

Cost Benefit Analysis of Investment in Growth Areas

Final Report

National Growth Areas Alliance

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This report has been prepared for:



National Growth Areas Alliance

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EXECUTIVE SUMMARY

Project Context

Australian cities are experiencing a sustained period of rapid urban growth, with significant growth earmarked for the urban fringe. This growth is predicted to remain strong for the next 25 years or more. The councils located on the urban fringe face the challenge of building socially vibrant, economically viable and environmentally sustainable communities, a difficult task indeed given their limited funding for delivering required infrastructure and services.

Project Objectives

SGS Economics & Planning (SGS) has been commissioned by the National Growth Areas Alliance (NGAA) to provide assistance and advice in the following areas:

1. To identify the interventions required to ensure that growth areas develop as sustainable and balanced communities.
2. To measure the net triple bottom line benefits and economic effects of making such interventions in case study growth areas.
3. To identify reasonable funding splits for these interventions, taking into consideration the merit and capacity for various stakeholders to pay in these case study locations.
4. To reconfigure the findings of the above at the national level by appropriately scaling the case study results to reflect national growth areas circumstances.

The Current Situation

Whilst the growth areas play an integral role in accommodating growth in metropolitan regions across the nation, they are not equitably equipped with public transport and social infrastructure services (e.g. health, education, cultural and community services) or employment opportunities.

Indeed NGAA member councils are disadvantaged across a number of indicators when compared to their host metropolitan regions. These include poor performances with respect to:

- The mix and depth of resident skills;
- Local employment opportunities and employment rates;
- Education, health and community services, as well as cultural and recreational services accessibility;
- Housing diversity; and
- Housing stress.

The Preferred Future of Growth Areas – Liveable and Sustainable Communities

Growth area communities obviously have a long way to go before they can be regarded as liveable or sustainable communities which, these days, are regarded as being more than environmentally friendly and amenable environments. Liveable and sustainable communities are increasingly associated with the availability and mix of employment opportunities and services, as well as the availability of quality public transport services and an urban form that encourages sustainable and healthy behaviour (e.g. transit oriented development, walkable neighbourhoods and public open space). Importantly, these amenities need to be readily accessible by a diversity of residents, acknowledging the various aspects of accessibility, i.e. distance proximity, physical access, financial affordability, and comfort and safety.

Key Interventions for Growth Area Communities

To develop a suite of interventions for addressing the imbalance faced by growth area communities, two case study growth areas were undertaken: Campbelltown, in Sydney's southwest growth corridor, and Swan, in Perth's northeast growth corridor. By working with relevant council and state government representatives, SGS went about differentiating between the depth of infrastructure services that were currently 'committed' and what was considered 'necessary' for:

- Partially closing the gap between growth areas and their metropolitan host regions, i.e. 'half' closing the gap with respect to jobs, service and public transport accessibility;¹ and
- Maintaining this level of provisioning over the coming decades given the growth expected.

These interventions include 'capital', or hard infrastructure investments, plus 'recurrent' or service based interventions. During the identification process a whole of government response was assumed, eliminating the complexity that results if tier of responsibility based discussions are attempted.

While the interventions in the respective case studies differed in terms of detail, they basically contained:

- A short to medium term outlook for infrastructure and service needs traditionally within the bailiwick of local government, with considerably less detail for services outside of this scope; and
- Very large scale public transport interventions (i.e. rail extensions), which comprised about three quarters of all identified capital investment requirements.

SGS used available social infrastructure provisioning benchmarks² to build a capital investment program based on case study expressed needs. Estimating the recurrent (or 'services') funding

¹ Purely for the sake of pragmatism, SGS has assumed that the gap between case study growth areas and their metropolitan host regions is not 'fully' but 'half' closed by the interventions identified.

² Including: ASR, 2008, Planning for Community Infrastructure in Growth Area Communities; and Office of Urban Management, 2007, South East Queensland Regional Plan 2005-2026, Implementation Guideline No. 5, Social Infrastructure Planning.

needs posed a much more difficult challenge and therefore the numbers should be considered as broad estimates.

To bridge this obvious information gap, SGS scaled up the target provision of 'public' jobs in the social service industries to ensure that the growth areas were afforded the services (i.e. jobs) that the host metropolitan areas recorded on average per capita. This provided an estimate of recurrent funding required to provide the target rate of social services assuming the capital facilities, identified earlier, were in place. Resorting to this process is a reflection of the significant difficulties confronting any genuine attempt to gain coordinated inter-agency funding commitments in growth areas.

After quantifying the necessary interventions to remedy the growth area servicing gaps, SGS forecasted local government's ability of fund the services they would traditionally deliver. This process found that both Campbelltown and Swan would be reliant on state and federal grants for funding their core obligations for the medium term. In the longer term they will move to a self funding position; however this assumes that existing infrastructure backlogs are removed and significant upfront investment by higher tiers of government in services such as hospitals, higher education, inter-urban transport occur promptly.

Intervention Costs & Benefits

The costs and benefits of making the interventions identified above are summarised in Table 1.

Costs relate solely to the provisioning costs and are likely to be somewhat over-stated, as the cost of the largest items (i.e. the rail extensions) has been fully attributed to Campbelltown and Swan respectively as a result of the difficulty in apportioning these costs across areas. From a recurrent funding perspective, all additional public sector service jobs have been treated as new costs and these are assumed only to provide services within the case study municipalities, i.e. external residents do not benefit from these social services. Both of these treatments are likely to render the cost benefit analysis as conservative.

The benefits stem from improved:

- Education, health, workforce participation and other community outcomes;
- Local job opportunities, both directly and indirectly as a result of improved social service provision;
- Centralisation of jobs in growth areas, as development is channelled into strategic centres well serviced by public transport; and
- Linkages with a wider catchment of jobs and services, i.e. outside the municipality, as access to metropolitan public transit systems is afforded.

These outcomes overlap significantly. As a result, we have quantified them under the discrete benefit headings of:

1. Regional productivity enhancements – the heightened productivity of the regional workforce as agglomeration economics accrue;

2. Improved social choice – the community’s willingness to pay for an improved choice with respect to the employment and services on offer locally;
3. Travel savings³ – the savings associated with fewer travel demands, some of which will be effectively serviced by public transport following investment; and
4. Deferred fringe development costs - non-urban land and trunk infrastructure connection savings, as some of the development pressures are redirected to the strategic centres promoted in the growth areas (i.e. as infill development).

Other benefits that remain unquantified include:

- The increasing amenity afforded in the growth areas; as well as
- Other social benefits that relate to improved health, education and other areas of improved servicing not included in the higher income levels of growth area residents. The exclusion of these items further renders the cost benefit results conservative as, for example, the estimated benefits of interventions that reduce youth disengagement in Melbourne’s interface councils could potentially return 23.6 times the government’s initial investment to society.⁴

The estimates presented in Table 1 highlight two key findings. First, the likely scale of investment for half closing the gap between growth areas and their metropolitan host cities is very large. Second, the benefits conferred outweigh the costs proving sound results on community capital recognising that this is a speculative but conservative quantification process.

Table 1 Case Study Results – Cost Benefit Assessment

	Campbelltown (PV @ 6%)	Swan (PV @ 6%)
<ul style="list-style-type: none"> • Capital costs • Recurrent costs 	<p>\$712 million \$379 million</p>	<p>\$1,326 million \$1,303 million</p>
Total costs	\$1,091 million	\$2,629 million
<ul style="list-style-type: none"> • Regional productivity enhancements • Improved social choice • Travel savings • Deferred fringe development costs 	<p>\$1,208 million \$40 million \$1,469 million \$24 million</p>	<p>\$331 million \$318 million \$1,971 million \$172 million</p>
Total benefits	\$2,741 million	\$2,792 million
Net benefit (NPV)	\$1,651 million	\$164 million
Benefit Cost Ratio (BCR)	2.51	1.06
Internal Rate of Return (IRR)	27%	11%

³ Note that these externalities relate to the wider metropolitan area and not just the case study municipality. For example congestion benefits relates to metropolitan wide congestion reduction.

⁴ Access Economics (2008) Staying Connected: A Cost Benefit Analysis of Early Intervention, report for the Interface Councils Group.

National Level Results

If these case study results are scaled up to reflect the nation's overall growth area investment requirements, the investment task is very significant indeed. In fact the overall scale of investment totals to \$69 billion over the 2009 to 2031, or a present value (@6% real) of \$50billion. Nonetheless, these significant costs are outweighed by benefits (with a PV of \$78 billion), with the following paybacks estimated:

- | | |
|--|-----------------------|
| • Net present value (NPV) of investment | \$28 billion |
| • Benefit cost ratio (BCR) | 1.56 |
| • Internal rate of return (IRR) | 18% |
| • GDP boost (average over long term) | \$18 billion p.a. |
| • GDP boost | 1% higher permanently |
| • National job creation (average over long term) | 230,000 |

Funding Options

Given the likely pay off of investing in growth areas, SGS has identified ways in which an increased funding commitment can be effectively channelled to the nation's growth areas. These include:

- New state grants programs for funding infrastructure services in growth areas;
- Specific Federal programs for leveraging investment across tiers of government (such as a refined Building Better Cities Program);
- Direct Federal provision of regional level infrastructure in growth areas via Infrastructure Australia; and
- Interest free loans for growth area infrastructure.

Importantly, the review of funding options highlights that existing institutional arrangements are more or less in place for delivering additional funding via these means. Moreover, the state and federal governments could readily increase their recurrent funding of social services, through existing budgetary processes, if a commitment to the growth areas was forthcoming.

Key Findings

At its broadest level, SGS's work has demonstrated that:

- The concepts of liveable and/ or sustainable communities are multifaceted but generally cover aspects such as the accessibility of jobs and services, and the diversity of choices available.
- Growth areas on the fringe of Australian capital cities are significantly disadvantaged in many of these areas and this situation will worsen if significant public funding commitments are not forthcoming.

- Councils will continue to heavily rely on state and federal coffers as they cannot effectively fund regional infrastructure items. While in the long term local government may move to a position of self funding for the infrastructure and services they traditionally deliver, they will not be in a position to pick up the tab for the items normally funded by higher tiers of government.
- An integrated plan for better provisioning growth areas with jobs and services is rare indeed. The plans that exist relate to envisaged land use and cover infrastructure servicing requirements at a broad level only, and generally do not integrate responsibilities across government tiers and/ or agencies.
- No widely accepted benchmarks exist for 'standard' or 'minimum' infrastructure service levels in growth areas. While some progress has been made on thresholds for when new capital facilities are required, very little progress is evident with recurrent servicing levels.
- The preliminary quantification work in this report highlights that while the cost of better servicing the growth areas may well be significant, they are likely to be outweighed by benefits, particularly benefits associated with metropolitan productivity enhancements.
- If state and federal governments step up to the challenge of investing in the growth areas, the necessary institutional arrangements are in place (i.e. for grants programs, direct investment) and valuable lessons from previous initiatives are available, ensuring that additional investment best leverages results.

1 INTRODUCTION

1.1 Background

Australian cities are experiencing a sustained period of rapid urban growth, particularly on the urban fringe. This growth is predicted to remain strong for the next 25 years or more.

The recently formed National Growth Areas Alliance (NGAA) represents the interests of these fast growing local government areas across Australia. The NGAA formed in response to a recognition by these local governments that the cost of building socially vibrant, economically viable and environmentally sustainable communities is high and is projected to increase. Importantly, many of these growth area councils have also identified that their capacity to deliver the quantity and quality of facilities and services required by these new communities will become increasingly compromised over time.

The NGAA believe that it is important that both national and state governments acknowledge the need for support for growing communities, while allowing local communities to decide their community infrastructure priorities. Moreover, this acknowledgement needs to be backed by increased funding levels for infrastructure, as well as a high level of coordination and cooperation between all levels of government (and other stakeholders).

1.2 Purpose & Objectives

SGS Economics & Planning (SGS) has been commissioned by the NGAA to provide assistance and advice in the following areas:

1. To identify the interventions required to ensure that growth areas develop as sustainable and balanced communities.
2. To measure the net triple bottom line benefits and economic effects of making such interventions in case study growth areas.
3. To identify reasonable funding splits for these interventions, taking into consideration the merit and capacity for various stakeholders to pay in these case study locations.
4. To reconfigure the findings of the above at the national level by appropriately scaling the case study results to reflect national growth areas circumstances.

1.3 Structure of this Report

This report is structured as follows:

- Section 2 Examines Australia’s growth areas as they currently stand. It does this via two means. First, by drawing together relevant articles that describe the disadvantage and challenges faced in and by growth areas. Second, each of Australia’s growth areas is benchmarked using a variety of socio-economic statistics against their host metropolitan areas, independently highlighting some of the key issues faced in Australia’s growth areas.
- Section 3 Reviews literature surrounding the concept of liveable communities. It then draws from this review to highlight the priority actions for growth areas, recognising that some elements of liveability are determined at the broader (e.g. national) level. It then, drawing from the findings of the previous chapter, introduces some of the key interventions that need to be made in the growth areas to reduce the inequities faced by growth area residents.
- Section 4 Presents two case study growth areas: Campbelltown in NSW and Swan in WA. These municipalities are explored in terms of their existing positioning and performance, their growth forecasts and the development outcomes that can be expected under a business as usual scenario. Following this a set of interventions that will better balance and improve liveability in the case study municipalities are identified and costed. Finally, the improved development outcomes that are likely to result from these intervention scenarios are postulated.
- Section 5 Presents a cost benefit analysis of implementing the initiatives identified in the previous section. That is, after a common set of cost and benefit categories are identified, the performance of each case study municipality with respect to each category is assessed in parallel. The net benefits of intervention in each municipality are subsequently estimated.
- Section 6 Scales the case study based cost benefit analyses to reflect national growth area needs and payoffs. This includes an assessment of national intervention costs, the net benefits of this national investment and the economic impact of national intervention using variables such as GDP and employment impacts.
- Section 7 Examines options to fund the required investments including mechanisms through which additional investment can be facilitated from state and federal governments, be they via municipal budgets or direct investment in infrastructure and services.

2 GROWTH AREAS IN AUSTRALIA TODAY

This section examines Australia's growth areas as they currently stand. It does this via two means. First, by drawing together relevant articles that describe the disadvantage and challenges faced in and by growth areas. Second, each of Australia's growth areas is benchmarked using a variety of socio-economic statistics against their host metropolitan areas, independently highlighting some of the key issues faced in Australia's growth areas.

2.1 Commentary on Growth Areas

Trends in Australia are clearly pointing to a major imbalance in its metropolitan areas, with large residential growth locating on the outskirts of the metropolis. These outskirts remain underserved in terms of employment, human services and community facilities provision or access to these. Furthermore, the consolidation of quality jobs in the metropolitan core is not being complemented with the required transport linkages to growth areas.

Whilst population growth directly places pressure on growth area councils to service new estates, it also impacts on maintenance and revitalisation of older established (and often disadvantaged) areas and on meeting needs of rural communities within the municipality.

Previous research indicates that the growth areas have⁵:

- An imbalance in the number of residents and the number of jobs.
- A younger age profile, comprised largely by young families with mortgages.
- A lower skills profile in comparison to the national average.
- Low proportions of residents in white collar occupations, tending to have higher percentage of residents employed in blue collar occupations.
- Local employment dominated by population serving sectors such as retail trade, education, and construction.
- More middle income brackets households, and less in the low and high brackets.
- A higher reliance on car transport as a means of travel.
- Lower school retention rates.
- Lack of diversity with respect to housing type as well as affordability.
- Relatively low accessibility to jobs and services. The situation for fringe areas is poor from a private vehicle perspective, diabolical from a public transport perspective.

⁵ SGS Economics and Planning, 2007, "Local Economic Development in the Interface" and SGS Economics and Planning, 2007, "National Growth Area Alliance Research Report"

Whilst self containment of employment for member municipalities varies across the nation they are generally poorer than established areas. This is particularly so for high order jobs in sectors such as finance and insurance, and property and business services. Furthermore the growth areas typically have poor access to the employment nodes as a result of relatively poor public transport access. Mobility of residents is an important ingredient in maximising the productivity of the population, and hence for a more efficient operation of a metropolitan economy.

With an already existing deficit in infrastructure and service provision in growth areas, a growing population places further strain on existing infrastructure. Local provision of human services does not keep pace and are difficult to access. It is argued that a comprehensive and coordinated system is required to provide cost effective services⁶.

A need expressed strongly via NGAA member councils is a timely and flexible system for delivery of early years, youth and family support services in order to promote healthy and sustainable communities and avoid the disadvantage experienced by many of the more established parts of these municipalities. This includes parent assist programs, child parent relationship programs, counselling, supported playgroups, transition to school support and programs to support young people to stay in school. Best practice in family support services now advocates for early intervention and prevention, however high demand and limited resources means that only families with high needs get assistance, making early intervention and prevention difficult in the broader population.

Services and facilities which address the needs of ATSI communities and of culturally diverse populations are critical as many growth areas have higher than average representation of these communities.

More efficient interventions in these areas would improve health of growth area communities, i.e. through improved life outcomes for children in the long term (higher rates school attendance, university attendance, and employment), as well as reducing the likelihood of major health, social, criminal and other problems.

2.2 Socio-economic Benchmarking of Growth Areas

Analysis in this section is conducted for the NGAA member municipalities in comparison to their respective metropolitan areas⁷. The councils included in NGAA membership at the time of the study are listed in Appendix A.

⁶ City of Whittlesea, 2008, "City of Whittlesea submission to Parliament of Victoria Education and Training Committee: Inquiry into the geographical differences in the rate in which Victorian students participate in higher education"

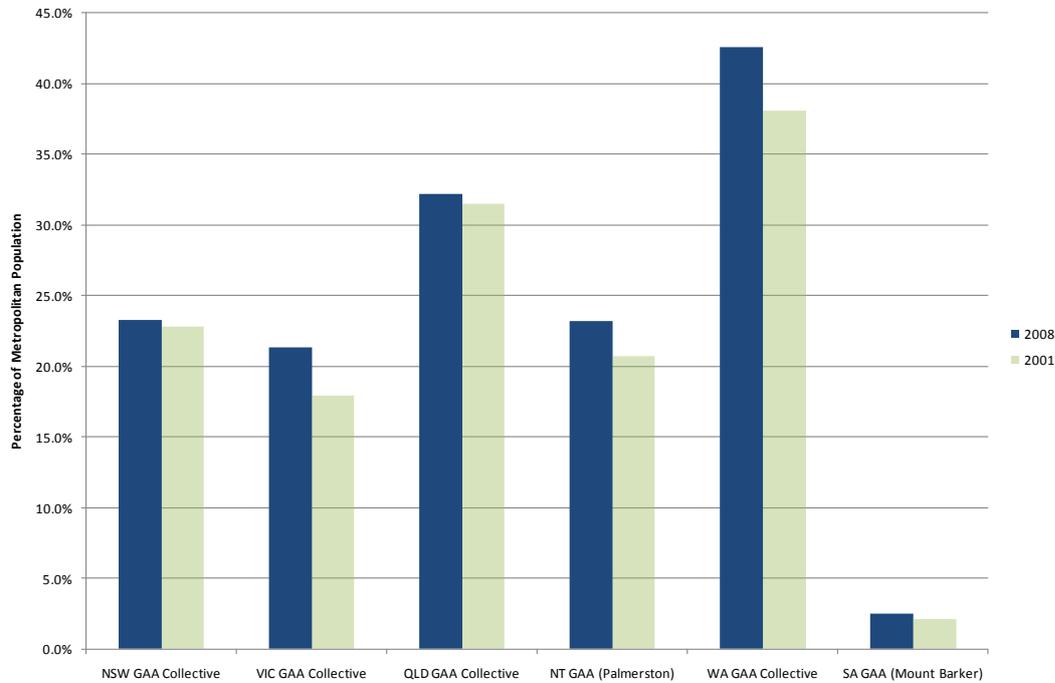
⁷ Note that the data analysis takes a different approach to that used to calculate the data reported on the NGAA website. The average proportions reported are the averages calculated across individual municipalities, weighting each LGA equally not by population.

A Focus for Growth

Analysis of most recent population data indicates that NGAA member councils accommodated, on average, a quarter of population in all metropolitan areas across the nation in 2008, and increase from 22% in 2001. As expected, both jobs and population trends show that NGAA member councils grew faster than their respective metropolitan regions. In fact NGAA member population grew twice as fast as metropolitan regions across Australia. The average annual population growth rate for a metropolitan area in Australian is 1.6% between 2001 and 2008, whilst the average NGAA member council experienced an annual average growth of 3% over the same time period.

Figure 1 illustrates the proportion of populations accommodated by NGAA member councils for all metropolitan areas across Australia, i.e. at 2001 and 2008.

Figure 1 Percentage of Metropolitan Population 2001 & 2008, NGAA Collectives by State

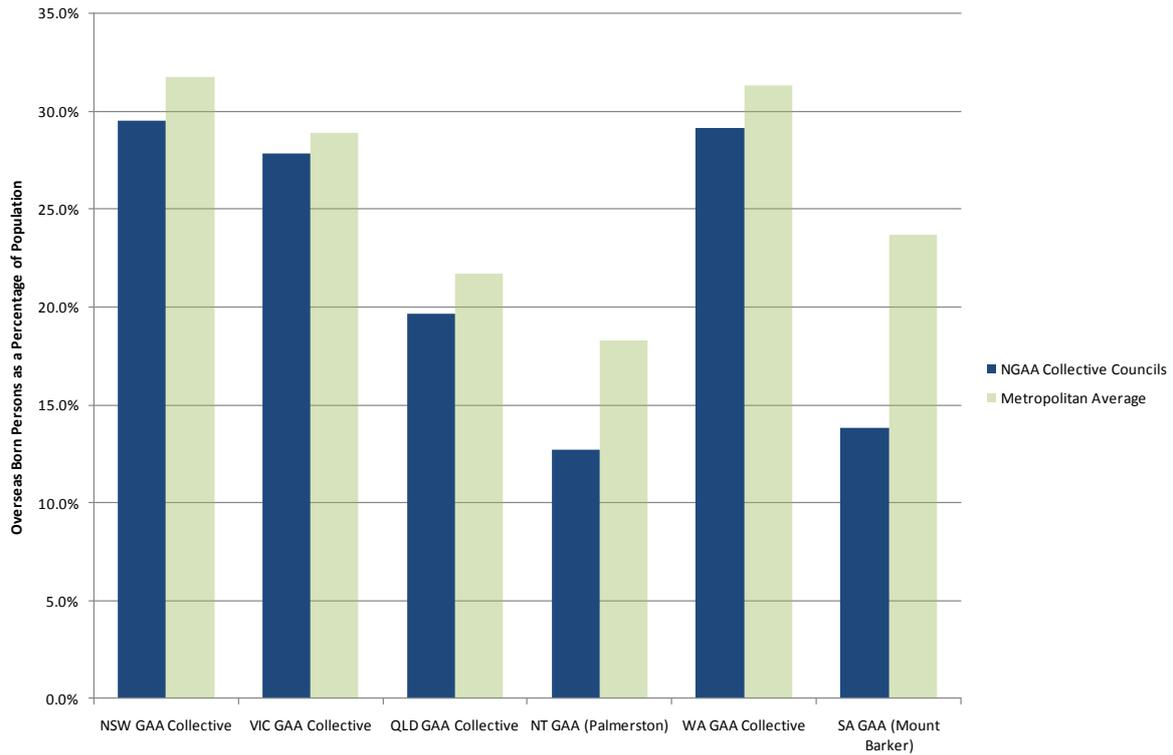


Source: ABS, Estimated Resident Population 2009

Australian Born Population

Growth areas are varied with regard to overseas born populations. The chart below shows that the GAA member municipalities as a whole in each state are comprised of a higher percentage of Australian born populations and lower proportions of migrant populations when compared to host metropolitan regions.

Figure 2 Percentage of Population Born Overseas, 2006, NGAA Collectives by State and Metropolitan Regions

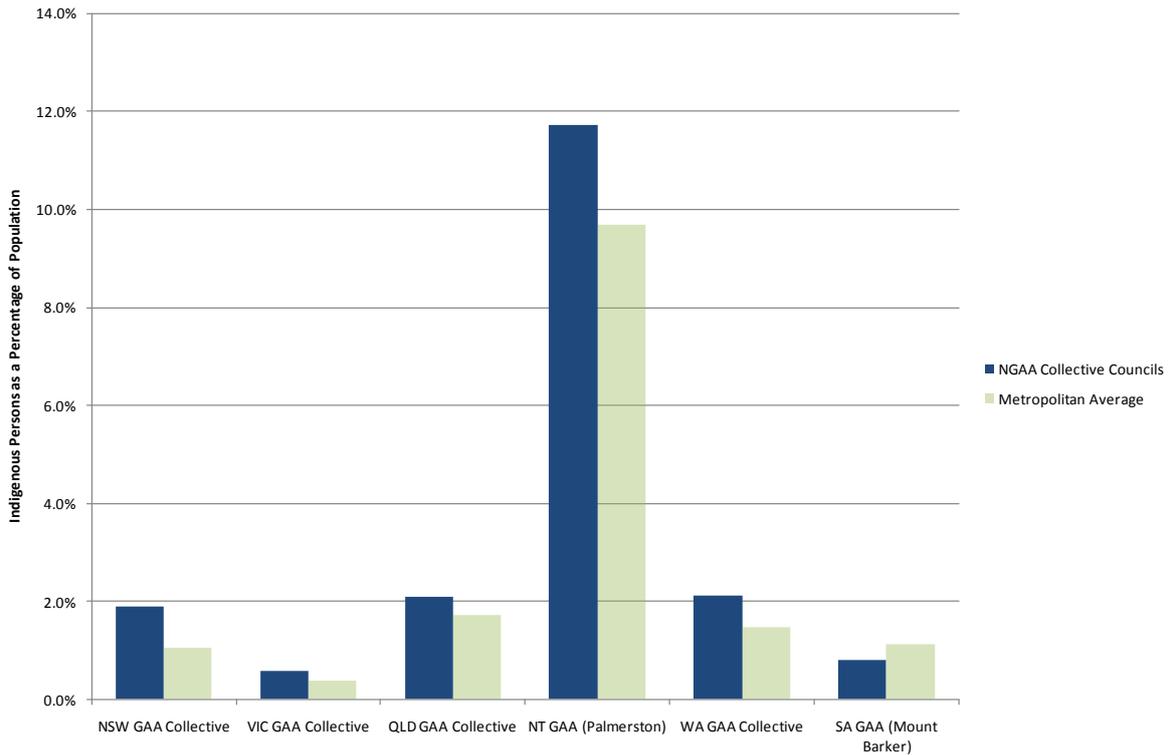


Source: ABS Census 2006

Indigenous Population

Indigenous populations are an important part of Australian growth areas. They form 1.7% of the total NGAA membership population. Figure 3 illustrates the GAA state collectives have a higher proportion of indigenous residents to total population (with the exception of Mount Barker).

Figure 3 Percentage of Indigenous Population, 2006, NGAA Collectives by State and Metropolitan Regions



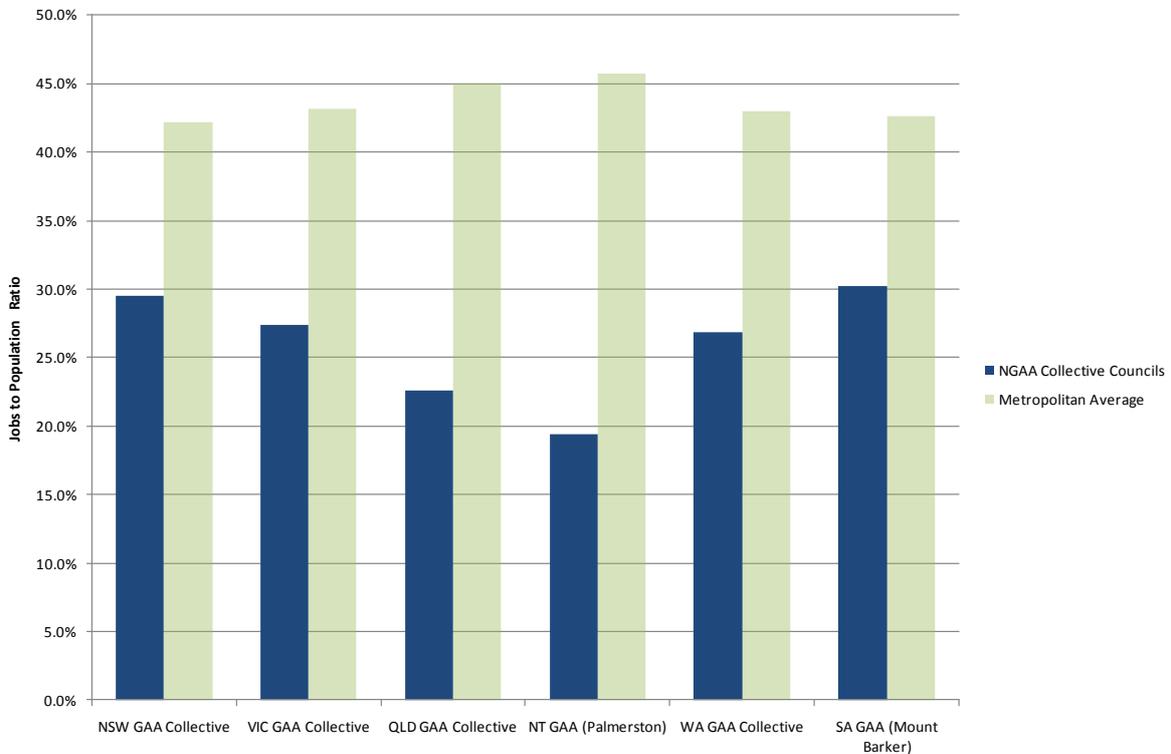
Source: ABS Census 2006

Job & Service Availability/ Accessibility

Figure 4 highlights that the jobs to population ratios in growth areas are well below the average of their respective metropolitan regions. This trend is maintained across the various states. The data thus confirms that growth areas are challenged by limited local employment opportunities.

Whilst the jobs to population ratios are relatively steady for most growth area councils in New South Wales, they vary more between the councils for Western Australia and Victoria. The best performing municipality in this regard is Kwinana City in Western Australia with a ratio of around 48%. This is followed closely by City of Hume in Victoria at 44% and City of Swan in Western Australia, at 41%.

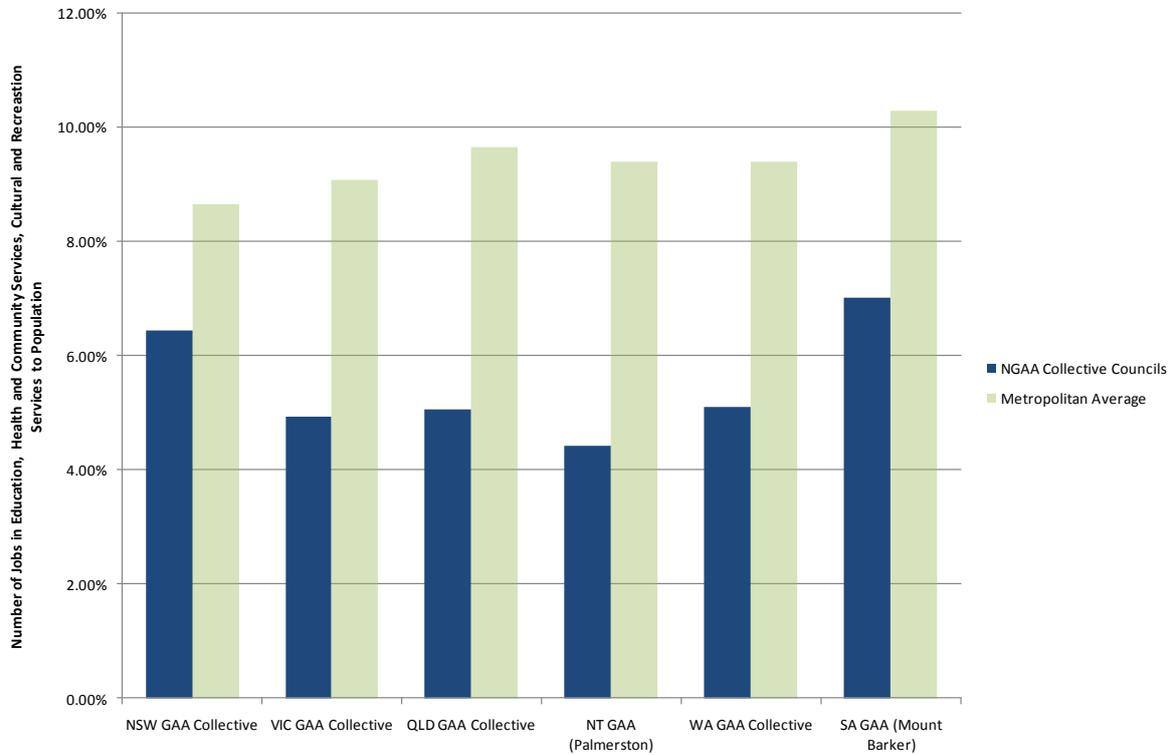
Figure 4 Jobs to Population Ratio 2006, NGAA Collectives by State and Metropolitan Regions



Source: ABS Census 2006 and Journey to Work Data

Figure 5 assesses the jobs to population ratio for those working in education, health and community services and cultural and recreational service jobs (“education, health and community services and cultural and recreational service index”). This is used as an indication of availability of these services to residents in NGAA member councils. Penrith (NSW) has the highest ratio amongst NGAA member councils at 7.8%, followed by Armadale (WA) with 7.3%. In all cases the NGAA municipalities are well below their metropolitan average with regard to these services.

Figure 5 Education, Health & Community Services and Cultural & Recreational Services Index (Jobs to Population Ratio) 2006, NGAA Collectives by State and Metropolitan Regions

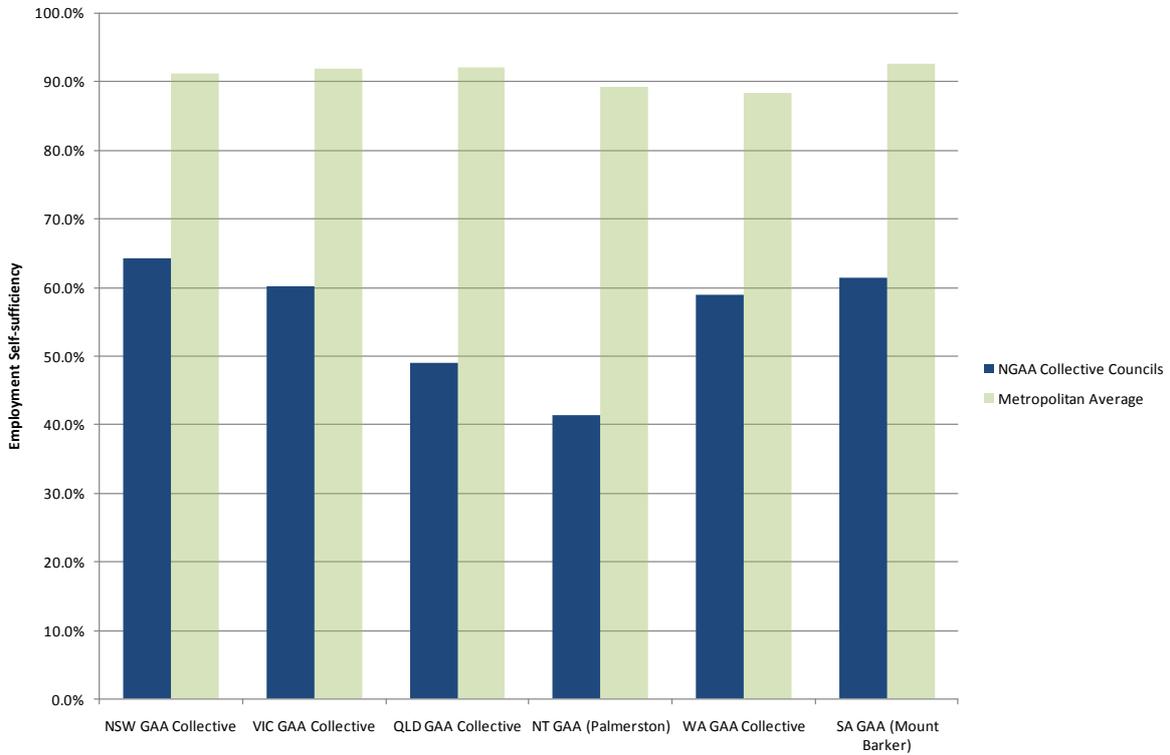


Source: ABS Census 2006 and Journey to Work Data

Employment self-sufficiency refers to the ratio of jobs to resident workers within a region. This is a broad measure of the ability of a region to provide employment opportunities for its resident workers. The following chart highlights that NGAA member municipalities have relatively low levels of employment self-sufficiency. The New South Wales GAA collective evidently has the highest rates of employment self-sufficiency, largely reflecting the geographic scale of municipalities in New South Wales, and a number of Sydney’s major employment destinations are accommodated within the growth areas.

Of the NGAA members the municipality with the highest rate of employment self-sufficiency was Town of Kwinana where jobs exceeded workers, bringing self-sufficiency to 121%.

Figure 6 Employment Self-sufficiency 2006, NGAA Collectives by State and Metropolitan Regions



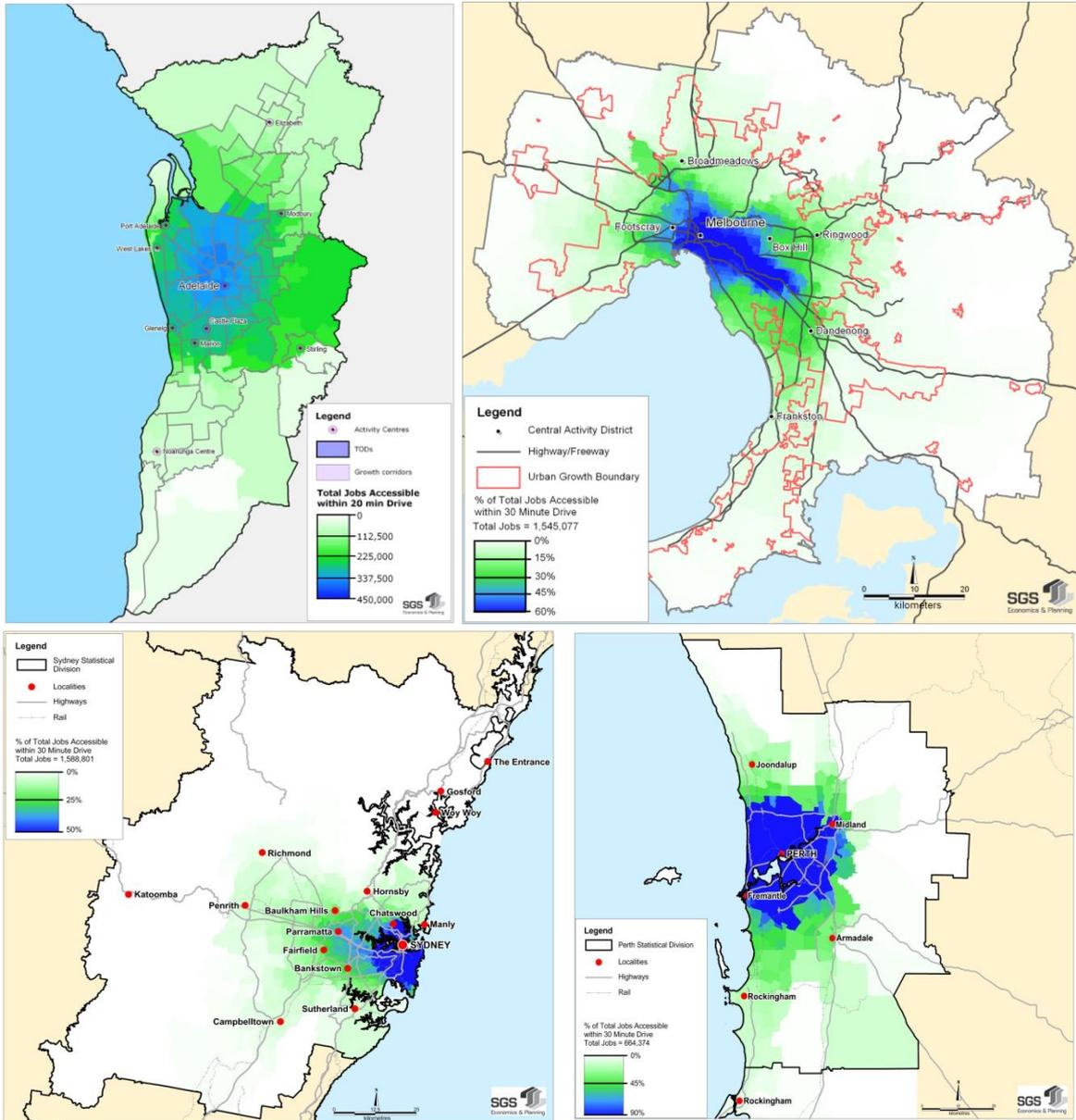
Source: ABS Census 2006 and Journey to Work Data

It is important to note that employment self-sufficiency is a broad measure of availability of employment opportunities but a more informative guide is to understand actual accessibility to employment opportunities. Employment nodes lying just beyond the local government boundary that provide opportunities for residents would not be captured in the employment self-sufficiency measure.

The analysis below measures 'accessibility to employment opportunities' for growth area municipalities via both primary modes of travel - car and public transport. Importantly, one person's job is another's service, so the following analysis also provides indications of accessibility to services broadly.

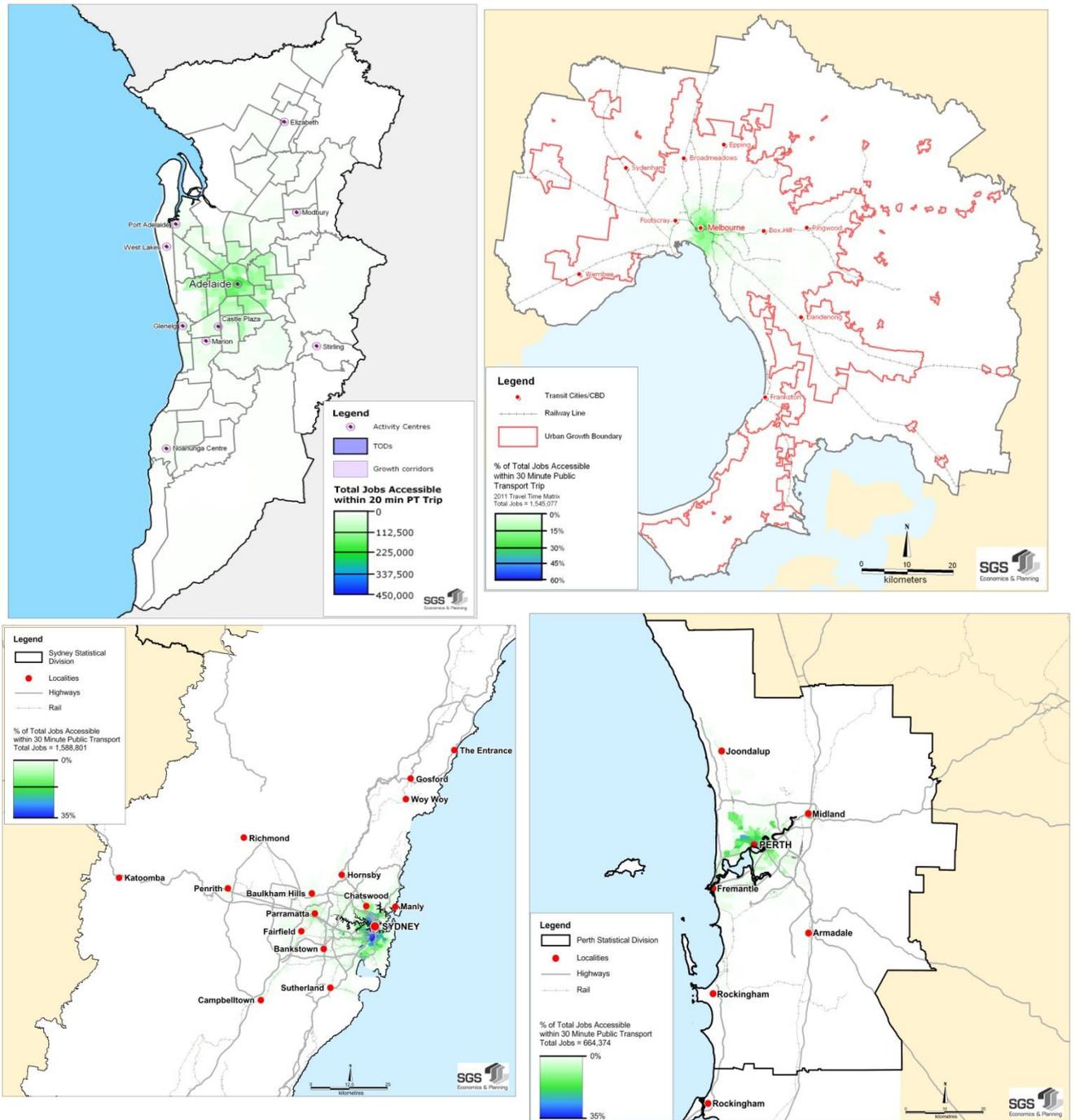
It is evident from the maps below that growth areas are clearly disadvantaged in terms of access to employment opportunities and services. The situation is much worse when taking a public transport only perspective.

Figure 7 Number of Jobs within 30 Minute Drive Time, NGAA Collectives by State and Metropolitan Regions



Source: ABS Journey to Work Data, Travel Time Data sourced from respective State Governments

Figure 8 Number of Jobs within 30 Minute Public Transport Trip, NGAA Collectives by State and Metropolitan Regions



Source: ABS Journey to Work Data, Travel Time Data sourced from respective State Governments

Child and Youth Disadvantage

The areas of disadvantages evident in growth areas are not independent and have noticeable flow on impacts. This is particularly evident in indicators of disadvantage for young people where low school retention rates results in lower participation in higher education and, hence, a lower propensity to participate in the knowledge economy.

Research conducted by RMIT for the Victorian interface councils⁸ reinforces that younger people on the urban-rural "Interface" are particularly disadvantaged, as these interface communities suffer from:

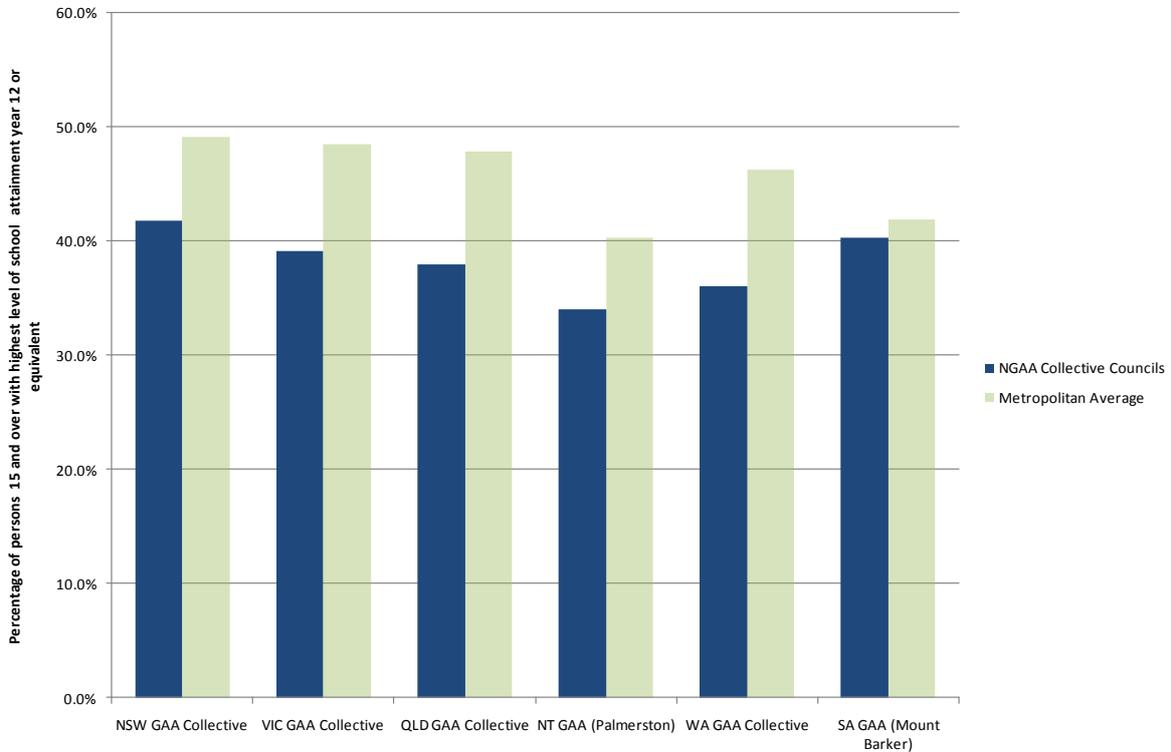
- Higher rates of low birth weight amongst infants;
- A lower likelihood of infants being breast-fed;
- Higher rates of post-natal depression; and
- Higher rates of child protection notifications, substantiations and care and protection orders.

Figure 9 depicts levels of school retention in NGAA member councils in comparison to metropolitan averages. There is a clear trend of lower school retention rates across the states in growth areas. Whilst roughly half of metropolitan populations 15 and over have completed year 12, the statistic is around 39% for growth area councils.

The best performing of the NGAA municipalities is The Hills where 56% of population 15 and over have completed year 12 or equivalent.

⁸ RMIT, Centre for Applied Social Research, 2003, "Human Service Gaps at the Interface between urban and rural"

Figure 9 Proportion of Population over 15 years of Age with highest level of Schooling as Year 12 or Equivalent, NGAA Collectives by State and Metropolitan Regions

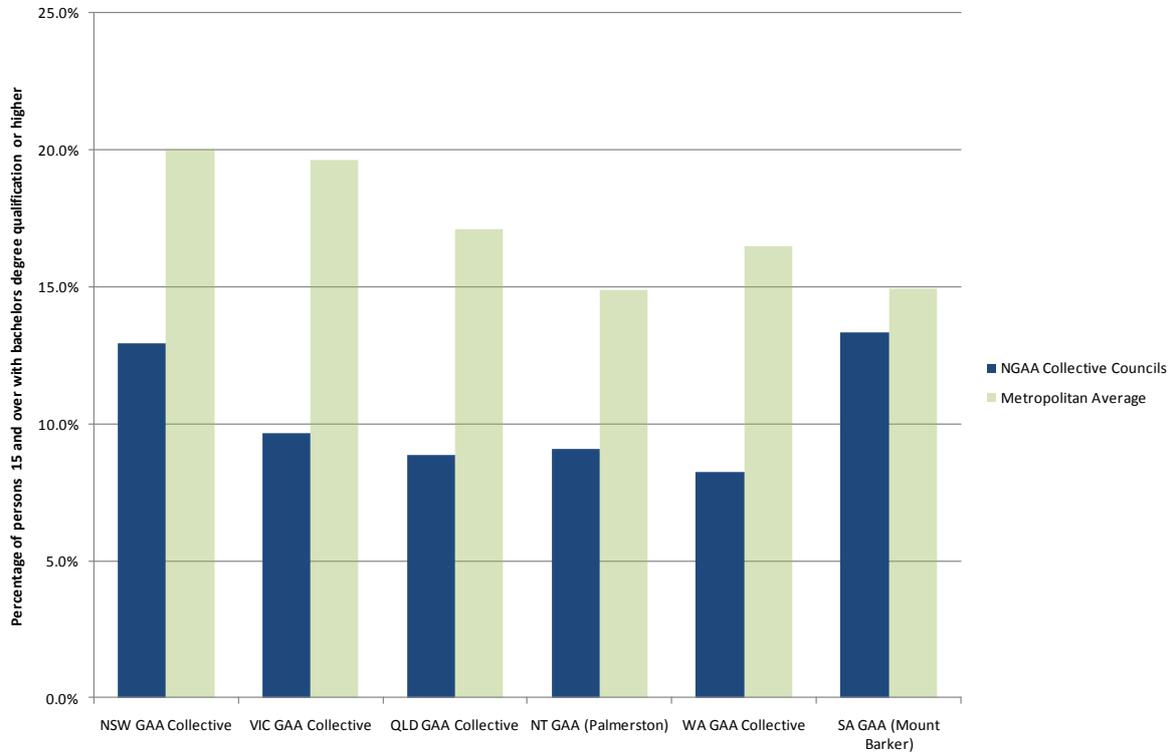


Source: ABS Journey Census 2006

The impact of low school retention rates is evident in the low participation in higher education. The figure below illustrates that the growth areas underperform with regard to attainment of bachelor qualifications or higher.

In metropolitan populations 15 and over roughly 20% have bachelor qualifications or higher. However, in growth areas the average is half of that (around 10%). The best performing of the NGAA municipalities is The Hills, where 24% of the population 15 and over have attained a bachelors degree qualification or higher.

Figure 10 Proportion of Population over 15 years of Age with Bachelors Degree or Higher, NGAA Collectives by State and Metropolitan Regions



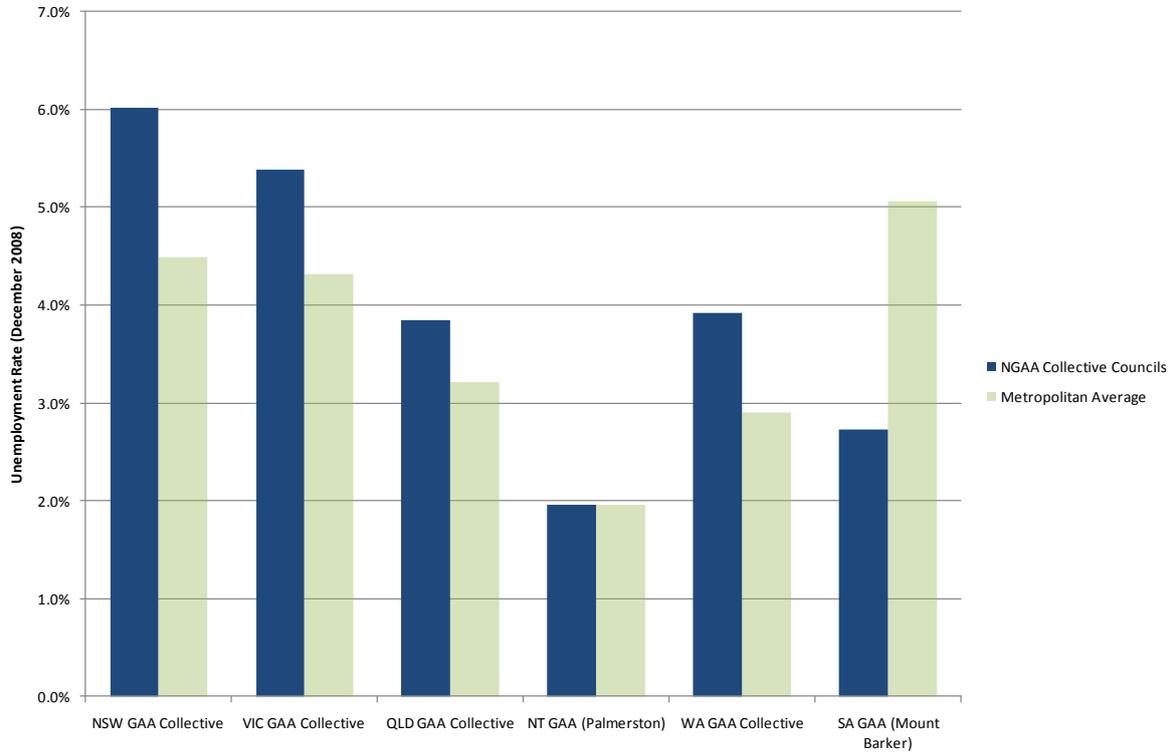
Source: ABS Journey Census 2006

Unemployment

Not surprisingly, rates of unemployment are consistently higher in NGAA member councils in comparison to metropolitan averages, with the exception of South Australia and Northern Territory which each have only one member council and thus do not provide a fair representation of all growth areas in those metropolises.

Unemployment rates are highest for the New South Wales and Victorian GAA collectives in December 2008 - 6% and 5.4% respectively. Serpentine-Jarradale performed the best with an unemployment rate as low as 1.6% in December 2008. A potential target for member councils with high unemployment rates would be to achieve metropolitan average rates.

Figure 11 Unemployment Rate December 2008, NGAA Collectives by State and Metropolitan Regions



Source: Department of Employment and Workplace Relations

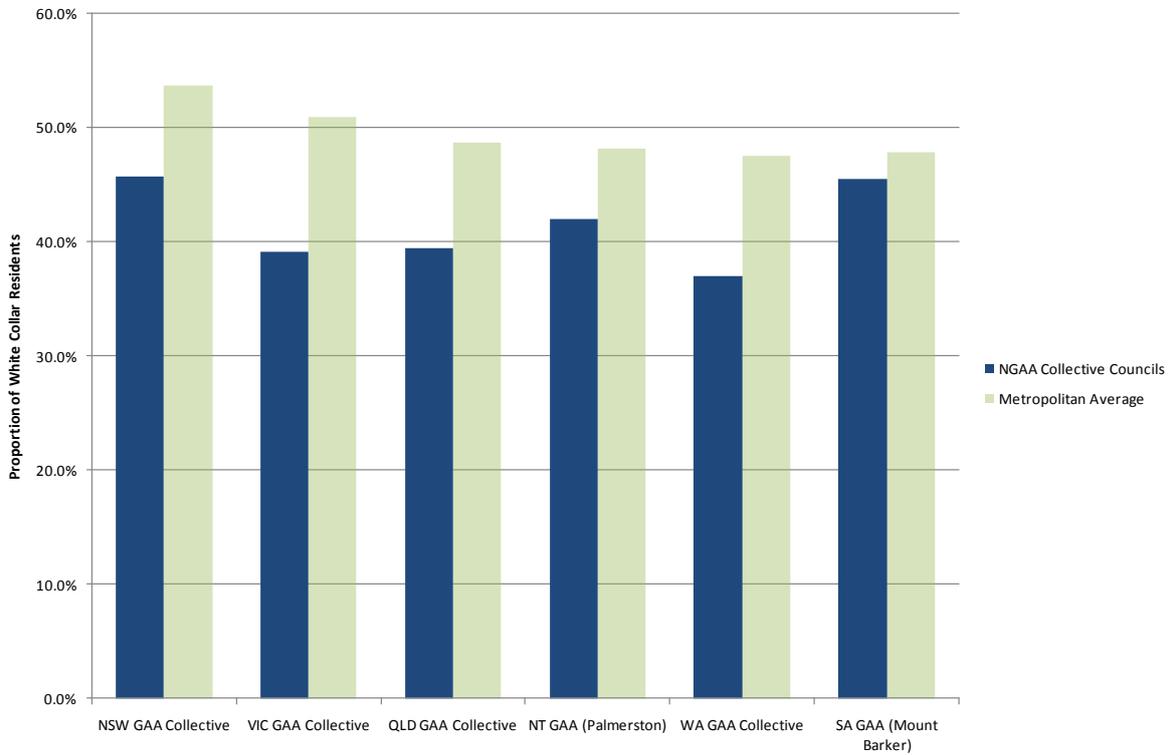
Occupations

A measure of both skills and diversity of an area’s resident base is resident occupations. For this purpose occupations have been grouped into ‘white collar’ (which includes persons in professional, managerial, clerical and administrative roles) and ‘blue collar’ (including occupations such as machine operators and drivers, labourers, technicians and trade workers).

A good balance of skills in a region will attract a more diverse range of employers and reduce the vulnerability of a region to economic downturns (discussed in more detail further in Section 3.1).

Figure 12 illustrates that NGAA member councils are typically comprised of lower proportions of white collar workers than their respective metropolitan averages. For most NGAA member municipalities this proportion is around 40%, with the exception of The Hills Shire which has the distinct characteristic of accommodating a high proportion of Sydney’s white collar workers. Around 61% of resident workers in The Hills Shire were employed in white collar occupations.

Figure 12 Proportion of White Collar Residents 2006, NGAA Collectives by State and Metropolitan Regions



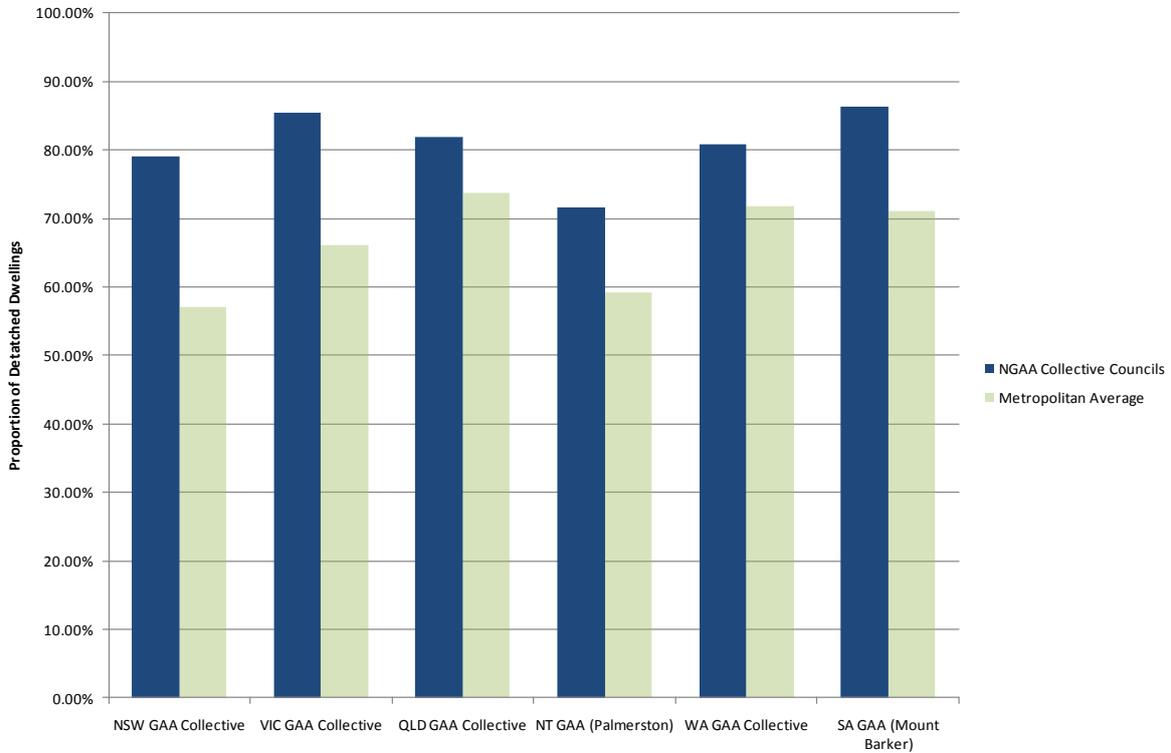
Source: ABS Census 2006

Housing

As a measure of diversity in housing types available, the proportion of total dwellings that are detached dwellings have been assessed for the NGAA member municipalities. High proportions of separate or detached dwellings are taken as being potentially representative of uniformity in urban form with low levels of density and diversity in the housing mix.

The following chart illustrates that in all cases the GAA collective groups exhibit a higher proportion of detached dwellings than their respective metropolises. Palmerston contains the lowest proportion (72%) of detached dwellings amongst the NGAA member councils.

Figure 13 Proportion of Detached Dwellings 2006, NGAA Collectives by State and Metropolitan Regions



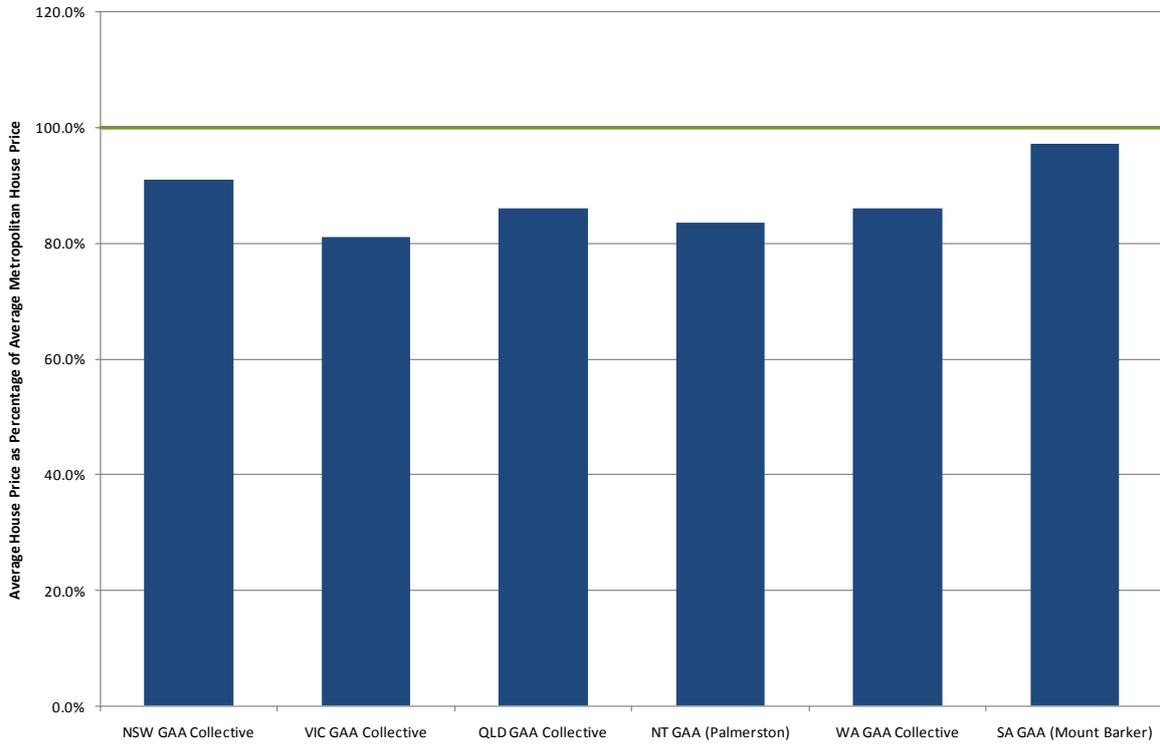
Source: ABS Census 2006

House Prices

Median housing prices provide a good measure of 'liveability' and a basic 'affordability' indication of a place. It is taken as given that characteristics such as vibrancy, availability of services and facilities and a diverse range of employment opportunities is reflected in the price of dwellings. Conversely, housing prices used in conjunction with resident income profiles also serve as an indicator of housing affordability (or at least housing purchase affordability).

Figure 14 charts the state collective averages of median house price in the NGAA councils relative to metropolitan average. The data reveals that house prices in growth areas are consistently lower than average metropolitan prices.

Figure 14 Median Housing Price, NGAA Collectives by State



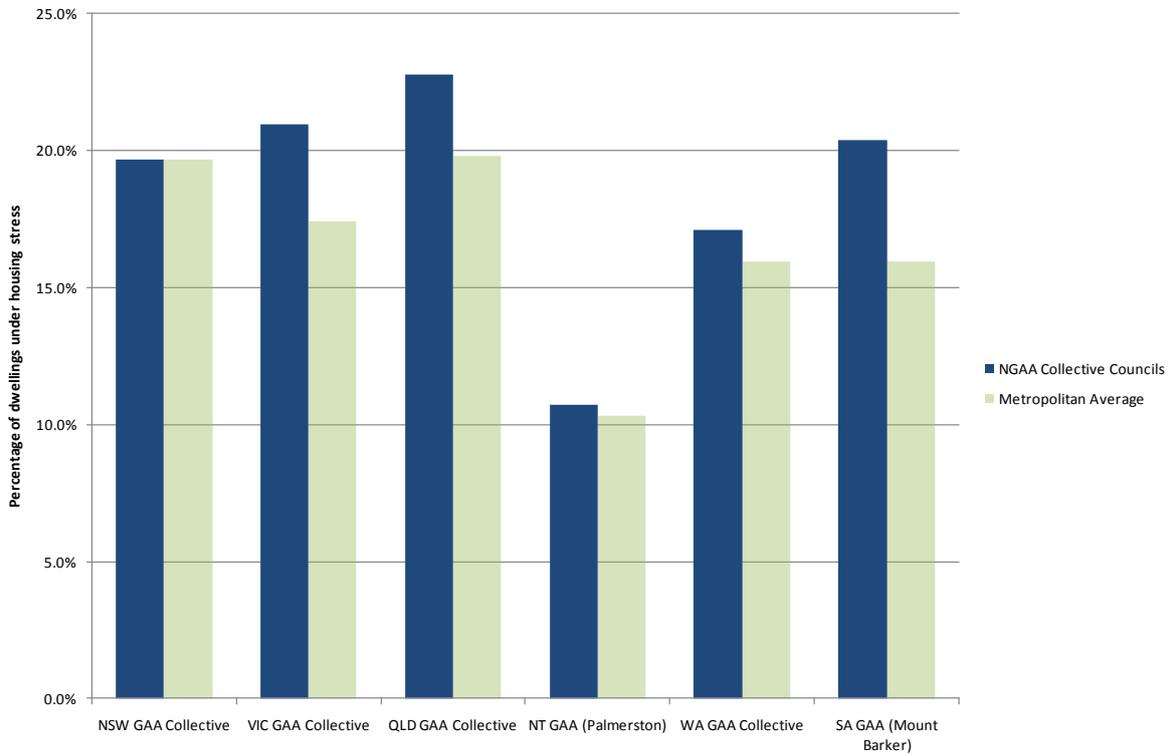
Source: RP Data NSW (March 2009), VIC Valuer Generals Office (2008), Real Estate Institute QLD (REIQ), Real Estate Institute WA (June 2009), Real Estate Institute SA (June 2009), Real Estate Institute NT (June 2009)

Housing Stress

Figure 15 illustrates the average proportion of low income households (between the 10th and 40th deciles of the income distribution) that are paying greater than 30% of their income on rent. Essentially it is the proportion of households under “housing stress”.

NGAA members in Queensland and Victoria have the highest proportion of households under housing stress, though all NGAA member municipalities have higher levels of housing stress than their host metropolitan areas. The NGAA member municipalities performing best regarding this are Palmerston at 11% and Serpentine-Jarradale at 14%.

Figure 15 Housing Stress, NGAA Collectives by State and Metropolitan Regions



Source: ABS Census 2006

2.3 Synopsis

The data analysis reconfirms the important role that growth areas have been playing in accommodating growth in metropolitan populations across the nation, and that they are growing twice as fast as metropolitan areas on average. Data suggests that the continued strong influx of residents to the outskirts is not being supported by the provision of human services and employment opportunities.

The communities of the NGAA member municipalities have lower school retention rates, post-school qualifications, and breadth of skills in comparison to the metropolitan regions as a whole. They lack diversity with respect to housing. They are also relatively disadvantaged with regard to access to employment opportunities and services. The outcomes of this are reflected in lower levels of income, higher unemployment rates and a higher proportion of households considered to be under housing stress.

The following table summarises findings from the data analysis.

Table 1 Summary of Data Analysis

Indicator	Total NGAA Member Councils	Total Metropolitan Areas
Annual average population growth between 2001 and 2008	2.7%	1.5%
Proportion of indigenous population	1.7%	1.1%
Proportion of migrants (overseas born)	27%	29%
Job to population ratio	27%	43%
Education, health and community services and cultural and recreational service Index	6%	9%
Employment self-sufficiency	59%	91%
Proportion of 15 and over with year 12 or equivalent	39%	48%
Proportion of population with bachelors degree or higher	10%	19%
Unemployment Rate December 2008	5%	4%
Proportion of white collar working residents	41%	51%
Proportion of detached dwellings	82%	65%
House price in proportion to metropolitan	88%	100%
Housing stress	19%	17%

Source: SGS Economics and Planning

3 INVESTING IN AUSTRALIA'S GROWTH AREAS

This section reviews literature surrounding the concept of liveable communities. It then draws from this review to highlight the priority actions for growth areas, recognising that some elements of liveability are determined at the broader (e.g. national) level. It then, drawing from the findings of the previous chapter, introduces some of the key interventions that need to be made in the growth areas to reduce the inequities faced by growth area residents.

3.1 Liveable Communities

The concept of 'liveability' is multifaceted and universal definitions are elusive. In its recent inquiry into liveability the Victorian Competition and Efficiency Commission (VCEC)⁹ adopted the following broad based definition:

"Liveability reflects the wellbeing of a community and represents the many characteristics that make a location and place where people want to live" (p. XXI).

VCEC also recognised that there is a broad diversity of factors that influence the liveability of a place including:

"...community strength; economic strength; built infrastructure; social infrastructure; amenity and place; environment; citizenship; equity and human rights; participation; leadership and good governance; information and communication technology (ICT); transport; government services; and innovation" (p. XXI)

In line with this, measuring liveability is a difficult concept, particularly at the local area level. While there are some well known liveability indices published by the Economic Intelligence Unit, Mercer Consulting and others, these are generally produced at the national level.

The previous chapter concluded that when compared to their host metropolitan region, growth area communities perform poorly across a broad range of indicators. Many of these indicators are inter-related with the concept of liveability.

What follows is a discussion around some of the key elements of liveability that are most strikingly lacking in growth area communities in Australia. From this discussion and the data presented in Section 2, some possible interventions for addressing liveability and sustainability in growth area communities evolve. These interventions will surely also influence 'liveability' and 'sustainability'

⁹ Victorian Competition and Efficiency Commission, 2008, "A State of Liveability: An Enquiry into Enhancing Victoria's Liveability"

more broadly across Australia. For example improving public transport capacity will reduce the environmental impact of population growth, externalities associated with congestion across the metropolitans and national economic performance.

3.2 Growth Area Liveability & Sustainability

Liveable and sustainable growth areas are more than environmentally friendly and amenable environments. Liveable and sustainable growth areas can be associated with quality public transport services, the availability and mix of employment and services, and urban form that facilitates healthy communities, with walkable neighbourhoods and public open space. Importantly, these amenities are easily accessible by a diverse population residing in these growth area communities. This accessibility refers to distance proximity, physical access, financial affordability and comfort and safety.

Liveable and sustainable growth areas need to be concerned with short and long term wellbeing for all residents. Overarching this are the four facets of sustainability – environmental, economic, social and cultural – which need to be addressed concurrently. Economic and social wellbeing of residents can be assisted by ensuring employment and services are accessible to residents. Reduced travel times and costs allow additional time for social and leisure pursuits while saving money spent on travel, e.g. petrol and vehicle maintenance and reducing environmental impacts. Services assist personal/ family development and health as well as broader community cohesion.

Environmental sustainability is becoming more important in the face of potential peak oil and a carbon constrained future. These two events alone are likely to conflict with private car use which is prevalent in growth areas. The benefits of sustainable transport, such as reduced greenhouse gas emissions, improved air quality and increased physical activity are important for local and global environmental quality, as well as personal health. Sustainable transport options like walking, cycling and public transport are also more attractive when destinations are in close proximity.

Addressing the cultural elements of liveability is also important and is fundamentally about identity. This refers to taking account of a place's history and expressing it in the urban design form and through public art. It also includes providing opportunities for cultural expression for all members of the community. And it refers to supporting the local arts industry as a means of economic development.

These elements are all important for the wellbeing of growth area residents. After all, it is people which create, contribute to and benefit from liveable and sustainable growth areas.

This section continues by detailing the following elements of liveable and sustainable growth areas, and what indicators might be useful when measuring and assessing a growth area community's:

- Accessibility to employment opportunities across the breadth of industries;
- Personal mobility including public transport services;
- Local service provision including health, cultural, community and education facilities; and
- Diversity with respect to resident population and housing.

Accessibility to employment opportunities across the breadth of industries

Employment opportunities enable economic and individual growth. While commuting times have been a major concern for years, the need for local job opportunities was intensified by rising fuel prices through 2007 and 2008. The increasingly unaffordable cost of personal mobility had stark economic and social implications on those who relied on cars to access employment, i.e. growth area residents.

Achieving a more equitable situation with regard to jobs access includes a combination of both locating a diverse range of employment in centres that service communities on the outskirts to reduce commuting time and costs, and improving connectivity between communities and metropolitan wide employment nodes. Thus rather than dispersing jobs across growth areas, the focus should be on supporting concentrations of employment in strategic centres with high accessibility to growth area residents and improving the mobility of residents across the metropolis.

The provision of jobs in centres needs to build on and pay respect to the importance of agglomeration economies. The World Bank (2009 p. xxii) strongly argues:

"...that economic growth will be unbalanced. To try to spread out economic activity is to discourage it. But development can still be inclusive, in that people who start their lives far away from economic opportunity can benefit from the growing concentration of wealth in a few places. The way to get both the benefits of uneven growth and inclusive development is through economic integration".

So getting jobs to growth areas will not be an easy task, as existing agglomerations elsewhere around the metropolises (especially CBDs) will outcompete growth areas in a variety of high end jobs (e.g. finance and insurance).

However, land use regulation and infrastructure commitment can be used to ensure that local employment centres in growth areas:

- Accommodate their rightful share of population induced jobs.
- Act as hubs for social service delivery.
- Are developed in a way that encourages scale and a diversity of employment types over the long term.

If these effects are successful reduced commuting time and costs will allow additional time for non-work pursuits, reduced expenditure on travel and less traffic congestion, air pollution and expensive road costs will result. Local employment opportunities also reflect services for local residents. For example, employment in health occupations is usually a good indicator of a high quantity of health services. Therefore success in attracting employment will simultaneously address the element of service accessibility.

Personal mobility including public transport services

Independent movement to access employment, education, health, leisure and other services is important for people of all ages and abilities. Public transport is important for those without a car who need to go about their daily lives. Improving mobility relates to:

- Provision of required infrastructure (road and rail);
- Provision of required services e.g. bus services, regular trains etc; and
- Affordable cost of transport.

Research by Monash University indicates that interface¹⁰ residents travel further and make more trips per day than those in inner areas, however they have access to 5.6 times less public transport services per week on average. Consequently, rising fuel costs led residents to link trips and reduce travel and activities¹¹. This would have significant implications for personal mobility, and the lives of residents. Previous research by SGS (and others), indicates that there is a correlation between transport locational disadvantage and social exclusion.

Mobility is vital across all age groups and refers to connections to regional centres, to the CBD and around the municipality itself. Growth areas have noted that lack of public transport limits access to education, health, employment and support services. Lack of mobility across the municipality itself often results in a dispersal of facilities and services that could potentially be delivered more effectively as a centralised 'hub'.

Improving transport services may also affect other indicators of community health such as crime rates, for example through reduced waiting times at train platforms or bus stops.

Local service provision including health, cultural, community and education facilities

Local social services together with provision of quality regional level social services are important for individual and community development. These needs of growth area councils cover a broad range of facilities and services, examples of which are listed in the table below. The priority categories expressed by the NGAA member municipalities are early years services, youth services and family services.

¹⁰ Councils on the edge of metropolitan Melbourne and rural Victoria, including Cardinia, Casey, Hume, Melton, Mornington Peninsula, Nillumbik, Whittlesea, Wyndham and Yarra Ranges.

¹¹ Currie, G and Delbosc, A, 2009, "Background, Field Surveys and Next Steps: Interface Councils CEO Forum", Australian Research Council (ARC) Project: Investigating Transport Disadvantage, Social Exclusion and Well Being in Metropolitan, Regional and Rural Victoria, Monash University, 12 August 2009.

Example Community Infrastructure	Example Recurrent Services
<ul style="list-style-type: none"> • Nursing home • Respite facilities • Neighbourhood centre and community hub • Crises accommodation • Recreation and sporting facilities • Arts and cultural centre • Leisure centre • Early childhood centre • Library and education facilities • Youth facilities 	<ul style="list-style-type: none"> • Early years • Youth • Family support • Legal • Respite • Drug and alcohol • Mental health • ATSI • Aged care • Multicultural • Out of school care • Settlement • Crises housing • Emergency relief • Homelessness • Community transport • Health care • Education • Safety/ crime

Educational institutions are important to ensure that residents have an opportunity to grow personally and improve their earnings and life prospects. Many of these facilities and services are provided at low or no cost.

Such community infrastructure encourages engagement and participation in society. Support networks and services are important to ensure that people are engaged in society, particularly through training, education and employment, as well as involvement in local groups and activities.

The building of social networks and resilience can also assist individuals and communities to work through difficult times. This can be through participation in community organisations, sporting groups and use of facilities such as libraries. This can also translate to health benefits, with reduced rates of depression and improved health.

Aside from community infrastructure, a variety of other infrastructure and services is required to facilitate community development. This includes a variety of shopping, civic and meeting spaces and high environmental quality. Service provision also needs to be unique and responsive to its local context and history, and have appropriate and early provision of required community infrastructure. Recreation and leisure activities can be enhanced through the provision of green spaces and environmental areas. These also provide amenity values and can act as a break between intense urban activities.

In terms of service delivery, services must be equitable, accessible, responsive to local needs, promote flexibility and innovation, participatory, adequately resourced, and integrated, providing options and choices for people. This facilitates the best chance of use, and therefore the potential benefits of providing such services.

Potential indicators for assessing the need for local service provision include:

- Child protection data¹²;
- Child health, including birth weight and rate of breastfeeding;
- Post natal depression rates;
- Youth unemployment;
- Drug use and self harm; and
- School completion rates.

In terms of equitable levels of service and facility provision, there are currently no national standards. Some work on this has been undertaken in South East Queensland and Victoria¹³

Diversity with respect to housing

Diversity in social and housing mix is important to facilitate tolerance and build community. Diversity in housing is interrelated with achieving diverse resident mix. Housing provision in growth area communities should address the different life stage needs of residents, e.g. support working age residents, younger families and older residents. The diversity of housing will help avoid booms and busts in servicing needs as the resident populations change over time

Traditionally the population has been provided with predominantly detached housing based on a one size fits all approach. We now know that this is not the case, and that a diverse population requires diverse housing types.. It is also important that different dwelling types are dispersed to ensure that opportunities are provided for people with different housing requirements in various locations. This will be important when the 'baby boomer' generation looks to downsize in their local area, or near to their children and grand children.

Diverse housing provision refers to the range of house pricing as well as size, tenure and affordability. Studies¹⁴ have shown that the affordability of dwellings is the most important factor for residents decision to move to growth areas.

¹² Marston, G, Morgan, L, Murphy, J, 2003, *Human service gaps at the Interface between urban and rural*. RMIT Centre for Applied Social Research, p 7.

¹³ SGS's previous work on social infrastructure guidelines for SEQ and "Planning for Community Infrastructure in Growth Area Communities" by ARC.

¹⁴ Currie, G and Delbosc, A, 2009, "Background, Field Surveys and Next Steps: Interface Councils CEO Forum", Australian Research Council (ARC) Project: Investigating Transport Disadvantage, Social Exclusion and Well Being in Metropolitan, Regional and Rural Victoria, Monash University, 12 August 2009.

Diversity with respect to resident population

Another element of importance is diversity with respect to the local resident base. This refers to achieving a balanced cultural mix, age profile and a balanced skills mix. Cultural diversity tends to be reflected in a wider range of activities held in a community, as well as wider range of retail activity, and can potentially add to the vibrancy of a community. Enclaves of one demographic can result in a homogenous community and limit opportunities for other residents.

In times of economic downturn, a recent study by the Centre of Full Employment and Equity (CofFEE) identified that outer metropolitan regions are typically composed of low skilled workers most prone to losing their jobs. To redress this the study goes on to highlight how attracting a more diverse mix of residents is important but this relies on accessibility enhancing infrastructure and quality lifestyle opportunities. That is, implementing measures to reduce one of the identified gaps of a 'balanced community' directly will indirectly aid the closure of other gaps.

An integrated community

Australia's growth areas generally comprise multiple land use types including new greenfield developments, older established areas, neighbourhood centres and rural areas.

Disadvantaged, older established areas within growth area councils require investment to address existing service deficits and past planning decisions while new estates require investment to prevent future disadvantage.

3.3 Evolving Interventions for Growth Area Communities

The next phase of the project will undertake case studies to identify and assess interventions to close the existing gaps evident in the structure of growth area communities. While each case study will present slightly different challenges, the findings to date indicate that key interventions might include:

- Actions to ensure that strategic centres in growth areas capture their fair share of jobs;
- Early investment and higher quality of public transport services;
- Earlier and better provisioning of a range of local and regional level human services and infrastructures; and
- Actions to promote diversity in growth areas in terms of jobs, residents, dwellings and urban form such as those that aim to avoid locking in low density and/ or homogenous development, (e.g. actions that promote high amenity, mixed use activity centres, or promote transit oriented development, etc.).

4 CASE STUDY INVESTIGATIONS

This section presents two case study growth areas: Campbelltown in NSW and Swan in WA. These municipalities are explored in terms of their existing positioning and performance, their growth forecasts and the development outcomes that can be expected under a business as usual scenario. Following this a set of interventions that will better balance and improve liveability in the case study municipalities are identified and costed. Finally, the improved development outcomes that are likely to result from these intervention scenarios are postulated.

4.1 Introduction

This case study analysis aims to identify the interventions that two growth area communities need if the inequities that they face are to be addressed, at least partially, and a more sustainable community developed.

The case studies draw from data analysis similar to that presented in Section 2, particularly the data contrasting the performance of growth area communities with respect to their host metropolitan areas. The case study analysis also draws from other benchmarking and consultative exercises, including:

- Provisioning levels articulated in accepted social infrastructure benchmarks¹⁵;
- ABS Journey to Work employment statistics, ABS industry cost structures reflective of participants in infrastructure service provision, and other data sets; and
- Rounds of consultation with local and state government representatives.

The basic aim of the case studies was to identify the nature and level of interventions required to close the gap in growth area communities with respect to:

- Access to jobs;
- Public transport servicing; and
- Social infrastructure servicing, particularly health, education, recreation and community services.^{16 17}

¹⁵ Including: ASR, 2008, Planning for Community Infrastructure in Growth Area Communities; and Office of Urban Management, 2007, South East Queensland Regional Plan 2005-2026, Implementation Guideline No. 5, Social Infrastructure Planning.

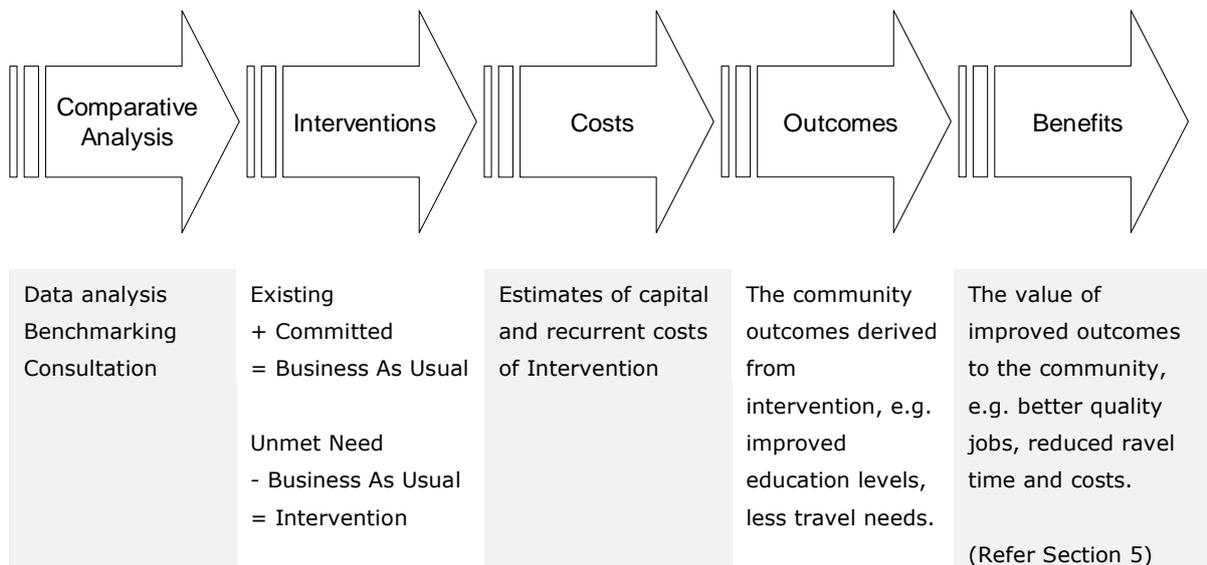
¹⁶ Interventions to address or bolster housing diversity, community diversity and community integration have not been included.

¹⁷ It has been assumed that, in line with best practice urban planning, these jobs and services, and the flow on jobs/ services that they induce are directed into strategic centres within the growth areas. Urban form benefits are subsequently triggered as the nodal development that occurs will enable more diverse (e.g. denser) housing forms in and around these strategic centres.

To do this we have compared the scale of intervention required in Campbelltown (NSW) and Swan (WA) to close the existing servicing gaps and to maintain this improved provisioning rate as constituent populations grow in future. The interventions include both 'capital', e.g. infrastructure facilities provision, as well as 'recurrent services' provision, i.e. ongoing services to the community enabled by these infrastructure facilities but which requires ongoing commitment. In essence, the interventions required are the unfunded investments that are required over and above the Business As Usual (BAU scenario), which we have defined to include 'existing' facilities and services, as well as 'committed' facilities (Refer Figure 16).

An attempt has been made to identify the cost of intervention requirements for all levels of government. This has been done by extrapolating their traditional roles in infrastructure provision. This is not a highly precise process but is indicative of the level of intervention needed and the likely funding source if there was a Whole of Government commitment to improving the sustainability of growth area communities.

Figure 16 Case Study Process



The final stage of the case study analysis was to match the nature and level of intervention with improved outcomes in the case study community. Again this is not a precise process. Nonetheless, the figures adopted in the case studies below are posited as reasonable targets given the context of each case study community.

The section that follows (Section 5) converts the achievement of these outcomes into a variety of economic, social and environmental benefits and contrasts these with the intervention costs, enabling an assessment of net community benefit of 'closing the gap' to be generated.

4.2 Campbelltown City Council

Campbelltown City Council is located in Sydney's South West and accommodates almost 150,000 residents. Campbelltown City is designated as a Major Centre in the Draft South West Subregional Strategy which covers the region encompassing Camden, Campbelltown, Liverpool and Wollondilly. The nearest Regional Centre designated in the Strategy is Liverpool.

According to the South West Subregional Strategy, the State Government is planning for around 53,500 dwellings in the South West of which around 24,650 are expected to be located in Campbelltown LGA as infill development. In addition, it is expected that the South West growth centre (which sits predominantly across Camden and Liverpool LGAs) will expand by a further 100,000 dwellings.

4.2.1 State of Play

Table 2 illustrates the performance of Campbelltown City Council in comparison to metropolitan Sydney on a number of key indicators.

Campbelltown is underserved in regards to education, health and community services, and in terms of employment opportunities for its residents. A significant proportion of workers leave the municipality to work. When compared to the metropolitan area, Campbelltown has a:

- Higher rate of unemployment;
- Significantly lower diversity in housing type;
- Lower proportion of white collar workers;
- Lower levels of school completion;
- Lower proportion of tertiary qualified residents;
- Lower individual incomes; and
- Higher proportion of car based trips.

Table 2 Key Statistics Campbelltown and Sydney Metropolitan Region

Indicator	Campbelltown	Sydney Metropolitan Region
Average annual forecast population growth (2006-31)	1%	1%
Proportion of indigenous population	3%	1%
Proportion of migrants (overseas born)	26%	32%
Job to population ratio	27%	42%
Education, health and community services and cultural and recreational service Index	7%	9%
Employment self-sufficiency	60%	91%
Proportion of 15 and over with year 12 or equivalent	36%	49%
Proportion of population with bachelors degree or higher	9%	20%
Unemployment Rate December 2008	8%	4%
Proportion of white collar working residents	40%	54%
Proportion of detached dwellings	77%	57%
House price in proportion to metropolitan	71%	100%
Housing stress	17%	20%
Median Individual Income (\$/ Weekly)	464	518
Method of Travel to Work (Car only)	75%	70%

Source: SGS Economics and Planning

4.2.2 Growth Projections

As shown in Table 3, the forecast population and employment growth rates are modest for Campbelltown. However, the expected strong population growth in the South West growth area, on the fringe of Campbelltown, will certainly place pressure on Council to increase the provision of facilities and services over and above that required to service its growth expectations.

Table 3 Population and Employment Growth Projections, Campbelltown City Council and Metropolitan Sydney, 2006-2031

	Population			Employment		
	Campbelltown City	Metropolitan Sydney	Campbelltown's Share of Sydney	Campbelltown City	Metropolitan Sydney	Campbelltown's Share of Sydney
2006	147,440	4,281,988	3.4%	38,068	1,736,824	2.2%
2011	154,602	4,493,533	3.4%	49,815	2,248,935	2.2%
2016	162,519	4,696,679	3.5%	52,411	2,338,235	2.2%
2021	172,992	4,894,535	3.5%	54,701	2,406,476	2.3%
2026	179,250	5,084,480	3.5%	57,075	2,455,340	2.3%
2031	181,843	5,262,065	3.5%	60,789	2,491,838	2.4%
Annual Growth Rate (2006-31)	0.8%	0.8%		1.9%	1.5%	

Source: Transport Data Centre NSW

4.2.3 Committed Investment

Discussions with representatives from the City and NSW State Government identified the following committed investment in Campbelltown:

Local Government

- Raby Sports Complex upgrade \$1.25 million (in partnership with NSW Cricket and NSW Department of Sport and Recreation).
- Blair Athol Community Centre.
- Asset Management Program.
- Intersection upgrades.
- Pedestrian Overbridge at Leumeah.

State and Federal Government

- Stage three redevelopment of the Campbelltown Sports Stadium, \$8m.
- South West Rail Link (SWRL) – partially committed \$186 million.
- Rail upgrades (increase capacity at certain stations).

- Commuter Car Parking Program (CCPP).
- Bus services (infrastructure plan for the South West Growth Centre), \$39.95 million.
- South Sydney Freight Line (SSFL).
- Two new community centres (Oran Park and Leppington).
- Build and upgrade community infrastructure (a number of items) from Commonwealth's Community Infrastructure Program, \$1.51 million.
- Minto renewal project (redevelopment of a public housing site).

4.2.4 Priority, Planned & Necessary Investment

Capital Funding Needs

Campbelltown LGA is host to considerable public housing which has resulted in concentrated pockets of social disadvantage. This generates particular infrastructure and servicing challenges. As an example buses will reportedly not travel in some public housing districts due to concerns about safety.

Pressures on infrastructure from historic land releases in the municipality have been identified as an issue for Campbelltown. Whilst population growth has continued, it has done so without the matching commitment for supporting infrastructure.

The previous 'Community Facilities Program' has been superseded predominantly by Section 94 plans and developer agreements. Consequently, Campbelltown City Council does not have an up to date, clear guiding document for facilities planning. However, the Council is currently in the process of completing a CBD structure plan as well as an Open Space and Community Facilities review, with the aim of identifying future needs for infrastructure and open space.

As an up to date facilities plan with quantifiable identification of facilities is currently not available, SGS has conducted an analysis of future needs based on widely accepted social infrastructure planning benchmarks. That is, the Transport Data Centre population forecasts have been applied to yield demand for different facility types. The analysis reveals that by 2031 numerous facilities will be required.

Table 4 brings the benchmark based needs together with those anecdotally expressed needs from Council. For each of the identified facilities, the traditional tier of government responsible for delivery is shown. It shows that approximately \$839 million of capital spending is required to cope with population growth and current under-provisioning between now and 2031. Ten percent of this capital funding 'gap' would traditionally fall to local government, with the residual 90% the responsibility of State/ Federal governments.

Table 4 Campbelltown’s Infrastructure Facilities Needs (Intervention Scenario)

Facility Name	Responsibility	Indicative Cost
Neighbourhood Active Open Space	Local Govt	Not costed
Higher Order Active Open Space Reserves	Local Govt	Not costed
Neighbourhood Passive Open Space	Local Govt	Not costed
Community/Civic Centres	Local Govt	
Neighbourhood	Local Govt	\$8.1 million
Local	Local Govt	\$2.4 million
District	Local Govt	\$5.2 million
Regional	Local Govt	\$5.2 million
Central Library	Local Govt	\$14.2 million
Branch Library	Local Govt	\$12.8 million
Exhibition / Convention Centre	Local Govt	\$5.2 million
Performing Arts Centre	Local Govt	\$26 million
Museum	Local Govt	\$4 million
Art Gallery	Local Govt	\$4 million
Youth Centre - Local	Local Govt	\$1.2 million
Youth Centre - District	Local Govt	\$7.8 million
District TAFE	State Govt	Not costed
Community Health Centre	State Govt	\$7.8 million
Community Care Hub	State Govt	\$32.4 million
Community Care Precinct	State Govt	\$24 million
Aged Care Service/Respite Centre - local	State Govt	\$4.5 million
Aged Care Service/Respite Centre - District	State Govt	\$4.6 million
SW Rail Completion	State Govt	\$670 million
Total Capital Investment Need		\$839 million

Sources: City of Campbelltown, and calculations by SGS Economics and Planning.

Note: In no way does the list of interventions above bind the City to their provision. Also due to lack of information some of the items remain un-costed.

Recurrent Funding Needs

In addition to capital investment in infrastructure facilities, the recurrent services accommodated by these facilities need to be funded.

Estimating future needs for recurrent servicing is an inherently complex process, as current services spending is not reported on a local area basis by State and Federal agencies. There are also complex cross-funding agreements which further complicate the issue.

The City has designated the following services as being a priority:

- Early years services;
- Youth services;

- Family support services.

Many of Council’s child care facilities are located within the public housing estates in the LGA. This is seen as important social infrastructure to allow for early intervention for a range of social issues. These facilities cost approximately \$2.3 million to run each year. They require additional support staff (e.g. security) reflecting the particular demographic served.

In order to quantify recurrent service funding needs, SGS has assumed that the existing number of public sector jobs in the education and training, health care and social assistance, and arts and recreation services sectors in Campbelltown are a good starting point. SGS has subsequently applied sector specific average salaries and salaries to total cost ratios to convert public sector job estimates to total recurrent spending needs.

Table 5 uses these relationships to estimate the recurrent services funding required to fully (100%) close and partially (50%) close Campbelltown’s servicing gap, i.e. in comparison to the average servicing level across metropolitan Sydney. It culminates in a recurrent services funding estimate of \$77 million p.a. by 2031. Note that the required services will also include the recurrent funding for public transport services but these have not been costed.

Table 5 Costs of Required New Services ¹⁸

		Education and Training	Health Care and Social Assistance	Arts and Recreation Services
Jobs per capita 2006	Campbelltown	3.1%	2.8%	0.2%
Jobs per capita 2006	Sydney	3.1%	4.2%	0.6%
Jobs per capita 2031 (Business as Usual)	Campbelltown	2.5%	2.3%	0.2%
Target Additional Public Sector Services Required to Close the Gap by 2031				
Close the Gap by 100%		0	826	51
Close the Gap by 50%		0	413	26
Additional Annual Cost of Servicing to Close the Gap by 2031				
Close the Gap by 100%		0	69,000,000	8,000,000
Close the Gap by 50%		0	34,500,000	4,000,000
Total Additional Annual Cost to Close the Gap by 2031				
Close the Gap by 100%			\$77,000,000	
Close the Gap by 50%			\$38,500,000	

Source: SGS Economics and Planning

¹⁸ Note it is assumed that under the business as usual case, there are no increases in government spending on recurrent services. The method used to calculate the recurrent services has utilised public sector jobs, due to the difficulty in measuring the publicly funded jobs.

4.2.5 Meeting the Funding Challenge

The total annual spend on capital and services required collectively across all spheres of government to (100%) close the identified gap is \$207 million p.a. as at 2009. This reduces to \$126 million p.a. by 2031, recognising that the capital funding needs are earmarked for the short and medium terms. This Whole of Government funding need falls to \$84 million p.a. by 2031, if only half the gap is closed.

In order to quantify the likely funding gap by tier of government, the City's historical and forecast budgets were assessed and utilised to produce a forecast of Council's 'total' and 'own source' revenues out to 2031¹⁹. The forecast local government own source revenue available to fund education, health, community and recreational services/ facilities is \$42 million p.a. at 2009 and \$79 million p.a. as at 2031. Therefore, the current gap in local government funding in these areas is around \$30 million p.a., reducing to approximately \$11 million p.a. by 2031.

Of course the existing grant base from Federal and State Government ameliorates this gap somewhat. If we assume that the grants base continues to grow at its historical growth rates, then the gap between Council's total revenue and its traditional share of the infrastructure/ services burden falls to \$21 million p.a. in 2009 (\$4 million surplus in 2031). Figure 17 and Figure 18 convert the unfunded gaps to annual estimates, with Figure 17 assuming funding closes the growth area/ metropolitan imbalance by half, rather than in full.

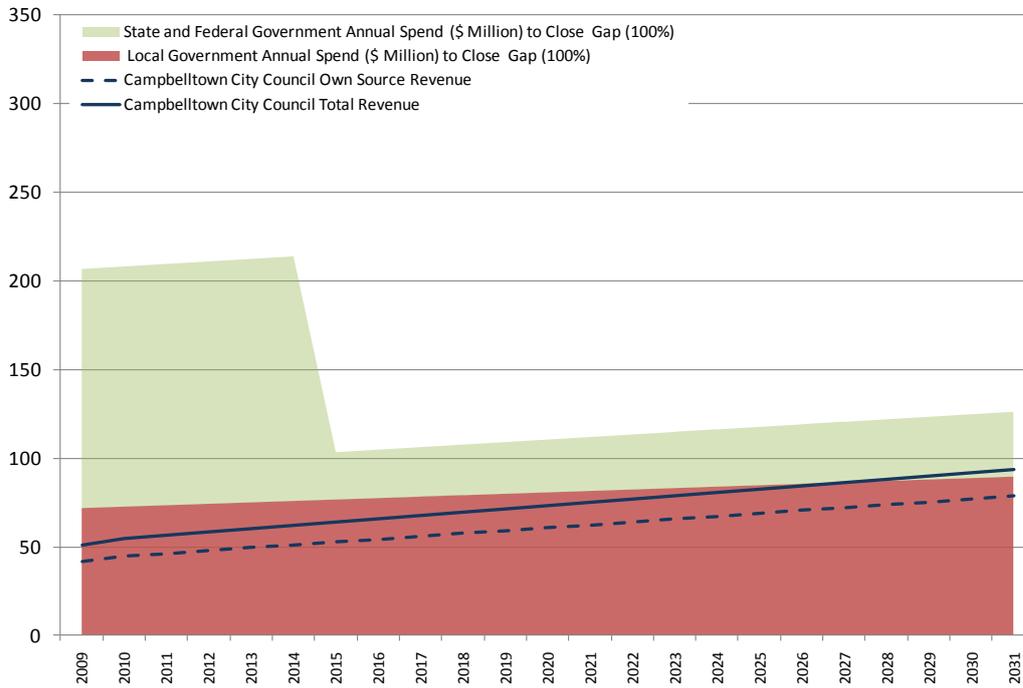
The question that remains is who should fund this residual gap. The Productivity Commission's (PC) Assessing Local Government Revenue Raising Capacity (April 2008) report is instructive here. It suggests that:

- Urban fringe councils have the lowest revenue raising (fiscal) capacity of all municipalities across Australia, reflecting their low after tax income levels per person; and
- Urban fringe council work harder than all other municipal categories, excluding remote municipalities, in tapping into their revenue raising capacity (i.e. as measured by own source revenues compared with total income).

While the PC goes on to speculate that rate increases might be possible, it does not recommend such. Nonetheless, a complex benchmarking process suggests that councils are tapping only 88% (on average) of their hypothetical benchmarks. For urban fringe councils, the PC speculates that own source income levels could rise by 14% per person.

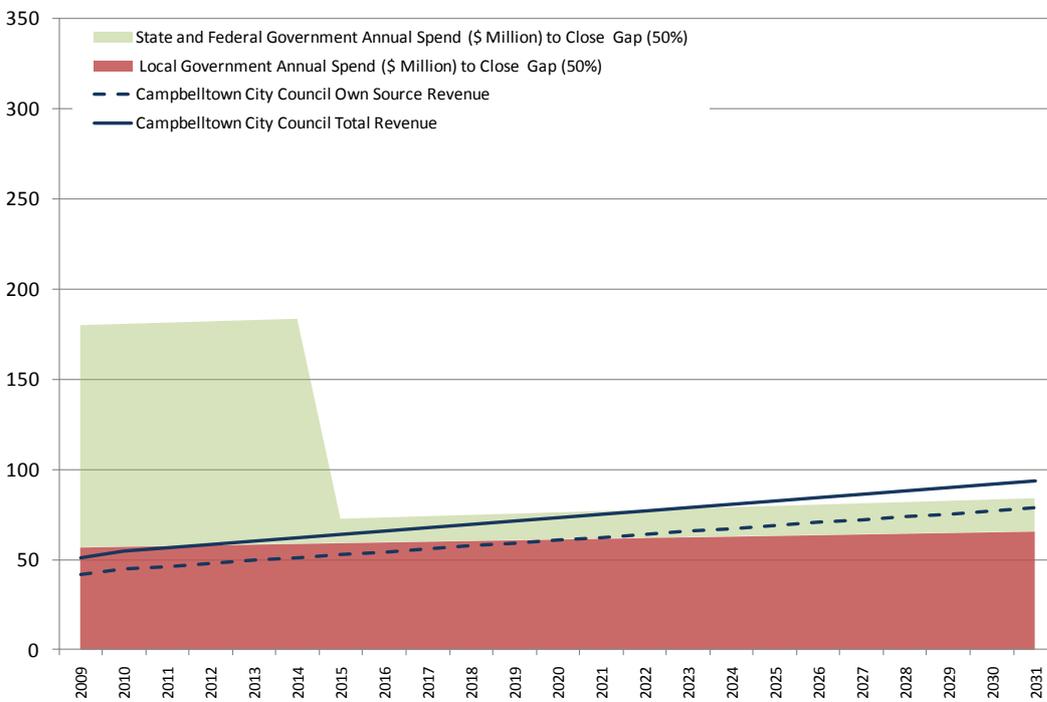
¹⁹ It is noted that rate pegs limit rate revenue increases for NSW Councils. However, given that rates are a weighted average of changes in CPI and in average weekly earnings, in forecasting rate revenues it is assumed that the underlying drivers of CPI and average weekly earnings will grow according to their historical trends.

Figure 17 Required Annual Funding to Close (100%) Infrastructure Serving 'Gap' & Campbelltown's Capacity to Fund (2009 to 2031)



Source: SGS Economics and Planning

Figure 18 Required Annual Funding to Close (50%) Infrastructure Serving 'Gap' & Campbelltown's Capacity to Fund (2009 to 2031)



Source: SGS Economics and Planning

Rate Pegging in NSW

Rate pegging is a limit on the growth in Council's revenue from rates which has had a long history in NSW. The Minister for Local Government determines rates, which is currently based on weighted averages of changes in Consumer Price Index (CPI) and average weekly earnings.

A study commissioned by the Local Government Association of NSW and Shires Association of NSW²⁰ illustrates that this system does not adequately align with the growth in expenditure requirements for Councils. Moreover, the modest rate revenue increases hinder local government's ability to pay.

The increasing of rates in NSW is obviously limited by rate pegging. However, if we assume hypothetically that Council had the flexibility to do so, and if the hypothetical benchmark suggested by PC is adopted, Campbelltown's 2009 own source income rises to \$48 million and to \$90 million at 2031, suggesting it still falls short of its share of capital and services funding.

Cost Shifting

Cost shifting refers to a transfer of responsibility and associated costs from one level of government to another, and it impedes local government's capacity to pay. In 2006 an Independent Inquiry into the Financial Sustainability of NSW Local Government was held, with cost shifting from Federal or State Government to Local Government being one of the issues investigated.

Campbelltown was a participating municipality in the investigation, and the findings suggested that the value of cost shifting for Campbelltown City Council amounted to \$93.8 million or 4.84% of its total revenue.

4.2.6 Intervention Outcomes

The interventions identified above (i.e. the capital and recurrent items) are assessed as needed for addressing the backlogs in required infrastructure and services in Campbelltown, and coping with the strong population growth expected in the South West Growth Centre. If these facilities and services are delivered, it is anticipated that the municipality will be in a position to close a number of gaps readily identifiable when comparing Campbelltown with metropolitan Sydney.

Table 6 identifies how the improvements are likely to be most clearly manifest, i.e. in local jobs and service provision, in education, employment and income improvements, and in journey length

²⁰ Local Government Association of NSW and Shires Association of NSW, July 2003, *NSW Local Government Rate Determination Model*

improvements and transport mode changes. The statistics for Campbelltown highlight that a key challenge for the municipality is to alleviate the significant disadvantage amongst its residents.

Table 6 Intervention Outcomes

Indicator	Intervention Outcomes
Job to population ratio	Improvement as local jobs provision increases with higher services based employment plus flow on effects. That is, municipal self containment in jobs builds with 1,130 additional jobs in the municipality over the business as usual scenario. ²¹
Education, health and community services and cultural and recreational service Index	Improvement included in direct intervention measures. Accessibility improvements lead to improved health, education and community integration/ participation outcomes, with an additional 440 jobs in these sectors over the business as usual scenario.
Employment self-sufficiency	As above.
Unemployment Rate	Increased workforce participation and a reduction in unemployment rate to 6% as a result of accessibility improvements and increases in local jobs provision.
Proportion of 15 and over with year 12 or equivalent	Better education outcomes likely, as education facilities more accessible and barriers to further education removed.
Proportion of population with bachelors degree or higher	As above.
Proportion of white collar working residents	Improved employment quality as education levels gradually flow through to Campbelltown's labour force quality and productive capacity. That is, regional self containment in 'quality' jobs builds.
Median Individual Income (\$/ Weekly)	Individual income levels grow to \$490 per week, as quality jobs are successfully competed for by Campbelltown's labour force.
Method of Travel to Work (Car only)	Method of travel to becomes less car dependent, as public transport services improve and local jobs ratio increases. Distance to work also likely to reduce as surrounding region matures.
Method of Travel to Work Involving Public Transport	As above.

²¹ Additional jobs in Campbelltown may well be delivered in the interventions muted in the Sydney's metropolitan Strategy are advanced.

4.3 City of Swan

The City of Swan is the largest metropolitan local government area in Perth, and is one part of the fastest growing urban corridors in Australia. Its physical area represents 1,042 sq.km. (19% of the metropolitan area), and currently (2008 ERP from ABS) accommodates a population of 105,000 (a similar percentage). This population is centred around several key nodes, interspersed by large rural and semi-rural tracts of land. Swan's population is forecast to double over the next 15 years, positioning a number of its urban localities as 'critical' for absorbing part of Perth's expected population growth.

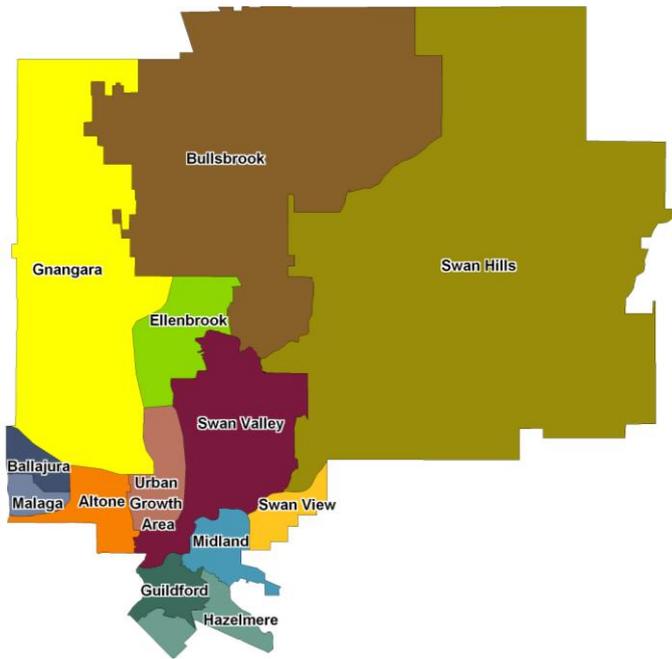
From a state planning perspective, Swan has an integral role to play in the delivery of the Department of Planning's Metropolitan Spatial Framework (Directions 2031). Swan accounts for the majority of the North-Eastern Sub-regional Area in the Framework, and encompasses:

- The strategic centre of Midland;
- The regional centre of Ellenbrook; and
- The regional industrial centres of Hazelmere and Malaga.

Over the 22 years to 2031, the Framework forecasts a 37% population increase to 258,000 in Perth's north east, and suggests that an additional 42,000 jobs will be needed. In line with the Framework's centres (i.e. development node) approach, the majority of these population and employment increases will occur in the strategic and regional centres in Swan. This nodal growth further emphasises the need for significant infrastructure and service delivery commitments.

In planning for the delivery of these services and infrastructure, the diversity of Swan has resulted in a 'place based' approach to local planning. The City encompasses rural and agricultural areas, industrial and commercial interests, innovative new residential suburbs as well as significant historic areas. It subsequently requires a planning approach that reflects this diverse nature. The City's place plan therefore divides Swan into thirteen smaller planning areas or 'places' based on geography or common interest.

Figure 19 City of Swan “Places”



Source: SGS Economics and Planning

4.3.1 State of Play

Table 7 illustrates the performance of Swan in comparison to metropolitan Perth via a number of key indicators.

The indicators highlight that Swan is underserved in education, health and community services. Moreover, when compared to the metropolitan area, Swan has:

- A much lower diversity in housing type;
- A lower proportion of white collar workers;
- Lower rates of school completion and tertiary qualification attainment;
- Individuals with lower than average incomes;
- A higher proportion of journeys that are car based.

Table 7 Key Statistics City of Swan and Perth Metropolitan Region

Indicator	Swan	Perth Metropolitan Region
Average annual forecast population growth (2006-31)	2.4%	1.2%
Proportion of indigenous population	3%	1%
Proportion of migrants (overseas born)	28%	31%
Job to population ratio	41%	43%
Education, health and community services and cultural and recreational service Index	6%	9%
Employment self-sufficiency	86%	88%
Proportion of 15 and over with year 12 or equivalent	38%	46%
Proportion of population with bachelors degree or higher	9%	16%
Unemployment Rate December 2008	3%	3%
Proportion of white collar working residents	39%	48%
Proportion of detached dwellings	85%	72%
House price in proportion to metropolitan	88%	100%
Housing stress	16%	16%
Median Individual Income (\$/ Weekly)	490	513
Method of Travel to Work (Car only)	86%	82%

Source: ABS, Department of Employment and Workplace Relations, Real Estate Institute of WA,

4.3.2 Growth Projections

Table 8 shows the forecast rates of growth in population and employment in Swan and in Metropolitan Perth. Swan is expected to grow rapidly with forecast population growth rates roughly double that of the metropolitan region. According to the Department of Planning, employment growth is expected to be roughly in line with population forecasts.

Table 8 Population and Employment Growth Projections, City of Swan and Metropolitan Perth, 2006-2031

	Population			Employment		
	City of Swan	Metropolitan Perth	Swan's Share of Perth	City of Swan	Metropolitan Perth	Swan's Share of Perth
2006	94,653	1,498,000	6.3%	37,813	621,690	6.1%
2011	108,904	1,614,600	6.7%	47,365	748,269	6.3%
2016	121,143	1,734,300	7.0%	50,968	802,467	6.4%
2021	145,088	1,849,200	7.8%	61,698	854,728	7.2%
2026	158,677	1,952,100	8.1%	64,887	901,515	7.2%
2031	169,915	2,043,500	8.3%	69,307	943,832	7.3%
Annual Growth Rate (2006-31)	2.4%	1.2%		2.5%	1.7%	

Source: Department of Planning WA

4.3.3 Committed Investment

Discussions with representatives from the City and WA State Government identified the following committed investment in Swan:

- A community care precinct: Midland Health Campus will form the basis for regional health service provision, incorporating both private and public hospital facilities and services, as well as linkages to aged care accommodation and services.
- A public primary school at Ellenbrook.
- Low order performance arts facility: Midland Arts Junction (capacity of 180-200).
- Ellenbrook lawn bowls facility.

4.3.4 Priority, Planned & Necessary Investment

Capital Funding Needs

The City uses a two stage process to estimate demand for social infrastructure facilities. The first involves a review of structure plans, whereas the second includes a local needs assessment following major land parcel sales. In addition to this process, the City is also reviewing facility provision as part of the Open Space and Community Facilities Strategy, which is currently under development.

The State Department of Education and Training (DET) undertakes facility demand forecasting based on proposed lot subdivisions, and subsequent population estimates. Following the submission of developer structure plans to the local planning authority, DET applies relevant demographic standards to the lots to determine the area necessary for reserving for education facilities. As dwellings are constructed, DET identifies the appropriate site and requirements for facility development. Current forecasts for facility delivery by DET cover a planning horizon to 2012 for primary schools, and to 2014 for secondary schools.

The Public Transport Authority (PTA) undertakes revisions of its bus services on an annual basis based on population density. In addition to this, the Authority is currently undertaking a 20 year planning process in coordination with the State Department of Planning to assist in guiding future provision.

The City has identified a number of gaps in current facility provision in Swan. Gaps identified include the following:

- Community facilities in Ellenbrook.
- A central events space, most likely in the Swan Regional Riverside Park, i.e. as a gateway to the Swan Valley.
- Recreation amenities in Bullsbrook.
- Community facilities in Swan Valley. However, due to its predominantly rural land use, the need for community facilities can be met by adjoining urban areas, such as the Urban Growth Area. This is also the case for Swan Hills (a predominantly rural area) and Gngangara (which is predominantly state forest land).
- Paths and trails to connect the City and increase access to facilities and spaces. This is particularly relevant in areas such as Ballajura and Swan View where access may be constrained due to the street layout.
- Active open space such as ovals and square pitches to service Midland and Ellenbrook. In Midland, this will be to replace Midland Oval and to meet growing demand in this area, as well as serve regional functions. This could potentially be located in the Urban Growth Area.
- Local parks in Ellenbrook Place. This is particularly needed in the northwest, reflecting the need to provide facilities in new areas early.
- Additional youth facilities. District facilities could be located in Ballajura and Ellenbrook where the youth demographic is expected to emerge. A regional facility in Midland to replace the existing youth centre is also required.
- Library services for the Swan Valley and Swan Hills. These could be met through mobile library programs.
- Facilities in the Urban Growth Area. These should be provided up front to facilitate community development.

In addition to the unmet demand for local government facilities (listed above), forecasts by the DET reinforce the need for additional public secondary facilities at Ellenbrook. Health agencies will

respond to city-wide needs via the provision of regional health facilities at Midland. The PTA currently has no immediate plans for additional bus services to/ in the City. However, the PTA does recognise the increasing demand for transport connectivity to Ellenbrook, and is currently undertaking a pre-feasibility study for the extension of the Midland railway line.

In addition to expressed need, SGS has also conducted analysis of future needs based on widely accepted social infrastructure planning benchmarks (as noted above). That is, the WA Tomorrow population forecasts have been applied to yield demand for different facility types. The analysis reveals that by 2031 numerous facilities will be required beyond that expressed by Council. These include a number of libraries, childcare centres and aged care centres.

Table 9 brings the expressed facilities need and benchmark based needs together. For each of the identified facilities, the traditional tier of government responsible for delivery is shown, as are indicative costs and timing (where available). It shows that approximately \$1,335 million of capital spending is required to cope with population growth and current under-provisioning between now and 2031. Eighteen percent of this 'gap' falls to Council, with the residual 82% the traditional responsibility of State/ Federal governments.

Table 9 Swan’s Infrastructure Facilities Needs (Intervention Scenario)

Facility Name	Responsibility	Indicative Cost	Start Date	Completion Date
Ballajura Youth Facility	Local Govt	\$1.5 million	2009/10	2010/11
Bullsbrook Pavilion/ Community Building	Local Govt	\$3 million	2010/11	2012/13
Turkich Parade Pavillion/ Community Building	Local Govt	\$2.05 million	2009/10	2012/13
Ellenbrook District Open Space Pavillion	Local Govt	\$3.1 million	2009/10	2013/14
Ellenbrook District Open Space Pavillion/ Community Building	Local Govt	\$3.6 million	2009/10	2013/14
Town Centre Community Building, Ellenbrook	Local Govt	\$1.05 million	2009/10	2013/14
Village 7 Community Building, Ellenbrook	Local Govt	\$1.05 million	2012/13	2016/17
Malvern Springs Community Building Fit out, Ellenbrook	Local Govt	\$0.2 million	2010/11	2013/14
Ellenbrook District Open Space Playing Fields	Local Govt	\$8-12 million	2009/10	2013-16
Ellenbrook Aged Care Facility	Local Govt	\$3 million	2009/10	2014/15
Ellenbrook Leisure Centre	Local Govt	\$10 million	2013/14	2019/20
Ellenbrook Youth Facility	Local Govt	\$1.5 million	2013/14	2015/16
Ellenbrook Local POS	Local Govt	Unknown	Progressive	2015/16
Percy Cullen Pavillion	Local Govt	\$2.85 million	2009/10	2010/11
South Guildford Community Building	Local Govt	\$1.05 million	2010/11	2011/12
Midland Playing Fields development	Local Govt	\$1.5 – 2 million	2011/12	2012/13
Midland Youth Facility	Local Govt	\$2 million	2009/10	2012/13
Caversham Playing Field and Pavillion	Local Govt	\$2.1 million	2011/12	2015/16

Facility Name	Responsibility	Indicative Cost	Start Date	Completion Date
Caversham Small Community Centre	Local Govt	\$1.7 million	2011/12	2015/16
UGC District Community Centre	Local Govt	\$3 million	2013/14	2018/19
WSE Local Community Centre	Local Govt	\$2.1 million	2011/12	2014/15
Albion Local Community Centre	Local Govt	\$2 million	2012/13	2016/17
Albion Arts and Culture Facility	Local Govt	\$2 million		2018/19
UGC Active Public Open Space (estimated 62ha)	Local Govt	\$49.6 million	2010/11	2019/20
UGC Passive Public Open Space (estimated 90ha)	Local Govt	\$45 million	2009/10	2017/18
UGC Youth Facility	Local Govt	\$1.5 million	2013/14	2016/17
Central Events Space	Local Govt	\$4 million	2010/11	2016/17
Regional Playing Fields	Local Govt	\$20 million	2016/17	2020 +
Swan River Infrastructure	Local Govt	\$5 million	2009/10	2012/13, 2013/14, 2014/15
Lilac Hill open space	Local Govt	\$4 million	2009/10	2013/14
Swan River regional park	Local Govt	\$8 million	2009/10	2014/15 and beyond
Refurbishment of the Midland leisure centre	Local Govt	\$25 million	2010/11	2014/15
North Swan Park open space redevelopment	Local Govt	\$5 million	2010/11	2016/17
Beechboro Community Centre replacement	Local Govt	\$4 million	2010/11	2014/15
Public secondary school	State Govt	\$60 million	2015	2018
Ellenbrook rail extension	State Govt	\$ 1 billion	-	-
Major tertiary institution at Midland	Private	Not costed	-	-
TOD Development at Guildford	Local Govt	Not costed	-	-
Broadband Infrastructure Investment	Federal Govt	Not costed	-	-
<i>Additional needs from provision guidelines</i>				
Libraries	Local Govt	\$28 million	-	-
Aged care centres	State Govt	\$20 million	-	-
Regional TAFE	State Govt	Not costed	-	-

Total Capital Investment Need
\$1,335 million

Sources: City of Swan, Department of Education, and calculations by SGS Economics and Planning.

Note: In no way does the list of interventions above bind the City to their provision. Also due to lack of information some of the items remain un-costed.

Recurrent Services Needs

In addition to capital investment in infrastructure facilities, the recurrent services accommodated by these facilities need to be funded.

Estimating future needs for recurrent servicing is an inherently complex process, as current services spending is not reported on a local area basis by State and Federal agencies. There are also complex cross-funding agreements which further complicate the issue.

The City has earmarked the following services as being a priority:

- Early years services;
- Youth services;
- Family support services;
- Mental health services; and
- Services catering for Aboriginal and Torres Strait Islander community

In order to quantify recurrent service funding needs, SGS has assumed that the existing number of public sector jobs in the education and training, health care and social assistance, and arts and recreation services sectors in Swan are a good starting point. SGS has subsequently applied sector specific average salaries and salaries to total cost ratios to convert public sector job estimates to total recurrent spending needs.

Table 10 uses these relationships to estimate the recurrent services funding required to fully (100%) close and partially (50%) close Swan's servicing gap, i.e. in comparison to the average servicing level across metropolitan Perth. It culminates in a recurrent services funding estimate of \$229 million p.a. by 2031. Note that the required services will also include the recurrent funding for public transport services but these have not been costed.

Table 10 Recurrent Services Gap²²

		Education and Training	Health Care and Social Assistance	Arts and Recreation Services
Jobs per capita 2006	Swan	2.9%	2.7%	0.4%
Jobs per capita 2006	Metropolitan Perth	3.5%	4.6%	0.6%
Jobs per capita 2031 (Business as Usual)	Swan	1.6%	1.6%	0.2%
Target Additional Public Sector Services Required to Close the Gap by 2031				
Close the Gap by 100%		1,709	1,370	43
Close the Gap by 50%		854	685	21
Additional Annual Cost of Servicing to Close the Gap by 2031				
Close the Gap by 100%		105,000,000	117,000,000	7,000,000
Close the Gap by 50%		52,500,000	58,500,000	3,500,000
Total Additional Annual Cost to Close the Gap by 2031				
Close the Gap by 100%		\$229,000,000		
Close the Gap by 50%		\$114,500,000		

Source: SGS Economics and Planning

4.3.5 Meeting the Funding Challenge

The total annual spend on capital and services required collectively across all spheres of government to (100%) close the identified gap is \$569 million p.a. as at 2009. This reduces to \$287 million p.a. by 2031. This Whole of Government funding need falls to \$161 million p.a. by 2031 if only half the gap is closed.

In order to quantify the likely funding gap by tier of government, the City's historical and forecast budgets were assessed and utilised to produce a forecast of Council's 'total' and 'own source' revenues out to 2031. The forecast Local Government own source revenue available to fund education, health, community and recreational services/ facilities is \$43 million p.a. at 2009 and \$125 million p.a. as at 2031²³. Thus the current gap in Council's funding is around \$147 million p.a., reducing to approximately \$104 million p.a. by 2031.

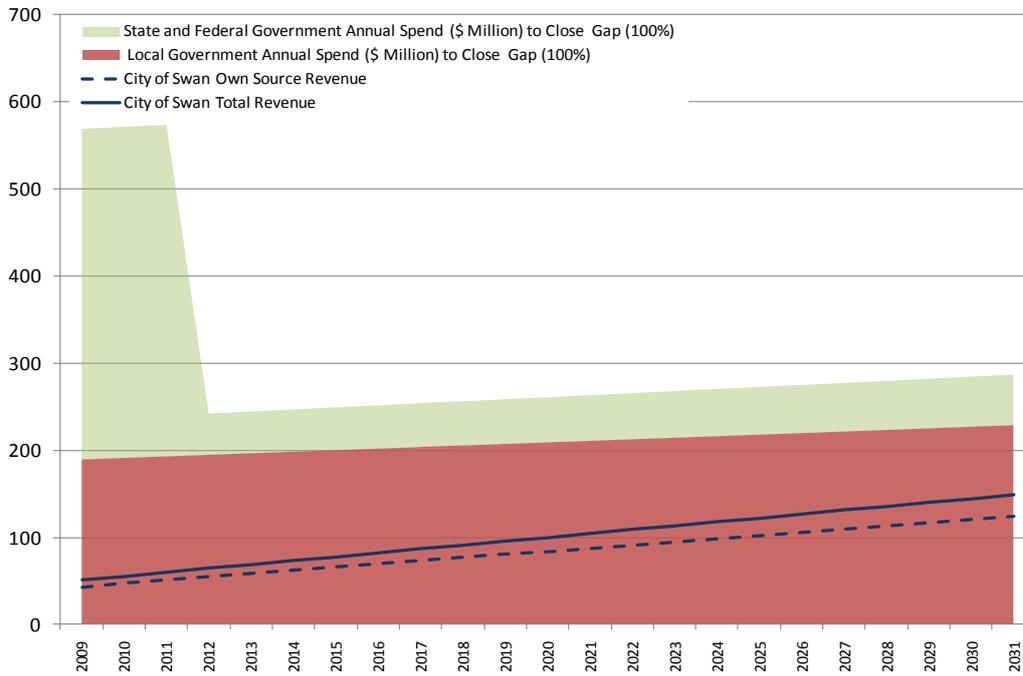
Of course the existing grant base from Federal and State Government ameliorates this gap somewhat. If we assume that the grants base continues to grow at its historical growth rates, then the gap falls to \$138 million p.a. in 2009 (\$79 million p.a. in 2031).

Figure 20 and Figure 21 convert the unfunded gaps to annual estimates, with assuming funding closes the growth area/ metropolitan imbalance by half, rather than in full.

²² Note it is assumed that under the business as usual case, there is no increases in government spend on recurrent services. The method used to calculate the recurrent services has utilised public sector jobs, due to the difficulty in measuring the publicly funded jobs.

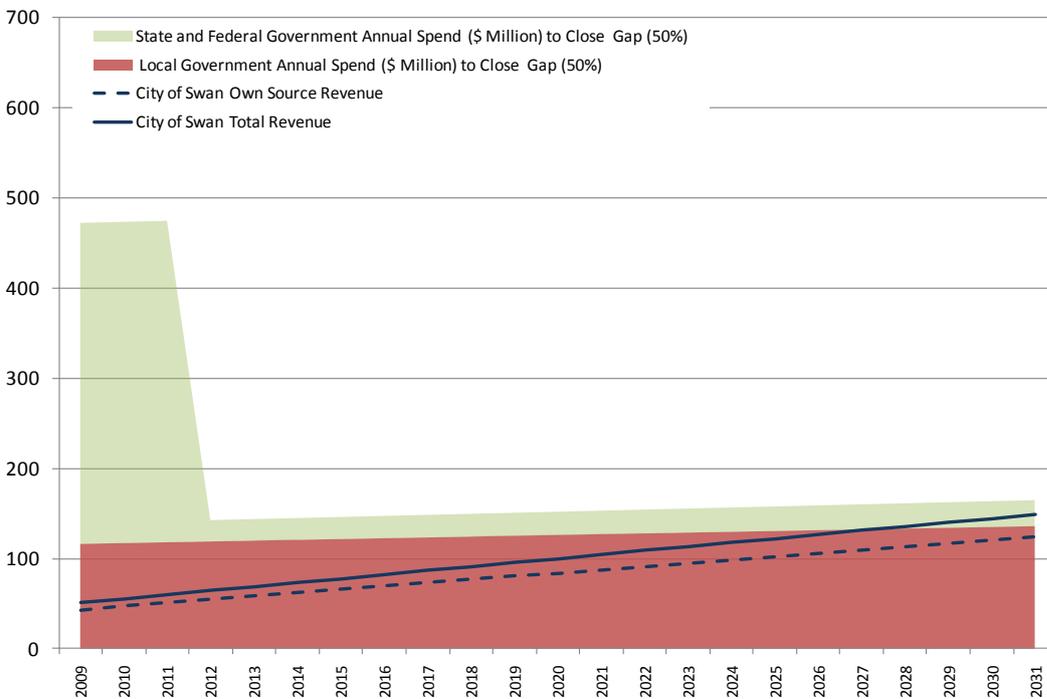
²³ The introduction of a developer contribution for new developments in the City of Swan will serve to increase the Council's own source revenue.

Figure 20 Required Annual Funding to Close (100%) Infrastructure Serving 'Gap' & Swan's Capacity to Fund (2009 to 2031)



Source: SGS Economics and Planning

Figure 21 Required Annual Funding to Close (50%) Infrastructure Serving 'Gap' & Swan's Capacity to Fund (2009 to 2031)



Source: SGS Economics and Planning

As in Campbelltown, the question that remains is who should fund this residual gap. The discussion earlier concerning the Productivity Commission's (PC) work is also relevant here. If the PC's hypothetical benchmark about raising own source revenues is adopted, Swan's 2009 own source income rises to \$48 million and to \$142 million at 2031, suggesting it still falls short of required capital and services funding.

4.3.6 Intervention Outcomes

The interventions identified above (i.e. the capital and recurrent spend) are assessed as needed for coping with the strong population growth facing the City. If these facilities and services are delivered according to the timelines suggested, it is anticipated that the municipality will be in a position to close a number of gaps readily identifiable when comparing Swan with metropolitan Perth.

Table 11 identifies how the improvements are likely to be most clearly manifested, i.e. in local jobs and service provision, in education, employment and income improvements, and in journey length improvements and transport mode changes.

The statistics for Swan highlight that the challenge for the municipality will be to improve its access to jobs and services, and avoid future disadvantage in amongst residents.

Table 11 Intervention Outcomes

Indicator	Intervention Outcomes
Job to population ratio	Improvement as local jobs provision increases with higher services based employment plus flow on effects. That is, municipal self containment in jobs builds with 3,625 additional jobs in the municipality over the business as usual scenario.
Education, health and community services and cultural and recreational service Index	Improvement included in direct intervention measures. Accessibility improvements lead to improved health, education and community integration/participation outcomes, with 1,560 additional jobs in these sectors over the business as usual scenario.
Employment self-sufficiency	The employment self-sufficiency fares well in relation to the metropolitan area, improvement in local jobs provision will ensure that it continues to perform well in the face of strong population growth.
Proportion of 15 and over with year 12 or equivalent	Better education outcomes likely, as education facilities more accessible and barriers to further education removed.
Proportion of population with bachelors degree or higher	As above.
Proportion of white collar working residents	Improved employment quality as education levels gradually flow through to Swan’s labour force quality and productive capacity. That is, regional self containment in ‘quality’ jobs builds.
Median Individual Income (\$/ Weekly)	Individual income levels grow to \$500 per week, as quality jobs successfully competed for by Swan’s labour force.
Method of Travel to Work (Car only)	Method of travel to work becomes less car dependent, as public transport services improve and the local jobs ratio increases. Distance to work also likely to reduce as surrounding region matures.
Method of Travel to Work Involving Public Transport	As above.

5 COST BENEFIT ANALYSIS

This section presents a cost benefit analysis of implementing the initiatives identified in the case studies in the previous section. That is, after a common set of cost and benefit categories are identified, the performance of each case study municipality with respect to each category is assessed.. The net benefits of intervention in each municipality are subsequently estimated.

5.1 Introduction

This section presents a cost benefit analysis (CBA) of the 'interventions' identified in the previous case study based chapter. While these interventions were numerous, they generally fall into the following categories:

- Improved public transport services, via rail extensions and complementary bus services;
- Earlier and broadened delivery of a range of social services, i.e. across the gamut of education, health, recreation, cultural and community services; and
- Urban form changes, i.e. as the social services/ jobs identified above and the spin off jobs that they induce, are focussed in strategic centres in the growth areas, enabling transit orient development around key public transport nodes.

Importantly, the identified interventions are both capital and recurrent items that are required over and above what has been committed, which is encapsulated in the Business As Usual (BAU) scenario.

5.2 Cost Benefit Framework

Table 12 lists broadly the anticipated outcomes, costs and benefits associated with funding the key interventions necessary for 'half closing' the gap between the growth area communities and their host metropolises. The costs of implementation have broadly been scoped in the previous section, enabling this section to focus on the description and quantification of the marginal benefits.

While from an equity perspective it is arguable that the 'gap' should be completely closed, this analysis does not adopt such a position purely for the sake of pragmatism.

Importantly, the benefits are speculatively scoped and take a societal perspective. That is:

- It is assumed that the interventions are **sufficient** to lead to the benefits conferred; and
- Transfer payment such as income taxes, rates, etc. are excluded from the analysis, as these are not considered benefits to society; they reflect the transfer of wealth from one section of society to another.

Table 12 Intervention Outcomes, Costs and Benefits

Outcomes	Marginal Costs	Marginal Benefits ²⁴
<ul style="list-style-type: none"> • Improved education, health, workforce participation and other community outcomes as social infrastructure services significantly bolstered. • An increase in jobs in growth areas, both directly and indirectly as a result of improved social service provision. • Higher quality jobs in growth areas as labour force skills markedly improved. • Greater centralisation of jobs in growth areas, as development channelled into strategic centres well serviced by public transport. • Improved accessibility of growth area residents to a wider catchment of jobs and services as key public transport linkages enhanced. • Growth area resident travel journeys shortened and less car dependent. 	<ul style="list-style-type: none"> ➤ Implementation capital expenditure. ➤ Implementation recurrent expenditure. 	<ul style="list-style-type: none"> ✓ Heightened regional economic productivity associated with: <ul style="list-style-type: none"> ○ Improved workforce participation rates; ○ Higher skilled labourforce; ○ A better physically linked labourforce; ○ Consolidated business nodes in growth areas; ○ Improved connections between regional business nodes. ✓ Improved choice in growth area communities with respect to: <ul style="list-style-type: none"> ○ Job opportunities; ○ Services availability; ○ Community participation; ○ Housing diversity. ✓ Travel demand savings with commensurate savings in: <ul style="list-style-type: none"> ○ Travel time; ○ Vehicle operating costs; ○ Road accidents; ○ Environmental externalities. ✓ Deferred fringe development cost as nodal and transit oriented development promoted.

²⁴ Section 5.4 discusses each of these benefits progressively.

5.3 Marginal Costs

Section 4 details the composition of capital and recurrent costs necessary for funding the interventions which halve the gap between growth areas and their metropolitan host areas. These are summarised in Table 13.

Table 13 Marginal Costs

	Campbelltown (PV @ 6%)	Swan (PV @ 6%)
Capital costs (2009 to 2031 total) <ul style="list-style-type: none"> • Local Government • State/ Federal Government 	\$29 million \$683 million	\$77 million \$1,249 million
Recurrent costs (2009 to 2031 total) <ul style="list-style-type: none"> • Local Government • State/ Federal Government 	\$215 million \$164 million	\$992 million \$311 million
Total costs (2009 to 2031 total) <ul style="list-style-type: none"> • Local Government • State/ Federal Government 	\$1,090 million	\$2,629 million

Note that PV @ 6% means the present value of the cost stream over the period to 2031 discounted back to today's values using a 6% real discount rate.

Source: SGS Economics & Planning

Note that the costs are likely to be somewhat over-stated, as the cost of the largest items (i.e. the rail extensions) has been fully attributed to Campbelltown and Swan respectively due to difficulties in apportioning these costs across areas. Moreover, from a recurrent funding perspective, all additional public sector service jobs have been treated as new costs and these are assumed only to provide services within the case study municipalities, i.e. external residents do not benefit from these social services. Both of these treatments are likely to render the cost benefit analysis as conservative.

5.4 Marginal Benefits

5.4.1 Regional Economic Productivity

Regional economic productivity will be bolstered by the Interventions as growth area residents are more likely:

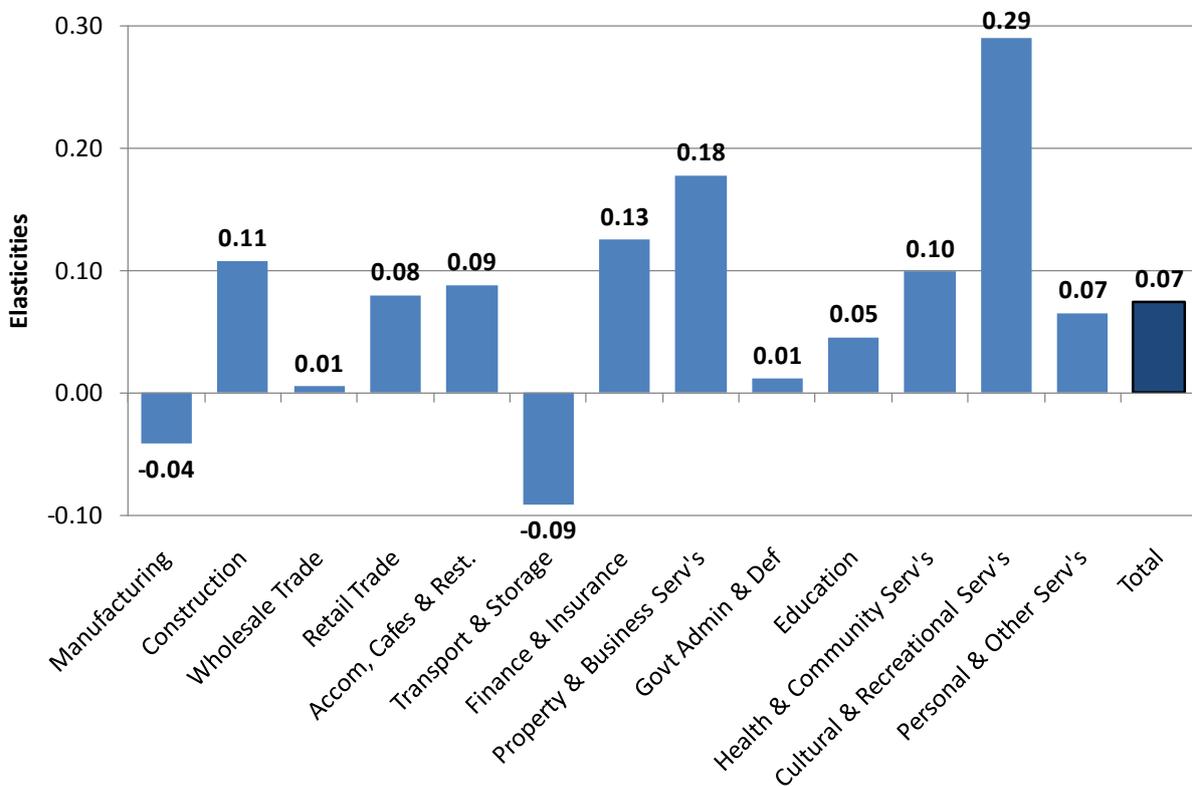
- To participate in the workforce and to gain employment, as improved skills are afforded and the physical barriers to employment are reduced;

- To work in higher value adding jobs, as education/ skill levels are higher and as the agglomeration economies within the broader region take effect as physical and non-physical linkages are enhanced.

In terms of the agglomeration effects, there is clear evidence linking the 'effective' density of economic activity with labour productivity (SGS 2009). This has been demonstrated empirically to apply in Melbourne with the relationship varying across industry types. Figure 22 shows how each industry's labour productivity in Melbourne improves as effective density doubles.

Overall, a doubling of effective density leads to a 7% improvement in productivity, with other labour intensive industries showing much stronger relationships. This is within the range of results estimated in international studies of agglomeration (refer Graham 2007).

Figure 22 Elasticities of Labour Productivity by Industry



Source: SGS Economics & Planning

A complementary perspective of agglomeration economies as identified in the economic literature is described as Matching Theory (aka Search Theory). That is, if there is a wide range of jobs on offer, a worker can search the available jobs and best match their skills to what's on offer and, potentially, maximise their wage. They also have the opportunity to work in a number of different jobs and hence gain a range of experiences (which can be seen as on-the-job investment in their education), which will also translate into higher wages.

Again there has been an empirical study estimating these impacts in Melbourne (SGS 2009). The results generated suggest that a doubling of the effective density of economic activity (jobs) translates to between a 6% and 15% increase in worker incomes, with more highly skilled occupations benefiting most.

In our case study growth areas we have assumed that the interventions half close the gap between case study area and host metropolitan salary levels. In both instances the worker incomes increase conservatively, i.e. less than 6%.

Table 14 Regional Economic Productivity Benefits

	Campbelltown (PV @ 6%)	Swan (PV @ 6%)
Higher workforce participation	\$270 million	n.a.
Higher productivity due to agglomeration, human capital enhancements	\$938 million	\$331 million
Total	\$1,208 million	\$331 million

Source: SGS Economics & Planning

5.4.2 Improved Growth Area Choice

Improving jobs provision, social service provision, housing diversity and transport connectivity in growth areas (and between growth areas and their metropolitan areas) will provide growth area residents with much improved choice. This choice, regardless of whether residents actually avail themselves of such options, is in itself viewed as a social benefit and can be measured by resident 'willingness to pay'.

To estimate this willingness to pay, SGS has regressed the premium paid on dwellings in highly accessible locations. In essence, SGS has estimated that dwelling prices are bid up by \$0.40 to \$0.80 for each and every job (alternatively an available service) that is brought into a 30 minute travel time, i.e. for households the bottom three quintiles of jobs accessibility. This household premium can be applied to growth area households with high confidence levels given the significance of the relationship found and the depth of data used in estimation.

Table 15 Improved Social Choice

	Campbelltown (PV @ 6%)	Swan (PV @ 6%)
Improved choice	\$40 million	\$318 million

Source: SGS Economics & Planning

5.4.3 Travel Savings

The case study growth areas will undeniably accommodate a significant proportion of future metropolitan population growth. Improving public transport, concentrating urban development within growth areas, and locating more jobs and services in growth areas will yield travel related benefits as trips become shorter and quicker. A greater share of trips will be made via public transport, with reduced car dependency.

Savings are likely to be generated under multiple banners²⁵:

- External congestion costs;
- Travel time;
- Vehicle operating costs;
- Road accident costs; and
- Environmental externalities.

In generating estimates for case study growth areas under these banners, some key assumptions have been made including:

- Improved public transport share of journeys to work in line with similarly serviced areas.
- Shorter vehicle trips to access train stations.
- A reduction in worker movement to the additional jobs created in the growth areas by the interventions.

Table 16 Travel Savings

	Campbelltown (PV @ 6%)	Swan (PV @ 6%)
Congestion	\$373 million	\$504 million
Travel time	\$127 million	\$154 million
Vehicle Operating Costs	\$174 million	\$235 million
Environmental externalities	\$787 million	\$1,066 million
Road accidents	\$9million	\$12 million
Total	\$1,469 million	\$1,971 million

Source: SGS Economics & Planning

²⁵ Note that these externalities relate to the wider metropolitan area and not just the case study municipality. For example congestion benefits relates to metropolitan wide congestion reduction.

5.4.4 Deferred Fringe Development Costs

Given that case study councils are strong on the desire to concentrate jobs growth and, to a lesser extent, household growth in strategic centres in the growth areas rather than ongoing urban expansion, there are likely to be significant urban development savings including:

- Network infrastructure extension savings; and
- Non-urban land savings.

In short, the greater intensity of urban forms induced via the intervention will have real resource savings which can be valued using market prices.

Market price estimates adopted by SGS include:

- Infrastructure saving per dwelling transferred from greenfield to strategic centre within the growth municipalities (\$40,000);
- Non urban land saving per hectare, valued in agricultural use (\$50,000 per hectare).

In the case study communities we have applied these rates to the level of infill residential development induced by the interventions.

Table 17 Deferred Fringe Development Costs

	Campbelltown (PV @ 6%)	Swan (PV @ 6%)
Infrastructure savings	\$22 million	\$153 million
Non-urban land savings	\$2 million	\$19 million
Total	\$24 million	\$172 million

Source: SGS Economics & Planning

5.5 Unquantified Benefit Categories

Excluded from the cost benefit analysis are the following benefits:

- **Amenity enhancements to growth areas.** Quantifying this benefit often rests with an assessment of land or house price increments which, if not argued extremely carefully, can easily be interpreted as a fall in housing affordability. Alternatively, if it is assumed that the demand for housing is relatively fixed and there isn't a structural imbalance between housing supply and demand, amenity improvements in a growth area may cause house prices in surrounding established urban areas to diminish. Again, this does not negate the benefit itself, but certainly complicates the matter and introduces possible transfer effects.
- **Social benefits and/ or cost savings** associated with improved social infrastructure services not accounted for in regional productivity enhancements (refer Section 5.4.1) or household willingness to pay measures (refer Section 5.4.2). For example, improved access to health services might lead to early detection and treatment of illness or disease and may lead to significant long term savings in the nation's health bill.

The exclusion of these items further renders the cost benefit results conservative as, for example, the estimated benefits of interventions that reduce youth disengagement in Melbourne’s interface councils could potentially return 23.6 times the government’s initial investment to society.²⁶

5.6 Net Benefit Measures

The quantified cost and benefit items discussed above have been contrasted in terms of the likely scale and timing over the 2009 to 2031 investment horizon using discounted cashflow analysis.

The performance measures generated via the discounted cash flow analysis are summarised in Table 18. Table 19 enunciates how these performance measures should be interpreted. In short:

- The benefits in Campbelltown outweigh the costs by a factor of 2.5, providing a sound return on community capital. The strong net benefit exhibited in the Campbelltown case study is a reflection of both the significant levels of disadvantage in the area to improve on as well as its effective servicing of high growth fringe areas beyond the municipality.
- The returns associated with half closing the growth area/ metropolitan gap in Swan meet minimum hurdle rates for government investment (between 3-8%), again with benefits outweighing costs. The results reflect the cost of servicing a strong anticipated population influx, with aim of preventing future disadvantage.

Table 18 DCF Generated Performance Measures

	Campbelltown	Swan
Benefit Cost Ratio @ 6%	2.51	1.06
Net Present Value @ 6%	\$1,651 million	\$164 million
Internal Rate of Return	27%	11%

Source: SGS Economics & Planning

Table 19 Interpretation of Performance Measures

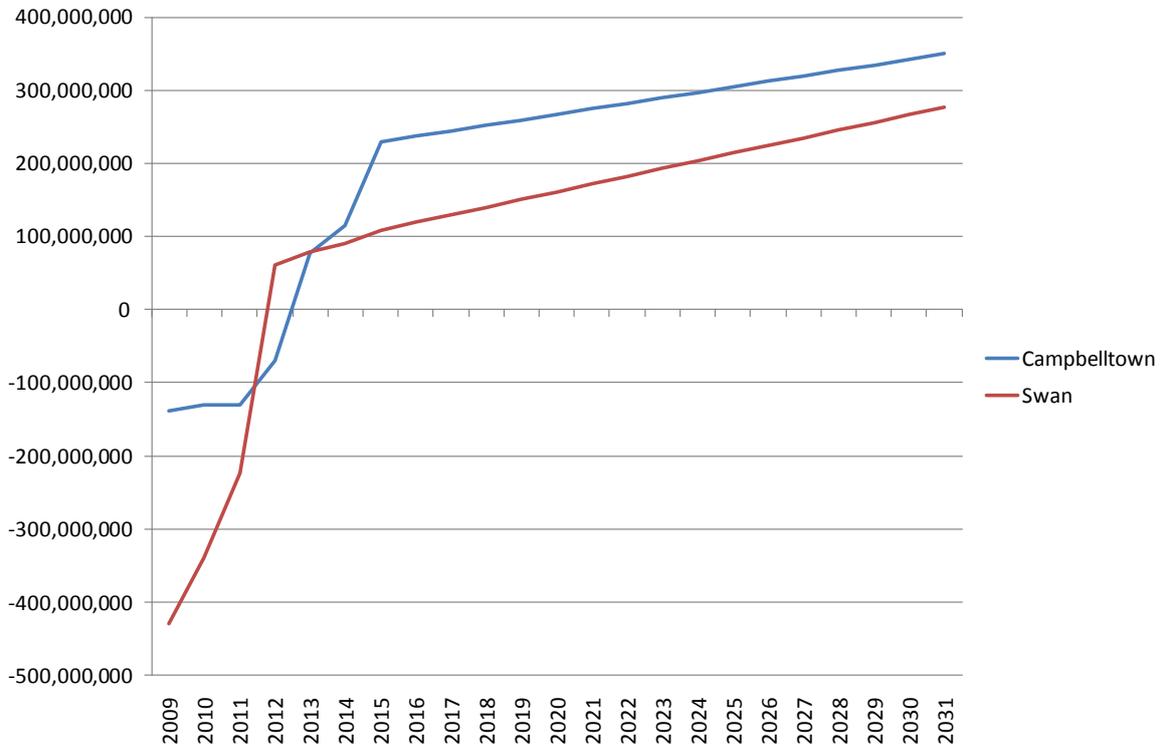
Performance Measure	Interpretation
Benefit Cost Ratio	<ul style="list-style-type: none"> • Accept projects with a BCR > 1 • Reject projects with a BCR < 1
Net Present Value	<ul style="list-style-type: none"> • Accept projects with a positive NPV • Reject projects with a negative NPV
Internal Rate of Return	<ul style="list-style-type: none"> • Accept projects with an IRR > the cost of capital (discount rate) • Reject projects with an IRR < the cost of capital (discount rate)

Source: SGS Economics & Planning

²⁶ Access Economics (2008) Staying Connected: A Cost Benefit Analysis of Early Intervention, report for the Interface Councils Group.

The flow of net benefits (i.e. benefits minus costs) in each of the case studies over the 2009 to 2031 period is shown in Figure 23. This graph clearly shows how a significant initial investment is recouped and gradually builds to net benefit flows in each of the growth areas.

Figure 23 Net Benefit Flow, Case Study Interventions (2009 \$), 2009-2031



6 NATIONAL LEVEL RESULTS

In this section the results of the case study based cost benefit analyses are scaled up to reflect national growth area needs and payoffs. This includes an assessment of national intervention costs, the net benefits of national investment and the economic impact of national interventions using variables such as GDP and employment impacts.

6.1 Estimated National Net Benefits of Investing in Growth Areas

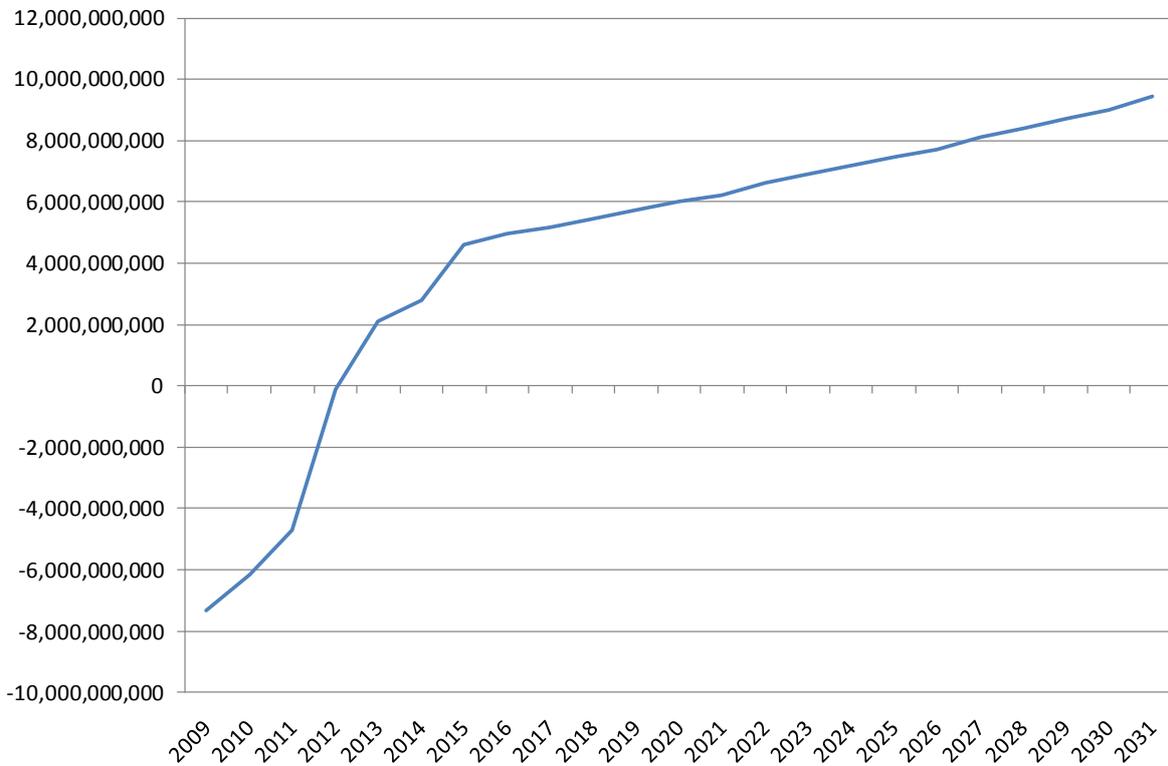
In this section the results of the case study based cost benefit analyses are scaled up to reflect national growth area needs and payoffs, i.e. assuming the gap between the growth areas and the metropolitan areas is halved. Admittedly the required investment will vary between individual growth areas, however for the purpose of illustrating the potential payoffs of investing in all NGAA member councils across the nation, the costs and benefits have been scaled up using per capita rates, i.e. those exhibited in the case studies.

If these case study results are scaled up to reflect the nation's overall growth area investment requirements, the task is very significant indeed. In fact the overall scale of investment totals to \$69 billion over the 2009 to 2031, or a present value (@6% real) of \$50 billion. Similarly, if the case study benefits are scaled up, the benefits total to \$173 billion over the 2009 to 2031 period, or a present value (@6% real) of \$78 billion.

The net present value (NPV) of this investment is \$28 billion, commensurate with a benefit cost ratio (BCR) of 1.56 and the internal rate of return (IRR) of 18%.

The flow of net benefits (i.e. benefits minus costs) of investing in all NGAA member municipalities over the 2009 to 2031 period is shown in Figure 24. As with the case studies, the flow of net benefits are obviously linked with a substantial, upfront investment in infrastructure facilities, with the ongoing benefit streams clearly outweighing the recurrent costs of improved service provision.

Figure 24 Net Benefits Flow, Investment in All NGAA Member Councils (2009 \$), 2009-2031



6.2 National Economic Contribution

SGS applied the Treasury Macroeconomic (TRYM) Model to estimate the impact of the identified interventions, as summarised in the figure above, on the national economy.

The TRYM model of the Australian economy has been developed by, and is in constant use within the Commonwealth Treasury of Australia. A number of other agencies (other researchers and analysts in both the private and public sectors) use the TRYM, as it was designed to assist in policy analysis and forecasting at the macroeconomic level. It can be used as a tool to assist with understanding the workings of the Australian economy and with economic research and analysis.

The major advantage it provides over the more simplistic Input Output Table approach to economic impact assessment is that it is a dynamic model. That is, it takes into account capacity constraints within the economy, competition for resources and labour market constraints amongst other things. For more detailed information on the mechanics of TRYM please refer to <http://www.treasury.gov.au/contentitem.asp?NavId=016&ContentID=238>.

6.2.1 Stimuli Specification in TRYM

The infrastructure investments and benefits discussed above in the cost benefit analysis need to be expressed as standard inputs to TRYM. SGS applied the following logic and assumptions to this task.

- *Infrastructure Capital & Operating Costs and Network Infrastructure Connection Savings* – Infrastructure capital & operating costs are additional investments which are likely to have positive economic impacts, while deferred extension of radial infrastructure servicing would lead to decline in investment. Hence, SGS estimated the net increase in infrastructure investment as a result of identified interventions in growth area municipalities. For the purpose of TRYM modelling, it was assumed all of the identified infrastructure investment would be undertaken by the government sector.
- *Congestion Benefits* – The Bureau of Transport and Regional Economics estimates that around 48.7% of total congestion cost in Australia’s cities are incurred by the business sector²⁷. SGS therefore applied this proportion to estimate the congestion benefits likely to be experienced by the business sector. For the purpose of the modelling, the productive efficiency of the enterprise sector under the ‘with interventions’ scenario was assumed to improve in line with the estimated business sector congestion benefits.
- *Travel Time Savings* – There is a significant body of research that highlights that on margin workers are prepared to trade off higher pay for work closer to home or lower travel distance/ time. Hence, the travel time savings were translated to savings in average wage per employee and inputted into the TRYM.
- *Greenhouse Gas Savings* – whilst the details of the emissions trading scheme is still being finalised, Australia is ultimately expected to be operating in an emissions trading environment. Participation in emissions trading would therefore increase the cost of production, thereby impacting on the productivity of Australian firms. For the purpose of the modelling, the productive efficiency of the enterprise sector under the ‘with interventions’ scenario was assumed to improve in line with the estimated savings in greenhouse gas emissions.
- *Worker Productivity Benefits* – The improvements to worker productivity was inputted in TRYM by way of improving the enterprise sector productivity. In other words, the enterprise sector productivity was assumed to improve in proportion to the estimated worker productivity benefits.

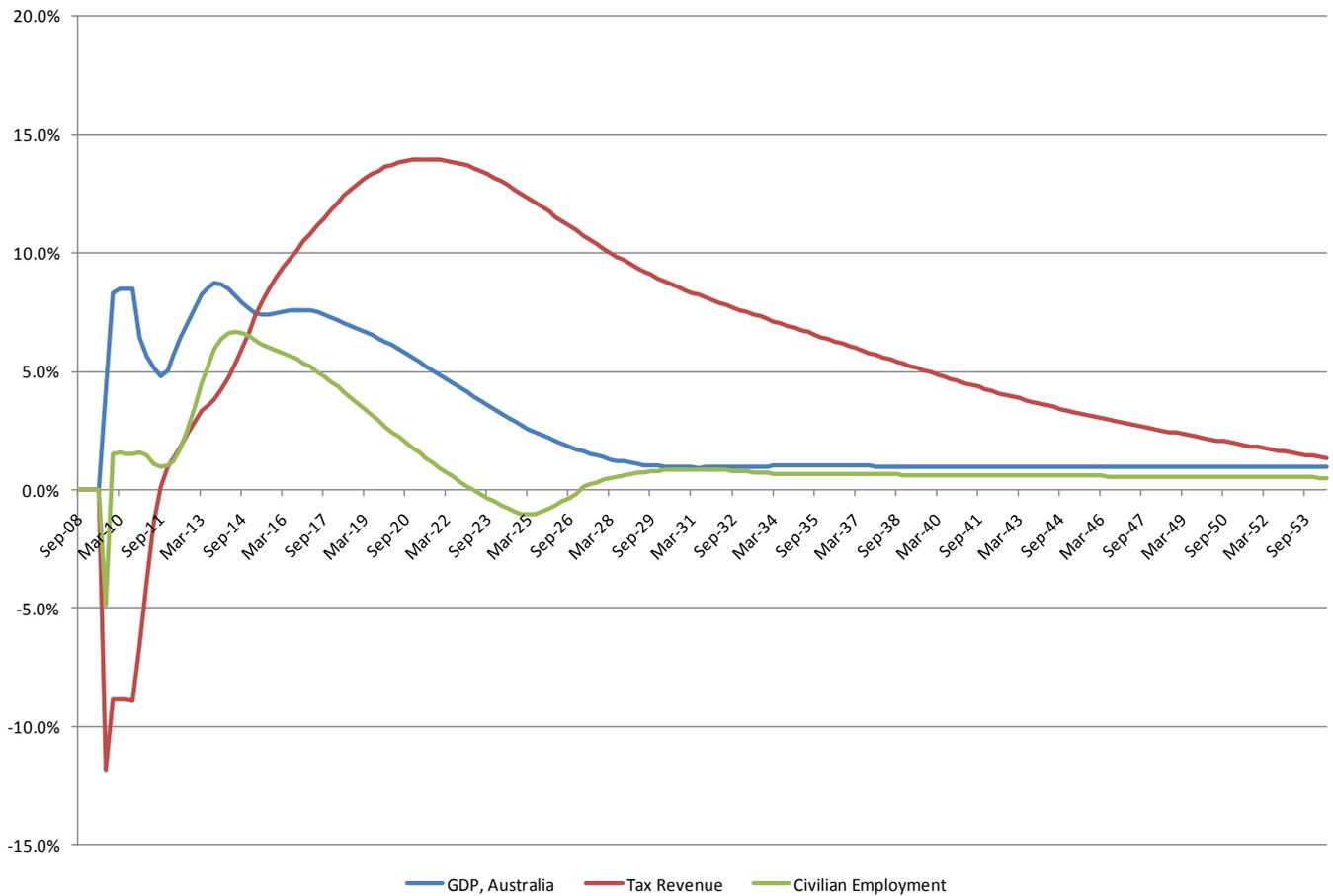
All the above described stimuli was assumed to follow the trends estimated in the cost benefit analysis from 2009 to 2031 and was further assumed to continue in linear trend fashion into the future to 2054 except for infrastructure investment, which was assumed to stop in the post 2031 evaluation period. That is, the positive economic effects extend beyond the infrastructure investment horizon.

²⁷ Bureau of Transport and Regional Economics [BTRE], 2007, Estimating urban traffic and congestion cost trends for Australian cities, Working paper 71, BTRE, Canberra ACT

6.2.2 Findings

The following chart shows that due to identified interventions, Australia’s GDP would be permanently higher by around 1% when compared to Business As Usual. Similarly, total tax revenue (including all government tax on products and production and labour income tax) would be higher by approximately 1.4%.

Figure 25 Economic Impact of identified Interventions on the National Economy, % change from Business As Usual



In dollar terms, Australia’s GDP is estimated to be higher by an average of \$18 billion per annum over the whole evaluation period to June 2054. Tax revenues are expected to be higher by \$6 billion per annum. Employment is expected to be higher by 230,000.

Table 20 Economic impact of identified interventions on the National Economy, Change from Business As Usual, \$m, Short, Medium and Long Term Impacts

	Impact on GDP \$m	Impact on Tax Revenue \$m	Impact on Employment '000
Short Term (5 years of implementation)	21,550	-188	267
Medium Term (5 - 15 years of implementation)	23,380	8,464	333
Long Term (15 years plus)	9,169	9,976	87
Average, during whole evaluation period	18,033	6,084	229

7 FUNDING OPTIONS

This section examines mechanisms through which additional investment in growth areas can be facilitated from State and Federal Governments, be they via municipal budgets or direct investment in infrastructure and services. It commences by describing how Federal and State Governments typically provide funding for local councils. Key issues associated with this funding process are identified and principles for future funding regimes proposed. Finally, funding mechanisms for delivering new money to growth areas in line with these principles are developed.

7.1 Existing Funding Programs

7.1.1 Federal Programs

The Commonwealth Government has two on-going funding programs for local government. These include **Financial Assistance Grants:** General Purpose Grants (GPG) and Local Roads Grants; as well as **Roads to Recovery** funding.

Financial Assistance Grants are allocated across Australia's local councils usually via a State Government grants commission. The general purpose component is distributed between the States and Territories according to population, i.e. on a per capita basis, whilst a local road component is distributed between the States and Territories according to fixed historical shares. In the 2009/10 Federal Budget around \$2.0 billion was made available for Financial Assistance Grants to local governments across Australia.

Roads to recovery funding is allocated via the fixed historical shares methodology. An extended program commenced on 1 July 2009, with \$1.75 billion available over five years to councils (or ~\$35 million p.a.).

While not currently an on-going program, the Federal Government committed an additional \$1.2 billion to councils across Australia via the **Regional and Local Community Infrastructure Program**, as part of the economic stimulus package. This one off funding program has two components, with funds to be largely spent in 2009-10. That is, a general allocation to all Councils plus a strategic projects component for 'shovel ready' projects.

7.1.2 State Government Grants

Specific Purpose Grants are the principal source of local government funding from the States and are tied to particular programs. State Governments do not provide any untied grants to local government.

Specific purpose payments from the States come in three types:

- From State Governments as part of State programs;
- From State Governments but using monies provided by the Federal Government;
- From Commonwealth Government direct to councils (e.g. Child Care Centres operation subsidies).

While councils receive grants for a large number of programs, the grants totals are dominated by two areas:

- Aged Care with the Home and Community Care (HACC) program the single biggest funding program; and
- Services for Families and Children with funding for child care centres (coming directly from the Commonwealth) and Maternal and Child Health facilities.

7.2 Funding Allocation Issues

The following issues have been identified in relation to infrastructure funding for service provision in growth area councils.

Inadequacy of New Capital Works Funding to Growth Areas

The methodology for Financial Assistance Grants is based on recurrent expenditure with scant regard to new capital investment needs. Whilst these grants provide a partial offset against maintenance costs, growth area councils generate significant new capital expenditure requirements associated with providing new infrastructure to support new communities. The Financial Assistance Grants system of funding does not provide for the particular needs of growth communities and does not address the infrastructure and capital expenditure requirements in urban growth areas. An allocation to growth areas outside this model is proposed.

Uncertainty over Funding from the States and Territories

Growth area councils continue to be affected by ongoing uncertainties over State and Territory funding of new infrastructure services even as State and Territory Governments release more land for development.

Current budgetary uncertainties means a more holistic approach to State Government funding commitments is required to ensure growth area councils can undertake reliable structure planning for new communities.

Lack of Autonomy in Infrastructure Service Delivery

Growth area planning processes typically require the nomination of projects required to service new urban development. These include various public open space, recreation and community facilities, roads, and drainage projects.

Growth area councils appreciate the unique infrastructure and service requirements for their communities but invariably lack the financial and jurisdictional capacity to deliver many of the projects and services required. In turn, growth area councils not only require funding contributions from State and Federal Governments but also greater autonomy to deliver and coordinate nominated infrastructure services in line with growth area plans.

Lack of Coordination in Infrastructure Delivery

Growth area planning has long been challenged by a lack of coordination of infrastructure and service delivery across the Federal, State and Local Government. This has typically been the result of:

- A lack of funding capacity in growth area councils and a consequential reliance on Federal and State agencies to provide a reliable stream of funds to deliver plans.
- The demarcation of infrastructure service responsibilities across the three tiers of Government especially in relation to social infrastructure services. Indeed there are no universally accepted benchmarks for 'minimum' or 'acceptable' standards of social infrastructure and services.
- A lack of coordination across State and Federal agencies in project development and delivery, particularly major road and rail infrastructure projects which are outside the scope of local government. Agreed implementation plans for growth areas, committing all tiers of government to investment projects and timing, are rare indeed if not non-existent.

While these issues have existed for some time, some comfort rests with the renewed COAG interest in coordination. At its April meeting, COAG agreed to establish a Task Force to identify ways of better integrating government infrastructure investment in major metropolitan cities with relevant land use planning and urban development strategies.

7.3 Principles for the Future

The following infrastructure provision and funding principles should be pursued in growth areas:

1. All governments benefit from efficient cities and should invest in them

Cities are the engine room of the Australian economy and all governments reap the benefits from their productivity. Growth areas provide an important contribution to their host cities, i.e. as residential locations of choice for urban workers. The linkages of growth areas into their metropolitan economies are critical as are the liveability of growth areas themselves in optimising this dynamic. Investment in road and public transport systems, and infrastructure which enhances 'liveability' such as public open space and recreation facilities, and community services is therefore essential.

2. The Federal Government can be involved in urban policy through the provision and funding of infrastructure

The Federal Government is the recipient of around 85% of all tax receipts in Australia, with State Governments receiving around 15%. Despite this, State and local governments have the greatest burden to fulfil in servicing urban areas, particularly growth areas.

The Federal Government has a vested interest in investing in major urban policy initiatives and in the creation of liveable communities. This is not only because of the economic benefits generated from the major cities but also because of the need to minimise the future costs of not doing so.

The contribution from the Federal Government to urban policy is best channelled into major new infrastructure investments of at least regional significance (e.g. major rail/ rail connections, hospitals, universities, etc). Funding programs should also be provided for new local infrastructure services which directly service new communities but when combined, deliver regional level amenity and liveability benefits.

3. State Governments have a responsibility as urban managers to provide certainty to growth area communities

State Governments are instrumental in shaping urban policy as principal custodians of local governance processes, planning and land management systems, public transport systems, and other portfolios relating to urban service provision.

As State Governments continue to provide for growing populations on the fringes of cities, heightened commitment needs to be shown in infrastructure service delivery. Greater commitment should be provided to funding growth area councils which ultimately deliver many of the elements of the suite of infrastructure and services.

7.4 Future Funding Mechanisms

This section sets out possible new Commonwealth and State funding mechanisms that could be utilised to assist growth area councils across Australia, including:

- A new state grants program for funding infrastructure services in growth areas;
- A federal funding program specifically designed to leverage growth area funding (such as a refined Building Better Cities Program);
- Direct federal provision of regional level infrastructure in growth areas via Infrastructure Australia; and
- Interest free loans for growth area infrastructure.

Of course both state and federal governments could also readily deliver recurrent service funding to the growth areas through the social service agencies that they fund within their jurisdictional boundaries (e.g. hospitals, TAFEs, universities, non-government sector agencies etc).

7.4.1 New State Grants Program

State Governments have long played a role in planning, coordinating and delivering new infrastructure in metropolitan areas. The State Government's role in providing land for the creation of new communities makes it incumbent on the States to make a contribution to servicing new release areas.

The States currently provide funding programs across various agencies in the areas of public open space, community facilities, regional roads, and drainage and stormwater systems. The creation of new communities on the urban fringe however necessitates a targeted response to growth area infrastructure provision, including approaches that can deliver a reliable stream of funds to growth area councils to offset new infrastructure costs.

The following actions would potentially aid State and Territory Governments to better deliver on infrastructure requirements in growth areas:

- Creating a body with the responsibility for governing the metropolitan region and/ or the growth areas in each State jurisdiction i.e. a Metropolitan or Growth Areas Authority, as the basis for State Government interaction with local councils.
- The creation of new funding programs through a Growth Areas Authority which are directed towards funding the costs of new capital investments in growth areas.
- A commitment to funding of new infrastructure prior to rezoning of new land on the urban fringe.

7.4.2 Funding Programs for Leveraging Growth Area Investment

The Building Better Cities Program (BBC) was a Federal Government initiative established under the Hawke Government in 1991 as a new national approach to managing urban development which would support the Commonwealth's objectives for more efficient and sustainable urban development.

The program was implemented via an Intergovernmental Agreement between the Federal Government and the State and Territory Governments. For its time, the BBC program was unique in its approach as it was focussed on capital works projects.²⁸ The program was discontinued from 1996 upon the first budget of the newly elected Howard Government.

Project Identification Based on Comprehensive Area Strategies

The identification of projects was informed by 26 Area Strategies. The Area Strategies needed to "demonstrate how outcomes would be achieved, consistent with the objectives of the program" and provide a cost estimate for implementation together with an estimate of funding support required

²⁸ Nielson, L; *The 'Building Better Cities' program 1991-96: a nation-building initiative of the Commonwealth Government*; http://epress.anu.edu.au/anzsog/auc/mobile_devices/ch08s02.html

from the Commonwealth. Each Area Strategy was agreed by both Federal and State Governments as the basis for funding.²⁹

In total, the BBC program provided \$816 million of seed funding for strategic projects in the 26 Area Strategies across Australia. This funding provided a partial contribution to infrastructure investments and other projects in each area with complementary funding from the respective State Governments triggered.

Provision of Funding Certainty for Metropolitan Growth Areas

The BBC program provided funding certainty once an Area Strategy (and the associated projects) was agreed. A similar principle and program would work well for the funding of infrastructure projects and services in metropolitan growth areas.

Such a program would be structured around binding growth area strategies which are costed and could form the basis of funding agreements between Federal and State Governments. In some instances, growth area structure plans which nominate necessary infrastructure services could provide the basis of these funding agreements. Regardless, infrastructure funding certainty would be provided upfront prior to rezoning or urban development occurring.

The program would typically act as leverage funding for infrastructure and other projects in growth areas with funding balances made up from an agreed State Government contribution, local council rates, borrowings, development contributions and other finance.

7.4.3 Direct Federal Provision of Regional Infrastructure

The Federal Government currently provides funding support for the provision of a variety of infrastructure services in growth area communities. The creation of Infrastructure Australia, including the Major Cities Unit, signals a greater intent by the Federal Government to become involved in urban issues.

²⁹ *ibid*

Major Cities Unit – Infrastructure Australia

The Major Cities Unit has been established to identify opportunities where federal leadership can make a difference to the prosperity of our cities and the wellbeing of their residents.

The issues surrounding the infrastructure and governance of our major cities are complex and require the input of Local, State and Federal government, the integration of services and infrastructure bodies, and industry and community participation. The Unit will provide a more coordinated and integrated approach to the planning and infrastructure needs of major cities.

Source: <http://www.infrastructureaustralia.gov.au/mcu.aspx>

This presents a unique opportunity for the Federal Government to make direct infrastructure investments in growth areas. Infrastructure Australia has developed a priority list of 'nationally significant' infrastructure projects, including new roads and rail systems. As such, Infrastructure Australia is foreshadowing playing a role in funding major road and public transport network upgrades.

IA could leverage the productivity dividends from its activities further by focusing on metropolitan 'region' significant projects. Taken together, regional level infrastructure across all growth areas is significant nationally. It is projects of regional level significance that most often fall through the funding gaps, and which would truly benefit many of Australia's metropolitan growth areas.

Such a program could operate through the Major Cities Unit as a grant provided to growth area councils for new infrastructure services, i.e. upon councils making a funding application. The program could be used to fund a variety of growth area council projects including:

- Regional level public open space projects;
- Recreation, cultural and community facilities;
- Drainage projects;
- Regional education facilities e.g. tertiary colleges, unis etc;
- Regional level road and rail projects.

The fund should be ongoing with successful projects announced on an annual basis. These programs should not redistribute funds away from other councils but instead be part of a larger pool of new funds flowing to growth areas councils and local government in general.

7.4.4 Interest Free Loans

The NSW Government has recently introduced interest free loans for local government infrastructure to help fund essential infrastructure projects. The loans are for local/ neighbourhood level infrastructure and services, with repayments linked to the development trajectories of the recipient municipalities.

While this approach will ease the immediate timing issues surrounding growth area infrastructure, it is unlikely to solve region wide or structural infrastructure deficiencies which are largely uncovered by development contributions.

Such an approach could be extended to key regional level infrastructure needs in urban growth areas. It would however be somewhat limited by local government’s capacity to generate revenue, as principal requirements will eventually need to be made depending on the detail in the borrowing conditions. Nonetheless, the delivery timing of infrastructure services currently at the margins of local government’s delivery capacity may be accelerated.

7.4.5 Funding Mechanism Strengths and Challenges

Funding Option	Strengths	Challenges
New State Grant Programs	<ul style="list-style-type: none"> • Would be targeted to growth area councils specifically • Would provide improved funding certainty if projects are announced on an annual basis • Could operate within existing Governance structures 	<ul style="list-style-type: none"> • Increased and ongoing State funding allocations.
Funding Programs for Leveraging Growth Area Investment	<ul style="list-style-type: none"> • Provides funding certainty from Federal and State/ Territory Governments • Plans would be developed with projects robustly costed 	<ul style="list-style-type: none"> • Issues around flexibility should local and regional project priorities change • Would likely require a contribution from local councils, thereby requiring funds to be set aside.
Direct Federal Provision of Infrastructure in Growth Areas	<ul style="list-style-type: none"> • Institutional structures in place to deliver funding support • Political will to invest is currently in place Federally • Improved certainty of provision 	<ul style="list-style-type: none"> • ‘Regional’ focus a major shift from ‘nationally significant’ projects but which are nationally significant when considered collectively. • Priorities susceptible to change.
Interest Free Loans	<ul style="list-style-type: none"> • Specific to growth area communities. • May accelerate delivery of local area infrastructure items. 	<ul style="list-style-type: none"> • Region wide infrastructure still the outstanding issue.

APPENDIX A

The following table lists the councils comprising the NGAA membership at the time of the study.

East Coast		West Coast	
NSW	Blacktown Camden Campelltown Liverpool The Hills Penrith	WA	Wanneroo Swan Cockburn Mandurah Serpentine-Jarradale Kwinana Armadale Rockingham Gosnells
VIC	Casey Cardinia Wyndham Melton Hume Whittlesea		
QLD	Moreton Bay Regional Council Logan City Council		
NT	Palmerston		
SA	Mount Barker		