

URBAN GROWTH CENTRES ON THE PERIPHERY: AD HOC POLICY VISION AND RESEARCH NEGLECT¹

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ABSTRACT: The focus of this paper is peripheral urban growth centres on the edges of capital cities in Australia and the challenges they face as dormitory suburbs attempting to establish their own local business development. These challenges create dilemmas as infrastructure and climate change place pressure on long commuting times, while developing strong locally based communities is limited by many resource and demand constraints. The main research question is to examine how these challenges are being addressed in both public policy and academic research. Two propositions emerge from this analysis. The first is that, despite clear recognition of these challenges by public policy makers, there is a lack of coherent policy vision in addressing the dilemmas that are facing these urban growth centres. The second is that, despite all the concerns and lack of policy vision, there is a dearth of useful academic research in Australia to understand the dilemmas and provide guidance for appropriate policy options.

In the context of ad hoc policy and academic neglect; Casey, Melton and Wyndham are the three major urban peripheral local government areas in Victoria that are profiled in this paper. They serve as examples in examining incoherence of policy and then analysing the elements that are needed for effective and strong peripheral growth centres that could propel these centres towards efficient and equitable liveable communities. A broad composite model of regional economic development is used to examine the attendant problems in these urban centres and the various viable policy options for addressing these problems. In the process, this paper aims to provide a basis for further rigorous academic investigation of peripheral urban growth centres in Australia and, arising from this, more coherent policies for the economic development of such centres.

1. THE PROPOSITIONS

Peripheral urban growth centres and the challenges they face is the broad scope of this paper. Melbourne (and its aligned growth centres) is the specific focus of this inquiry. The main research question is how these challenges in peripheral urban centres are being handled by policy makers and academic researchers. From this emerge two propositions that we wish to deal with in order to answer the research question. The two propositions argued in this paper

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are:

1. **Ad hoc Policy Vision** – Local governments and certain regional development ministries within state governments are well aware of the problems and challenges facing peripheral urban growth centres. With little research and little previous policy experience, such policy makers are putting in place ad hoc policies with a vision of creating increasingly more self-contained suburban regions. The policy aim of broader business and social development in the region is often based on adopting any fashionable idea from high priced consultants who are willing to give expensive and sometimes gratuitous advice without any deep analysis of the region itself, e.g. Florida and creative classes (2005); Porter and clusters (2003); Salt and lifestyle change (2003).
2. **Research Neglect** – Despite the problems and challenges facing peripheral urban growth centres, there is a dearth of significant, useful research into the problem, the challenges and policy options that can address this issue. Academic researchers have tended to neglect the problems and challenges faced by these outlying regions of large population growth. There is also a dearth of significant useful research into the policy options that address this issue in the current political climate, thus the attachment of local government economic development officers to simple and fashionable policy options.

First, this paper sets out the dilemmas that exist in the peripheries of major urban centres, and especially Melbourne, in the context of the extant research literature. Then, the characteristics of peripheral urban growth centres are identified by looking at the 2006 Census related to three major Melbourne peripheral urban local government areas: Casey, Melton and Wyndham. Their education, income and occupation profiles are compared with the overall Melbourne Statistical Division (MSD) and the national averages. A broad composite model of regional economic development is then used to place the profiles of the three Melbourne areas and their attendant problems in perspective when specific policies are discussed. How this leads to lack of a coherent development policy and research neglect will round off this paper. The conclusion briefly indicates the direction of future research and the path to viable policy options for addressing the dilemmas outlined initially.

2. DILEMMAS OF URBAN GROWTH CENTRES

The vast Australian landscape has developed over the last century as a predominantly urban sprawl, encouraged by cheap land and public infrastructure (Frost and Dingle, 1995). This has led to a situation of large capital cities like Melbourne spreading over large distances and increased distance to travel to work (South East Development Melbourne ACC, 2006). In the current era of increasing oil prices and emphasis on climate change, the predominance of motor vehicle travel to work creates a major dilemma with the continued development of peripheral suburbs (and nearby regional cities) as population expands rapidly from immigration, provincial areas, and inner suburbs of major capital cities. As Smith and Scott (2006, p. 312) note about capital cities, private vehicle numbers

for outer suburban areas increase at a rate greater than the population increase per year, with a preference of using cars at around 80 percent of trips. Preference has fallen from this extreme position in the last two years due to large petrol price rises, but the dilemma is still entrenched because of:

...the social complexities of transport planning, and the urgency of dealing with other local tasks such as population – and affluence-driven land development and waste management, mean that local government has traditionally failed to come to grips with this important subject other than in zealous over-engineering of roads for private cars. (Smith and Scott, 2006, p. 312)

Other dilemmas go back many years. Self (1995, pp. 250-3) raised “alarm bells” about these urban fringe dilemmas such as poor serviced social facilities, traffic congestion, pollution of watercourses, smog, noise hazards, sewerage and waste disposal limits and “rapid consumption of environmental resources”. These raise significant financial problems for dealing with their mitigation, and sharp social problems in bringing about change to this situation.

The dilemmas are mounting. In 2006-07, all states and territories experienced population growth. However, the fastest and the largest population growth tended to be in the outer suburbs, inner areas of capital cities and some coastal areas (Australian Bureau of Statistics, 2008). This paper specifically looks at the growth in the outer suburbs as they have their own peculiar problems which have been much less investigated than inner-city dwellers and the sea changers. As will become evident, the peripheral outer suburbs are worthy of investigation as they house people who are in low socio-economic groups and are reliant on non-professional jobs, or are recently-arrived migrant groups with little skills to negotiate the complexities of urban dwelling.

Urban growth centres can be defined as the local government areas that have grown significantly due to population factors (Jain, 2006). These include Wanneroo and Rockingham [WA]; Wyndham, Casey and Melton [Victoria]; Blacktown [NSW]; Wakerley and Griffin-Mango Hill [Queensland]; Litchfield and Palmerston [NT]; Gunghalin [ACT] (see Appendix A). Population is attracted to these local government areas due to the availability of cheap land and new housing. There exists large job leakage from these regions to the Central Business Districts (CBD) of their respective capital cities and to some “suburban labour sheds” (Forster, 2004, p. 73) that have attracted some manufacturing industries and other employment providers like retail and personal services. O’Connor and Rapson (2003) identify these labour sheds as “more locally self-contained labour markets” which have increased and diversified employment opportunities; yet peripheral growth centres like Casey have job growth chiefly in the population-driven mass goods and services sector with significant jobs shortfall arising in the future. Forster (2004, p. 73) examines the most recent evidence and concludes there are overlapping distinctive labour sheds that have shifted some jobs away from the CBD to mini-suburban cities. A complex polycentric greater urban situation emerges. In this complex environment, the specialised nature of these sheds means there is still much travelling time to work, with only part-timers and low skilled women having jobs relatively closer

to home than the rest of the suburban population. For this reason, Australia does not have “edge cities” that are self-contained on the periphery of capital cities, as described in USA and UK by Garreau (1992).

The local government areas (LGAs) in these urban periphery centres of strong population growth are not self-contained; instead they have developed as dormitory suburbs with low-to-middle socio-economic standing. Thus, the 2001 State of the Regions Report (National Economics, 2001) divides Australia into core metropolitan regions and non-core (or peripheral) metropolitan regions. In addition it divides regions on the basis of production, lifestyle, resources and remoteness. The report recommended that all region-based economies other than core metropolitan economies should become more knowledge-based to share in the benefits of globalisation and the information technology (IT) revolution, in line with Castells (1989) idea of the “informational city”. Recent Victorian State interest in this IT formulation follows on the success of Ireland in its development of growth corridors, which parallels the development of the Melbourne CBD (O'Brien, 2008). However, these calls for mounting the IT bandwagon ignore the pre-conditions necessary for such a transition to occur. Brothie (1992) saw these pre-conditions were beginning to emerge in Melbourne, yet Forster (2004) in his update of this idea argues the pre-conditions have not significantly improved in the years since the early 1990s. The skill base of residents in a region would influence somewhat the shift to IT based sectors. This is what Massey (1994) calls time-space compression: where the position of the person in society determines where and what they can do. Workers are much less mobile than capital, and the economic and developmental outcomes for any place or community are a complex outcome of its social, political and cultural relations. The impact of a policy change towards IT does not change the skill set of the local worker immediately: this requires time, money and resources within the worker's own sphere of activity to acquire the new skills. It may be cheaper for employers to find somebody from another community or place to take the role, thereby reducing the lot of the unskilled or inadequately skilled worker further or perhaps just move the job to another site with more skilled workers.

As a result of the above forces, the peripheral growth centres of Melbourne remain geographically, economically and politically disadvantaged in the manner discussed by Gren (2003) for European regional growth centres. Professionals and highly skilled workers are few in these centres, with the large majority of population being employed in low skilled jobs in a situation of relatively higher unemployment than in the core. Of the employed, many tend to be in part time employment (O'Connor and Rapson, 2003). This is a vicious cycle in which low (or very limited) skills, low skilled jobs and unemployment prevail. The latest 2006 Census data indicate that regional cities and peripheral urban centres are losing population to the CBDs of capital cities (Salt, 2007). This is a new trend, very different from the familiar migration to the seaside and warmer climates of the last few decades. Migration of higher income non-traditional resourceful people - what Florida (2005) calls the creative classes - to the trendy inner Melbourne (city and inner suburbs) robs the periphery of the movers and shakers it needs to develop, compete and grow (Florida, 2005; Salt, 2007). These

peripheral regions have been variously classified as working class battler disadvantaged, mortgage stress disadvantaged, old economy extremely disadvantaged, or peri-urban disadvantaged (Baum et al., 2005). The focus of this paper is on a sub-group of these peripheral regions, specifically those that have grown significantly due to population factors as urban regional growth centres.

Successful economic development of peripheral regional growth centres has traditionally relied heavily on transport infrastructure to improve the accessibility and competitiveness of these regions. This is the principal argument used by the European Union to fund transport infrastructure by about a third of total structural funding (Gren, 2003). The exact mode of transport on which this funding is spent varies with the country, region and their specific needs. Transport infrastructure impacts on the economy by demand effects, including increased demand for goods and services in building, operating and maintaining infrastructure; and supply effects in the provision of the infrastructure. The impact is direct through increased employment in construction, machinery and materials sectors. Indirect effects on the economy include increased consumption of goods and services due to increased incomes. This results in the improvement of the efficiency of the product and labour markets. Another benefit of investment in transport physical infrastructure includes the improvement in reliability of a region. However, with the recent sharply rising cost of petrol, it may be prudent to consider stronger moves towards more self-containment in these large growing regions by increasing local employment; while at the same time reducing travel distances, time and carbon dioxide emissions, which in turn reduce the economic cost of going to work as well as creating a strong sustainable region. Of course, total self-containment is unrealistic and inappropriate in this complex polycentric urban environment, within this globalised world.

There is some literature pointing to ways of increasing regional self-containment. Krugman (1991) suggests that human and spatial factors, such as quality of institutions and governance issues, play a strong role in the success or otherwise of a region. Spatial agglomeration is considered important as a driver of growth, more so as a result of localised technology spillovers (Baldwin and Martin, 2004). Institutions, including government bodies (federal, state and local), educational centres (secondary, TAFE, private vocational colleges, universities), business support centres (enterprise centres, incubators, technology parks), regional business groups and local businesses all crucially lie behind such agglomerative drivers (Cooke et al., 2004). These elements become clusters within regional innovation systems and are considered to be the drivers of development. This has been seen to work in parts of Europe, where local and federal governments have taken an active role in the development of industry, services and the institutions that accompany this development. Governments in the USA have taken a different view that “market forces” and entrepreneurs will be able to provide the impetus for the propagation of such developments (Cooke et al., 2004). This issue will be revisited in the specific context of Melbourne’s peripheral urban growth regions after the characteristics of these regions are

outlined in the next section.

3. DILEMMAS IN PROFILE: THREE MELBOURNE PERIPHERAL URBAN GROWTH CENTRES

The dilemmas identified above need to be understood within the specific situation in the Greater Melbourne Area (GMA). By examining the demographic profile of the three largest peripheral growth centres in GMA as per Appendix A, the research question on the role of policy makers and academic researchers can be applied specifically to these three regions, and the two propositions can then be brought forward and examined. The three regions are defined as LGAs and are located on the outskirts of the GMA. Casey is in the “far east” around Berwick and Narre Warren. Melton is to the “wild west” at the foothills of the Pentland Hills, focused around the City of Melton. Wyndham is also on the western fringe of Melbourne centred further south in Werribee, half way to Geelong on the Princes Highway.

The following data tables have been extracted from the three council websites, based on the 2006 Census. All three tables compare the three LGAs with the MSD average and the national Australian average. Table 1 shows that there is a significantly lower proportion of the population with “bachelor degree or higher”, and slightly lower with “diplomas”, in these peripheral urban growth regions compared to Australian and MSD averages. In contrast, these three LGAs have a much higher proportion of residents with no qualifications and with vocational (especially TAFE) qualifications.

Table 1. Educational Qualification, 2006 Census (average proportion of the specified population area)

Highest Qualifications Achieved	CASEY	MELTON	WYNDHAM	MSD	AUSTRALIA
Bachelor or Higher degree	9.50	10.39	11.66	19.63	15.59
Advanced Diploma or Diploma	6.80	6.22	6.96	7.66	7.10
Vocational	18.92	18.86	18.00	14.14	16.73
No qualifications	52.36	51.77	51.08	45.79	47.47
Not stated	12.42	12.75	12.30	12.79	13.11

Source: .id demographers (2008).

Table 2 shows a similar pattern of variation in weekly family income levels. Specifically, there is a significantly lower proportion of the population with incomes greater than \$2,500 per week (p.w.) in these peripheral urban growth regions compared to Australian and MSD averages. In the middle income brackets (\$650-\$2,499 p.w.) there are a clear higher proportion of residents living in these LGAs compared to MSD and national averages. At the very

bottom of the income brackets, these three LGAs fall a fair amount below the MSD and national averages. It is in the \$1,000 to \$2,000 p.w. that these three LGAs shine the strongest. The three regions are where 'the heartland' of Melbourne exists as 'aspirational' families (in the words of former Labor Party leader, Mark Latham); often in Master Planned Communities like Caroline Springs which are private developers' own new suburbs (Forster, 2004, p. 124), or as Gleeson (2003) calls them, 'privatopias'. Inequality here is dressed up in pretty but minimum standard project homes away from public housing and welfare dependent poor suburbs (Forster, 2004, p. 124).

Table 2. Weekly Household Income, 2006 Census (average proportion of the specified population area)

Household income	CASEY	MELTON	WYNDHAM	MSD	AUSTRALIA
\$1 to \$149	1.03	0.96	1.01	1.47	1.39
\$150 to \$249	3.18	2.94	3.02	4.39	5.00
\$250 to \$349	4.56	4.37	4.50	6.06	6.92
\$350 to \$499	4.19	3.74	3.66	4.47	4.99
\$500 to \$649	8.86	8.59	8.36	9.16	10.25
\$650 to \$799	7.30	7.08	6.48	6.22	6.33
\$800 to \$999	8.34	8.23	7.79	7.06	6.91
\$1,000 to \$1,199	12.79	12.53	12.01	10.59	10.69
\$1,200 to \$1,399	7.72	7.48	7.15	5.45	5.46
\$1,400 to \$1,699	9.34	9.57	9.47	7.81	7.42
\$1,700 to \$1,999	7.08	7.54	7.87	6.41	6.02
\$2,000 to \$2,499	6.85	7.74	7.99	6.61	6.04
\$2,500 to \$2,999	4.00	4.27	5.30	6.10	5.31
\$3000 or more	2.94	2.97	3.68	5.66	4.88

Source: .id demographers (2008).

Table 3 provides an occupational perspective of the residents of these three LGAs. The number of professionals and managers living in these areas is well below the national and MSD averages. Casey is the lowest in professionals, below the other two LGAs and considerably lower than MSD and national averages. The strong occupational categories in these LGAs lie with manual labour, machine operators and administration. None of these occupations provide much scope for aspirations to be realised. In the other occupations of sales, services and trades the proportions are only slightly higher than the MSD and national averages. In Melbourne, gentrification of the inner suburbs and extension of this phenomenon north along 'the university (U) corridor' – from Monash U, through to Deakin U and Swinburne U and up to La Trobe U and the RMIT Bundoora campus – provides the source of the truly aspirational household units as professionals and managers (Forster, 2004, pp. 119-23).

The socio-economic disparity identified in the three tables clearly relates to the very nature of the employment and the educational opportunities existing in

these growth centres. The low number of high income families and professionals is because of the concentration of these jobs in the CBDs of capital cities; with relatively few of these jobs in the suburban labour sheds around the city edges. The physical distance between these LGAs and the CBD for travelling to both work and cultural activities is a major disincentive for higher income and professional people to venture out there. By and large people like to live closer to their place of work, in suburbs with good amenities, close to transport and greater lifestyle opportunities. While outer urban growth centres may be able to provide larger blocks of land, the amenities in these regions reflect the limited buying power of the local population, thus, the trendy cafes and boutiques favoured by Florida's creative classes (2005) would therefore not flourish.

Table 3. Occupation of Residents, 2006 Census (average proportion of the specified population area)

Occupation	CASEY	MELTON	WYNDHAM	MSD	AUSTRALIA
Managers	10.10	9.54	10.57	12.48	13.21
Professionals	11.76	12.58	14.13	22.57	19.84
Technicians and Trades Workers	17.60	17.04	15.70	13.57	14.38
Community and Personal Service Workers	7.34	8.48	8.59	8.13	8.81
Clerical and Administrative Workers	16.34	17.64	18.04	15.88	15.00
Sales Workers	10.90	10.06	10.09	10.23	9.84
Machinery Operators And Drivers	11.16	11.14	10.41	6.37	6.64
Labourers	12.53	11.24	10.38	8.74	10.46
Inadequately described or Not stated	2.26	2.28	2.09	2.04	1.82

Source: .id demographers (2008).

The dilemmas arising from the disparities outlined above should be basis for concerted urban regional development policies. Before any such policies can be evaluated, there is a need for a model that can provide the framework of analysis into the policies that have been previously implemented and some conception of what a coherent policy for future development of regions could resemble.

4. COMPOSITE MODEL OF REGIONAL DEVELOPMENT

Australian cities have developed by dispersion of population, initially as far as the reach of public transport and later due to the development of the road system. The spread of suburbs, typical in Australia but very different from the European concept of high density living, is a result of its policy of encouraging

urban sprawl and not developing its regional centres (Forsyth, 1999). As jobs increased in these cities, internal migration occurred as people from regional and rural Australia followed these jobs into the capital cities. In the period 1971-91, this created demand for housing blocks further away from the city CBD and further away from cultural amenities and lifestyle options (O'Connor and Stimson, 1995, p. 16).

The Hawke/Keating Federal Labour Government under minister Brian Howe began to overcome these inequities through the "Building Better Cities" program and the Australian Urban and Regional Development Review in 1994 (Self, 1995, p. 257). Unfortunately, all this amounted to naught as the incoming Howard Federal Coalition Government from 1996 dismantled all the cities programs and eschewed any concerted regional development policy as it chose to let market forces shape urban and regional precincts (Beer et al., 2005).

With a major political backlash from "the bush" after the Victorian State Kennett Liberal Government was surprisingly voted out of office in 1999, the Howard Government recognised the importance of Regional Australia for a short time, and formed the Area Consultative Committees to help in both rural and metropolitan development (Area Consultative Committees, 2006). This limited consultative role is the only policy that the Howard Federal Government had in place. Since the 2003 State of the Regions report, its recommendation for a much higher level of government intervention in driving regional economic growth in urban, provincial and rural areas (National Economics, 2003, p. 1.10) has become a focal point for efforts both at local and state government levels.

A model framework that allows policy makers and researchers alike to understand all the factors operating in regional economic development, prior to any intervention is required if a cohesive and effective policy outcome is required. From a detailed review of both overseas and Australian research literature, Jain (forthcoming) develops a broad composite model of regional economic development (Figure 1). This recognises multiple factors affecting the development process. Each of the components of this model draws heavily upon seminal work in the field.

The model in Figure 1 has three rings of abstraction, with the outer ring being the most important determinants of development in any region. The second or middle ring comprises interdependent determinants linking outer to inner ring. The inner ring represents the final endpoint of interaction of all these factors in regional economic development.

All the lines and arrows in this model are two-way, emphasising the bi-directional influence of each determinant of development on the other. Each circle comprises a set of determinants which influence each and every other set of determinants in development of a region as shown in the three ring structure. Together, the circles, lines and arrows provide a dynamic and complex interaction of economic forces on a region. This model recognises that development in any centre (regional or urban) is a composite end result of the complex interplay of all the determinants of development. This model is flexible in that it permits variations of its basic tenets for the evaluation of different regions.

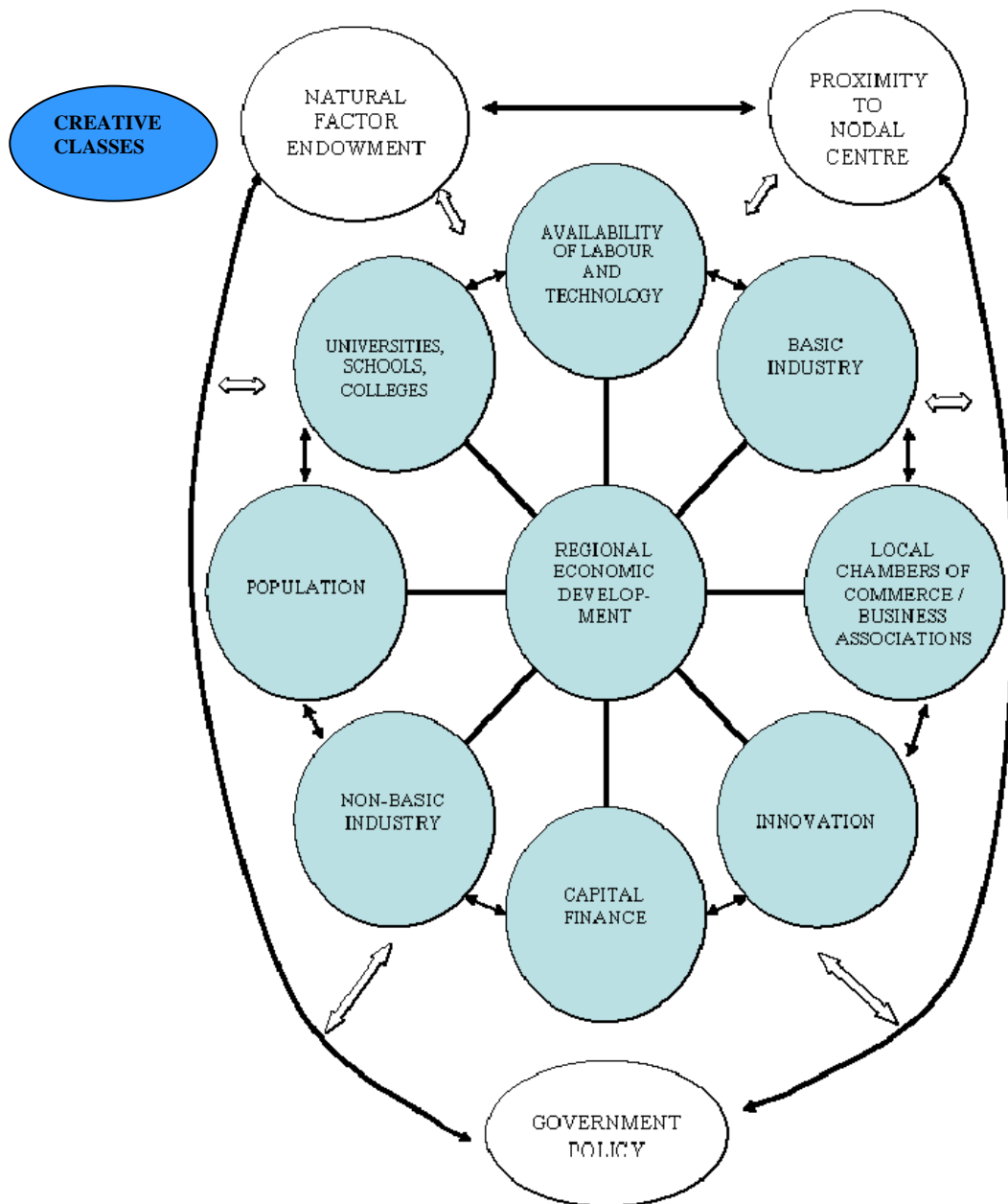


Figure 1. Broad Composite Model of Regional Development (Source: Jain, forthcoming).

The outer ring comprises the three major set of determinants of development: natural factor endowment, proximity to a nodal centre and government policy (Fung et al., 1999; Osborne, 2003). These three determinants of development provide the institutional setting in which the second ring determinants operate and these three are also relatively more independent than the second tier. It should be noted that government policy is often a result of applied political economy of the entire country and does not necessarily reflect the specific needs of a single region (Osborne, 2003). The interplay between the three outer ring determinants will affect the second ring of determinants of development. In Figure 1, the creative classes (Florida, 2002) are treated as an external “free radicals” determinant that is exogenous to the system, in due recognition of its migratory nature that makes it able to latch onto any part of the system.

The middle or second ring comprises what is considered by this model as the second tier set of determinants which have a direct immediate pathway to development. The second ring determinants of development can influence the outer ring only to a limited degree. The eight set of second tier determinants are briefly set out below, beginning with “population” and moving clockwise around the tier.

Population is the most significant, since it is the presence of an adequate number of people with whatever specific skill sets that they have which is crucial in the success of a region. The quality of the population does have a significant influence in the development of a region, its industry and long term sustainability (de Laurentis, 2006; Massey, 1994; Saxenian, 1985). All the three Melbourne peripheral regions (MPR) profiled show extremely large population growths as per Appendix A. Universities and other educational institutions such as secondary schools, TAFE technical colleges, and private colleges, all provide leadership, teaching and learning opportunities by becoming assertive in the community they are involved in, and by providing leadership (Garlick, 1998; Gunasekara, 2006). All three MPR have recently upgraded their educational status, with Berwick campus of Monash University, Melton campus of Victoria University, and Werribee building upon a long established University of Melbourne agricultural base into a food and biotechnology “technology precinct”.

The availability of labour and technology form the backbone of a region’s potential for development. The nature of existing industry in the region and the nearby nodal centre(s) influences the development of the dominant labour skill set in the region in terms of a market for these skills. The role of technology in driving economic development is recognised by both governments and academics (Malecki, 1997). The import and uptake of new technology is influenced by government policy. Well recognised subsidies for technology development include tax breaks and grants for research and development. Educational and research institutions certainly have a significant role in the development of new technology (Garlick, 1998; Heidenreich and Krauss, 2004). The profiles of MPR under study indicate significant need to build up labour and technology from its comparatively low base.

Basic industry refers to the extent of “exporting” goods and services outside

the region, through supplying to people outside the region such activities as tourism, education, fresh food markets, and cultural festivals. Perroux (1950) first identified such activity in specific sectors of a region as growth-poles strategies that form the region's core basic industries, transmitting success through spillovers to the peripheries of the region and even wider. Parr (1999) assesses growth-poles as major drivers in regional development, since they extend market development past the limiting market of non-basic industry (known euphemistically as "bringing in each other's washing"). Due to the strength of population-driven sectors in all the three MPR, there is a very limited external market focus.

Local chambers of commerce and business associations have proven to be vital in developed economies. These are of particular importance in regions dominated by Small and Medium Enterprises (SMEs) such as in Italy (Braczyk et al., 1998; Cooke et al., 2000; Otatti, 2004). These associations provide a forum for the expression of the needs of local SMEs. They provide training and learning opportunities, tax planning services, knowledge, exposure to new technologies, and showcase local products and services to potential markets. In essence these associations function like knowledge distribution nodes, marketing centres, and resource centres all at the same time; which enable enterprise to be inculcated into the region and a source of policy input to local government (Bacaria et al., 2004). Even though the descriptions of the role of business support groups are from established economies and regional innovation systems, the relatively new MPR business associations are working hard building up from a relatively small base in order to play a similar role.

Innovation can be defined as the transformation of an idea into a marketable product or service, a new or improved manufacturing or distribution process or a new method of a social service (European Commission, 1995). Innovation may be credited to a research scientist or any other member of the production, sales or user teams, but it is the entrepreneur (private or public) who breaks down the barriers of resistance in society and succeeds in using the innovation commercially. The link between effective innovation and growth may be difficult to prove, but there is circumstantial evidence supporting this hypothesis (Linder, 2006). Cooke et al. (2004) and others subscribe to the view that innovation-based policies that attract and maintain technology, industry, services and workers are the key to economic development in any region. Innovation engenders endogenous change to the regional system, whether incremental or radical 'big ticket' research and development. Self-containment is significantly enhanced when such innovation makes businesses self-reliant and jobs growth sustainable in the absence of government support in the long run. Government support for innovation-based policies may be more relevant for nascent economies (Fung et al., 1999) or regions where there is a shortage of entrepreneurs (Cooke et al., 2004). This is an area that needs thorough investigation in all three MPR that goes beyond the scope of this paper, but there are some signs of new impetus based around the Casey Technology Park in close proximity to the Berwick Campus of Monash University and the food and biotechnology precinct in Werribee.

Capital financing is vital for all development, whether infrastructure or for basic and non-basic industries. The major sources of finance could be governments (all levels), financial institutions (both local and international), residents, entrepreneurs and venture capitalists (OECD, 2006). Non major metropolitan regions, which suffer from a locational disadvantage, often do not have access to adequate venture capital, government and public money to allow them to implement change or develop economically (Ughetto, 2006). Further, the skills to lobby governments and float public share issues reside mainly in the major financial and industrial centres located in major nodal centres, often capital cities. This can therefore explain the reason why regional and non-core centres, like the three MPR, lack access to adequate funds and financial institutions.

Finally the influx of population brings with it demand for basic infrastructure services, considered to be non-basic industry, such as essential infrastructure, education, health, law and order etc. (Mazur, 1994). Governments by appropriate legislation and policy can either invest in these industries themselves or encourage private investment or a mixture thereof (for example, the recently completed Eastlink Freeway in Melbourne). From the population-driven base that the three MPR started with, essential services have been expanded from their very limited base through public and private developers' funds.

The composite model outlined in Jain (forthcoming) recognises that there is no single common pathway for economic improvement. Further, the assessment of development can be done by using any measure necessary for the study: job and firm numbers; quality of life indices, gross regional product, per capita income, infrastructure, utilisation of high technology products, education levels, health and nutrition, or any other measure of development. The holistic model recognises that the system is open to influence from outside in a globalised economy. The externalities that this model recognises are: changes in the world economy, national and international government policy, international demand and supply of goods and services, development of new products and services that may provide new competition to the products and services of the studied region and external innovation. This model also recognises that labour, capital and technology are endogenous to the system and not perfectly flexible and mobile in contradistinction to neoclassical theory.²

This holistic model considers the social, political and cultural make-up of all regions (peripheral and core/nodal) as being crucial in development. It accepts that agglomeration will affect the nature of industry in a nascent region by virtue of spatial proximity to the nodal region and also due to cluster formation within the region or with industry outside the region. The inherent nature of factor endowment and of the populace itself changes slowly over time; thus the skill set and the values persist for a long time and are valuable in directing development and innovation.

With this model it is easy to see why urban growth regions of the type profiled in the previous section are struggling. These three MPR: (i) are further

² The model and its description is an adaptation from Jain (forthcoming).

away from the centres of economic activity of major cities (in the CBD and - to a much lesser extent - labour sheds); (ii) grow due to cheap housing which is usually bought by people with a lower income and limited access to capital funds; (iii) have industries that are mostly non-basic supported by population growth; (iv) have comparatively weaker educational qualifications and standards; and (v) have people who work in basic blue and white collar occupational categories. This provides very limited opportunities for endogenous innovation (Stimson et al., 1998, p. 14). With all the characteristics of dormitory suburbs, is there any evidence that in these three peripheral Melbourne growth centres profiled that there are coherent policies being implemented from the perspective of the composite model outlined in this section?

5. AD HOC POLICY

From a broad macro perspective, the lack of a coherent urban policy is clear. The Australian Futures Task Force Report (2007) identifies a lack of coherent development policy in Australia and an absence of State and Commonwealth policies related to urban issues. “There remains a significant differential in strategic and smart infrastructure affecting quality of life outcomes.” (The Australia Futures Task Force, 2007, p. 3). There is also no Commonwealth department or ministry looking after urban affairs despite 70 percent of the population residing in urban centres.

Further, the macroeconomic policy of containing inflation may have been at the cost of public infrastructure and public spending, exacerbating the socio-economic outcomes in peripheral suburbs (Baum et al., 2005). David Blanchflower, a member of the Monetary Policy Committee of the Bank of England, in a speech to the Royal Society stated that he felt tight monetary policy was likely to result in recessionary outcomes. He felt that the USA is already in recession and the UK is likely to follow (Blanchflower, 2008). Despite a lengthy period of high resource prices, Australia continued to have a problem resourcing peripheral growth centres as they (for the most part) exist in states without a strong resources boom. More recently, the USA sub-prime crisis has turned into a global financial crisis veering on global recession (Lander, 2008). There is also a clear indication that Australia will join the rest of the world in moving towards a recession (Martin, 2008). Any recession is likely to hurt the peripheral urban growth centres very hard due to the situation outlined in the two previous sections.

Focusing at the broad Federal level of government policy; in an urban and regional development strategy that is largely neo-liberal and market driven, interventionist policy methods of encouraging development is not an option (Beer et al., 2005). A limited range of policy measures can be used in this situation. These include micro-policy options such as those influencing reallocation of labour: in-situ occupational retraining, education, journey to work subsidies; spatial reallocation of labour by migration policies, housing assistance for migrants, easing house sale and purchase, increasing efficiency of labour markets. Policy instruments that reallocate capital are taxes and subsidies, export subsidies and rebates, technology subsidies, improving efficiency of

capital markets, and administrative controls (Armstrong and Taylor, 1985). None of these directly address the specific disparities identified above, and therefore such micro-policies tend to be restricted to supporting people and businesses that are already well connected as per the composite model.

Macroeconomic policy options include devolution of trade policy, fiscal policy and monetary policy to regions. This is diametrically opposite to the central control of macro-policy where the federal or national government formulates regionally discriminating tax, expenditure, monetary policies; tariffs and other trade controls (Armstrong and Taylor, 1985). Such macroeconomic policy options are seldom if ever utilised in the real world.

The challenges before state governments are many, in the context of tight federal funding. In Victoria, for example, the state parliament commissioned a report on the economic development of outer suburbs in Melbourne to examine their specific concerns (Outer Suburban/ Interface Services and Development Committee, 2008). While this document identifies some of the problems facing peripheral suburbs, it does not offer any concrete solutions only a long list of non-binding interventionist recommendations. Such interventionist policy options available to tackle urban growth problems are not considered appropriate by mainstream market-based economists. However, many state policy options have been implemented, for example, decentralisation of government departments away from CBDs of capital cities, incentives to large foreign corporations to open offices; significant tax breaks; public transport (especially to airports and the CBD); disincentive to travel to the CBD (e.g. congestion tax like London to make travel to CBD less attractive); investment in hospitals and universities in these outer suburbs. These measures have been proven to be successful in Europe (Cooke et al., 2004).

State governments continue to offer business attraction and development schemes which are often expensive (Bachelor, 1997). There does not appear to be any single set of policies that suit firms of different types (Fox and Murray, 1991). The incentives provided in the USA and European Union (EU) include grants, tax incentives, loans, training assistance, infrastructure assistance, land, financing help and transport concessions (Bachelor, 1997). Similar outcomes have been achieved in both the USA and Europe (Bondonio and Greenbaum, 2006), suggesting that it may be possible to improve the lot of poorer local government areas with federal and state support.

Globalisation has led to limiting of appropriate strategies by governments (Felbinger and Robey, 2001). In Australia these would include both the state and federal governments. Governments need to promote public, private, non-profit and educational partnerships to allow regions to maintain their competitive advantage (Felbinger and Robey, 2001, p. 68). This requires heavy and appropriate investment in education and training to develop the skill sets required. This sentiment has been echoed by Acs and Szerb (2007) who have suggested that increasing human capital and upgrading availability of technology is of prime importance in promotion of entrepreneurial development. This may be an option for local governments especially in Australia, which are powerless to influence multinational corporations and other businesses to invest in their

regions (Everlsoe and Martin, 2006).

As has been noted earlier, the Victorian State Government is driven by the need to develop regional/non-core metropolitan university campuses and for them to become more entrepreneurial and financially independent. With university-based technology parks, there is an impetus for regional and non-core metropolitan communities to increasingly pursue their own initiatives to maintain their viability and economies (Garlick, 1998; Gunasekara, 2006).

What is the overall outcome of the set of policies outlined above? Urban regional population growth centres are burgeoning due to cheap land and housing. Increasing cost of inner city suburbs is driving population to these suburbs which have few high skilled jobs. Given an opportunity these people migrate away from these MPR and closer to their places of work. LGAs such as the City of Casey (Victoria's largest LGA) are concerned about the lack of jobs for their youth. Business support by locally based associations and development policies by state and local governments have the potential, but so far, not the concerted effective plan to increase the number of jobs in the area, vital in making the suburbs more self-contained. The dilemma remains that market forces will drive jobs and businesses away from any regions that are being successful, in search of even cheaper labour, cheaper land and lower costs of production, unless there is a coherent regional plan of intervention.

Increasing jobs in any given region for its residents will intuitively reduce their trips outside the region. In particular the long trips every day to and from the CBD for work will be reduced, reducing the congestion on the roads and greenhouse emissions. Increasing job opportunities will also increase the migration of skilled workers to the area, another positive feedback for development. This needs to be the basis of any coherent policy, maybe around the idea of growth corridors which (O'Brien, 2008) has argued is the approach taken to urban development in Ireland.

In times of economic stress that is appearing in 2008-09, with reduced economic activity, increased unemployment, and still high inflation due to extrinsic factors; these urban regional growth centres are being severely adversely affected. All data presented in this paper is a reflection of an economy that peaked with cheap credit and easy to obtain home loans. This allowed for high home ownership (Australian Bureau of Statistics, 2007). However, home loan approvals have fallen to an eight year low in June 2008 by 3.7 percent over May, the fifth consecutive month to show reduction (Zappone, 2008). This does not bode well for urban regional growth centres. Their organic growth has been on the back of first home buyers and other relatively new home owners, many of whom have taken loans up to 100 percent of the property value. As real estate values fall, many of these will be forced to sell at a loss in a falling market and default on their mortgages (Cooke et al., 2006). This has been the final outcome; a market-based, ad hoc set of policies adopted in a variety of uncoordinated ways from three tiers of government and a set of private providers (like business associations and developers).

6. RESEARCH NEGLECT

Given all the problems and dilemmas faced by peripheral urban growth centres, and the lack of any planned or coherent government policy(ies) to address them, it is surprising to see very little academic research into the causes, implications and future directions that need to be spelt out. The reasons are multifarious, and we have space only for three.

The first reason is the nature of the urban planning debate. Forster (2004, pp. 169-74) summarises this debate into three distinct approaches to urban planning: decentralisation, multi-centralisation, and consolidation. Decentralisation, by creating major regional cities, has two major problems that do not make this approach the answer to the huge peripheral urban population growth. One is the lack of lifestyle attractions in these smaller cities, with governments offering various incentives to recent migrant arrivals to move to these cities. The other is the environmental sustainability problem, because of the greater dependence on motor vehicles in these smaller cities and higher energy use per resident (Moriarty, 2002). Multi-centralisation has not worked, despite efforts in the Melbourne during the 1980s to create district centres. As discussed earlier, the result has been a complex web of suburban labour sheds to which people travel significant distance to reach for work and trade, with no strong local community base (Forster, 2004). Urban consolidation, with its concentration on higher housing densities, corresponds with the market-based gentrification of the inner-to-middle suburbs. There are questions about the environmental sustainability of such increased density (Troy, 1996) however, it is working for the professionals and the creative classes who have little or no family structure to support. This is not the answer to the family-based population that has moved out for cost and space reasons. In fact, none of the three approaches address the specific dilemmas outlined at the start of this paper. With all the research concentrating on the urban planning debate, there has been very little room for the dilemmas of the periphery.

Another reason for the neglect is conservative market-based solutions that are projected by some researchers. Cities, it is argued, are moving into a post-industrial information economy with increasing suburbanisation of employment (Brotchie et al., 1995; O'Connor, 1992). Byrne (2001) sees many problems with the informational city idea of Castells (1989) in spreading throughout the urban space, and the profile of the three MPR earlier indicate the digital divide³ is appearing in cities like Melbourne. The recommendation to build up IT infrastructure in these non-core regions by the 2001 State of the Regions (National Economics, 2001) points to this digital divide problem being structural, which prevents any equitable market-based employment across the urban space and very little sign of any self-containment for the MPR.

The final reason to be discussed cuts deeper, but is more circumspect. Historically, the peripheral or outer suburbs of capital cities have a locational

³ The term "digital divide"- implying an ICT inequality within and across nations of access, ability to adopt and effective usage - became part of the language as a result of the book by Norris (2001) and supported very quickly afterwards by an official study by the OECD (2001). For a recent empirical 161 country panel study over the period 1999-2001, see Chinn and Fairlie (2007).

disadvantage in terms of education facilities, self-improvement, recreation, culture, employment creation and standard of life which was identified by Maher (1997). However, following Maher 'ringing the bell', there have been no studies following these concerns with peripheral outer suburbs per se. The more appealing to researchers are issues that reflect their own predilections towards societies that are increasingly more fulfilling. Casey, as an example is 'The Land of Fountain Gate, Kath & Kim, and party boy Corey with the big yellow sunglasses from Narre Warren', and this is an object of ridicule and not for serious investigation. In the meantime, the Melbourne 2030 Strategy Plan and further announcements by the Victorian State Government to combat the housing shortage is to open up more land in the growth corridors precisely through the three MPR areas profiled in this paper. This creates even more Master Planned Communities by developers, exacerbating the very dilemmas identified.

7. CONCLUSION

The underlying lack of motivation by academics to research peripheral urban growth centres may be many: not trendy, not popular with the government, lack of empowerment of academics, and a booming economy hiding the problems of these regions. However, as the economy slows down and unemployment bites, with still high prices, the problems faced by these regions will become more widespread, extending into the traditional middle income suburbs and LGAs of capital cities. It is when the proportion of the marginalised population increases, that the political imperative may perhaps drive academic research to look closer at this problem.

What is clear is that the current policies are ad hoc and lack a coherent approach to addressing the dilemmas of disparity and inequality in these regions. What is also clear is that it is necessary for governments to invest in public transport and infrastructure despite the economic downturn. This has significant multiplier effects: reduces greenhouse emissions, creates jobs, allows these urban regional growth centres a chance to keep developing. Creation of jobs in these regions is of paramount importance. Market forces in a recessionary economy will not be the salvation of those individuals reduced to a mere statistic as another unemployed. Governments need to act now. In an increasingly bear market with collapsing share prices and impending recession, active intervention is required to ensure the survival and development of urban growth centres. The composite model presented in this paper is a framework to further investigate the dilemmas that continue to beset these disadvantage urban regions and provide guidance towards a coherent policy.

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APPENDIX A: LOCAL GOVERNMENT AREAS WITH LARGEST POPULATION CHANGES

National rank and LGA (b)	Part of state/ territory	ESTIMATED RESIDENT POPULATION AT 30 JUNE			CHANGE		
		2002pr	2006pr	2007p	2002-2007p(a)	2006-2007p	
		no.	no.	no.	%	no.	%
LARGEST INCREASES IN 2006-2007							
1	Gold Coast (C) Qld	440 807	507 439	524 667	3.5	17 228	3.4
2	Brisbane (C) Brisbane	917 715	992 176	1 007 901	1.9	15 725	1.6
3	Wanneroo (C) Perth	88 329	115 513	124 887	7.2	9 374	8.1
4	Wyndham (C) Melbourne	90 982	116 001	123 163	6.2	7 162	6.2
5	Casey (C) Melbourne	190 758	222 236	229 080	3.7	6 844	3.1
6	Pine Rivers (S) Brisbane	126 712	144 860	150 268	3.5	5 408	3.7
7	Ipswich (C) Brisbane	128 651	143 649	148 700	2.9	5 051	3.5
8	Blacktown (C) Sydney	268 187	279 759	284 692	1.2	4 933	1.8
9	Melton (S) Melbourne	58 151	80 911	85 613	8.0	4 702	5.8
10	Maroochy (S) Qld	132 054	152 664	157 238	3.6	4 574	3.0
11	Melbourne (C) Melbourne	55 671	76 678	81 144	7.8	4 466	5.8
12	Cairns (C) Qld	119 959	136 558	140 913	3.3	4 355	3.2
13	Caboolture (S) Brisbane	117 298	135 359	139 707	3.6	4 348	3.2
14	Rockingham (C) Perth	75 722	87 541	91 702	3.9	4 161	4.8
15	Sydney (C) Sydney	137 076	164 547	168 682	4.2	4 135	2.5
16	Whittlesea (C) Melbourne	120 353	129 525	133 156	2.0	3 631	2.8
17	Parramatta (C) Sydney	147 851	154 158	157 775	1.3	3 617	2.3
18	Hume (C) Melbourne	139 466	153 729	157 145	2.4	3 416	2.2
19	Stirling (C) Perth	177 290	185 705	189 083	1.3	3 378	1.8
20	Swan (C) Perth	87 463	97 251	100 593	2.8	3 342	3.4

Source: ABS, 3218.0 Regional Population Growth, Australia, 2006-7

Notes:

(a) Average annual growth rate

(b) National Rank based on population change between June 2006 and June 2007

pr: refers to revised estimates

p: refers to preliminary estimates