The North Inland sub-region of the Wide Bay-Burnett region: Demographic and economic change – a perspective and prospective analysis

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A report for the
Wide Bay-Burnett Regional Organisation of Councils and the Queensland Department of State Development, Trade & Innovation

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Contents

List of tables

List of tables (cont.)

List of figures

Glossary of terms

LGA	Local Government Area
Region/regional	Wide Bay-Burnett region as a whole
Sub-regional	The group of Local Government Areas comprising the four Wide Bay-Burnett region grouping of North Coast, South Coast, North Inland, South Inland (see the following table for WBBR LGA assignments to the regions.
Aged population	A region has an aged population if the share of population aged 55 and over (or 65 and over) is relatively high compared to other comparable regions.
Rate of ageing	Rate of increase in share of population aged 55 or 65 and over.
Migrants	Anybody who comes into a region or sub-region to live permanently from elsewhere in Queensland, the rest of Australia or from overseas.
Exports and imports	Exports (or imports) of goods and services to (or from) anywhere outside the WBBR.
Intra regional exports and imports	Trade between the regions or LGAs with the WBBR.
Gross regional product	Indicator of total economic activity in a region. Formally total value added (wages plus gross profits) generated in a region.
Gross output	For an industry gross output equals value added plus imports of goods and services.
Business income	Similar to value added derived from TAX statistics data.
Productivity	Productivity is measured in two ways in the study. Either as value added (or business income) per employed person, or gross output per employed person.
High skilled occupations	Occupations requiring a university qualification.
Intermediate skilled occupations	Occupations requiring a Certificate III and above TAFE qualification.
Low or unskilled occupations	The residual occupations.
Unemployment rate	This is a NIEIR measure, derived by using Centrelink data. It includes all people receiving Newstart allowance, Mature Age Allowance, excess growth in DSP (that is, at a level greater than population growth), youth allowance as a non-student and an estimate of students on youth allowance who are, for example, unemployed and undertaking compulsory training. This measure is based on demographic trends and microsimulation.
Not in workforce households	Households with adults of working age range where no member is in employment. These households could be unemployed households, or self funded retired households, or households supported legitimately by social security, other than unemployment benefits. For example, households on disability benefits that are legitimate.

WBBR LGA assignments to the regions	
LGA	**Region**
Biggenden (S)	North Inland
Bundaberg (C)	North Coast
Burnett (S)	North Coast
Cooloola (S)	South Coast
Eidsvold (S)	North Inland
Gayndah (S)	North Inland
Hervey Bay (C)	South Coast
Isis (S)	North Inland
Kilkivan (S)	South Inland
Kingaroy (S)	South Inland
Kolan (S)	North Inland
Maryborough (C)	South Coast
Miriam Vale (S)	North Inland
Monto (S)	North Inland
Mundubbera (S)	North Inland
Murgon (S)	South Inland
Nanango (S)	South Inland
Perry (S)	North Inland
Tiaro (S)	South Inland
Wondai (S)	South Inland
Woocoo (S)	North Inland

1. Introduction

This paper summarises the results for the North Inland sub-region of the Wide Bay-Burnett region (WBBR) from a study into demographic and economic change. The paper should at the very least be read in conjunction with the summary of the project as a whole. The project is the Wide Bay-Burnett Region: demographic and economic change – a perspective and prospective analysis. The stakeholders in the study are Federal and State Government agencies and the Local Government bodies.

The objectives of the project are defined in terms of the questions that have to be assessed in terms of the study's findings. These questions are:

(i) What is the causal link between the observed positive correlation between high unemployment rates and an aged population and what is the WBBR's relative position? The associated question is, has recent WBBR performance been satisfactory?

(ii) Is it a fact that the WBBR and its sub-regions are trapped in a vicious cycle of rapid ageing and is this linked to relative poor economic performance?

(iii) If current trends continue, what are the implications of the demographic structure of the WBBR and its sub-regions?

(iv) What are the links between future demographic change and ageing?

(v) What are the core factors and associated strategies that can both reduce the rate of ageing and improve economic performance?

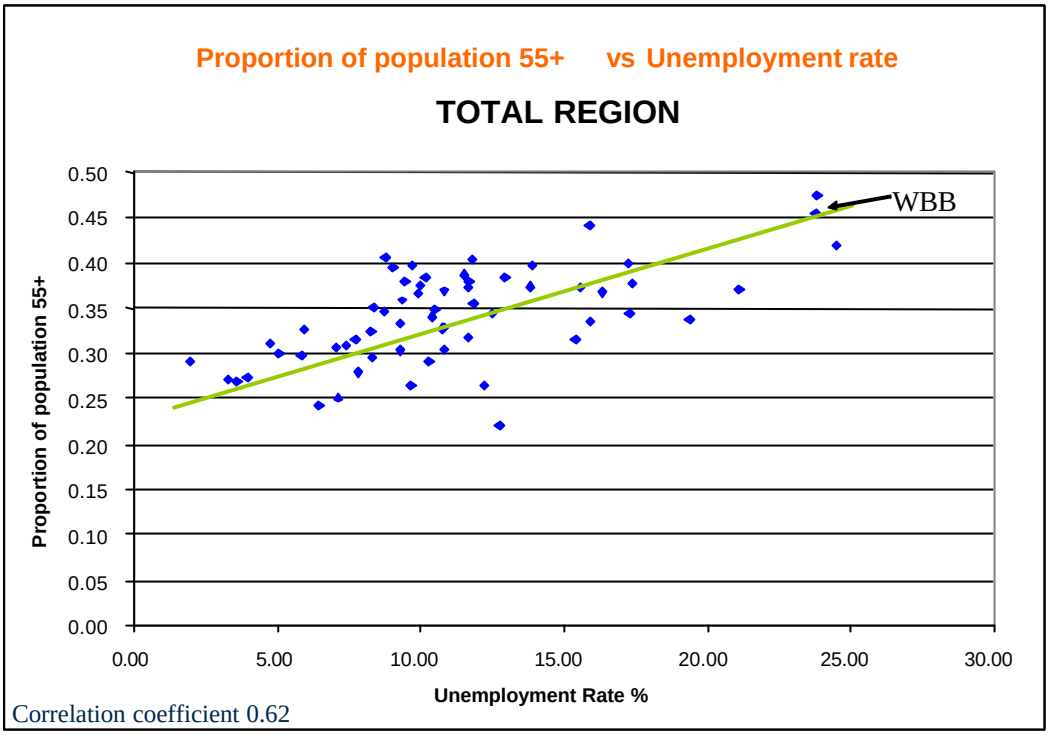
1.1 The observed links between aged regions and unemployment

Figure 1.1 shows the observed relationship across 62 comparable Australian regions between the share of population aged 55 and over and the unemployment rate. The positive correlation is strong, suggesting that for every 1 percentage point rise in the share of population aged 55 and over, the unemployment rate will increase by 0.9 percentage points. More importantly, the WBBR is one of the top regions in terms of aged demographic structure and high unemployment.

The data in the figure is for the early part of this decade. Since then, although unemployment rates have fallen across Australian regions, the fall in the WBBR unemployment rate has been relatively less. Although the rate of population growth has accelerated due to a doubling of net migration in the WBBR, this has had the effect of accelerating the rate of ageing in the WBBR because migration has roughly doubled uniformly across the adult age range. That is, the WBBR's status as being at the forefront of Australia's unemployment and ageing issues has been well and truly maintained.

In addition, like the WBBR, in general the more aged a region the greater the rate of ageing. To answer one of the questions required by the study's objectives, past and current trends indicate that the WBBR is trapped in a vicious cycle of ageing.

Figure 1.1: The relationship between the proportion of the population aged 55+ and unemployment rate



Correlation coefficient 0.62

2. The recent performance indicator outcomes for the WBBR and the North Inland sub-region

In general, both for the dub-region and the WBBR as a whole, Table 2.1 indicates that:

- average household incomes are low;
- there is a high unemployment rate;
- there are particularly high unemployment rates amongst lone households and couples without children;
- there is a high dependency on government social security benefits in household income;
- employment generation per capita is low; and
- average earnings per capita are low.

Table 2.1 Recent economic indicator outcomes – NORTH INLAND

Indicator	Unit	Period	North Inland	WBBR	Brisbane
Average household income	2001 $/week	2005	668	696	929
Average household income relative to Brisbane	Brisbane = 100	2005	71.9	74.9	100.0
Social security as a per cent of household income	Per cent	2005	19.5	26.7	13.1
Social security as a per cent of Brisbane		2005	148.9	203.8	100.0
Lone – not in employment rates working age households	Per cent	2001	44.5	47.1	27.7
Lone parent – not in employment rates working age households	Per cent	2001	12.4	15.1	13.4
Couples with children – not in employment rates working age households	Per cent	2001	16.3	15.8	6.2
Couples without children – not in employment rates working age households	Per cent	2001	28.4	30.5	9.5
Total – not in employment rates working age households	Per cent	2001	26.8	27.9	14.7
Unemployment rate	Per cent	2005	16.7	17.1	4.9
Unemployment rate per cent of Brisbane	Per cent	2005	340.8	349.0	100.0
Employment per capita	Per cent	2005	0.41	0.37	0.53

The following points summarise the differences between the regions.

(i) The South Coast has the highest unemployment rate in 2005 at 19 per cent and the North Coast the lowest unemployment rate. The two inland regions have unemployment rates between 16.2 and 16.7.

(ii) The North Coast has the highest average household income, while the two inland regions have the lowest average household income. The North Coast's average household income is estimated to be 77 per cent of Brisbane levels in 2005, while the South Inland's average income was estimated to be 72 per cent of Brisbane levels.

(iii) The two inland regions have a relatively low reliance on social security as a per cent of household income (19.5 per cent for North Inland and 22.8 per cent for South Inland), while the South Inland has the highest dependency at 31 per cent.

(iv) The South Coast has over a third of working age households of coupled without children without any member in employment and half of lone working age households are not in employment.

Over the past decade there has been a significant improvement in the regional unemployment rates across Australia as measured by NIEIR using social security recipient data.[1] However, the WBBR is the exception in that the unemployment rate has declined relatively slowly. Between 1998 and 2005 the WBBR's unemployment rate declined by 1 percentage point, or 6 per cent. For Brisbane the decline between the two years was 3.4 percentage points, or 41 per cent.

For the North Inland region the decline in the unemployment rate between 1998 and 2005 was 2.8 percentage points, or 15 per cent. Along with the North Coast, this represents the best performance out of the four WBBR sub-regions.

One of the questions posed for the study to be answered has a straightforward answer. The WBBR and its sub-regions, to a lesser or greater extent, are locked in a vicious cycle of rapid ageing and high (and relatively higher) unemployment rates.

The next question is what are the drivers of this vicious cycle?

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[1] **Employment:** This is a NIEIR measure of employment. It is the adjusted labour force minus the estimated NIEIR unemployment level.

Unemployment: This is a NIEIR measure, derived by using Centrelink data. It includes all people receiving Newstart allowance, Mature Age Allowance, excess growth in DSP (that is, at a level greater than population growth), youth allowance as a non-student and an estimate of students on youth allowance who are, for example, unemployed and undertaking compulsory training. This measure is based on demographic trends and microsimulation.

3. The drivers of migration flows around Australia

As the main report makes clear:

- the young are leaving high unemployment and low productive (i.e. low real earned income) regions for low unemployment-high productive regions;
- the older aged (that is, 55 and over) are leaving the low unemployment-high productive-high income regions for high unemployment-low productive-low income regions; and
- the skilled working age are going to high income-high productive regions, while the unskilled working age are going to the high unemployment-low productive-low income regions.

The drivers of these flows are the harsh forces of economic survival. Low unemployment-high productive-high income regions have high costs of living. That is:

- high house prices;
- high rents;
- high costs of mobility; and
- pressure to maintain high cost of living lifestyles.

This assertion is supported by the evidence in Figures 3.1 and 3.2.

Figure 3.1: Real household income and non-primary productivity

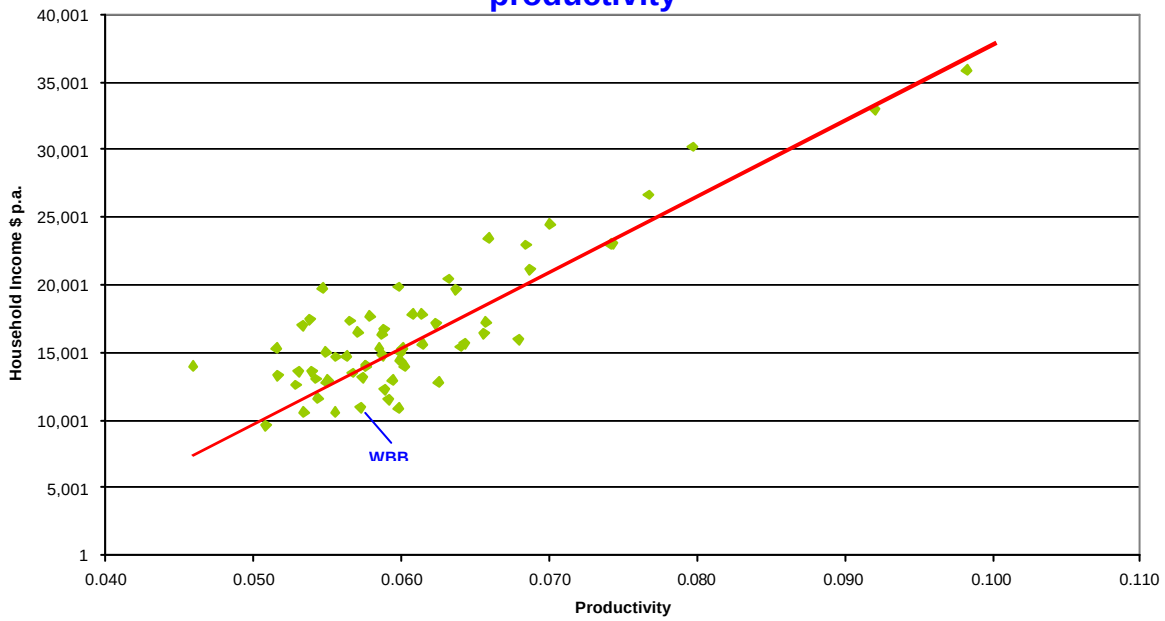
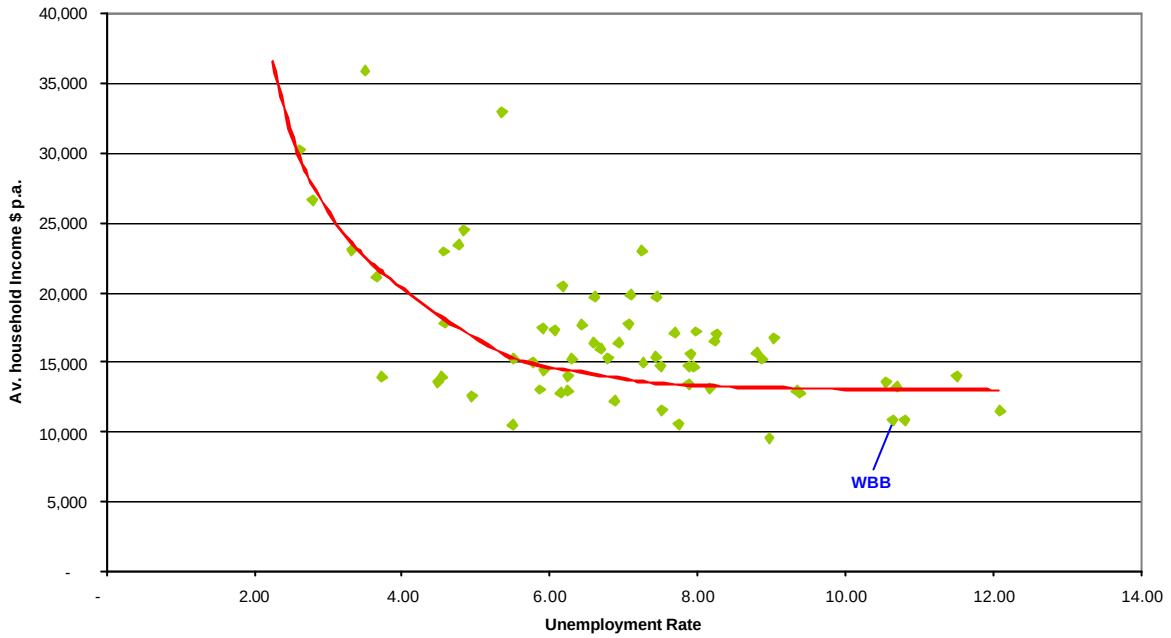


Figure 3.2: Household income and unemployment rate



Those who tend to become permanently established in this environment are those with the skills, ambition to access moderate to high income employment opportunities. At the other end of the spectrum, those who tend to leave are those who are unskilled or semi-skilled and those on relatively low income support (social security beneficiaries, self-funded retirees) because a significantly higher standard of basic living can be obtained in low productive-low income regions (which tend also to be high unemployment regions). In these regions the cost of accommodation, transport and personal support services tend to be substantially lower than the metropolitan areas.

People tend to be happier because if most in a community have roughly the same standard of living then loss of self esteem from not being able to keep up with the neighbours, friends or relatives, in terms of standard of living, is avoided. Those who are unhappy in this environment (the young, the ambitious and/or skilled working age households) tend to leave.

The above mechanism explains why high unemployment regions tend to be rapidly ageing regions.

However, it does not explain why high unemployment rates tend to persist and in relative terms increase.

Why high unemployment rates tend to persist and even increase in rapidly ageing regions is because the regions also tend to be regions with low capacity for internal skills formation. This is because either there are no universities, or if there are they are of small scale (courses narrowly specialised) with the result that most of the graduates leave the region for suitable employment. TAFE type institutions are likely to be constrained by a relatively small and stagnant young demographic (the criteria on which TAFE funding is allocated to regions), in terms of demand for services with the result that the internal supply for vocational skills falls well short of the region's requirements.

What this means is that for the regions like the WBBR nearly all the skills requirements have to be met by migration and with between 50 and 60 per cent of employment growth requiring high and inter-mediate skills, it means that only around 40 new employment opportunities out of every 100 will be for semi and unskilled workers. However, as around 40 out of every 100 working age migrants are semi and unskilled, this means that even when there is rapid employment growth (and rapid ageing from high levels of migrants aged 55 and over) sustained high levels of unemployment will persist. In addition the unemployment rate will tend to increase (and increase on a sustained basis) if there is a significant number of the older age migrants who have both the inclination and experience to successfully compete for the employment positions that would have otherwise gone to the existing resident working age unemployed, or the newly arrived semi and unskilled working age migrants.

That is, the WBBR is locked into a vicious cycle of ageing and high and relatively increasing unemployment rates (at least for some of the sub-regions) because:

- it is a relatively low productive region with relatively low cost of living;
- it has a relatively attractive sea change/tree change environment;
- it has low capacity for skill formation from domestic residents;
- the inflow of semi and unskilled working age migrants equals the growth in the net number of employment opportunities for semi and unskilled workers; and
- the high level of migrants aged 55 and over means that if only a relatively small proportion maintain labour market participation, there will be upward pressure on the unemployment rate.

4. Sub-regional migration attractiveness and the unemployment rate

If all sub-regions of the WBBR more or less require similar skill inputs structure and attract similar structure of migration inflows for working age migrants, then this would suggest that the unemployment rates across the sub-regions should be more similar (and be more similar in trend terms) than what in fact they are. That is, although this mechanism is the core mechanism for explaining the maintenance of high unemployment rates across the sub-regions there are other factors relevant in determining the variation in the performance of sub regional unemployment rates.

To complete the explanation of the link between the unemployment rate and migration flows, it is necessary to look at the attractiveness of each sub-region for different types of migrants. These are summarised in Table 4.1.

The data in the tables are ranked out of 630 LGAs in Australia. The North Coastal rank is the population weighted average rank of all LGAs in the North Coast. The lower the rank, that is the closer the rank to 630, for dominant locations means that the smaller, per capita, the largest regional centre in a locality.

The lower the rank for family/youth migration, the lower the propensity for family migrants with children to locate in an LGA.

The lower the aged migration rank, the less likely migrants aged 55 and over will locate in a locality.

The lower the rank for working elderly, the less likely migrants aged 55 and over will find employment in a locality.

The low the rank for demographic stress, the more likely the working age will leave a locality when relative employment opportunities decline.

The working elderly indicator measures the capacity of the sub-region to provide employment to those in the elderly demographic who want to work.

Table 4.1 explains why the South Coast has the highest unemployment rate amongst the working age. It has the highest attraction for aged migration but with the best capacity (out of the four sub-regions) to provide the aged demographic employment opportunities. Thus, there is greater competition between the working age and the aged for the employment opportunities that are available. Moreover, for the South Coast the unemployed working age population is least likely to leave. It is little wonder then that the South Cost has the highest unemployment rate across the sub-regions.

That is, the other three regions have a lower unemployment rate than the South Coast because they are less attractive to elderly migration, have a greater capacity to provide employment for the elderly migrants and the young and working age unemployed tend to leave. Hence, the lower unemployment rates than the South Coast.

Table 4.1 The WBBR: indicator rankings for the sub-regions' attractiveness and retention of migrants[a]

Description	North Coastal rank	North Inland rank	South Coastal rank	South Inland rank
Dominant locations	236	477	268	408
Family/youth migration	251	442	260	387
Aged migration	111	100	45	113
Working elderly	578	340	603	403
Demographic stress[b]	248	408	228	426
Overall score	245	388	228	331

Note: (a) Ranked out of 630 LGAs.
(b) Tendency for working age to leave when unemployment increases. A high number of 500 means that there is a high tendency for the working age (including the young) when the unemployment rate increases. This response tends to keep the unemployment rate low.

The reason why the inland regions are less attractive to the elderly and why the working age unemployed tend to leave (other than lack of coastline) is due to the lack of dominant locations that can offer a wide range of services to the population. From Table 4.1, the inland regions have a low ranking in terms of the WBBR and Australia in possessing dominant locations. The lack of community, social, health, education and other lifestyle choice infrastructure for the inland regions is a positive in constraining the unemployment rate, but a major negative or major obstacle when the objective becomes for the inland regions of lifting their population and economic growth rates above that of recent historical trends.

On the evidence from Table 4.1, the North Coast should have an unemployment rate between the inland regions and the South Coast. The fact that the North Coast has the lowest unemployment rate suggests that it has the highest capacity to generate employment opportunities (in terms of exporting) from the resource base of the region relative to the other sub-regions. That is, it has a higher capacity to provide employment opportunities to the resident population. This would be due to the sub-region having a greater resource (agriculture and mining) base per capita, a more efficient dominant location (Bundaberg) generating superior economies of scale and scope, and perhaps a greater per capita level of installed general infrastructure.

5. The WBBR's major bullet: enhanced productivity

The main report makes clear that the core driver, in terms of lifting WBBR and the sub-regions' economic performance outcomes in a sustained manner, is to enhance productivity and productivity growth rates. Productivity is the major bullet for:

- reducing the rate of ageing towards the national average;
- closing the gap in real average household incomes relative to Brisbane; and
- increasing the inflow of working age skilled workers.

Table 5.1 outlines how productivity enhancement is the key driver for the region and sub-regions reaching their core economic objectives.

Table 5.1 The link between increasing WBBR productivity and core regional objectives

Objective		Productivity facilitation
1.	Retain the young	More quality (higher paying, more interesting) employment available in region.
2.	Attract younger migrants	As for 1. Lower financial risks. More likely home prices will maintain parity with elsewhere in Australia.
3.	Attract skilled migration	As for 2.
4.	Increase capacity to export	Increase business profitability. Increased capacity to undertake R and D, training and marketing to identify and exploit export markets.
5.	Diversify the economic base	Increase incentives for investment (high profitability) and lower risks. The more productive industry clusters, the more likely they will grow. Entrepreneurs more likely to import replace goods and services (e.g. from Brisbane, or from Coastal WBBR for Inland regions).
6.	More balanced demographic outlook	A higher productive region means that the attractiveness of the region for the older age migrants will decline because of higher cost of living from real wages, real rents and house prices.
7.	Improve the strength of local government finances	High productivity via higher incomes means that households will have greater capacity to pay rates and the capital value of businesses will be greater.

5.1 The reasons for the WBBR's low productivity

The main report makes clear that the WBBR has low productivity and, as a result, an earnings per hour relative to Brisbane. As a whole the WBBR's average earnings per hour are 25 per cent below Brisbane levels, with the Coastal regions being 22 per cent below and the Inland regions 34 per cent below Brisbane levels.

The main report also makes clear that the core reason why productivity is lower is because out-of-region exports per employed person are low. In turn exports are low (chicken and egg causality dilemma) because the skill base of the region and its sub-regions are low.

In particular the business skill base as represented by global knowledge workers, is particularly low as Table 5.2 indicates. Table 5.3 defines the range of global knowledge worker occupations.

Table 5.2 Trends in share of global knowledge workers' share of total employment (per cent)

	1996	2001	2005
North Coast	4.8	5.2	5.1
South Coast	4.7	4.9	5.0
North Inland	2.8	2.1	2.2
South Inland	3.5	3.5	3.5
Wide Bay-Burnett	**4.3**	**4.4**	**4.5**
Brisbane	12.4	16.0	18.5
Gold Coast	6.9	8.1	9.7
Noosa	5.5	6.2	7.6
Queensland	**7.9**	**9.6**	**10.8**

Table 5.3 Global knowledge occupations – ASCO 4-digit categories

Importers, Exporters & Wholesalers	Computing Professionals
Resource Managers	Miscellaneous Business & Information Professionals
Finance Managers	Human Resource Professionals
Information Technology Managers	Librarians
Sales & Marketing Managers	Mathematicians, Stat'ns & Actuaries
Policy & Planning Managers	Business & Organisation Analysts
Media Products & Artistic Directors	Property Professionals
Professionals	Other Business & Information Professionals
Science, Building & Engineering Profs.	Legal Professionals
Natural & Physical Science Professionals	Economists
Chemists	Designers & Illustrators
Geologists & Geophysicists	Journalists & Related Profs
Life Scientists	Authors & Related Professionals
Medical Scientists	Film, TV, Radio& Stage Directors
Other Natural & Physical Science Professionals	Media Presenters
Building & Engineering Profs.	Scientists, Engineers & Related Assoc Profes
Electrical & Electronics Engineers	Medical & Science Tech Offs
Business & Information Profs	Medical Technical Officers
Accountants, Auditors & Corp. Treasurers	Science Technical Officers
Accountants	Financial Dealers & Brokers
Auditors	

Corporate Treasurers	Financial Investment Advisers
Sales, Marketing & Advertising Profes.	Project & Program Administrators
Marketing & Advertising Professionals	Computing Support Technicians
Technical Sales Representatives	Library Technicians

5.2 The virtuous cycle: realised high productivity growth enables future higher productivity growth

The key to recognising that a long run improvement in economic and demographic performance is possible for the WBBR and the sub-regions is to understand that realised short term improvements in productivity (from whatever cause) enables future higher productivity growth. This virtuous cycle is outlined in Figure 5.1.

Realised short term improvement in productivity will increase future productivity growth because:

- increased real wages, thereby allowing firms to employ higher skilled workers and attract higher skilled workers to the region;
- increased real profits enabling increased investment and capacity installed;
- fund the R and D, marketing expansions, training programs, etc. to increase exports; and
- accelerate the growth in domestic demand increasing the incentive and opportunities for import replacement. The growth in exports, domestic demand and import replacement will all contribute to increasing productivity growth rates from economies of scale and scope and economics of agglomeration from increases in cluster density.

That is, once productivity is lifted (relative to Brisbane) then it becomes much easier to sustain higher productivity growth rates in the region relative to the past growth rates and relative to Brisbane.

5.3 Pathways to higher productivity

The initial instrument to kick-starting (that is, accelerating) the rate of growth in productivity from past trends are listed in Table 5.4. In the main the instruments are self-explanatory in terms of their impact on productivity. The regional integration instrument, however, requires elaboration.

Public sector regional governance integration by creating larger public sector operational (principally local government) entities will unlock economies of scale and scope, which will increase productivity. However, perhaps the largest gains from public sector regional integration will come from network expansion. From the public sector perspective, strategic decisions will be made more from a regional perspective with regional level resourcing, which will unlock additional productivity enhancement.

Mirroring and driven by the integration of public sector networks will be similar consolidation in private sector networks, which will take more of a regional coverage and perspective. This will facilitate trade between the sub-regions (that would otherwise have gone to imports) and would allow greater efficiency in organising local supply chains for exporting firms.

Figure 5.1: The dynamics of the virtuous cycle of productivity growth and overall growth

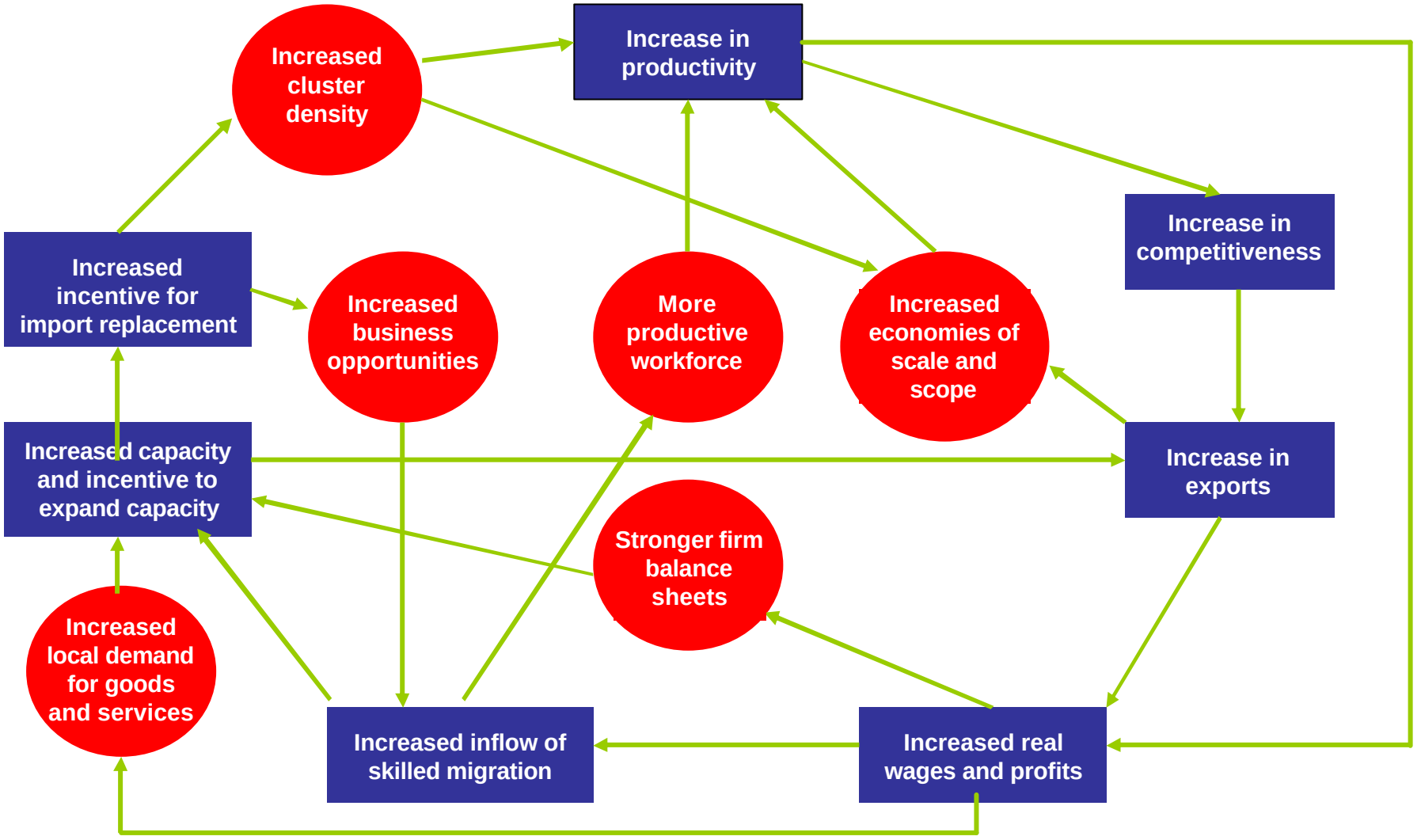


Table 5.4 Instruments to accelerate productivity growth		
		Direct and indirect benefits
1.	Communication infrastructure	1. Increased productivity. 2. Identification of export markets. 3. Increased capacity to innovation. 4. Facilitate regional integration. 5. Increase proximity to suppliers and increase (de facto) cluster density.
2.	Transport infrastructure	1. Increase transport opportunities which will increase productivity for all industries. 2. Unlock private sector investment (mining, agriculture, manufacturing processing). 3. Leverage up activity for existing transport services (ports, etc.).
3.	Other infrastructure (education, health, community and government services)	1. Expands domestic economic activity by import replacement. 2. Attracts and retains the young. 3. Strengthens the skill base of the economy. 4. Increases the liveability of the region and attracts skilled households. 5. Creates business platforms which sustain growth by switching from import replacement to exporting. 6. Expands innovation capacity of region.
4.	Regional political and economic integration	1. Economies of scale and scope and increases in intensity of skill input. 2. Public sector regional network culture. 3. Private sector enterprise regional network consolidation. 4. Enhanced import replacement activities. 5. Export facilitation.
5.	Training programs	The development of local training programs to upgrade the skills of those in employment and to increase the employability of residents not in employment.
6.	Entrepreneurial development programs	Programs to help local actual, or would-be, enterprises to exploit import replacement potential and for established businesses to expand sales outside the region.
7.	Major investment attraction	Programs to facilitate major private investments to exploit the material and/or human capital resource base of a region.

6. The WBBR and its sub-regions: four alternative futures

The study developed four alternative futures for the WBBR and its sub-regions. The four alternative futures or scenarios were entitled:

- God's waiting room;
- Connecting with the world;
- Two speed development; and
- Bumbling along (or current trends).

The dynamics of each of the scenarios will be discussed in turn.

6.1 The God's waiting room scenario

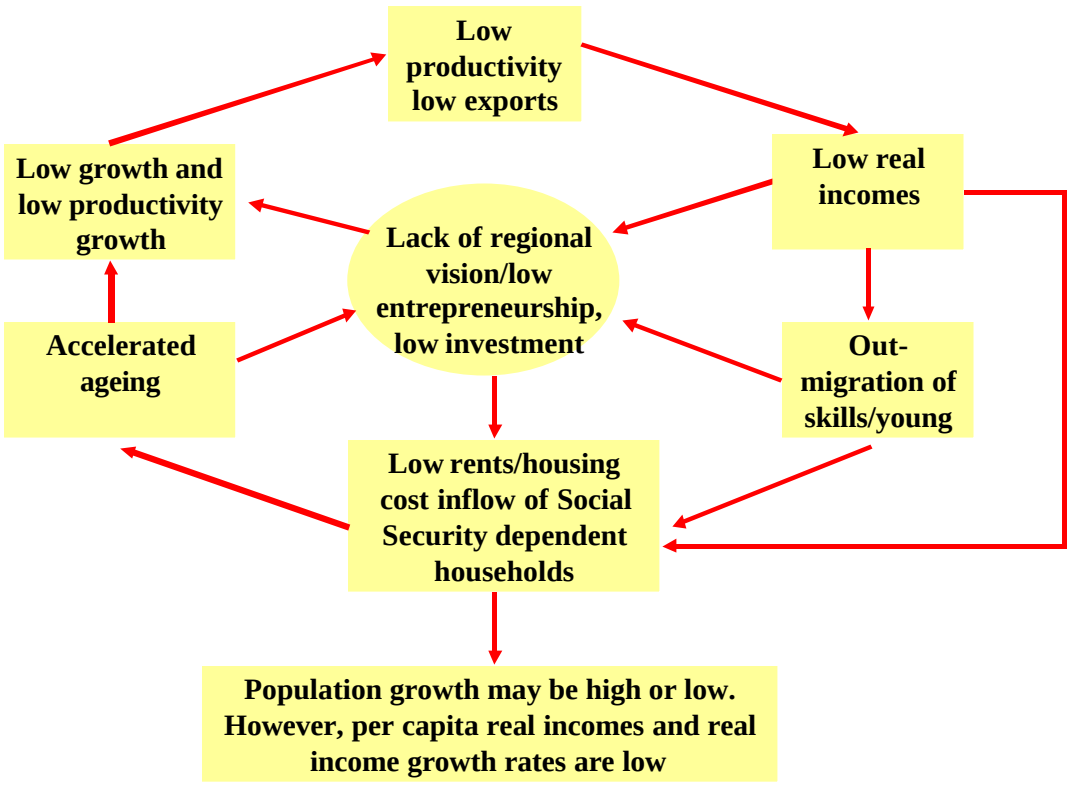
In terms of economic outcomes and accelerated ageing, the God's waiting room case has the poorest outcome. The dynamics of the worst case, that is the God's waiting room scenario, are outlined in Figure 6.1. Table 6.1 gives additional features of not only the God's waiting room scenario but also the other three alternative futures.

Under the God's waiting room scenario the negative economic impacts of an aged society dominate. Older workers result in a decline in productivity from ageing itself and from unwillingness to retain and reskill. The entrepreneurial talent pool declines and businesses are less willing to assume risk. The needs and constraints of the relatively poor (compared to professional workers) begins to dominate the economic outlook.

The young see little future and leave, and the working aged skilled households require high incomes to migrate to the region to compensate for the future risks for their families. That is, loss of capital values on dwellings and no future for children. Business increasingly cannot afford the costs to attract skilled workers and investment opportunities are foregone and businesses have to close because of inability to attract skilled labour. Imports of goods and services increase to offset the loss of domestic supply.

The limited growth prospects for the region discourages governments from investing aggressively in the future of the region, which further undermines competitiveness of the region and leaves unrealised export opportunities. The poor economic performance reduces cost of living, increasing the inflow of aged and unskilled migrants. The vicious cycle continues.

Figure 6.1: WBB – The dynamics of the low growth God's waiting room scenario



6.2 The Connecting with the world scenario

The scenario with the best demographic and economic outcomes for the region as a whole and for each of the four sub-regions is the Connecting with the world scenario. The longer run dynamics of the Connecting with the world scenario are the same as those described in Figure 6.1. The shifting of the WBBR towards the Connecting with the world scenario is achieved by very aggressive application of the instruments listed in Table 6.1 over the next five to ten years. This would require a significant increase in both public and private sector investment in the region.

At the heart of the Connecting with the world scenario is the development of best practice communications and transport infrastructure in the region. Communications, roads, rail and port facilities are brought up to the standard necessary to unlock all major private investment project opportunities and to the standard where small and medium businesses do not experience major disadvantages in comparison with competition elsewhere in Queensland. This would include such projects as the upgrading of the Bundaberg to Monto railway line to unlock the coal and mineral resources for export and the associated expansion of the port.

Table 6.1 The WBBR: Four alternative factors

Moderate ↓ Retiree's playground ↓ Strong

Bumbling along (current trends)	Connecting with the world
1. Economic refugees, sea change/tree change and aged migration flows in line with historical trends. 2. Some formal regional governance changes but weak social and political regional network integration occurs. Low proportion of foreign migrants. Weak expansive networks. 3. Sea change/tree change in economic refugee culture and values. 4. Not in my backyard political culture and hegemony of established interests. Difficult to get investment projects implemented. 5. Weak political leadership. Long lags in infrastructure provision. Many growth opportunities lost. 6. Convoy development regional dynamics. 7. Development instruments focus on major projects (when they can be located in isolated areas) and the lifestyle choice of the dominant culture. 8. De facto regional goals are a mixture of environmental production and fortress WBBR.	1. Entrepreneurship – commercial culture/expansive networks/mutual obligation. 2. High skill based migration and high rates of skill formation. 3. Infrastructure provision drives economic growth, not lags it. 4. Locomotion development. At any point in time the best opportunities are exploited irrespective of where they are in the region. 5. Strong political leadership – vision driven regional focus on a foundation of entrepreneurial culture. Aggressive political culture. 6. Representative political culture. Full regional integration and network consolidation. 7. Import replacement opportunities strongly exploited. 8. Export driven development. Regional goals are best practice productivity to reduce income differentials with other regions. Weak lifestyle choice.
God's waiting room	**Two speed development: dual economy and society**
1. Accelerated ageing/older aged migrants and economic refugees 2. Flight of the young consumerism. 3. Low rates of skill formation. Many lost investment opportunities. Local social network isolation. 4. Not in my backyard or anywhere else either. Strong conservative culture for either selfish or environmentally driven motives. 5. Convoy development in the region produces similar poor performance outcomes for most localities. 6. Weak regional and sub-regional leadership lack of regional integration. Local area primacy. 7. Lifestyle choice homogeneity. Low income lifestyle dominates. 8. Fortress WBBR. 9. Dominant public sector dependency. Weak export growth (except tourism) and increased import penetration further weakens existing supply chains. Low mutual obligation.	1. Balanced lifestyle choice. Expansive networks coastal regions. Inland regions' network isolation. 2. Increase in skills formation in coastal regions. 3. Increasingly unequal regions. Households forced out of coastal regions as cost pressures impact who migrant to inland regions. 4. Strong political leadership vision driven but sub-regional focus on coastal regions. Inland weak leadership. 5. Some optimal design in sub-regional integration in coastal regions. 6. Partial connecting with the world strong in coastal regions weak in inland regions. 7. Inland regions become relatively more public sector dependent. Inland inter-governmental relationship more important than regional networks. 8. Locomotion development coastal/ convoy development inland.

→

Weak **Export intensity strong**

Table 6.2 Economic drivers and focus of sub-regions for Connecting with the world scenario	
North Inland	**North Coast**
Mining (gold, coal, minerals). Agriculture. Food processing.	Agriculture. Processing. Transport services. Sub-regional service centre (health, distribution). Physical infrastructure focus (roads, rail, ports).
South Inland	**South Coast**
Quality lifestyle. Regional integration (maximum leverage from Coastal region development. Export of services to Coastal regions. Expansion of business services and some health services by import replacement. Transport services and other manufacturing.	Tourism. Health. Education. Business services. Quality lifestyle. Soft infrastructure focus (education, lifestyle, creative capital). Communications technology.

Under the Connecting with the world scenario there would also be expansion in social, education, health (research) and community infrastructure, especially in the South Coast region, to maximise this area's attractiveness to high skilled working age households, both in terms of livability but also in terms of a driver to expand the export of a range of health related and knowledge based services. In the South Coast region health and business services becomes increasingly important.

In the North under the Connecting with the World scenario, the benefits from current irrigation capacity is fully exploited with private investment in channels, land consolidation and crop development, maximising the yield (that is, productivity) from the recently completed dam and further potential water storage projects. As a result, significant additional agricultural and manufacturing processing investments are made.

Under the God's waiting room scenario the failure to restructure the North's (that is, Inland and Coastal) agriculture sector to take advantage of the current potential results in much of the potential being lost and only limited additional processing investment undertaken.

6.3 The Two speed development scenario

The Two speed development scenario allows coastal regions to exploit their direct potential of connecting with the world. However, little of infrastructure investment and limited regional integration results in the Inland regions from not being well connected with the world via the coastal regions. Resource investment (mining, food processing, etc.) are foregone in the Inland regions, compared to the Connecting with the world case. The Inland regions are also limited in their capacity to export goods and services to the Coastal regions as well as, of course, outside the region. Skilled migrants shun the Inland regions.

Real incomes fall relatively in the Inland regions, compared to the Coastal regions and aged and low skilled working age households are forced out of the Coastal regions into the Inland

regions, with the Inland regions' growth dynamics being much closer to the God's waiting room scenario than the Connecting with the world scenario.

However, the performance outcomes for the Coastal regions under the Two speed development scenario is less favourable than the Connecting with the world scenario. This is because the direct and indirect economic benefits that flow to the Coastal regions from strongly performing Inland regions are foregone, which reduces the Coastal regions' capacity to grow exports, productivity, total activity and real incomes.

6.4 The Bumbling along scenario

The Bumbling along scenario assumes that current trends continue in terms of the structure of migration flows, skills formation, infrastructure provision lags and only limited regional integration and the adoption of a culture of maximising the opportunities for the region as a whole.

In terms of performance outcomes, the Bumbling along scenario is better than the God's waiting room scenario, but inferior to the other two scenarios, at least for the Coastal regions.

7. The alternative futures: migration flows and demographic outcomes

Table 7.1 shows the net migration flows for the total WBBR. The data in the table shows the annual net migration flows for the 1996 to 2001 period and for the four alternative futures scenarios.

Over the historical 1996-2001 period total net migration into the region was 2,200 per annum, of which half were people aged 55 and over. For the current trends, Bumbling along scenario, the net migration inflow increases to 4,900 per annum for the period 2006 to 2030. The increase reflects the growth in the general migration flows projected over the next quarter of a century, due to the expanding Australian and Queensland population. The population aged 55 and over, over the next quarter of a century will double. Hence, a current trend scenario interpreted in terms of the WBBR maintaining a roughly constant share of Australia's migration market for those aged 55 and over would require that the level of net inflow of migrants aged 55 and over into the WBBR also double.

Over the last three years, the level of net inflows into the WBBR by age range have been near the Bumbling along scenario settings.

Table 7.1 Demographic outcomes by scenario (000's per annum net migration inflow) – 2006-2030 – TOTAL WBBR

	1996-2001	Bumbling along	God's waiting room	Connecting with the world	Two speed development
0 – 24	-0.2	0.2	0.0	1.0	0.7
25 – 54	1.3	2.2	1.5	3.6	2.7
55+	1.1	2.5	4.1	2.3	2.3
Total	**2.2**	**4.9**	**5.6**	**6.9**	**5.8**

For the God's waiting room scenario, the level of working age net migration inflows declines by one third, compared to the Bumbling along scenario level. As noted earlier, this is due to the poor productivity outcomes under the God's waiting room scenario and relatively falling real wage rates, either discouraging skilled migrants from settling in the WBBR, or encouraging residents to emigrate in search of higher quality employment.

The decline in working age net migration inflows under the God's waiting room scenario is more than offset by an increase in net migration inflows of those aged 55 and over. For the WBBR as a whole, the inflow increases to 4,100. This reflects both pull and push factors. The pull factor is that under the God's waiting room scenario, the productivity/real wage outcomes and the lowest and there is a decline compared to Brisbane levels. This increasing gap in the cost of living will encourage greater older age migration flows from increasingly higher productive regions into lower production regions. The push factor stems from the fact that regions, such as the Sunshine Coast and Gold Coast, which captured a significant share of older age migrants in the past, are likely to suffer a decline in share as the regions become better integrated into the Brisbane economy, thereby allowing significant increases in productivity in the regions compared to the WBBR. To older age low income migrants these regions will become less attractive compared to the WBBR. That is, unless the WBBR can significantly lift its productivity performance, the net migration inflow of those aged 55 and over

into the WBBR is likely to be much closer to the 4,100 per annum level than the 2,500 level of the Bumbling along scenario.

Under the Connecting to the world scenario, productivity growth in the WBBR is significantly changed and there is a narrowing of the real income/cost of living differential between the WBBR and Brisbane. This reduces the net inflow of migrants aged 55 and over from 4,100 to 2,300, while the overall increase in high production/high income employment increases the net inflow for the working age migrants from 2,200 of the Bumbling along scenario to 3,600. Moreover, the latter long run prospect for the region needs to retain the young and attract skilled young workers to the region. At the very least there will be a higher return rate for the young who leave the region for tertiary education elsewhere.

The Two speed development scenario lies between the Bumbling along and Connecting with the world scenarios. The aged inflow of migration aged 55 and over for the Two speed development scenario remains at the Connecting with the world scenario level because the two regions that accept the bulk of the older migrants, that is the North and South Coast sub-regions, do lift their productivity significantly compared to the Bumbling along scenario.

However, the North and South Inland sub-regions do not lift their productivity performance. As a result, the lower skilled labour attractiveness of these sub-regions, compared to the Connecting with the world scenario, results in a fall off of working age migration flows into these regions. The fall off in economic performance for the Coastal regions under the Two speed development scenario, compared to the Connecting to the world scenario, because of the poor performance of the Inland sub-regions will reduce working age migration requirements. Hence, the net decline in working age range migrants from 3,600 under the Connecting with the world scenario, to 2,700 for the Two speed development scenario.

Turning to the sub-region outcomes.

The sub-regional outcomes for North Inland are given in Table 7.2.

Table 7.2	**Differences in demographic outcomes by scenario – net migration flows (average 2006-2030) – NORTH INLAND**				
	1996-2001	**Bumbling along**	**God's waiting room**	**Connecting with world**	**Two speed development**
0-24	-0.2	**-0.1**	-0.1	0.0	0.0
25-54	0.1	**0.2**	0.2	0.4	0.2
55+	0.0	**0.1**	0.2	0.2	0.3
Total	**0.0**	**0.2**	**0.3**	**0.6**	**0.5**

For the Coastal regions, under the Two speed development scenario, the net inflow of migrants aged 55 and over falls between the Connecting to the world and the Two speed development scenario. This is because the relatively poor performance of the Inland regions under the Two speed development scenario induces an increase in older aged migration flows from the Coastal sub-regions to the Inland regions. As a result, the net migration of those aged 55 and over increases for the Two speed development scenario, compared to the Connecting with the world scenario, for the Inland regions.

For the Two speed development scenario for the Inland regions, the net migration inflows of working age migrants falls, compared to the Connecting with the world scenario, back to the levels of the Bumbling along scenario. For the Two speed development scenario the fall in net working aged migration inflows, compared to the Connecting to the world scenario, is less than 20 per cent.

7.1 Alternative futures: demographic outcomes

The outcomes for the growth rates of population and the working age population, and for the old age dependency ratio and share of population aged 65 and over, are given for the region as a whole in Table 7.3 and for North Inland in Table 7.4.

If there were zero net immigration across all age ranges, the region's population would stabilise after 2010. That is, without positive net migration, births would equal deaths. Between 2006 and 2030, the rate of population growth for the Coastal regions and North Inland would be negligible. The South Inland has the highest national (that is, zero net migration) growth rate. On the basis of zero net migration, the average annual population growth for South Inland between 2006 and 2030 would be 0.3 per cent per annum.

This means that the rate of population growth will vary in accordance with the level of net immigration and the age structure of the inflow.

Table 7.3 Demographic outcomes by scenario – TOTAL REGION

Scenario	Population growth rate 2006-2030	Working age population growth rate 2006-2030	Old age dependency 2006	Old age dependency 2030	Share of population 65+ 2006	Share of population 65+ 2030
Bumbling along	**1.4**	**1.0**	**32**	**65**	**17**	**32**
God's waiting room	1.5	0.7	32	83	17	36
Connecting with world	2.0	1.8	32	53	17	24
Two speed development	1.7	1.4	32	58	17	30
Brisbane City 2026						**14**

Table 7.4 Demographic outcomes by scenario – NORTH INLAND

	Population growth rate 2006-2030	Working age population growth rate 2006-2030	Old age dependency 2006	Old age dependency 2030	Share of population 65+ 2006	Share of population 65+ 2030
Natural growth	0.0	-0.8	28.4	65.7	16.4	31.1
Bumbling along	**0.6**	**-0.1**	**28.4**	**69.9**	**16.4**	**34.3**
God's waiting room	0.6	-0.3	28.4	79.9	16.4	37.3
Connecting with world	1.4	0.9	28.4	60.5	16.4	31.2

Two speed development	1.1	0.2	28.4	79.3	16.4	37.1

For the region as a whole, the population growth rates for Bumbling along and God's waiting room are close to 1.4 and 1.5 per cent per annum respectively. That is, the high net migration inflow of God's waiting room of 5,600 per annum, compared to 4,900 for Bumbling along, is neutralized because of the higher average death rate for the God's waiting room scenario due to the significantly higher share of the population aged 65 and over. Under the God's waiting room scenario, the share of population aged over 65 increased from 17 per cent in 2006 to 36 per cent by 2030. The corresponding outcome for the Bumbling along scenario is 32 per cent.

The corresponding outcome for the old age dependency ratio (or the ratio of the share of population aged 65 and over to the working age population) is 83 per cent by 2030 for the God's waiting room scenario to 65 per cent for the Bumbling along scenario.

The main report argues that the economic difficulties of ageing are proportional to the gap between the overall population growth rate and the growth rate of the working age population. The closer the rate of growth of the working age population to the overall population growth rate, the less will be the economic difficulties created by an increasing share of the population aged 65 and over. For the region as a whole, the scenario with the narrowest gap between the population growth rate and the working age population growth rate is the Connecting with the world scenario. As will be seen below, this scenario has the best economic performance outcomes. Under this scenario the share of population aged 65 and over is held to 24 per cent by 2030 and the old age dependency ratio to 53 per cent.

In terms of the sub-regional outcomes, the following results are generated.

(a) The North Coast has the smallest absolute gap between the population growth rate and the working age population growth rate across the scenarios. As a result, it has the lowest share of population aged 65 and over outcomes across the scenarios. For the Connecting with the world and Two speed dev elopement scenarios, the population growth rate equals the working age population growth rate and the share of population aged over 65 is constrained to one quarter of the total population.

(b) The worst aged sub-regional outcome is for the South Coast for the God's waiting room scenario. The growth in the working age population is half the population growth rate, the share of population aged 65 and over reaches 40 per cent by 2030 and the old age dependency ratio reaches 93 per cent.

(c) In contrast, for the Connecting with the world scenario, the South Cost has a population growth rate over 2006 to 2030 of 2.2 per cent per annum, a working age population growth rate of 1.9 per cent per annum and a share of population aged 65 and over of 29 per cent by 2030.

(d) For the North Inland sub-region for the Bumbling along and God's waiting room scenarios, the population growth rate is 0.6 per cent per annum, while the working age population growth rate falls -0.1 and -0.3 per cent per annum.

(e) The best demographic outcome for the North Coast is for the Connecting with the world scenario, where the population growth rate is 1.4 per cent, the working age population growth is 0.9 per cent and the share of population aged 65 and over is 31 per cent. Under the Two speed development scenario the population growth rate is over 1 per

cent per annum, however, the working age population growth is negligible and the share of population aged 65 and over reaches 37 per cent by 2030.

(f) For the South Coast, the variations in population growth rates across the scenarios are similar, except the working age population growth rate is closer across the scenarios to the population growth rate. This is due to the younger age structure of the South Inland population compared to that of the North Inland region, which in part is due to the inclusion of Cherbourg in South Inland. As a result, the share of population aged 65 and over for the South Inland region is below that of the North Inland region across all scenario outcomes.

Table 7.5 shows the average annual population change by age range, the ratio of the change in population of age range to total sub-regional population change and the same outcome for the WBBR as a whole.

Across all sub-regions the results are:

(a) the variation in the ratios for the Coastal sub-regions across the scenarios are similar to the variations for the WBBR outcomes, except they are below the WBBR outcomes. The North Coast ratios are below the South Coast ratios for the population aged 65 and over and above the South Coast ratios for the younger population age ranges. For example, for the God's waiting room scenario the ratio of population aged 65 and over to total population change is 0.79, while it is 0.74 for the North Coast. That is, for the South Coast four out of every five of the total population change between now and 2030 will be aged 65 and over for this scenario; and

(b) For the Inland regions the ratio of population aged 65 and over to total population change is above 1 for the Bumbling along and God's waiting room scenarios, with the North Inland rations being greater than the South Inland ratios. Only for the Connecting with the world scenario does the ratio fall below 1 for North Inland. For South Inland the ratio is below 1, albeit marginally, for the Two speed development scenario.

Table 7.5 Average annual population change 2006 to 2030 by age range – NORTH INLAND

	Average annual population change (number)				Ratio to total change			Ratio to total change – WBBR		
	0-20	21-64	65+	Total	0-20	21-64	65+	0-20	21-64	65+
Natural growth	-56	-129	189	4	-12.35	-28.73	42.08	-1.55	-1.56	4.10
Bumbling along	**-85**	**-10**	**298**	**204**	**-0.42**	**-0.05**	**1.46**	**-0.03**	**0.36**	**0.67**
Gods waiting room	-95	-49	340	196	-0.48	-0.25	1.73	-0.07	0.22	0.85
Connecting with world	-25	181	345	501	-0.05	0.36	0.69	0.06	0.48	0.46
Two speed development	-65	43	408	385	-0.17	0.11	1.06	0.04	0.42	0.54

7.2 Skilled migration flows and skills formation

For each of the sub-regions the structure of skills for the working age migration flows was similar to the WBBR average, shown in Table 7.6, for the 1996-2001 period. Hence, only the WBBR total is shown. As can be seen from Table 7.6, for the Bumbling along and God's waiting room scenarios the share of high skills and intermediate skills increases by 25 and 20 per cent respectively, and the share of low and unskilled declines by 25 per cent. The increase is less for the Two speed development scenario because of the failure to fully integrate the Inland and Coastal regions.

Table 7.7 indicates that over a quarter of the relatively small changes in the rate of skilled migration have large consequences for the quantity of skills available by 2030. For the God's waiting room scenario the per capita availability of skills increases by 16 per cent between 2001 and 2030. For the Connecting with the world scenario the expansion is 75 per cent.

The model used to prepare the scenarios generates, to all sub-regions, the skills of the employed. Broadly, the growth in the skills base by region will be proportional to the total employment base of a region.

Table 7.6 Skills and migration: outcomes by scenario (per cent) – TOTAL REGION

	Share of high skills	Share of intermediate skills	Share of low and unskilled
1996 – 2001[(a)]	25	27	49
Bumbling along	**25**	**27**	**49**
God's waiting room	25	27	49
Connecting with the world	31	32	37
Two speed development	29	30	42

Note: (a) Share in terms of skills of working age migrants that came to the WBBR between 1996 and 2001.

Table 7.7 Skills supply by scenario (per cent of population) – TOTAL REGION

	Scenario			
	Bumbling along	**God's waiting room**	**Connecting with the world**	**Two speed development**
High skills				
2001	**7.7**	7.7	7.7	7.7
2020	**9.2**	8.9	12.1	10.7
2030	**9.6**	8.9	13.5	11.8
Intermediate skills				
2001	**8.1**	8.1	8.1	8.1
2020	**8.5**	8.3	11.2	9.9
2030	**8.4**	7.7	12.1	10.5

8. Alternative futures for the WBBR: the economic outcomes

Although the demographic outcomes were summarised in the previous section and the economic outcomes will be summarised in this section, it is very important to keep in mind that the demographic and economic outcomes are jointly determined. The demographic outcomes summarised above are what is required to make the economic outcomes, summarised below, possible. Alternatively, if the economic outcomes summarised below are realised, then the demographic outcomes summarised above will follow.

That is, the relationship between the demographic and economic outcomes is the age old 'chicken and egg' causal dilemma.

Before the economic results are summarised, the quantitative importance of the economic drivers of each sub-region will be summarised.

8.1 The drivers of current economic activity

Table 8.1 shows the direct and indirect contribution of each driver of economic expenditure by sub-region. A driver of economic activity is expenditures that are not directly related to the internal multiplier flow-on relationship within the region and sub-regions. That is, they are expenditures where the decisions on the level of expenditures are made outside the region. For example, the resources available to social security beneficiaries is made by Federal Governments, while the resources available to self-funded retirees is made by superannuation funds and private companies outside the region.

What the data in the table means is that, for example, from Table 8.1(a) 25 per cent of the North Coast total employment is explained directly and indirectly (including feedback effects from all other sub-regions) by out-of-region service exports, excluding overnight tourism. For the region as a whole, the contribution is 21.6 per cent. For the gross regional product indicator the contribution is 26.6 and 23.8 per cent respectively.

The sum of the contribution is 100 because the drivers listed in the table explain directly or indirectly together the totality of economic activity in the region.

From Table 8.1 the following points apply.

- The South Coast is the most reliant on overnight tourism and the South Inland the least reliant.
- The North Coast is the most reliant on government current expenditures as a driver of growth and North Inland is the least reliant.
- The North Coast sub-region is most reliant on service exports as a driver of economic activity, while North Inland is the least reliant.
- For the Coastal regions the most important driver of economic activity is exports of services, while for the Inland regions the most important driver is agriculture/mining exports. This is particularly the case for North Inland.
- For the region as a whole, a quarter of economic activity is explained by expenditures of not in workforce households, including retirees.

Table 8.1(a)	Aggregate percentage contribution by economic driver to employment and gross product formation – per cent of total explained contribution – NORTH COAST									
	Working age social security dependant households: contribution to regional economic activity	Retired social security dependant households: contribution to regional economic activity	Self funded retired and not in workforce households: contribution to regional economic activity	Government current expenditure: contribution to regional economic activity	Overnight tourism: contribution to regional economic activity	Construction: contribution to regional economic activity	Agriculture/ mining out of region exports: contribution to regional economic activity	Manufacturing out of region exports: contribution to regional economic activity	Out of region service sector exports (excluding overnight tourism): contribution to regional economic activity	Total explained contribution
Employment at place of work – number										
North Coast	7.9	6.6	9.7	19.2	5.0	11.5	8.1	6.9	25.1	100.0
Total WBBR	**7.1**	**6.2**	**8.9**	**18.2**	**5.7**	**11.8**	**12.6**	**7.9**	**21.6**	**100.0**
Gross regional product										
North Coast	10.9	6.7	8.3	16.6	3.9	11.6	8.4	7.1	26.6	100.0
Total WBBR	**9.6**	**6.2**	**7.5**	**15.9**	**4.5**	**11.5**	**13.3**	**7.7**	**23.8**	**100.0**

Table 8.1(b)	Aggregate percentage contribution by economic driver to employment and gross product formation – per cent of total explained contribution – SOUTH COAST									
	Working age social security dependant households: contribution to regional economic activity	Retired social security dependant households: contribution to regional economic activity	Self funded retired and not in workforce households: contribution to regional economic activity	Government current expenditure: contribution to regional economic activity	Overnight tourism: contribution to regional economic activity	Construction: contribution to regional economic activity	Agriculture/ mining out of region exports: contribution to regional economic activity	Manufacturing out of region exports: contribution to regional economic activity	Out of region service sector exports (excluding overnight tourism): contribution to regional economic activity	Total explained contribution
Employment at place of work – number										
South Coast	7.4	6.9	9.6	18.8	8.1	13.2	5.3	7.9	22.8	100.0
Total WBBR	**7.1**	**6.2**	**8.9**	**18.2**	**5.7**	**11.8**	**12.6**	**7.9**	**21.6**	**100.0**
Gross regional product										

South Coast	10.0	7.0	8.1	17.5	6.6	12.7	6.3	7.7	24.1	100.0
Total WBBR	**9.6**	**6.2**	**7.5**	**15.9**	**4.5**	**11.5**	**13.3**	**7.7**	**23.8**	**100.0**

Table 8.1(c) Aggregate percentage contribution by economic driver to employment and gross product formation – per cent of total explained contribution – NORTH INLAND

	Working age social security dependant households: contribution to regional economic activity	Retired social security dependant households: contribution to regional economic activity	Self funded retired and not in workforce households: contribution to regional economic activity	Government current expenditure: contribution to regional economic activity	Overnight tourism: contribution to regional economic activity	Construction: contribution to regional economic activity	Agriculture/ mining out of region exports: contribution to regional economic activity	Manufacturing out of region exports: contribution to regional economic activity	Out of region service sector exports (excluding overnight tourism): contribution to regional economic activity	Total explained contribution
Employment at place of work – number										
North Inland	5.0	4.4	6.7	14.1	3.5	9.5	39.5	4.4	12.9	100.0
Total WBBR	**7.1**	**6.2**	**8.9**	**18.2**	**5.7**	**11.8**	**12.6**	**7.9**	**21.6**	**100.0**
Gross regional product										
North Inland	7.2	4.3	5.6	11.7	2.9	9.6	37.3	3.4	18.1	100.0
Total WBBR	**9.6**	**6.2**	**7.5**	**15.9**	**4.5**	**11.5**	**13.3**	**7.7**	**23.8**	**100.0**

Table 8.1(d) Aggregate percentage contribution by economic driver to employment and gross product formation – per cent of total explained contribution – SOUTH INLAND

	Working age social security dependant households: contribution to regional economic activity	Retired social security dependant households: contribution to regional economic activity	Self funded retired and not in workforce households: contribution to regional economic activity	Government current expenditure: contribution to regional economic activity	Overnight tourism: contribution to regional economic activity	Construction: contribution to regional economic activity	Agriculture/ mining out of region exports: contribution to regional economic activity	Manufacturing out of region exports: contribution to regional economic activity	Out of region service sector exports (excluding overnight tourism): contribution to regional economic activity	Total explained contribution
Employment at place of work – number										

South Inland	6.4	5.0	7.0	17.5	1.8	10.2	21.2	12.9	18.0	100.0
Total WBBR	**7.1**	**6.2**	**8.9**	**18.2**	**5.7**	**11.8**	**12.6**	**7.9**	**21.6**	**100.0**
Gross regional product										
South Inland	8.1	4.6	5.5	13.1	0.9	9.4	25.0	11.8	21.7	100.0
Total WBBR	**9.6**	**6.2**	**7.5**	**15.9**	**4.5**	**11.5**	**13.3**	**7.7**	**23.8**	**100.0**

8.2 Alternative futures: gross regional product and industry development

Table 8.2 shows the gross regional product growth rates for the WBBR as a whole and the sub-regions. Table 8.3 shows the productivity growth rate by sector and Table 8.4 the average annual change in employment by industry sector. Table 8.5 shows the employment share by industry sub-sector by 2030. The tables, taken together, show the economic prospects of each sub-sector by scenario.

Because of the impact on growth of the aged population in all scenarios, all scenarios produced strong growth in health sector activity. The greatest growth in employment terms is for the South Coast, where the average annual increase in health sector workers varies from 279 per annum for the Bumbling along scenario to 364 per annum for the Connecting to the world scenario. This scenario also produces the highest productivity growth for health services in the South Coast region. This is because, under the scenario, export and import replacement of health services is an important driver of economic growth for the South Coast. By 2030 the employment share of health sector workers for the South Coast reaches 18 per cent, compared to 12 per cent currently.

All changes, in general, experience an increase in the share of health sector employment output. For the Inland regions the increase is relatively less under the Two speed development scenario as more of the health services are supplied by the Coastal regions.

The other core driver of South Coast growth is business and government services. Under the Connecting with the world scenario the average annual increase in business services employment is 13 per cent per annum, with a productivity growth rate of 6.4 per cent per annum, which would require significant expansion of exports to be achieved.

Accommodation (overnight tourism), restaurants, wholesale and retail trade explains almost half of the South Coast's employment growth under the Bumbling along scenario, while this falls to 37 per cent under the Connecting to the world scenario as other sectors become more important as drivers of growth. However, what is important is not the increase in employment, but the associated productivity growth. Under the Connecting with the world scenario the South Coast's retail and wholesale sectors productivity growth is 2.5 per cent per annum, compared to 0.9 per cent per annum for the Bumbling along scenario and -0.2 per cent per annum for the God's waiting room scenario. This is because the growth in employment per unit of output will be a function of the real wage rate. Under the Connecting to the world scenario the productivity growth for the sub-region is the highest at 2.4 per cent per annum, compared to 0.5 per cent per annum for the God's waiting room scenario. Real wages will, therefore, be significantly higher under the Connecting with the world scenario for the South Coast, which means that the employment positions in retail and wholesale will be more productive and better prices per hour for the Connecting with the world scenario compared to the other scenarios.

This example applies to all industries and all sub-regions.

For the North Coast the sectors that lifts the productivity growth rate outcomes, under the Connecting with the world scenario are agriculture, transport services, manufacturing and business services.

For North Inland the driving sectors lifting productivity growth rates are agriculture, mining, food processing and import replacement based services.

For South Inland the driver sectors for lifting productivity growth are other manufacturing, business services and, to a lesser extent, agriculture.

The overall gross product growth rate in Table 8.2 outcomes is a product of the productivity growth rate and the employment growth rate. In general the productivity growth rate, from Table 8.3, is least under the God's waiting room scenario and greatest under the Connecting to the world scenario. For the Coastal regions the next best productivity outcome is for the Two speed development scenario, while for the Inland regions this scenario produces the worst productivity growth rate, that is, lower than for the God's waiting room scenario. For North Inland the Two speed development scenario produces the second worst productivity growth rate outcome.

The pattern of gross regional product growth rates across the sub-regions and scenarios reflects the productivity driver outcomes.

Table 8.2 Average annual gross regional product growth rate (per cent per annum)

	2006-2016	2016-2030	2006-2030	2006-2030 North Inland difference with WBBR
WBBR				
Bumbling along	**3.6**	**1.9**	**2.6**	**-0.6**
God's waiting room	3.4	1.6	2.3	-0.7
Connecting with the world	5.7	3.7	4.5	0.3
Two speed development	4.5	2.8	3.5	-0.9
North Inland				
Bumbling along	**2.4**	**1.7**	**2.0**	
God's waiting room	2.2	1.2	1.6	
Connecting with the world	5.2	4.5	4.8	
Two speed development	3.0	2.3	2.6	

Table 8.3	Average annual productivity growth rate by industry sector and scenario (per cent per annum) – 2006-2030 – NORTH INLAND			
	Bumbling along	**God's waiting room**	**Connecting with the world**	**Two speed development**
Agriculture	**2.0**	1.7	2.6	2.2
Mining	**2.3**	2.3	2.7	2.3
Food manufacturing	**0.3**	-0.5	1.7	-0.3
Other manufacturing	**3.6**	1.7	0.7	2.5
Electricity, gas and water	**4.6**	4.3	7.1	5.0
Construction	**0.1**	-0.7	0.5	-0.9
Retail and wholesale trade	**0.4**	-0.4	3.3	-0.2
Accommodation, restaurants and cafes	**1.0**	1.0	1.2	1.1
Transport and communication services	**3.3**	3.1	4.9	3.4
Finance services	**2.2**	2.1	4.0	2.5
Business services	**4.4**	1.7	4.7	2.9
Government services and education	**2.0**	1.6	2.9	1.5
Health services	**1.0**	0.9	1.3	1.0
Recreation and personnel services	**1.3**	0.6	3.3	0.6
Other (property services/imputations)	**-2.5**	-3.2	-1.8	-3.2
Total	**1.4**	**0.8**	**2.3**	**0.9**

Table 8.4	Average annual change in employment by industry sector and scenario (number) – 2006-2030 – NORTH INLAND			
	Bumbling along	**God's waiting room**	**Connecting with the world**	**Two speed development**
Agriculture	**-22**	-27	36	5
Mining	**-1**	-1	34	-1
Food manufacturing	**6**	11	20	20
Other manufacturing	**4**	7	0	17
Electricity, gas and water	**-1**	-2	-2	-1
Construction	**14**	21	74	53
Retail and wholesale trade	**36**	52	91	89
Accommodation, restaurants and cafes	**30**	29	42	36
Transport and communication services	**-7**	-8	1	-2
Finance services	**-2**	-2	-1	-1
Business services	**6**	11	41	34
Government services and education	**4**	10	52	26
Health services	**21**	21	79	27
Recreation and personnel services	**7**	9	26	17
Other (property services/imputations)	**10**	11	10	16

Total	**104**	**141**	**502**	**334**

Table 8.5 Employment shares by industry sector 2006 and 2030 by scenario (per cent) – NORTH INLAND

		Employment share – 2030			
	Employ-ment share 2006	Bumbling along	God's waiting room	Connecting with the world	Two speed develop-ment
Agriculture	33.5	**26.3**	24.5	22.4	23.1
Mining	0.7	**0.4**	0.4	3.4	0.3
Food manufacturing	3.4	**3.8**	4.3	3.7	4.4
Other manufacturing	2.9	**2.9**	3.2	1.6	3.6
Electricity, gas and water	0.7	**0.4**	0.3	0.2	0.3
Construction	9.0	**9.5**	10.0	12.0	11.3
Retail and wholesale trade	14.7	**17.4**	18.5	16.0	18.6
Accommodation, restaurants and cafes	5.0	**8.5**	8.0	6.6	7.2
Transport and communication services	4.3	**2.6**	2.3	2.4	2.5
Finance services	0.7	**0.4**	0.4	0.3	0.3
Business services	3.0	**3.3**	3.8	5.2	5.3
Government services and education	12.2	**10.8**	11.0	11.1	10.6
Health services	6.4	**8.2**	7.8	10.1	6.9
Recreation and personnel services	2.7	**3.2**	3.4	3.6	3.5
Other (property services/imputations)	0.8	**2.1**	2.1	1.4	2.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

8.3 Alternative futures: total employment and earnings

Table 8.6 profiles the average annual employment growth rates across the scenarios. For the region as a whole the average annual employment growth rate varies from 1.4 per cent per annum for the Bumbling along scenario, to 2.1 per cent per annum for the Connecting with the world scenario.

For the North Coast the general outcomes are close to best, in general a little under the WBBR total region outcomes. The North Coast does relatively worst under the Two speed development and God's waiting room scenarios and best under Connecting with the world scenario.

For the South Coast the rate of growth in employment is always above the employment growth rate for the region as a whole. For the God's waiting room scenario the employment growth is 0.6 per cent per annum above the WBBR outcome. As economic prospects for the region improves and the region becomes less reliant on health and older age related expenditures, the average annual employment growth for the South Coast declines relative to the WBBR average. For the Connecting to the world and Two speed development scenarios the differential is only 0.1 per cent per annum.

Under the Connecting to the world and Bumbling along scenarios, North Inland produces an average annual employment growth that is approximately 0.5 per cent per annum under the WBBR outcome. Under Connecting to the world scenario the outcome is 0.3 per cent per annum greater than the WBBR outcome, while under the Two speed development scenario the employment growth rate is at parity with the WBBR outcome.

For the Bumbling along and God's waiting room scenarios, South Inland produces similar outcomes to North Inland. However, under the Two speed development scenario South Inland's average annual growth rate is 0.5 per cent per annum under the WBBR average and, therefore, inferior to the North Inland outcome. This is because of the greater agricultural and mining expansion potential in North Inland given current assessments and infrastructure proposals. However, under the Two speed development scenario South Inland produces an average annual employment growth above the WBBR average outcome.

Table 8.6 Alternative futures: average total employment growth rate (per cent per annum)

	2006-2016	2016-2030	2006-2030	2006-2030 North Inland difference with WBBR
WBBR				
Bumbling along	**1.9**	**1.0**	**1.4**	**-0.5**
God's waiting room	2.2	1.4	1.7	-0.6
Connecting with the world	2.8	1.7	2.1	0.3
Two speed development	2.3	1.4	1.7	0.0
North Inland				
Bumbling along	**1.3**	**0.6**	**0.9**	
God's waiting room	1.5	0.8	1.1	
Connecting with the world	2.8	2.2	2.4	
Two speed development	1.8	1.7	1.8	

8.4 Alternative futures: household formation

Table 8.7 shows the scenario outcomes for average household size. In general the greater the share of population aged over 65 the greater will be the reduction in average household size.

Table 8.8 gives the growth in the number of households across the scenarios for the WBBR as a whole and the sub-regions. The growth rate for the total number of households is the product of the growth rate for the average household size and the total population growth rate.

Table 8.9 gives the outcomes for the share of population with the head aged 65 and over as a per cent of all households. The greater the share of population aged 65 and over, the greater will be the share of households with the head aged 65 and over in all households.

Table 8.10 shows that the share of households of working age with no member working across all scenarios. In fact, there is a relatively small variation in final outcomes across the scenarios. This is because the changes in gross regional product growth rates across the

scenarios are more dependent on changes in productivity growth rates than employment growth rates. Higher productivity growth means those in employment are more productive and receive higher incomes, not that necessarily more of the existing employed will be employed.

Extensive labour market training and network connection programs will be refined to ensure that there is a reasonable probability that the existing unemployed will access employment opportunities.

Table 8.11 shows that, across all scenarios, the ratio of non-working (including retired) households to working households were more or less double.

Table 8.7 Household average size (number of people)

	2001	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR					
Bumbling along	**2.6**	**2.5**	**2.3**	**1.9**	**86.7**
God's waiting room	2.6	2.5	2.2	1.8	89.3
Connecting with the world	2.6	2.5	2.3	2.0	86.8
Two speed development	2.6	2.5	2.3	2.0	80.8
North Inland					
Bumbling along	**2.5**	**2.4**	**2.1**	**1.7**	
God's waiting room	2.5	2.4	2.0	1.6	
Connecting with the world	2.5	2.4	2.1	1.7	
Two speed development	2.5	2.4	2.0	1.6	

Table 8.8 Total household average annual growth rate (per cent per annum)

	2006-2016	2016-2030	2006-2030	2006-2030 North Inland difference with WBBR
WBBR				
Bumbling along	**2.4**	**2.5**	**2.5**	**-0.5**
God's waiting room	2.8	3.0	2.9	-0.7
Connecting with the world	2.7	2.8	2.8	-0.3
Two speed development	2.5	2.7	2.7	0.1
North Inland				
Bumbling along	**2.0**	**2.1**	**2.0**	
God's waiting room	2.1	2.3	2.2	
Connecting with the world	2.3	2.7	2.6	
Two speed development	2.2	3.0	2.7	

Table 8.9	Households aged 65 and over as per cent of total households (per cent)			
	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR				
Bumbling along	**32.0**	**37.9**	**44.6**	**96.6**
God's waiting room	32.0	40.1	48.3	92.2
Connecting with the world	32.0	36.3	41.4	99.7
Two speed development	32.0	37.0	42.5	104.9
North Inland				
Bumbling along	**29.3**	**36.6**	**43.1**	
God's waiting room	29.3	37.4	44.5	
Connecting with the world	29.3	35.7	41.3	
Two speed development	29.3	37.2	44.6	

Table 8.10	Not employed working age households as a per cent of total working age households (per cent)			
	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR				
Bumbling along	**30.4**	**35.5**	**44.1**	**85.3**
God's waiting room	30.4	33.7	42.5	86.3
Connecting with the world	30.4	31.5	40.3	83.7
Two speed development	30.4	34.4	43.0	91.3
Brisbane	12.1	9.6	6.7	
North Inland				
Bumbling along	**26.0**	**28.5**	**37.6**	
God's waiting room	26.0	27.1	36.7	
Connecting with the world	26.0	25.2	33.7	
Two speed development	26.0	27.4	39.3	

Table 8.11	Ratio of non-working (including retired households) to working households–ratio			
	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR				
Bumbling along	**1.1**	**1.5**	**2.2**	**73.9**
God's waiting room	1.1	1.5	2.3	69.7
Connecting with the world	1.1	1.3	1.8	79.7
Two speed development	1.1	1.4	2.0	88.8

North Inland			
Bumbling along	**0.9**	**1.1**	**1.6**
God's waiting room	0.9	1.1	1.6
Connecting with the world	0.9	1.0	1.5
Two speed development	0.9	1.1	1.8

8.5 Alternative futures: productivity and real incomes

Tables 8.12 to 8.17 show productivity per hour, average earnings per employed person and household average income, both in dollar terms and relative to Brisbane's likely outcomes. Simply put, the lower the productivity growth rate for the region or the sub-region, the lower will be the outcome for the productivity and real income indicators, both in absolute terms and in relative terms to Brisbane.

For the region as a whole, from Table 8.15, under the God's waiting room scenario, the lowest productivity growth scenario, average earnings per employed person falls from 70 per cent of Brisbane levels to 52 per cent, while under the Connecting with the world scenario it increases to 75 per cent. It is not surprising therefore, from Table 8.18, that under the God's waiting room scenario government benefits and government expenditure as a per cent of gross regional product increased by one third to 65 per cent for the region as a whole. The South Coast has the highest 2030 dependency, at 50 per cent of gross regional product.

Table 8.12 Productivity per hour $2001 – $2001 of gross output per hour worked

	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR				
Bumbling along	**68.8**	**84.0**	**102.6**	**80.7**
God's waiting room	68.8	80.2	89.1	82.0
Connecting with the world	68.8	92.3	126.1	79.0
Two speed development	68.8	87.4	111.7	66.8
Brisbane	85.8	106.9	139.3	
North Inland				
Bumbling along	**55.6**	**64.3**	**82.7**	
God's waiting room	55.6	62.6	73.0	
Connecting with the world	55.6	69.6	99.6	
Two speed development	55.6	63.3	74.6	

Table 8.13 Productivity per hour per cent of Brisbane – per cent

	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR				
Bumbling along	**80.2**	**78.5**	**73.7**	**80.7**
God's waiting room	80.2	75.0	64.0	82.0
Connecting with the world	80.2	86.4	90.6	79.0

Two speed development	80.2	81.7	80.2	66.8
North Inland				
Bumbling along	**64.7**	**60.1**	**59.4**	
God's waiting room	64.7	58.6	52.4	
Connecting with the world	64.7	65.1	71.5	
Two speed development	64.7	59.2	53.6	

Table 8.14 Average earnings per person employed – $2001

	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR				
Bumbling along	**595.7**	**681.9**	**786.5**	**98.5**
God's waiting room	595.7	652.7	675.2	103.7
Connecting with the world	595.7	746.0	980.9	92.8
Two speed development	595.7	703.2	860.4	80.0
Brisbane	846.4	1036.6	1311.6	
North Inland				
Bumbling along	**648.8**	**684.7**	**774.7**	
God's waiting room	648.8	669.3	700.3	
Connecting with the world	648.8	747.8	910.3	
Two speed development	648.8	676.0	688.2	

Table 8.15 Average earnings per person employed – per cent of Brisbane ($2001)

	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR				
Bumbling along	**70.4**	**65.8**	**60.0**	**98.5**
God's waiting room	70.4	63.0	51.5	103.7
Connecting with the world	70.4	72.0	74.8	92.8
Two speed development	70.4	67.8	65.6	80.0
North Inland				
Bumbling along	**76.7**	**66.0**	**59.1**	
God's waiting room	76.7	64.6	53.4	
Connecting with the world	76.7	72.1	69.4	
Two speed development	76.7	65.2	52.5	

Table 8.16 Household average income per week ($2001)

	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR				
Bumbling along	**619.8**	**626.3**	**585.8**	**99.6**
God's waiting room	619.8	585.9	503.3	105.8
Connecting with the world	619.8	612.4	618.3	108.6

Two speed development	619.8	624.6	602.9	90.8
Brisbane	931.3	1084.7	1306.9	
North Inland				
Bumbling along	**638.3**	**611.4**	**583.5**	
God's waiting room	638.3	592.2	532.6	
Connecting with the world	638.3	642.8	671.5	
Two speed development	638.3	602.2	547.7	

Table 8.17 Household average income per week (per cent of Brisbane)

	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR				
Bumbling along	**66.6**	**57.7**	**44.8**	**99.6**
God's waiting room	66.6	54.0	38.5	105.8
Connecting with the world	66.6	56.5	47.3	108.6
Two speed development	66.6	57.6	46.1	90.8
North Inland				
Bumbling along	**68.5**	**56.4**	**44.6**	
God's waiting room	68.5	54.6	40.8	
Connecting with the world	68.5	59.3	51.4	
Two speed development	68.5	55.5	41.9	

Table 8.18 Benefits and current government expenditure – per cent of gross regional product (per cent)

	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR				
Bumbling along	**32.6**	**33.1**	**42.1**	**80.6**
God's waiting room	32.6	33.6	45.4	79.0
Connecting with the world	32.6	25.4	25.4	64.8
Two speed development	32.6	29.3	32.6	95.8
North Inland				
Bumbling along	**25.8**	**27.2**	**33.9**	
God's waiting room	25.8	26.9	35.9	
Connecting with the world	25.8	18.9	16.5	
Two speed development	25.8	24.9	31.2	

8.6 Alternative futures: non-resource exports and import replacement requirements

Table 8.19 shows the non-resource exports and additional import replacement requirements to derive the productivity growth rate outcomes across the scenarios. The higher the productivity growth rate, the greater will have to be the growth in non-resource (that is, excluding agriculture and mining) exports per employed person from current levels. The data in Table 8.19 also indicates strategic import replacement initiatives, such as:

- substituting government services currently imported from Brisbane for locally available services; and
- substituting health and education services currently imported from Brisbane for locally available services.

Table 8.19 Non-resource exports and additional import replacements per employed person (2001 $'000)

	2006	2016	2030	2030 North Inland per cent of WBBR
WBBR				
Bumbling along	**31.8**	**47.2**	**54.8**	**77.9**
God's waiting room	31.8	42.9	37.1	78.1
Connecting with the world	31.8	65.1	112.7	72.9
Two speed development	31.8	56.5	83.9	55.4
North Inland				
Bumbling along	**18.7**	**27.9**	**42.7**	
God's waiting room	18.7	25.6	29.0	
Connecting with the world	18.7	35.9	82.1	
Two speed development	18.7	32.0	46.5	

8.7 Council revenue and expenditure

Under existing local government structures, from Table 8.20, the:

- ageing of the population;
- growth in households relative to population; and
- growth in households relative to employment,

means that the share of rate revenue in total council expenditure (at current service standards) will decline. The greater the rate of ageing and the less the productivity growth rate, the greater will be the decline in the rate revenue-expenditure ratio.

Table 8.20 Councils: ratio of rate revenue to expenditure (ratio)

	2006	2016	2030	2030 North Inland per

				cent of WBBR
WBBR				
Bumbling along	**0.51**	**0.40**	**0.28**	**51.9**
God's waiting room	0.51	0.36	0.21	59.4
Connecting with the world	0.51	0.40	0.31	59.4
Two speed development	0.51	0.40	0.30	44.1
North Inland				
Bumbling along	**0.27**	**0.20**	**0.15**	
God's waiting room	0.27	0.19	0.13	
Connecting with the world	0.27	0.22	0.18	
Two speed development	0.27	0.20	0.13	

Although, from Table 8.20, the gains in terms of net revenue ratio from productivity are strong in going from the God's waiting room scenario to Connecting with the world scenario. This is not the case for the differential between the Connecting with the world scenario and the Two speed development scenario. The difference between the scenarios, in terms of the rate revenue ratio for the WBBR as a whole, is marginal despite the fact that the Connecting with the world scenario has a higher productivity growth outcome.

The reason for this is because higher productivity unambiguously generates greater rate revenue. On the expenditure side, higher skilled households and employment induces higher council expenditures. The small difference between the Connecting with the world and Two speed development scenarios is due to the higher employment and skilled household concentrations in the region offsetting the increased rate revenue.

9. Industry opportunities

The opportunities for the WBBR over the next quarter of a century are specifically captured as drivers of the different scenario outcomes. The main drivers/opportunities in the scenarios are quantified in the following terms, from the Connecting with the world scenario.

- Overnight tourism increasing from $340 million in 2001 prices in 2006 to $1.4 billion by 2030 (similar for all scenarios).
- Food processing production increasing from $1 billion in 2006 to $2.6 billion by 2030.
- Other manufacturing (including aviation/aviation services) increasing from $1.5 billion to $4.7 billion by 2030.
- Underlying and construction expenditure running at $2.3 billion by the 2020s.
- Business service exports increasing from small levels to $1.5 billion by 2030 with export replacement by business services adding a similar amount.
- Increase available of within region government and education services adding $1.7 billion in additional output.
- Import replacement and some export of health services adding $1.5 billion in increased output.
- Mining and agriculture output adding an additional $1 billion.

Under the God's waiting room scenario, the combined fall from the above factors, in terms of output, is $8 billion by 2030, which represents 60 per cent of current WBBR output.

10. Conclusion

1. Accelerate the programs towards regional public sector integration. However, this will not be done by simply amalgamating some councils. It needs to be designed strategically from the perspective of achieving long run regional objectives. Local government restructure should be accompanied by the strengthening of regional organisations to maintain creative tension and a strategic outlook.

2. Develop, strengthen and align the development of private sector networks with public sector networks.

3. Develop a regional plan that translates the scenarios of the study (or modifications thereof) into a timetable for what supporting infrastructure must be in place to allow the employment creation and targets to be achieved and linked to specific private sector investment. Obtain political endorsement for the plan and then hold governments accountable for delays. The plan should have the dates for completion of hospitals, schools, transport links, etc. as well as a local skills enhancement program linked to the expansion of TAFE activities. The university's desired direct support tasks for industry development should also be specified.

4. Most of the industry development strategies required to drive the region are in place. What is required is a genuine regional commitment to the strategies and a level of resourcing that will make a difference. The plan should detail the level of resources required.

5. Perhaps the most important conclusion from the study is the importance of determining what type of economic future the region as a whole, and the sub-regions, would like to achieve. If the region or sub-region is successful in moving towards its desired objectives, then this will change the demographic outcome so that the desired objectives are realised. That is, the demographic structure should be taken as an objective of regional policy, not as a given around which policy adjusts.

6. The region and sub-regions should resist the temptation at this stage to accelerate short term growth by enhancing current demographic trends without considering the longer term economic consequences. This may well lock in the God's waiting room scenario and this may be an outcome the community may not deserve.

   Before large scale resort is made to accelerating the impact of current demographic trends (by expansion of affordable housing, large scale retirement facilities, etc.), the other strategies and pathways for accelerating productivity growth should be considered. Housing and land zoning policies should be integrated as a complementary instrument in the broader infrastructure industry development, in the regional integration context.

7. The analysis of the report is optimistic. The WBBR can achieve a future with improved economic performance and more balanced demographic outcomes.

   In the scenarios developed during the course of the study, the range is from poor to satisfactory. To achieve the satisfactory outcome the region has to increase its productivity by about 10 per cent, relative to Brisbane, and increase its real wage rate by approximately 8 per cent, compared to Brisbane. If this is done the problems associated with ageing will be "solved".

The study quantifies the exports, import replacement and skill formation requirements to do this. They are achievable given the agriculture, mining and manufacturing opportunities that are recognised to exist in the region. Secondly, given the population mass and its growth, import replacement of business services, health, government and educational services will provide a strong stimulus to growth. In the short term they will be up to 1.0 per cent per annum in regional growth.

The key to success is for the region to be able to act collectively to do what must b e done to unlock its potential.