusted to Full Time Equivalent and hence adjusts, over time, for shifts in the part-time/full-time balance.

Income flows and productivity

Source: ATO Taxation Statistics, National Accounts Data

This panel uses National Accounts definitions. All state totals are reconciled to the household accounts in the Australian Bureau of Statistics' "State Accounts".

The household disposable income indicator for each region 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 2015-15 prices.

To 2013-14 all data are derived from the postcode tax statistics. The data is estimated for subsequent years using the following series:

- wages/salaries;
- taxes paid;
- benefits;
- business income; and
- property income.

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 postcode to Local Government Area concordance derived from the latest available census.

Again, farm income is estimated using rainfall data as a proxy for the impact of 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 the national accounts. This process accounts for differences in the relative income-generating capacity of various agricultural activities. By varying the incomes derived by our estimate of the impact of drought we obtain a reasonably accurate distribution of incomes.

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 2012 figures are based on reported taxation statistics. The 2015 to 2017 figures have been estimated using state control totals and the estimates of income created earlier.

Benefits

This figure is an estimate of the total amount of government benefits as defined in the National Accounts, received at the local level. The Local Area distribution of the National Accounts data is estimated utilising the postcode distribution of Commonwealth benefits sourced from the Australian Taxation Office publication *Taxation Statistics* and a population component to capture those not required to submit tax returns.

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 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 this model is the amount of interest paid by the household sector on debt. The debts incurred in running unincorporated businesses are not included but are used in estimating net business income as 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.

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 level and hence National Economics relies on state trends to derive the recent year estimates.

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 a region. State totals for the depreciation of household assets 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, and aggregated to regions.

Resident GRP (local)

Gross regional product or value added (GRP) comprises wages and salaries plus business income. Local GRP excludes the gross surplus of companies, since this is difficult to allocate to any small geographic area. This estimate is on a residential basis and hence represents value added by the businesses in which the residents work rather than value added by businesses located in the region.

Place of work (industry) GRP (local)

Resident GRP is here re-allocated to the region of each resident's workplace according to the commuting patterns documented in the 2011 Census Journey to Work tables.

Headline Gross Regional Product (GRP)

Headline Gross Regional Product (GRP) is a measure of size or net wealth generated by the region's economy. Changes in this figure over time can represent changes in employment, productivity or the types of industries in the area. This figure is benchmarked to the National Accounts as produced by the ABS. NIEIR's methodology establishes GRP levels based on the strength of JTW income by industry for the region. The methodology allocates much of the mining activity to the production region and limits head office activity to professional service GRP rates when they are away from the production regions. Similar rules apply to Construction and Tourism related industries.

Household wealth and debt

All wealth and debt 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 record data for 2003-04 and earlier HES years. The same procedure is adopted for allocating household total liabilities. For the benchmark years, e.g. 2011, 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 to allow for repayments divided by disposable income.

The household income measure used for the debt to income ratio is household disposable income plus depreciation plus interest paid.

Housing

Source: RP Data; various derived statistics on dwellings and income.

The average value of dwellings is the average value of dwellings sold in the region (both houses and flats) as reported by RP Data. It has been deflated by the National Accounts consumption deflator.

The ratio of average dwelling price to household income is calculated using average household disposable income for the region, plus interest paid less the surplus from dwelling ownership.

The mortgage burden on average dwelling purchase is derived from the ratio of average dwelling price to average cash household income less direct tax by assuming that a household purchases a dwelling at the average regional price financed by a mortgage at the current mortgage interest rate with a deposit of 25 per cent of value. The mortgage thus calculated is reported as a percentage of average household income for the region.

Greenfield construction costs have been calculated separately for houses and apartments from approvals data at the LGA level, in both cases with the addition of allowance for land costs. Apartment and house costs are averaged using weights which reflect the prominence of each in the approvals data. The average cost so calculated is divided by the RESI average value of all dwellings sold in the region. Owing to the uncertainties of back-projection the 1990s values should be treated with caution.

The mortgage burden on new construction is derived from greenfield construction costs using the same methodology as for the ratio of mortgage payments to disposable income for the average house purchase. The caution concerning 1990s value applies here also.

Adult population per dwelling derives from the ABS Estimated regional populations, projected by NIEIR to 2016.

Resident and place of work employment and income

For sources for resident employment see above. Place of work employment is modelled using the journey to work matrix derived from the 2011 Census. Please note that UR is place of residence, and POW is place of work.

Hours and dollars per hour

The starting point for estimating hours and dollars per hour is the estimation of hours and dollars per hour at the 1-digit ANZSIC 2006 level at the State/Territory level. This is done by deriving total hours worked per quarter by industry and State/Territory from the ABS Labour Force Bulletin. The wages and salaries plus mixed income series are tables from the ABS Annual State Accounts Bulletin, converted to \$/hour by dividing by the estimates of total hours worked by industry. The annual series have then been converted to quarterly series by ensuring that the total industry quarterly estimates sum to state wages and salaries plus mixed income series from the ABS Quarterly State Accounts.

Hours of work by industry and dollars per hours at the LGA level for usual residents were estimated from a country-wide calculation, per quarter, where the LGA hours and \$/hour column income constraints were derived as outlined above. The row constraints were the state industry totals as outlined above. There were also group LGA constraints imposed at the 1-digit industry level derived from the quarterly regional estimates from the ABS Labour Force Bulletin.

The base matrix was derived for 2011.3 from the Census.

Industry estimates of employment hours of work and \$/hour by employment location were obtained by projecting workplace employment from the 2011.3 Census benchmark. Floorspace completion estimates by building type and by LGA were used to update the 2011.3 matrix of employment by location by industry. The employment location estimates were then estimated by 'back engineering' via the updated journey to work matrix based on usual residents, employment, hours and dollars per hour.

Finally, because of the erratic nature of the Labour Force data, five and seven quarter moving averages were passed through the data.

Regional indicators and data – more indicators and at LGA level

The full online SOR report available from the ALGA website (alga.asn.au) contains a four page indicator set for each SOR region, selected metropolitan cities, Australia and Northern Australia. A similar set of indicator data is also available at LGA level from National Economics (www.nieir.com.au). Enquiries for LGA level data should be directed to Nick Marinopoulos at National Economics. Phone 03 9488 8444 or email nickm@nieir.com.au.

Key map



- | | | | |
|----------------------------------|-------------------------------|-------------------------|------------------------|
| 1 – Sydney Metropolitan Core | 8 – Sydney Parramatta Ryde | 38 – SEQ Gold Coast | 53 – SA Fleurieu |
| 2 – Sydney Eastern Shores | 9 – Sydney South East | 39 – SEQ West Moreton | 54 – SA North |
| 3 – Sydney Mid West | 21 – NSW Southern Tablelands | 40 – SEQ Logan Redland | 56 – Perth Outer North |
| 4 – Sydney Near West | 24 – Melbourne Eastern Inner | 41 – SEQ Moreton Bay | 57 – Perth Outer South |
| 5 – Sydney Outer Northern Shores | 26 – Melbourne Northern Inner | 42 – SEQ Sunshine Coast | 65 – NT Darwin |
| 6 – Sydney Outer South West | 27 – Melbourne Northern Outer | 49 – Adelaide South | |
| 7 – Sydney Outer West | 30 – Melbourne Western | 50 – Adelaide North | |