

PRODUCTIVITY COMMISSION STUDY

**ECONOMIC IMPLICATIONS OF AN
AGEING AUSTRALIA**

**SUBMISSION BY THE WESTERN AUSTRALIAN
GOVERNMENT**

OCTOBER 2004



Government of Western Australia

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EXECUTIVE SUMMARY

This submission outlines the results of preliminary work on the likely economic and fiscal impact of an ageing population in the Western Australian context. It also considers some of the issues and current and potential policy responses to the challenges posed by the ageing population and non-demographic cost factors that are likely to impact on the State's finances.

It presents indicative projections of the impact of demographic change and other cost trends on the State's finances. These indicative projections suggest, contrary to statements in the Commonwealth Government's *Intergenerational Report* in 2002, that State finances will come under significant pressure over the long term. The initial work suggests that the magnitude of these pressures is likely to be broadly similar to those experienced by the Commonwealth.

Health expenditure is expected to be a major source of fiscal pressure for the State over the long term. Spending on health, which currently accounts for around one-quarter of total State expenditure, is projected to increase by 2.2% of Gross State Product (GSP) over the next four decades due to both population ageing and non-demographic cost factors. While education expenditure is expected to fall as a share of GSP over the same period, the decline is not sufficiently large to offset the projected increase in health expenditure.

In addition to the projected increase in total expenditure, fiscal pressure is also projected to arise from the revenue side of the State's budget. The main risk lies with a projected decrease in Commonwealth grants as a share of GSP, while own-source revenue could also fall relative to total economic activity.

In responding to the challenges posed by demographic change, the Western Australian Government agrees with the broad policy focus of promoting strong economic growth and improving the cost-effectiveness of public services. While recognising the important role State governments can play in contributing to such strategies, the ultimate success of these policy responses will require a high degree of collaboration between all levels of government in Australia.

Improving the effectiveness of the public sector has been a particular focus of the State Government in recent years. In this regard, the Government is currently implementing recommendations from a Functional Review Taskforce, which are aimed at increasing the efficiency of government services and reducing duplication. The State Government's ability to pursue further efficiencies will depend partly on the level of coordination between tiers of government to reduce duplication and avoid cost-shifting incentives.

Without understating the benefits of improved government service delivery, policies to encourage strong productivity and economic growth will have arguably the most important influence on how successfully governments can meet long-term fiscal challenges.

However, this very much depends on the extent to which community expectations for government service delivery expand in line with economic growth. To the extent that demand for public services expands with economic growth, then fiscal pressure on Australian governments will remain.

It is also important to recognise that under the current framework of intergovernmental relations in Australia, the Commonwealth may benefit more than the States from higher economic growth. This is partly because there is no certainty that specific purpose payments from the Commonwealth, which comprise a large proportion of State revenue, will expand in line with economic activity and community demand.

Accordingly, State revenue from Commonwealth grants looms as a significant long-term fiscal risk to State governments. There are also inefficiencies in Commonwealth-State financial relations that could increase fiscal pressure on the States in the long term. If the States are required to address these challenges through their relatively narrow taxation base, there could be strong disincentive effects on the economy. This again highlights the need for continued collaboration between all levels of government in Australia to achieve the best possible outcome for the community as a whole.

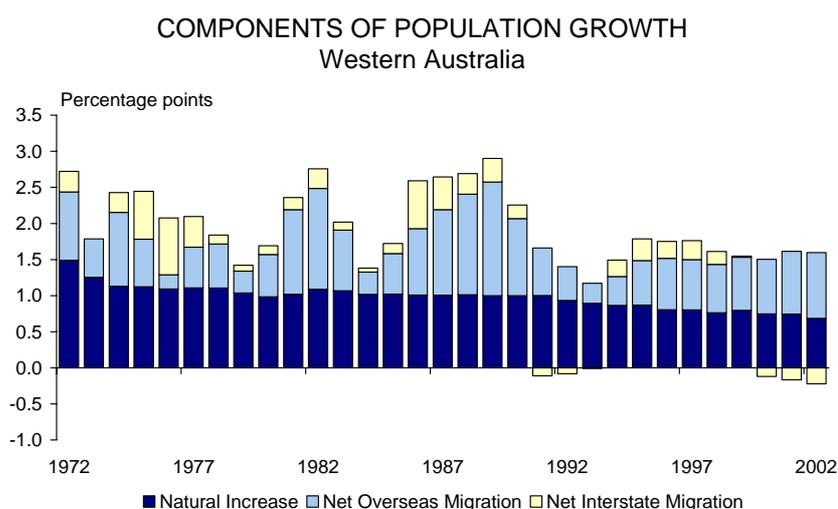
1. DEMOGRAPHIC AND ECONOMIC PROSPECTS

This chapter provides a brief overview of Western Australia's demographic and economic prospects in the context of the ageing population. Rather than examine these trends in detail, it highlights some of the key differences between the Western Australia and the rest of the nation. It also provides the key assumptions underpinning the fiscal projections in Chapter 2.

1.1 Demographic outlook

1.1.1 Historical trends

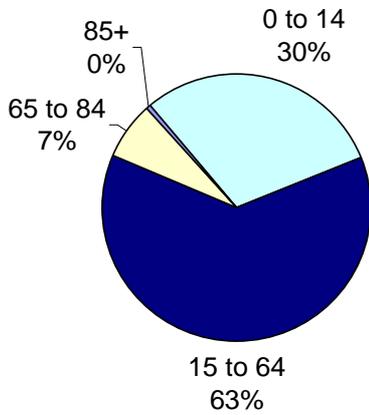
Western Australia has experienced the fastest rate of population growth of all States over the three decades. Over this period, the State's population has grown by around 79%, while the national population has increased by 48%. Stronger population growth in Western Australia has stemmed from a higher share of net migration, and to a lesser extent, a slightly higher rate of natural increase.



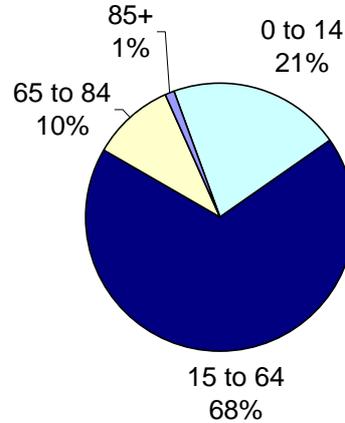
Source: ABS

Like other States and Territories in Australia, the demographic profile of Western Australia has changed considerably over this period due to declining fertility rates and continued improvements in life expectancy. Since 1972, the proportion of the State's population between 0 to 14 years has dropped from around 30% in 1972, to around 21% currently. At the same time, the share of the 15 to 64 age cohort has increased by 5.5 percentage points, while the proportion of those aged over 65 years has increased by 4.1 percentage points.

POPULATION BY AGE, 1972
Western Australia

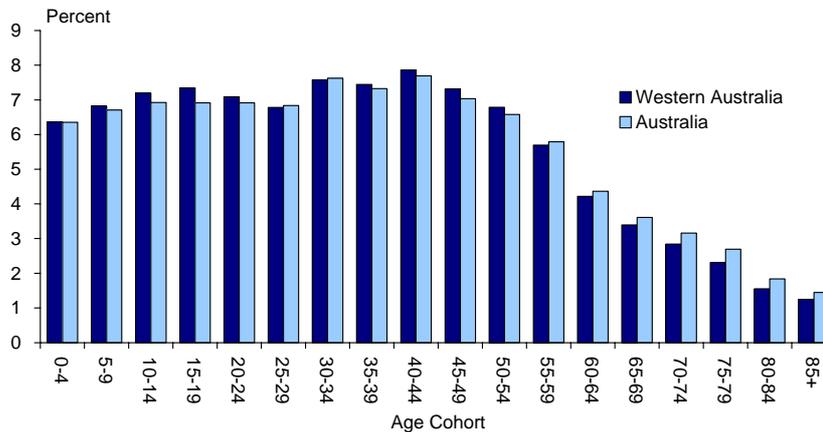


POPULATION BY AGE, 2002
Western Australia



Despite the slight increase in the age profile of Western Australia's population over this period, the State's population is still younger than the national average. For example, the median age of population in Western Australia was 34.5 years in 2003 compared with 36.1 years nationally. As indicated in the following chart, this reflects a higher proportion of those aged between 0 and 19 years, and a smaller proportion of those aged 55 and above in Western Australia. This offsets a relatively higher representation of those aged between 35 and 54 years in Western Australia.

POPULATION AGE STRUCTURE
Percent of total population, 2003

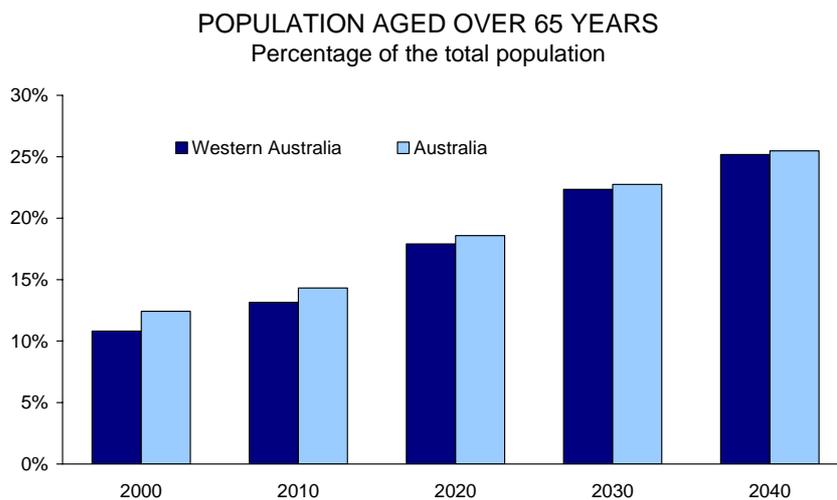


Source: ABS

1.1.2 Population projections

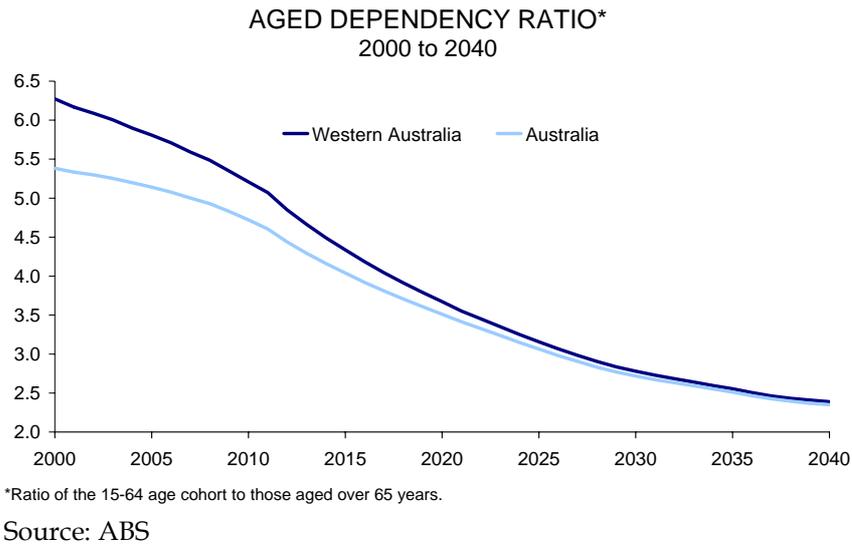
According to ABS mid-series projections, population growth in Western Australia is expected to continue to exceed the national growth rate in future years. By 2044-45, the State's population is projected to be around 41% higher than currently, while the national population is projected to grow by around 29% over the same period. While these projections suggest that growth in total economic activity will be higher in Western Australia, a projected change in the State's age structure relative to the rest of the nation may partially offset this.

Despite having a slightly younger population than most other States and Territories, Western Australia's population age structure is projected to be similar to the rest of Australia by 2044-45. The proportion of Western Australia's population aged over 65 years is projected to double from 11.6% currently, to around 25.8% in 2045. In comparison, the proportion of Australia's population over 65 years is projected to increase from 12.8% to around 26.1% over this period.



Source: ABS

These projections imply that Western Australia's population could age at a slightly faster rate than nationally (probably due to the higher proportion of those aged in the 35 to 55 year old age cohort in Western Australia). This means that the State's aged dependency ratio may converge with the national ratio in future decades (see following chart).



1.2 Economic outlook

Assuming a constant growth rate in productivity, growth in the headline measure of economic activity in Western Australia (gross State product) is projected to slow over the next four decades. This reflects expectations of a decline in labour force growth, due to lower population growth and a falling rate of overall labour force participation.

Real gross State product (GSP) per person, which is a more accurate measure of economic welfare, is also expected to grow more slowly than at present (although it is not expected to decline to the same extent as the growth rate of real GSP). The main influences on GSP per capita over the long term will be productivity growth, and to a lesser extent, workforce participation.

1.2.1 Productivity

Productivity growth is a key driver of real economic growth and per capita income in the long term. According to Commonwealth Treasury estimates, productivity growth in Australia contributed two percentage points to average annual economic growth of 3.5% since the 1960s.¹ More importantly, productivity growth has accounted for almost all of the growth in per capita GDP over this period.

¹ Henry (2002).

Data available for the States indicate that productivity growth in Western Australia has slightly exceeded the national average over the past two decades. Since 1985-86², GSP per hour worked in Western Australia has increased at an average rate of 2.0% per annum, compared with the average national increase of 1.7% per year.



Source: ABS and WA DTF.

Collaborative research undertaken by Queensland Treasury, the University of Queensland and Griffith University attributes higher labour productivity in Western Australia to a combination of strong multifactor productivity growth and capital deepening.³ The same research finds that innovation activity could explain much of the variation in productivity growth across the States since 1985-86, with faster productivity growth in Western Australia and Queensland partly due higher domestic business research and development.

Aside from its importance as a driver of economic activity, productivity growth is also important from a fiscal perspective. Other things being equal, an increase in real incomes arising from higher productivity could raise revenue relative to government expenditure, particularly at the Commonwealth level. Higher per capita incomes could also facilitate stronger investment and productivity growth through an increase in savings.

As productivity growth is very difficult to forecast over the long run, and in recognition of the work the Productivity Commission is undertaking on this matter, this submission does not attempt to examine how population ageing will affect future rates of productivity growth.

² Published ABS data for the States are not available prior to this time.

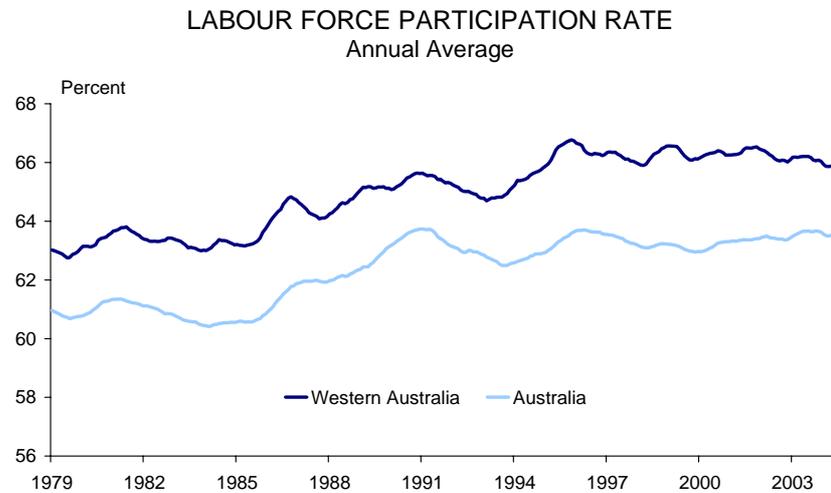
³ Queensland Treasury (2003) *Productivity and Regional Economic Performance in Australia*.

Given the uncertainty surrounding the outlook for productivity, GSP per hour worked in Western Australia is assumed to grow at the national long-term average rate of 1.75% per year for the purposes of the State's economic and fiscal projections.⁴

1.2.2 Participation

It has been widely recognised that population ageing will reduce the total labour force participation rate. Holding other factors constant, a decline in the participation rate will lead to lower per capita economic growth both in Western Australia and Australia. However, there are significant differences between workforce participation at a State and national level, which if sustained over the next few decades, could result in slightly higher per capita incomes in Western Australia.

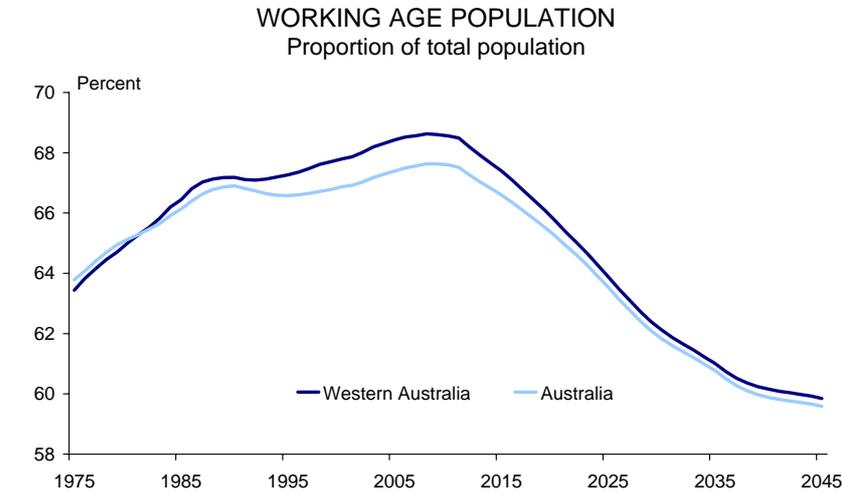
As indicated in the following chart, aggregate participation rates in both Western Australia and Australia have both trended upwards over the past few decades. This reflects a marked increase in female participation, which has more than offset a slight decline in participation by males. The chart also shows that labour force participation rates in Western Australia have consistently exceeded the national average over this period.



Source: ABS

⁴ This has become the 'standard' productivity assumption in recent long-term economic and fiscal reports for Australia. See for example the Commonwealth Government's *Intergenerational Report* (2002) and the Victorian Department of Treasury and Finance's *Shaping a Prosperous Future* (2003).

Higher aggregate participation rates in Western Australia stem from two main sources. The first relates to the size of Western Australia’s working age population relative to its total population, which has exceeded the national equivalent since the 1980s. However, as noted in the demographic outlook, this difference is projected to disappear over the next few decades.



Source: ABS

There are also significant differences in the propensity of different age groups to participate in the labour market. Notably, the participation rate of those aged between 55 and 64 years is substantially higher in Western Australia than the rest of the nation.

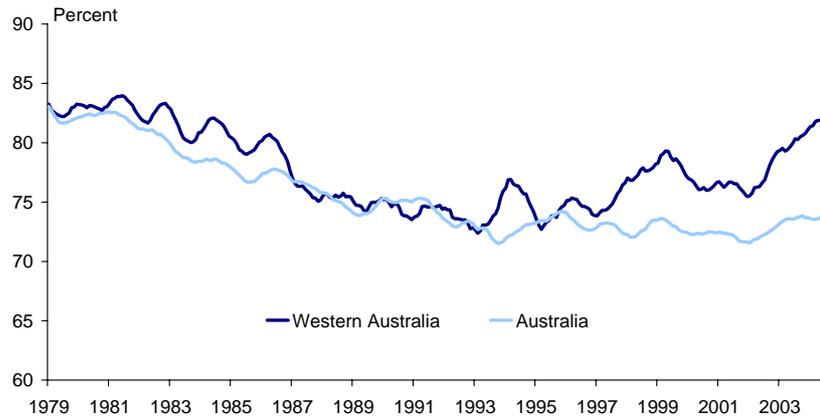
Average Participation Rates, 2003

Age Cohort	Western Australia	Australia
15-19	64.0	60.1
20-29	78.7	81.7
30-49	81.6	81.3
50-54	80.1	77.3
55-59	70.0	62.8
60-64	43.6	39.8
65-69	17.0	14.5
70 and over	3.6	3.1

Source: ABS

Although the reasons for this difference are not entirely clear, a number of observations can be made. First, both male participation and female participation in Western Australia in the 55 to 59 age brackets are significantly higher than the national average. Perhaps more significantly, male participation in Western Australia by those aged 55 to 59 years has trended upwards for some time. This is contrary to the experience nationally, and provides *prima facie* evidence that reversing the long-term downward trend in participation by older males in the rest of Australia is achievable.

PARTICIPATION BY MALES AGED 55-59 YEARS
Annual Average Rate

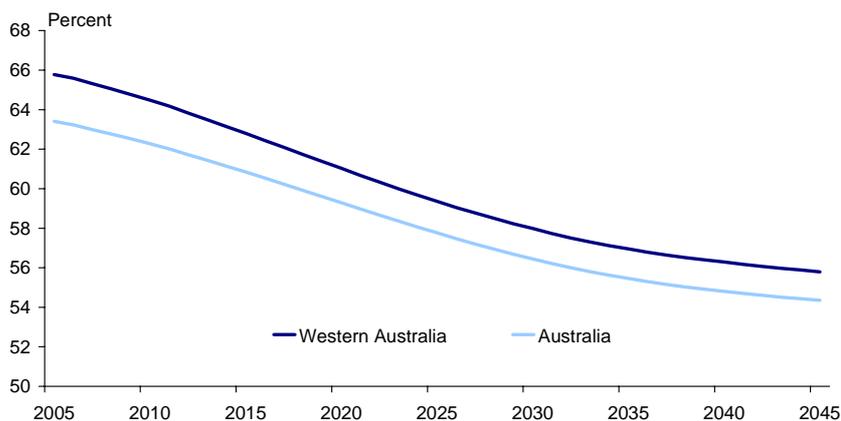


Source: ABS

Applying current age-specific participation rates to current population projections, the total workforce participation rate in Western Australia is projected to fall by around 10 percentage points, from 66% currently to around 56% in 2044-45. This reflects the projected increase in proportion of the population in the age cohorts that tend to participate least in the labour market.

Based on the (simple) assumption that higher age-specific participation rates will be maintained in Western Australia, the State's total labour force participation rate is projected to exceed that for Australia over the next four decades. However, there is likely to be some convergence in aggregate rates of participation, due to the relative slowdown in growth of Western Australia's working age population compared with the rest of the nation.

PROJECTED PARTICIPATION RATES
2004-05 to 2044-45



Source: WA DTF

The projected decline in the aggregate participation rates implies lower aggregate economic growth through a slowdown in the rate of employment creation. Assuming a constant unemployment rate in Western Australia of 5.5%, growth in employment is projected to fall from an average annual rate of 2.5% over the past two decades, to around 0.6% over the period 2004-05 to 2044-45.

Holding other factors constant, the decline in participation could detract around 0.5 percentage points from average annual growth in Western Australia's GSP over the next four decades. This corresponds to a 0.3 percentage point reduction in average annual per capita GSP growth over this period.

Box 1.1 *Participation in the State public sector*

Over the past decade, the Western Australia Department of the Premier and Cabinet (DPC) has monitored the demographic age profile of the Western Australian State Government workforce. In 2003, DPC completed a two-year research project with the Centre for Labour Market Research into the impact of population ageing on the public sector from 2002 to 2022. The findings of this research suggest:

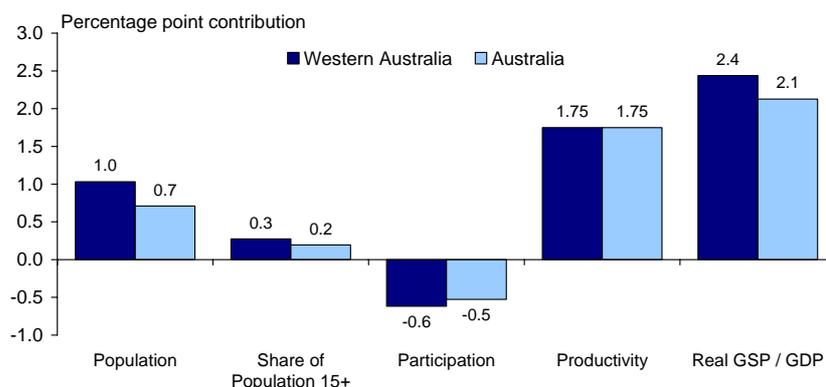
- the age composition of the State's public sector is considerably older than the balance of the Western Australian labour force, as well as other State and federal public sectors in Australia;
- the projected shortfall in the public sector workforce ranges between 4% and 23% by 2022, depending on assumptions regarding recruitment rates and increasing labour force participation;
- the two public sector industries likely to be most dramatically affected by population ageing are health and education;
- the magnitude of projected shortages in health and education will test the capacity of local education institutions to meet demand for graduate labour; and
- competition for skilled staff between agencies, and with the private sector, will intensify. Critical shortages in other States for particular skills could result in a significant skill drain from Western Australia.

Overall economic outlook for Western Australia

Over the next forty years, growth in Western Australia's economy is projected to moderate relative to the outcomes of the past two decades. In part, this follows from expectations of lower growth in the working age population and a projected decline in the workforce participation rate. It also reflects an assumption of slightly lower productivity growth compared with the 1990s.

Assuming that productivity growth is sustained at the (national) long-term average of 1.75% per annum, economic growth in Western Australia is projected to average 2.4% over the next four decades. This is slightly higher than the national projection of 2.1% growth, due to higher population growth in Western Australia.

COMPONENTS OF ECONOMIC GROWTH*
Average annual contribution, next 40 years



* Both the unemployment rate and average hours worked are assumed to remain constant.

Source: WA DTF

GSP per capita is also projected to grow more slowly over the long term. However, the growth in real GSP per person is not anticipated to decline to the same extent as the growth rate of real GSP. This is because the projected fall in aggregate economic activity is partly driven by slower population growth.

The following table summarises the economic projections for Western Australia over the next four decades. These parameters form the basis of the State's fiscal projections, which are discussed in the following chapter.

Macroeconomic Projections for Western Australia^(a)

	Labour productivity growth (%)	Employment growth (%)	Real GSP growth (%)	Growth in real GSP per capita (%)
1980s	n.a.	3.3	n.a.	n.a.
1990s	2.1	1.9	4.1	2.4
2000s	2.0	1.4	3.1	1.5
2010s	1.75	0.7	2.5	1.4
2020s	1.75	0.4	2.4	1.4
2030s	1.75	0.3	2.1	1.4

(a) Average annual growth rates.

Source: ABS and WA DTF.

2. FISCAL PROJECTIONS FOR WESTERN AUSTRALIA

This chapter presents long-term fiscal projections for Western Australia in the context of the ageing population and potential non-demographic cost factors. The projections are based on preliminary work undertaken by the Western Australian Department of Treasury and Finance and do not necessarily reflect the views of the State Government.

2.1 Introduction

The ageing of the population, combined with other non-demographic cost factors, is likely to present significant fiscal challenges to Australian governments. This is contrary to statements made in the Commonwealth Government's *Intergenerational Report* in 2002, which contained a limited analysis of long-term fiscal pressures facing the States and Territories (the States).

To consider the fiscal impacts of demographic change on the States in more depth, the Department of Treasury and Finance in Western Australia (DTF) has collaborated with Access Economics and other State and Territory Treasuries to develop a long-term modelling framework.

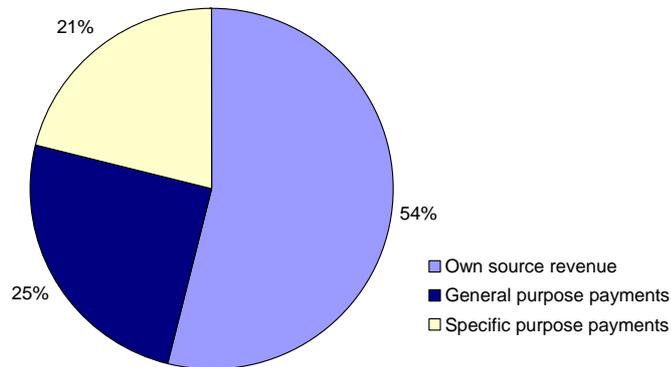
Indicative results obtained through this modelling are presented below. It is important to note that these projections are based on *preliminary* work undertaken by DTF. While they provide a broad indication of fiscal pressures over the next four decades, they do not purport to present a definitive statement of Western Australia's long-term fiscal outlook.

As with all long-term term models of this nature, the projections presented are subject to a high level of uncertainty. Accordingly, the projections are not forecasts or forward estimates, and should be clearly distinguished from the medium-term economic and fiscal forecasts contained in the 2004-05 State Budget.

2.2 Revenue

Western Australia currently obtains around half of its revenue from its own sources (mainly comprising indirect taxes), while the other half is provided by the Commonwealth in the form of general and specific purpose payments. Each of these sources of revenue is projected to fall as a proportion of economic activity over the next four decades.

COMPONENTS OF GOVERNMENT REVENUE
Western Australia, 2003-04



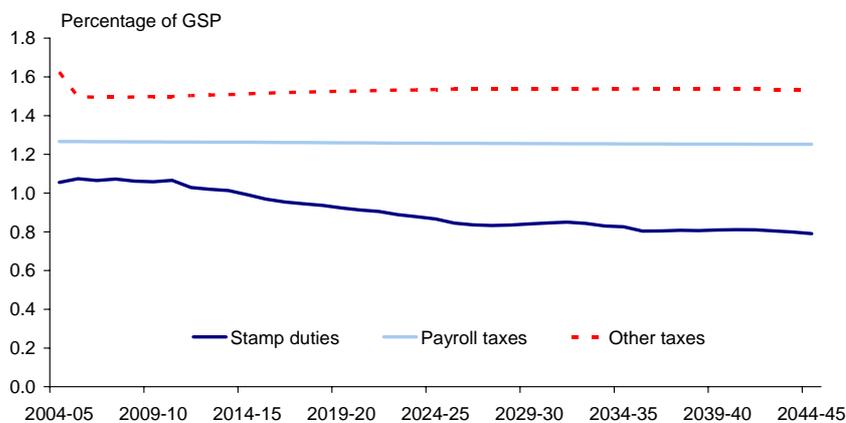
Source: WA DTF

2.2.1 *Own source revenue*

Own source revenue in Western Australia, which accounted for around 54% of total revenue in 2003-04, is projected to decline slightly as a proportion of GSP over the next four decades. This fall mainly reflects a reduction in stamp duty on conveyances as a share of GSP, which is expected to arise from a projected slowdown in the growth of the household forming age-bracket.

Payroll taxes, which comprise another major source of revenue for Western Australia, are projected to remain broadly stable relative to GSP. This is because the State's wage bill (that is, employment multiplied by average earnings) is projected to grow broadly in line with the nominal economy. Most other taxes, including land and motor vehicle taxes, are also projected to grow in line with GSP.⁵

PROJECTED OWN SOURCE REVENUE
Western Australia, 2004-05 to 2044-45



⁵ The fall in other taxes as a share of GSP in 2005-06 reflects the assumed removal of debits taxes.

An additional pressure on the revenue side is the Western Australian Government's commitment against poker machines. Gambling revenues in other States are projected to rise relative to economic activity, as the propensity for consumption on gambling generally rises with age.

Overall, total own source revenue in Western Australia is projected to fall by around 0.3% of GSP by 2044-45.

2.2.2 General purpose payments

Under the current system of intergovernmental financial relations in Australia, the Commonwealth passes on its Goods and Services Tax (GST) revenue collections to the States in the form of general purpose grants. These grants, which are distributed on the basis of Commonwealth Grants Commission recommendations, replace previous finance assistance grants to the States, and finance the abolition or reduction of a range of State taxes. In 2003-04, general purpose payments accounted for 25% of Western Australia's total revenue.

Over the next four decades, total GST revenue is expected to fall relative to nominal private spending because the GST base does not include some relatively faster growing components of consumption, such as private spending on health services. GST revenue is also partly affected by the projected in slowing growth of dwelling investment. As a result, general purpose payments to Western Australia are projected to fall by 0.4% of GSP by 2044-45.

2.2.3 Specific purpose payments

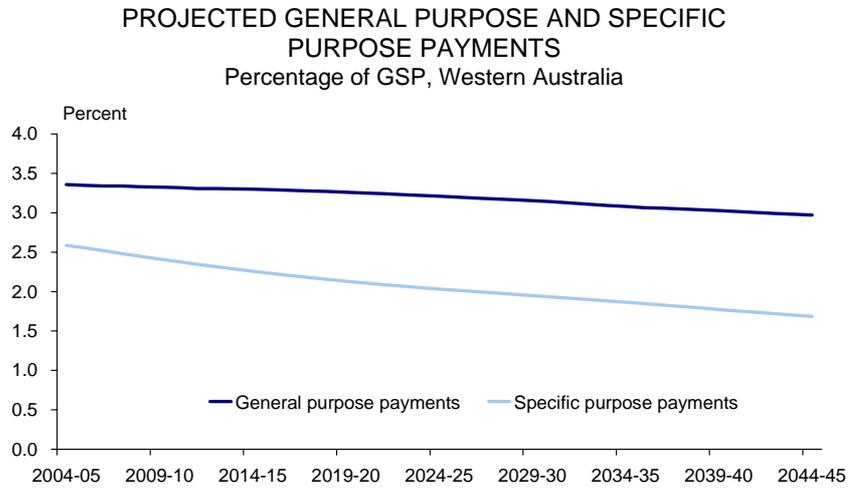
Specific purpose payments (SPPs) are grants provided by the Commonwealth to the States for specified activities. These payments are made under section 96 of the Australian Constitution, which provides that the Commonwealth may grant financial assistance to any State on such terms and conditions as it sees fit. As SPPs are made at the discretion of the Commonwealth, they represent a major fiscal risk for the States.

For health and education grants, the projections for SPPs are based on inflation and population growth, as well as changes in the age structure of the economy, per capita income and a residual cost trend, which is calculated from historical data.⁶ In the case of health grants, the residual cost trend is negative, implying that Commonwealth grants for health have not kept up with underlying demand. Using this approach, health grants fall as proportion of GSP over the projection period, while education grants increase slightly.

All other grants are projected to move in line with inflation and population growth only, implying that SPPs will grow more slowly than the economy.

⁶ Based on the period from 1978-79 to 1997-98. The residual is calculated using a similar methodology to that outlined in appendix A.

Overall, SPPs to Western Australia are projected to decline by 0.9% of GSP over the projection period. The following chart depicts the projected decline in both general purpose payments and SPPs from 2004-05 to 2044-45.



Source: WA DTF

2.2.4 Summary of Western Australia's revenue outlook

Total revenue in Western Australia is projected to decrease by 1.6% of GSP by 2044-45. This reflects the projected decline in Commonwealth grants and, to a lesser extent, lower own source revenue relative to GSP. The contributions of these components to the decline in total revenue as a share of GSP are given in the following table.

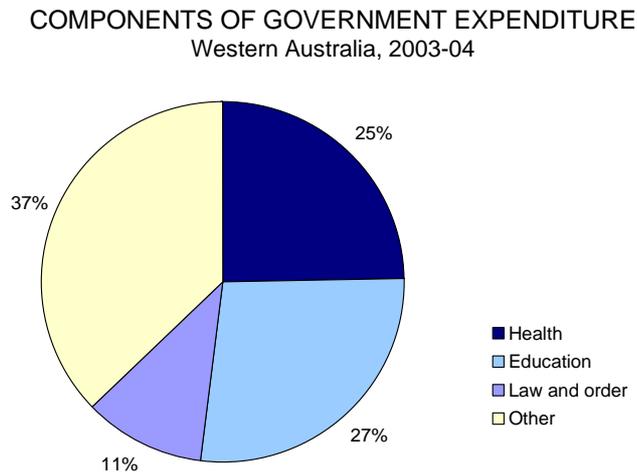
Projected change in revenue as a proportion of GSP
Western Australia, 2004-05 to 2044-45

Own source revenue	-0.3%
Taxes	-0.4%
Other revenue	0.1%
Grants	-1.3%
General purpose payments	-0.4%
Specific purpose payments	-0.9%
Total revenue	-1.6%

Source: WA DTF

2.3 Expenses

Similar to other States and Territories in Australia, Western Australia spends a large proportion of its budget on education, health and law and order. The following chart provides a breakdown of the State's total expenditure by ABS Government Purpose Classification.



Source: WA DTF

Expenditure on these items over the long term is modelled as a function of demographic change, per capita economic growth, inflation and a program-specific residual cost trend. The inclusion of the residual cost trend is designed to capture a range of factors, including higher utilisation of government services, the impact of technological change and other changes in program-related prices.⁷ The sensitivity of expenditure on Western Australia's key portfolios to these factors is outlined below.

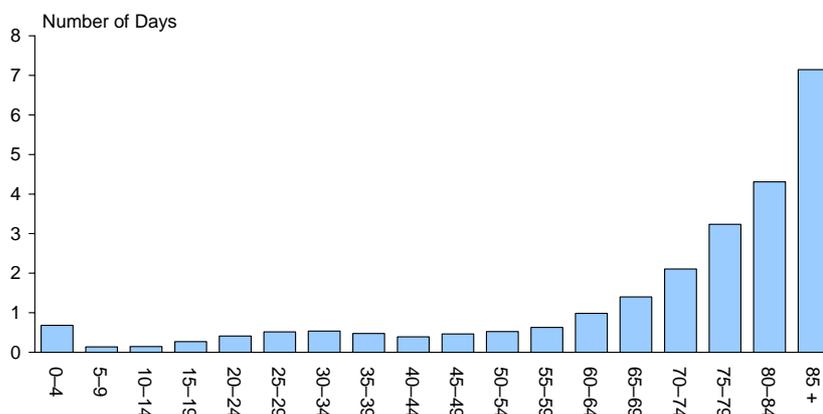
2.3.1 Health

Expenditure on health is a major component of Western Australia's budget, accounting for 25% of total spending in 2003-04. Similar to other States, Western Australia has primary funding responsibility for acute care institutions (i.e. public hospitals), mental health, public health and community care for the general population. In contrast, the Commonwealth government has primary responsibility in the areas of primary care (i.e. general practitioners, specialists and imaging/diagnostics), pharmaceuticals (under the pharmaceutical benefits scheme), residential aged care, private health insurance rebates and aged care.

⁷ A more detailed discussion of these assumptions is provided in appendix A of this submission.

Demographic change presents a significant pressure on health spending for all Australian governments. This is because many diseases such as cardiovascular disease and cancer are more common in mature age persons, so that demand for health services generally increases with age.

AVERAGE PATIENT DAYS BY AGE
Western Australian public hospitals, 2002-03



Source: Australian Institute of Health and Welfare

The following table summarises the demographic drivers for each individual program. These drivers are published by age cohort and are multiplied by population projections to obtain an index of projected demand for each program.

Demographic Drivers of Health Expenditure

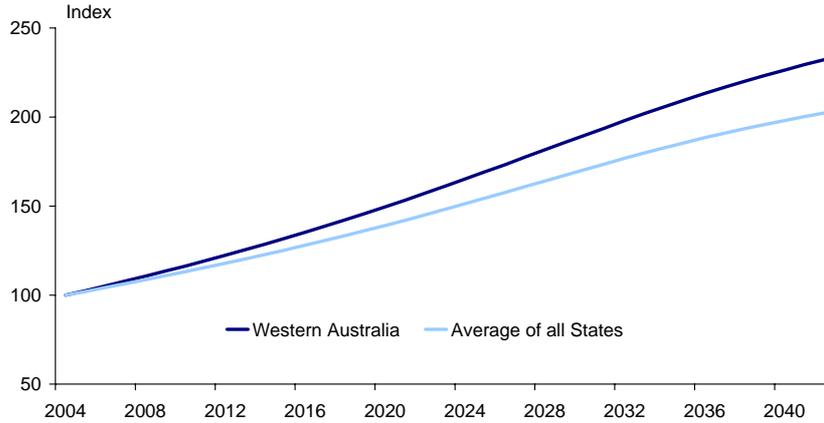
Health Program	Demographic Driver	Source
Acute care institutions	Hospital usage - average number of patient days by age cohort.	AIHW*
Community health services	Doctor (GP) usage by age cohort.	BEACH database**
Public health services	Disability demand by age cohort.	ABS
Mental health services	Hospital usage (average number of patient days) by age cohort.	AIHW
Nursing homes for the aged	Aged care bed usage by age cohort.	ABS

*AIHW: Australian Institute of Health and Welfare

**BEACH: Bettering the Evaluation and Care of Health Project

The combination of the ageing population and high use of medical services among older age groups means that demand for health services may grow substantially over the next four decades. The following chart plots the projected increase in demand for acute care institutions in Western Australia.

DEMAND FOR ACUTE CARE INSITUATIONS
Population weighted index

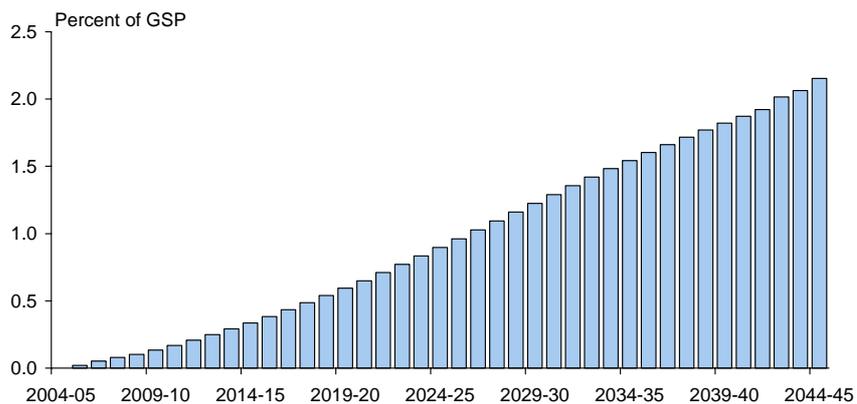


Source: WA DTF

Non-demographic cost pressures could also increase the burden on health expenditure over the long term. The introduction of expensive new technologies and treatments could add to cost of providing medical services per patient, while there is also evidence to suggest that utilisation of health services by age cohorts is increasing over time. Over the long term, these factors could have a larger impact on future health spending than demographic change.

The combination of these demographic and non-demographic factors means that health costs are projected to increase substantially as a proportion of GSP. As indicated in the following chart, health spending in Western Australia is projected to increase by 2.2% of GSP over the next four decades, making it the largest contributor to fiscal pressure over this period.

PROJECTED CHANGE IN HEALTH EXPENDITURE*
Western Australia, 2004-05 to 2044-45



* Net of user charges, which are projected to grow in line with expenditure.

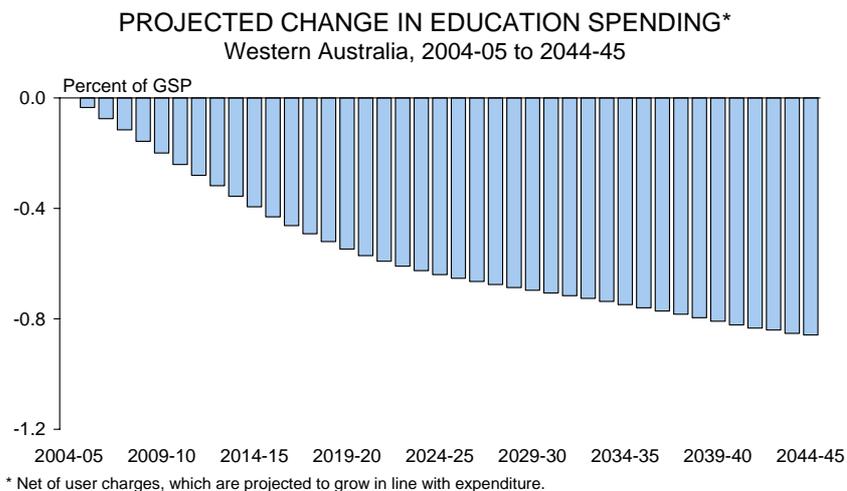
Source: WA DTF

2.3.2 Education

Education represents another major area of responsibility for State governments. In 2003-04, around 27% of total spending was directed towards education in Western Australia. The largest share of State expenditure on education is primary and secondary education spending, while technical and further education (TAFE) also constitutes a significant share of expenditure.

Demographic change will have a significant impact on education expenditure over the next few decades. This is because the growth in the total number of students is projected to slow in line with expectations of continued low fertility. According to ABS mid-series projections, the proportion of Western Australia's population in the principal age group for education (5 to 24 year olds) will fall from 28% in 2004-05 to around 21% in 2044-45.

Due to expectations of the relative decline in the principal age group for education, total spending on education in Western Australia is projected to fall by 0.9% GSP by 2044-45 (see following chart). Although spending on education is projected to fall relative total GSP, it is important to note that real expenditure per capita is still projected to increase over the same period.



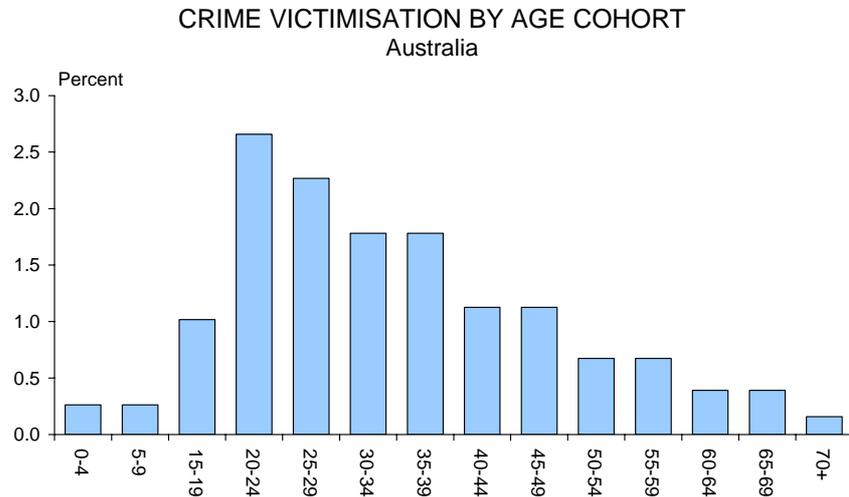
Source: WA DTF

2.3.3 Public order & safety

Spending on public order and safety accounts for a significant share of State government expenditure. In 2003-04, the Western Australian Government allocated \$1.3 billion or 11% of total expenditure to this portfolio. In future years, both demographic and non-demographic forces are projected to drive spending on public order and safety.

The demographic drivers of spending on public order and safety relate to age-specific rates of victimisation, court appearance and incarceration. Similar to health and education expenditure, each driver is multiplied by age-cohort population estimates to derive program specific expenditure projections.

As a general rule, young people tend to commit, and are also the victims of, more crimes than older people (see following chart). Court appearances and incarceration show a similar pattern. These tendencies imply that growth in the volume of demand for public order and safety services will decline in response to Australia’s ageing population.



Source: ABS

However, while the demographic analysis of crime suggests that pressure on public order and safety spending could ease over the long term, there is a risk that this could be more than offset by other non-demographic cost factors. Since 1978, State funding in this area has exceeded that which can be explained by demographic factors alone, possibly reflecting an overall increase in crime rates and/or the introduction of new technologies. Based on a continuation of these trends, Western Australian expenditure on public order and safety is projected to increase by 0.6% of GSP by 2044-45.

2.3.4 Summary of Western Australia’s expenditure outlook

By 2044-45, total expenditure in Western Australia is projected to increase by 1.6% of GSP. The health portfolio is projected to account for the lion’s share of this rise, reflecting pressures from both demographic and non-demographic sources. Spending on public order and safety is also projected to rise relative to GSP, while pressure on education expenditure could ease.

**Projected change in expenditure as a proportion of GSP
Western Australia, 2004-05 to 2044-45**

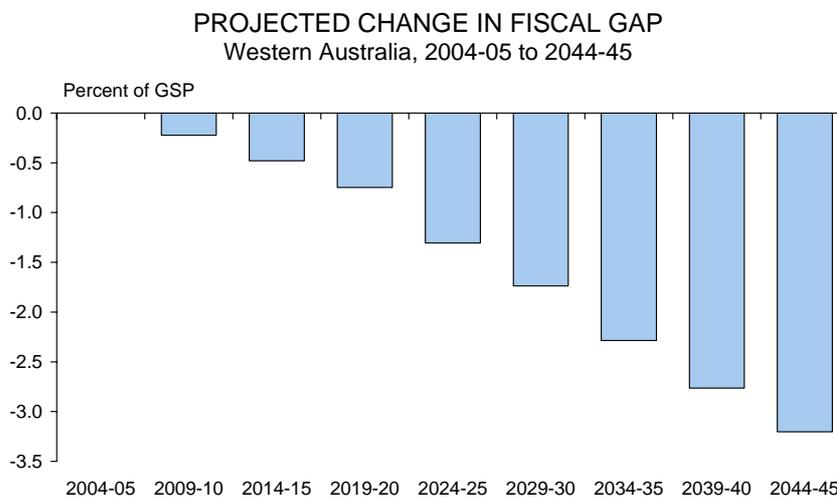
Health	2.2%
Education	-0.9%
Public order and safety	0.6%
Other expenditure	-0.3%
Total expenditure	1.6%

Source: WA DTF

2.4 Overall results

2.4.1 Western Australia

In the absence of corrective policy measures, the ageing of the population and other non-demographic cost factors could have a significant impact on Western Australia's finances over the long term. Under the scenario outlined in this and the previous sections, financial pressure, as measured by the 'fiscal gap', is projected to increase to 3.2% of GSP by 2044-45.⁸ The 'fiscal gap' is the same as the net lending measure of financial performance, which encompasses operating and capital spending, with the exception that it excludes net interest payments. By excluding net interest payments, it represents underlying structural pressures arising from the ageing of the population and non-demographic cost factors.⁹



Source: WA DTF

Fiscal pressures are expected to emerge from both the revenue and expense sides of Western Australia's budget. Total State revenue is projected to fall by 1.6% of GSP by 2044-45, due to a projected reduction in both own source revenue and Commonwealth payments as a proportion of GSP.

⁸ These projections should be distinguished clearly from the estimates contained in the State's annual budget papers. They are not estimates of the actual operating balance, but are designed to indicate the potential fiscal pressure facing the State on a 'no policy change' basis.

⁹ If net interest payments are not excluded from the 'fiscal gap' concept, the impact of any debt accumulation on interest costs and therefore the balance, could result in a debt spiral which could dominate the projected fiscal result. Excluding net interest costs removes these debt dynamics.

At the same time, total expenditure¹⁰ is projected to increase by 1.6% of GSP over the next four decades. This reflects a large increase in projected health spending due to both demographic and non-demographic cost factors. Although education spending is projected to decline as a proportion of economic activity, this is not sufficient to offset higher spending on health.

**Decomposition of projected change in fiscal gap (% of GSP)
Western Australia, 2004-05 to 2044-45**

Own source revenue	-0.3%
Revenues from the Commonwealth	
General purpose payments	-0.4%
Specific purpose payments	-0.9%
Expenditure	
Health	-2.2%
Education	0.9%
Public order and safety	-0.6%
Other expenditure	0.3%
Net change in fiscal pressure	-3.2%

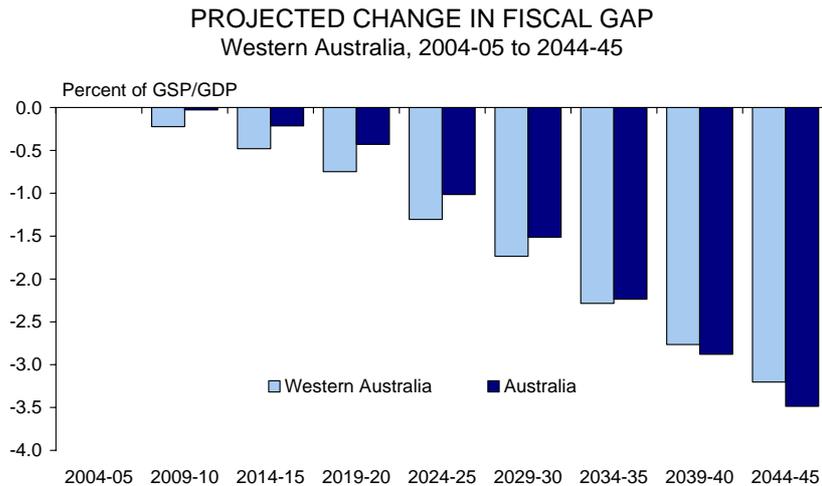
Source: WA DTF

2.4.2 Commonwealth

For comparative purposes, indicative projections for Commonwealth finances have also been derived. These suggest that in the absence of corrective policy measures, the change in the fiscal gap for the Commonwealth could increase to 3.5% of GDP by 2044-45.¹¹ This is broadly similar with the change in the fiscal gap projected for Western Australia over the same period, indicating that both levels of government face similar levels of potential fiscal pressure over the long term.

¹⁰ Excluding interest costs.

¹¹ This is lower than the projected gap for the Commonwealth in the *Intergenerational Report* of 5.0% of GDP. The variation largely arises from different assumptions relating to non-demographic expenditure growth, particularly for health.



Source: WA DTF

2.5 Sensitivity analysis

The projections outlined above are based on a number of key assumptions to economic and fiscal variables. Exploring the impact of varying these assumptions provides an indication of the robustness of the base-case projections and the relative importance of different policy alternatives.

2.5.1 Productivity and participation

The following table presents the projected fiscal gap for both the State and Commonwealth under different productivity growth and participation rate scenarios. In relation to the Commonwealth, changes in productivity have a significant influence on the projected fiscal gap. Holding participation rates constant, a 0.5 percentage point increase in labour productivity results in a 0.5 percentage point reduction to the Commonwealth's projected fiscal gap. Variations in the labour force participation rate also have an important (albeit relatively small) impact on Commonwealth finances.

Projected change in fiscal gap (% of GSP/GDP)
2004-05 to 2044-45

Participation ^(a)	Productivity					
	1.25%		1.75%		2.25%	
	WA	Aust.	WA	Aust.	WA	Aust.
- 2 ppts	-3.4	-4.4	-3.4	-3.9	-3.4	-3.4
- 1 ppt	-3.3	-4.2	-3.3	-3.7	-3.3	-3.2
0 ppts	-3.2	-3.9	-3.2	-3.5	-3.2	-3.0
1 ppt	-3.1	-3.7	-3.1	-3.3	-3.1	-2.8
2 ppts	-3.0	-3.5	-3.0	-3.1	-3.0	-2.6

(a) Represents the deviation from the base-case assumption (percentage points).

In contrast, the change in Western Australia’s fiscal gap is not sensitive to changes in productivity growth (under the assumptions employed for these projections). In part, this is because State revenue sources are projected to grow at a lower rate than economic activity (unlike Commonwealth revenues).

It also reflects the underlying assumptions relating to expenditure growth. The model of expense growth for both the State and Commonwealth assumes that demand for public goods and services increases with per capita economic growth, reflecting a rule of thumb that the public expects government goods and services to ‘keep up’ with real incomes. This association is deemed the ‘real income effect.’

The projections in the above table assume that a 1% rise in per capita economic growth corresponds with a 1% rise in demand for public services. Thus, the impact of higher productivity growth on the States is to increase expenses by an equivalent amount, so that there is no impact on the projected fiscal gap.

Although Commonwealth expenses also expand with economic activity, this is not the case with its grants to the States. As indicated earlier, growth in SPPs is projected to grow at a lower rate than economic growth, reflecting past trends and the current Intergovernmental Agreement. The effect is that higher productivity growth has a significant impact on the projected fiscal gap for the Commonwealth, but not the States.

2.5.2 The ‘real income’ effect and community expectations

The strength of the association between economic growth and community expectations is subject to uncertainty, but has a large impact on the fiscal projections for the Commonwealth and States. The following table presents a sensitivity analysis of variations in the real income effect.

**Projected change in fiscal gap (% of GSP/GDP)
2004-05 to 2044-45**

Real income effect ^(a)	Productivity growth					
	1.25%		1.75% (base)		2.25%	
	WA	Aust.	WA	Aust.	WA	Aust.
1.00 (base)	-3.2	-3.9	-3.2	-3.5	-3.2	-3.0
0.75	-2.4	-2.3	-2.0	-1.1	-1.8	0.0
0.50	-1.7	-0.8	-1.1	0.9	-0.6	2.4
0.25	-1.0	0.6	-0.2	2.6	0.6	4.5
0.00	-0.4	1.8	0.6	4.2	1.5	6.2

(a) Refers to the elasticity of demand for public services with respect to economic activity.

These projections indicate that if future demand for public goods and services increases at a significantly lower rate than economic growth, then fiscal pressure on Australian governments could be reduced substantially. For example, if community expectations were lowered such that only one half of the increase in real GSP growth was reflected in higher government spending growth, the projected change in the fiscal deficit for Western Australia falls by 2.1 percentage points (under the base case productivity scenario). Commonwealth finances also improve considerably under lower real income effect scenarios.

3. RESPONDING TO LONG-TERM CHALLENGES

This chapter discusses the issues arising from the likely economic and fiscal challenges presented in the previous two chapters. It also outlines current and potential measures to alleviate these pressures. It highlights, inter alia, the importance of productivity growth, labour supply and participation, public sector efficiency, community expectations and Commonwealth-State financial relations in determining the State's long-term economic and fiscal outlook.

3.1 Productivity

Productivity growth will have a key bearing on the economic and fiscal outlook for both Western Australia and the rest of the nation. To the extent that high levels of productivity growth can be maintained (and subject to community expectations), Australian governments will be reasonably well positioned to meet the challenges of population ageing and other non-demographic cost pressures.

This is because productivity growth means higher per capita incomes and hence an increased capacity for individuals to meet expenses privately. For example, assuming the average national long-term productivity growth rate of 1.75% per annum is maintained, per capita incomes in 2044-45 would be around 87% higher than today. Higher productivity and real incomes also imply the potential for higher savings. This could also boost economic growth via higher investment in productive capacity.

Whether productivity growth continues at the pace of recent years, or diverges from recent trends, is uncertain. Indeed, there is a possibility that future rates of productivity growth could fall below the outcomes of the past decade, in which case the fiscal pressure on all Australian governments could increase. To guard against this risk, policy settings in Australia must be supportive of continued growth.

In this regard, the State Government has implemented a number of measures to promote productivity and economic growth in Western Australia. These measures include reforms to the State's electricity and gas markets, which are designed to increase competition and place downward pressure on electricity prices for businesses and households.

The Western Australian Government's commitment to fiscal sustainability also supports strong productivity growth. Strong and stable finances signal that the State is an attractive destination in which to invest. Moreover, the commitment to operating surpluses allows the Government to invest in the infrastructure required to support investment growth. For example, the Western Australian Government recently committed \$159 million to the provision of common user infrastructure on the Burrup Peninsula, which could pave the way for several large resource developments. This is already being utilised, with the \$630 million Burrup Fertilisers ammonia plant being the first project to access the infrastructure.

Investment in human capital is imperative to improve productivity and promote high growth. The State Government places a high priority on education and training, to ensure a skilled and adaptable workforce in Western Australia. The Government is allocating vocational and educational training resources in line with industry development priorities to ensure alignment of workforce skills and educational pathways with the needs of industry.

In the tertiary sector, the Western Australian Government has focused on establishing world-class educational standards and facilities, and a sufficient flow of high quality graduates, particularly in relation to industries in which the State is recognised as having an existing or emerging competitive strength.

The Government is also strengthening Western Australia's science and innovation sectors, encouraging new ideas and building commercial links between industry and research, and improving Western Australia's scientific research capacity. This year, the State government invested a further \$100 million into science initiatives with an emphasis on bridging the gaps in the innovation pipeline and attracting further co-investment from the private sector.

3.2 Labour supply and participation

The sensitivity analysis contained in chapter 2 of this submission suggests that higher labour force participation will have a valuable (albeit relatively small) economic and fiscal impact on Western Australia over the next few decades. To a large extent, market forces may result in higher age-specific participation rates over the long term, while the Commonwealth government can influence participation through retirement incomes and taxation policy.

State governments also have a role in facilitating higher participation. In this regard, the Western Australian Department of Consumer and Employment Protection (DoCEP) is preparing a *Mature Age Employment Strategy*, which is designed to eliminate age discrimination and encourage the retention of mature workers in the paid workforce. This is part of the Government's *Active Ageing Strategy* (see box 3.1), which will include a campaign to promote the value of mature employees and flexibility in employment options for older workers.

In the public sector, the Government is including more flexible working arrangements in enterprise agreements to facilitate phased retirement and more flexible leave arrangements for public sector employees (including mature employees).

The Western Australian Government has also amended the *Industrial Relations Act 1979* to include a new provision for updating of State industrial awards to remove discriminatory provisions.

Finally, it is important to note that the *Equal Opportunity Act* in Western Australia legislates against age discrimination in employment, and age related retirement has been removed from most State legislation.

Box: 3.1 Active Ageing Taskforce

The Western Australian Government established the Active Ageing Taskforce in 2002 to develop an across-government five to ten year policy framework to promote the participation of older people in the community. The policy framework in the Taskforce's report is based on the World Health Organisation's active ageing policy framework, which focuses on prevention of illness throughout an individual's life, not just when they are 'old'.

Released in March 2004, the Government's response, *Generations Together - The Western Australian Active Ageing Strategy*, recognises five priority areas for Western Australia.

1. *Health and Wellbeing* - the strategy focuses on developing resources to retain good health and prevent illness. This includes the support of family and carers and promotion of the personal, social and environmental facilitators of wellbeing.
2. *Employment and Learning* - the strategy promotes policies to encourage employers to attract and benefit from older workers' skills and experiences. It assists employers to retain older employees through innovative workplace practices, phased retirement and life-long learning. It assists mature employees to maintain and develop their skills and profit from and contribute to the workplace.
3. *Community Awareness and Participation* - the strategy enhances the capacity of the community to employ and benefit from the experiences and skills of older people. It assists older people to be informed participants in our society.
4. *Protection and Security* - the strategy provides a framework for across government initiatives and community and private sector partnerships to increase social and economic security and protection of older people.
5. *Planning and the Built Environment* - the strategy promotes and extends initiatives to make our community more accessible for older people and improve planning, services and design to meet the needs of our ageing population.

3.2.1 Volunteering

It is important to recognise that consequences of a projected decline in the total labour force participation rate could be mitigated by an increase in the level of volunteering. In 2001, the Western Australian Government commissioned a report on baby boomers and volunteering. The research aimed to identify the extent to which baby boomers may volunteer in the future, and strategies to encourage baby boomers to volunteer their services in the community.

The report, *Boomnet: Capturing the Baby Boomer Volunteers*, notes that the 35 to 54 age cohort had the highest volunteer rate (37%), compared to 30% for those aged 18 to 34 years and 27% for those aged 55 years and over. To the extent that these data indicate the baby boomer generation has a higher propensity to volunteer, then the potential implications of a decline in the aggregate labour force participation rate could be reduced significantly.

3.2.2 Skilled migration

This issue has received limited attention in the policy debate on ageing. While an increase in migration would have a relatively small impact on the age structure of the population, it would promote higher labour force participation. Moreover, it could also drive higher productivity and economic growth, particularly if there is a focus on increasing skilled migration.

3.3 Public sector efficiency

Improvements in public sector efficiency will have an important impact on the State Government's bottom line over the long term. For example, a 10% rise in efficiency over the next four decades, holding all other factors constant, could reduce the projected change in Western Australia's fiscal gap by around one percentage point of GSP by 2044-45.

To ensure the effective and efficient delivery of public services, the Western Australian Government established the Functional Review Taskforce (FRT) in 2002. This follows from the Government's Machinery of Government recommendations in 2001, which saw the number of government agencies in Western Australia fall from 46 agencies to 23 agencies. The recommendations of the FRT will deliver estimated savings in the order of \$750 million over the four years from 2003-04.

Reflecting the likelihood of growing pressure on health spending over the long-term and the need for efficiency gains, the Government also established the Health Reform Committee in 2003 (see box 3.2). This committee released its final report in March 2004.

Box 3.2: Health Reform Committee: A Healthy Future for Western Australians

The March 2004 report by the Western Australian Health Reform Committee, *A Healthy Future for Western Australians*, acknowledges the impact of a growing and ageing population on inpatient demand for hospital services, and details a medium to long-term strategy for coping with it. The Health Reform Implementation Taskforce in Western Australia will further develop and implement the strategy and explore approaches including:

In an environment of rising cost pressures, it is also important that the States and the Commonwealth collaborate in areas of potentially overlapping responsibility, to avoid duplication and inefficient service delivery.

For example, both the Commonwealth and the States have responsibilities in the delivery of health services, leading to a fragmented health system and difficulties of flow between different health sectors (e.g. between the general practitioners and hospital sectors; and between hospital and community care sectors). Existing funding arrangements have led to cost shifting and services not being provided in the most efficient way (e.g. aged persons occupying expensive hospital beds rather than appropriate aged residential facilities).

As another example, the Commonwealth has indicated that it will set up TAFE colleges and give capital grants directly to State schools. This may lead to duplication of services and misallocation of resources.

The States are best placed to determine local priorities for health and education services. In particular, the States have a major role in delivering these services, whereas the Commonwealth generally funds these services rather than directly delivering them.

3.4 Managing community expectations

Community expectations will play an important role in determining long-term fiscal pressure on all Australian governments. The baseline projections in chapter 2 of this submission assume that demand for key public goods and services will increase in line with per capita income growth. Accordingly, a 1% rise in economic growth is assumed to result in a 1% rise in government expenditure, holding other factors constant.

If future demand for public goods and services increases at a lower rate than economic growth, then fiscal pressure on Australian governments could be reduced significantly. Unfortunately, the extent to which community expectations for public services increase with per capita income is unclear. While there is some evidence of this relationship holding, there is a strong case for a robust examination of the strength of this association.

3.5 Reform of Commonwealth-State financial relations

The current framework of intergovernmental financial relations in Australia presents a considerable long-term fiscal risk to State governments. In part, this is because States control only around half the revenues they need to fund their expenditure responsibilities, and some of the States' revenue sources have relatively narrow bases (the "vertical fiscal imbalance").

On equity and efficiency grounds, States have limited capacity to raise more revenue from their current narrow revenue bases. States face significant barriers in developing their own broad revenue bases, reflecting the Commonwealth's effective monopoly on income taxes, the Constitutional prohibition on States raising excise duties (which has been broadly interpreted by the High Court), and competitive pressures across the States.

Aside from issues relating to the States' own source revenue, inadequate growth in Commonwealth grants revenue looms as a major long-term fiscal risk for State governments. Under the current SPP indexation arrangements, the Commonwealth does not fully account for increasing community expectations and non-demographic cost growth pressures. As indicated in the previous chapter, this implies that SPPs will fall relative to GSP over the long term.

In addition to risk relating to the *level* of fiscal support from the Commonwealth, there are also concerns with regard to the economic *efficiency* of Commonwealth-State financial relations, and the consequent impact on State budgets.

In this regard, the Commonwealth is increasingly imposing conditions on SPPs (e.g. requirements to maintain effort, match Commonwealth funding growth, or adhere to particular policies). These conditions inhibit States' flexibility to allocate their resources to best meet community needs at minimum cost. As such, Western Australia and other States are seeking more outcome oriented SPP arrangements to provide better flexibility.

The allocation of GST revenues according to the principle of Horizontal Fiscal Equalisation (HFE) can also impact on economic growth. The HFE principle aims to ensure that all States can provide a similar standard of services if they make a similar effort to raise their own revenues. This means, for example, that States facing higher costs (e.g. due to servicing a population that is older than that of other States) will receive a higher share of funding.

In the context of the population ageing issue the strength of HFE is its ability to help share the costs of ageing equitably around the nation. However, the weakness of HFE (as acknowledged in the Garnaut-FitzGerald report¹²) is the disincentives it creates for States to promote economic growth (which is necessary to increase the States' revenue capacity) and control costs.

¹² Garnaut, R. and Fitzgerald, V. (2002) *Review of Commonwealth-State Funding: Final Report*.

APPENDIX A

MODELLING LONG-TERM EXPENSE GROWTH

This appendix outlines the methodology used in chapter 2 of this submission to project expense growth over the long term.

The approach taken to modelling expenses is based on the method used by the Queensland Government in its projections of State and Territory finances in May 2004.¹³ This approach decomposes expenditure growth into three main drivers:

- (i) demographic factors relating to the size and age structure of the population;
- (ii) economic growth; and
- (iii) additional cost trends based on historical data.

Algebraically, expense growth for each program is modelled as follows:

$$(1 + g_{tot_i}) = (1 + g_{pop}) * (1 + g_{age_i}) * (1 + g_{gdpc}) * (1 + g_{excess_i})$$

where:

- g_{tot_i} is the total growth rate of the expenditure for program i ;
- g_{pop} is the growth rate of the population;
- g_{age_i} is the growth rate of a population-weighted index of per capita demand for program i ; and
- g_{gdpc} is the growth rate of nominal per capita income;
- g_{excess_i} is a residual cost trend for program i .

The demographic drivers of growth (g_{pop} and g_{age_i}) are based on ABS mid-series population projections and data on the utilisation of public services by age cohort (where available).

The inclusion of the variable g_{gdpc} reflects the assumption that community expectations for public goods and services increases in line with per capita income. This assumption (which is referred to as the 'real income effect') is based on evidence of an historical association between these variables. As the strength of this relationship is unclear, chapter 2 includes a sensitivity analysis of changes in the elasticity of per capita income and expense growth.

¹³ Queensland Government Submission on *Australia's Demographic Challenges*, May 2004.

The additional cost trends for each portfolio (g_{excess_i}) reflect the component of historical expenditure growth that cannot be explained by demographic change and economic growth. These estimates also abstract from the growth in the size of the government sector relative to economic activity, which is used a proxy for past revenue measures taken by governments in response to community demand. It is necessary to abstract from growth in this variable to be consistent with the modelling approach of 'no policy change.'

The residual cost factors encompass a range of factors, including changes in program-related prices (in excess of inflation), utilisation and efficiency. Estimates of these factors (based on ABS Government Financial Statistics from 1978-79 to 1997-98) for key State and Commonwealth programs are given in the following table.

**Estimates of residual cost trends by program
(annual percentage increase)**

GFS Expenditure Type	States	Commonwealth
Acute care (251) and health grants	0.43*	-2.23**
Community health (254)	n.a.	3.39**
Pharmaceuticals (256)	2.33 (assumed)	2.33**
Nursing homes for the aged (253)	n.a.	-2.02**
Schools (241) and education grants	0.22	0.94*
Tertiary education (242)	-3.23** (joint estimate)	
Public order and safety (23)	1.34**	1.34 (assumed)

* significant at the 95 per cent confidence level

** significant at the 99 per cent confidence level

Source: State Treasuries' estimates in Queensland Government Submission on *Australia's Demographic Challenges*.

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